

## Chapter 4

### HISTORICAL BACKGROUND

---

#### A. FIELD METHODS SUMMARY

Except where otherwise specified below, a standard fieldwork methodology was employed in the surveyed areas. Following the removal of crops, each survey area was delimited with spray-painted six-foot wooden stakes. The defined area was then plowed and disked, usually by the tenant farmer, to expose the soils (Plate 4.1). After consecutive rains had made conditions suitable for surface collection, the area was systematically traversed. Keeping arms' length separation, the field team walked first in one direction and then crossed the area again on a path at 90° from the first traverse. It was also found to be important to walk both into and away from the sun.

Once artifact clusters had been noted these areas were walked repeatedly until it was felt all surface finds were located. A team of two then used a handheld Topcon GMS-2 data collector with a built-in sub-meter GPS unit to flag the artifacts with their locations (Plates 4.2 and 4.3). Selective shovel testing and excavation units were deployed judgmentally on the basis of the surface collection results and surface visibility.

In the text below the areas examined are described broadly from south to north. For key maps showing the locations of the areas along the proposed highway alignment, see Figures 4.1 and 4.2. Most of the area locations are also shown on the oblique aerial photographs taken by the Delaware Department of Transportation (see Plate 2.1, Figure 4.3, and specific site views below).

The description of each area, and the results of the work undertaken, are presented in the standard format developed for the management summary report. This comprises:

1. Area-Specific Field Methods where these varied from the standard procedures outline above.
2. Defined Artifact Clusters.
3. Subsurface Testing, where undertaken (shovel tests and units).
4. A brief summary of the historical research undertaken in the Phase IA study (Hunter Research Inc. 2009).
5. Archaeological Sensitivity as predicted in the overall sensitivity study completed earlier in the project (A.D. Marble & Company 2006)
6. Key Artifacts, illustrated by plates.
7. Interpretation.
8. Future research options.

If archaeological sites were defined in an area, their names and Delaware CRS and site numbers are provided. The site forms and full details of the subsurface and artifact data are provided in Appendices A through C.

#### B. DESCRIPTION AND RESULTS

##### AREA 1

No Phase IB testing was conducted in this area during the current survey. Situated at the southern end of Section 2, Area 1 actually falls within Section 3 and was therefore surveyed by Richard Grubb and Associates, Inc.



Plate 4.1. Area 2 - Disk used by Dennis Clay (Photographer: William Liebeknecht, November 2009) [HRI Neg.#09045/D3:001].

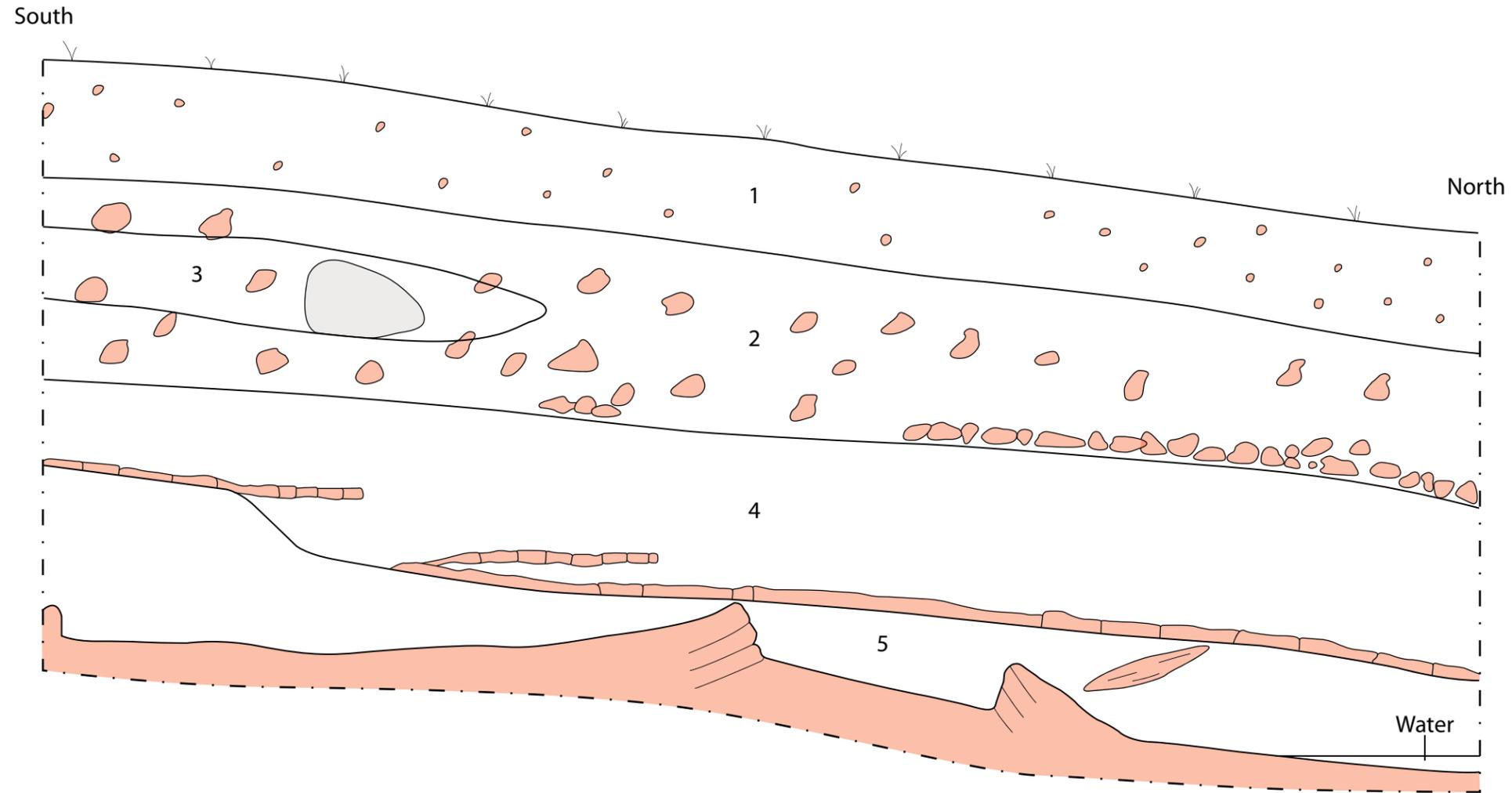


Plate 4.2. Area 2 - Dan O'Toole and Sue Ferenbach recording the locations of artifacts with a hand-held GPS (Photographer: William Liebeknecht, November 2009) [HRI Neg.#09045/D3:007].



Plate 4.3. Area 2 - Dan O'Toole recording the individual artifact locations with a hand held Topcon GMS-2 GPS unit looking north. Note the possible landing site in the background where the topography dips (Photographer: Sue Ferenbach, November 2009) [HRI Neg.#09045/D2:044].

Area 2 Excavation Unit 1  
West Wall



Context List

Context	Description [Interpretation]	Munsell
1	Silty sand with small pebbles and gravel [Ap horizon]	10 YR 3/3
2	Loamy sand with large limonite pebbles [B1 horizon]	10 YR 4/6
3	Loamy sand with cobbles and large limonite pebbles	10 YR 5/6
4	Clayey sand overlying limonite sheets	10 YR 4/6
5	Loamy sand overlying bedded limonite	10 YR 4/6

-  Cobble
-  Limonite Pebble
-  Limonite Sheet
-  Bedded Limonite

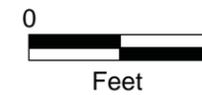


Figure 4.5. Area 2 - Excavation Unit 1, West Profile.

**AREA 2**  
**(Figures 4.4 and 4.5; Plates 4.4 – 4.7)**

**Archaeological Resources Assigned Delaware Site Numbers: Rumsey Historic/Prehistoric Site 7NC-F-117, N14497**

*Area-Specific Field Methods:*

Areas close to the Sandy Branch had been fallow for a number of years and so had less than perfect visibility at only about 50 percent, while the remainder of Area 2 was optimal with about 90 to 100 percent visibility. The entire area was walked from east to west and then from south to north. A White Spectrum metal detector was then employed to survey the areas where historic artifacts were clustered on the surface. Artifact clusters were then tested, employing 63 shovel tests, followed by six excavation units measuring 2.5 feet by 10 feet each. A total of 4,596 artifacts were recovered from this area.

*Artifact Clusters:*

Prehistoric artifacts were clustered on knolls overlooking the heads of relict streams (Figure 4.4, Site Clusters C and D).

A large group of historic artifacts dating to the mid-18th century was tightly clustered on a gentle rise which dips down to the south into a basin leading down to the Sandy Branch (Figure 4.4, Site Cluster A). A smaller distinct cluster of mid-18th-century artifacts (Figure 4.5, Site Cluster B) was located 60 feet southwest of the large cluster along a gentle rise.

*Shovel Tests:*

A total of 15 shovel tests produced prehistoric artifacts while 19 shovel tests produced historic artifacts.

*Excavation Units:*

Excavation Unit 1 (Plate 4.4 and Figure 4.5) was placed adjacent to Shovel Test 236, which had produced 200 pieces of limonite, weighing a total of 18.6 pounds. Excavation Unit 1 in turn produced over a thousand pieces of limonite, totaling 305.3 pounds, both from Context 1 (an active plowzone), and from subsequent B horizons (Contexts 2, 4, and 5). All the limonite excavated from this unit was saved, although not all of the material was thought to be cultural. Once cleaned in the laboratory it was examined for use or marks related to quarrying. An anomaly (Context 3) located in the southern half of the unit appears to be an eroded gully.

Excavation Unit 2 was placed between Shovel Tests 214 and 236, and lay on the southern edge of the large mid-18th-century cluster (A), in an area where a change in soil was visible when the soils were damp. Context 1, an active plowzone, produced small sherds of redware, creamware, and whiteware (one sherd), red brick and a wrought nail. Below the plowzone (Context 1) there was a visible soil anomaly (Contexts 3 and 4) at the southern end of the unit. The subsoil (Context 2) was cut (Context 4) by a shallow linear feature running east/west 0.5 feet below the plowzone and filled with a dark yellowish brown silty loam (Context 3). The fill (Context 3) contained a single redware sherd with slip-trailed decoration and clear lead glaze and two small brick crumbs. The function of this feature cannot be determined at this stage of work.

Excavation Unit 3 was located within the smaller cluster (B) of mid-18th-century artifacts near the location of a pistol gunflint found during the surface collection



Plate 4.4. Area 2 - Excavation Unit 1 west profile showing stratified bands of limonite (Photographer: Sue Ferenbach, December 2009) [HRI Neg.#09045/D3:035].

of this area. Context 1, an active plowzone, produced a dozen redware sherds, a single sherd of pearlware, red brick fragments, a wrought nail, vessel and window glass. The subsoil (Context 2) showed no signs of cultural disturbance.

Excavation Unit 4 was located within the northern end of the large cluster of historic artifacts (A). Context 1, an active plowzone, produced 48 redware sherds (three with slip-trailed decoration), a white salt-glazed stoneware sherd with scratch blue decoration, a creamware sherd, two pearlware sherds, three nail fragments, seven olive green vessel glass fragments and 32 fragments of red brick. A single piece of thermally altered rock and three pieces of quartz debitage were also recovered from the plowzone (Context 1). The subsoil (Context 2) showed no signs of cultural disturbance.

Excavation Unit 5 was located immediately southeast of Shovel Test 229, on the top of a knoll where prehistoric thermally altered rock fragments and historic brickbats observed on the surface during the surface collection. Context 1, an active plowzone, produced 26 brickbats, a redware sherd, two pieces of window glass and a nail fragment. Prehistoric materials from the plowzone consisted of 11 pieces of debitage, five thermally altered rock fragments and a quartzite hammerstone. The subsoil (Context 2) showed no signs of cultural disturbance.

Excavation Unit 6 was located within a heavy brick scatter situated at the northern end of the large cluster of historic artifacts dating to the mid-18th century observed on the surface during the surface collection. Context 1, an active plowzone, contained 34 redware sherds, seven creamware sherds, three pearlware sherds, a window light fragment and 17 red brick fragments. Three flakes, two jasper and one chert, were also recovered from the plowzone. The subsoil (Context 2) showed no signs of cultural disturbance.

*Research from Phase IA:*

The Phase IA research indicates this area is part of the larger Rumsey Farm, which was in the Rumsey family from 1742 to 1836.

*Predictive Model:*

The sensitivity predictive model formulated by A.D. Marble rated this area as Moderate for prehistoric sites and Moderate and Low for historic sites. The Hunter Research, Inc. Phase IA report felt that this area had a high sensitivity for both prehistoric and historic sites as portions are located on well-drained knolls and terraces above a reliable source of water. A brief one-day walkover during the Phase IA research had observed small bits of brick and debitage, supporting this assessment.

*Key Artifacts:*

**Prehistoric** (Plate 4.5)

- Limonite (high grade) narrow bladed projectile point with an expanding stem Clyde Farm Complex of the Woodland I period
- Limonite bifaces and debitage made from lower grade material
- Quartz late stage biface or knife
- Quartz core
- Quartz spokeshave
- Small pebble jasper contracting stemmed projectile point
- Debitage (quartz, limonite, chert, jasper, argillite and rhyolite)
- Thermally altered rocks

**Historic** (Plates 4.6 and 4.7)

- White salt-glazed stoneware
- Scratch blue white salt-glazed stoneware
- Grey-bodied salt glazed stoneware
- Tin enameled buff-bodied earthenware
- Engine turned refined redware



Plate 4.5. Area 2 - Selected prehistoric artifacts collected from the surface. Left to right: quartz spokeshave, medium quality early stage limonite biface, high quality limonite narrow bladed expanding stem projectile point with a distal impact point, small pebble jasper stemmed projectile point (Photographer: Josh Butchko, February 2010) [HRI Neg.#09045/D7:003].

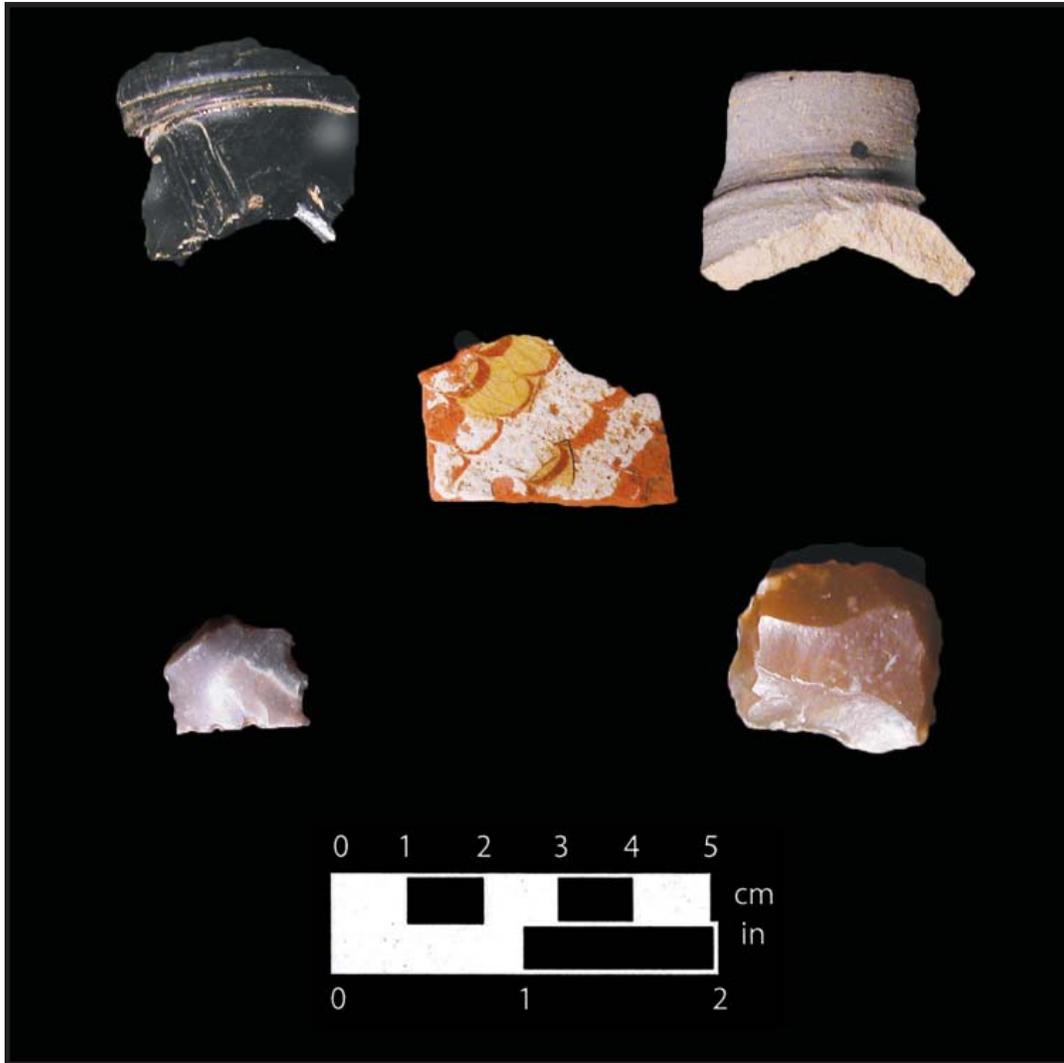


Plate 4.6. Area 2 - Selected 18th century historic artifacts collected from the surface. Top (left): dark olive green wine bottle closure with a hand applied string rim, (right): grey-bodied salt-glazed stoneware jug rim sherd. Middle: slip combed red earthenware body sherd with clear lead glaze. Bottom (left): pistol size grey gunflint, (right)honey colored French musket flint (Photographer: Josh Butchko, February 2010) [HRI Neg.#09045/D7:001].



Plate 4.7. Area 2 - Selected 18th century historic iron artifacts collected from the surface. Top (left): cast iron cauldron rim/shoulder with casting marks, (right) cast iron cauldron foot and base. Bottom (left): wrought iron fireplace hook, (right) wrought iron hook with a loop end (Photographer: Josh Butchko, February 2010) [HRI Neg.#09045/D7:002].

Creamware  
Pearlware (hand-painted blue and polychrome decorations)  
Redware (black glazed, clear lead glazed, manganese glazed, slip trailed, combed and copper oxide)  
Chinese export porcelain  
Grey spall-type gunflint pistol size  
French honey colored spall-type gunflint musket size  
Two olive green bottle closures (hand applied string lips)  
Twelve cast iron cauldron fragments (three rims one foot)  
Two wrought iron hooks (likely pot hooks to hang cauldrons)  
Wrought iron nails  
Red brick fragments (some “glazed”)

*Interpretation:*

Prehistoric materials from this area date from the Late Archaic/Woodland I periods and suggest short-term hunting and/or possibly lithic procurement for limonite. The Herring Island site in Maryland (8.1 miles northwest of Area 2) is analogous (Ward 1984).

The historic artifacts suggest the presence of non-domestic 18th-century site along the Sandy Branch. The artifact assemblage lacks tobacco pipe stems and faunal materials such as shell and bone. The presence of a single French gunflint would not normally be remarkable. However, Nathaniel Rumsey’s presence in France during the American Revolutionary War (representing the Philadelphia mercantile firm of Hodge and Bayard) presents intriguing possibilities. Rumsey evidently arranged exchanges of American tobacco for arms and powder.

A Revolutionary War context may also explain the presence of so many iron cauldron fragments (and two pot hooks). Cauldrons were of course standard military equipment. It seems highly probable that the site is extensive: Richard Grubb and Associates have

located another dense 18th-century artifact cluster immediately east of this location, a possible brick clamp immediately to the south, and a third cluster, also 18th century, in the Levels Road section. It is probable that these sites are all related in some way and reflect hitherto unsuspected complex operations on the Rumsey Farm not mentioned in the Rumsey Family Papers. The fact that William Rumsey Sr. was a customs agent at Bohemia Landing in the second quarter of the 18th century may be connected to these operations along the south side of the Sandy Branch.

*Future Research:*

1. Limonite as a Lithic Resource

Limonite is a poorly understood lithic resource in this region. The last serious study of limonite was by Henry Ward (1984:45-56; 1985) at Herring Island at the mouth of the Elk River. Custer places the use of the Herring Island quarry within the Clyde Farm Complex of the Woodland I period (Custer 1989:176-204). Beds of limonite within Area 2 were revealed in Excavation Unit 2, just below the plowzone. These sources would have been an accessible and reliable lithic resource for Native Americans. The quality of this material varies from very poor crumbly chunks to platy, high quality, tight-grained material, approaching quartzite in quality. Debitage, early stage bifacial tools, and projectile points, found during the Phase IB survey suggest that Native Americans were utilizing this resource locally (Custer 1984:57-99). Geologists working for the Delaware Geological Survey have expressed an interest in these limonite beds and have offered professional input during the Phase II excavations.

## 2. 18th-Century Commercial Operations on the Sandy Branch

The activities of William Rumsey Sr., William Rumsey, Jr., Benjamin Rumsey and Nathan Rumsey, and the family connection to Bohemia Landing in Maryland, may throw light on the archaeological assemblage from Area 2 and the adjacent areas. Such research may also shed light on other 18th-century sites in other parts of Section 2 such as Areas 7, 9, H, and J (see below). Clearly the number, density and types of 18th-century artifacts from Area 2 suggest complex activity at this location and the area merits evaluation of significance investigation.

### AREA 3

#### **Archaeological Resources Assigned Delaware Site Numbers: None**

No subsurface Phase IB testing was proposed in the Phase IA Cultural Resource Survey (Hunter Research, Inc. 2009). This area encompasses the main branch and a north-trending tributary of the Sandy Branch, and was initially thought to include a historic millpond. A review of historic maps and aerial photographs indicates that, although there is an earthen causeway and a submerged pony truss bridge, there is no evidence for a mill having been located at this location. A low earthen berm running east/west located along the northern border of Area 2 suggests the Sandy Branch was cleaned out or dredged sometime during the first half of the 20th century. Sections of large terra cotta drain field tiles suggest the lower portion of the agricultural fields were drained using these tiles placed end to end terminating in Sandy Branch. Such a process would have contributed significantly to the accumulation of silt in the bottom of the stream.

### AREA 4 (FIGURE 4.6; PLATES 4.8 AND 4.9)

#### **Archaeological Resources Assigned Delaware Site Numbers: Sandy Branch Prehistoric Site 1, 7NC-F-122, N14502**

##### *Area-specific Field Methods:*

Visibility in this area was nearly perfect after plowing and disking, approaching 100 percent. Artifact clusters were tested employing 20 shovel tests, and one excavation unit measuring 2.5 feet by 10 feet. A total of 233 artifacts were recovered from this area from these combined methods.

##### *Artifact Clusters:*

Prehistoric artifacts were lightly scattered across the entire field with more notable clusters apparent near the northern and southern ends at confluences with un-named smaller branches to the Sandy Branch. These clusters contained quartz cores, and limonite debitage.

##### *Shovel Tests:*

A total of five shovel tests produced prehistoric artifacts while no shovel tests produced historic artifacts.

##### *Excavation Units:*

Excavation Unit 1 was placed within a prehistoric artifact cluster located at the south end of Area 4. Artifacts recovered from Context 1, an active plowzone, consist of a small brown jasper bifacially worked humped end-and side-scraper, a thermally reddened jasper narrow-bladed projectile point mid-section, debitage (quartz, jasper and chert), and a single thermally altered rock fragment. Small humped scrapers are often associated with Hell Island ceramics of the Webb and Delaware Park Complexes of the Woodland I period



Plate 4.8. Area 4 - General view of the plowed and disked field prior to surface collection looking north (Photographer: Sue Ferenbach, December 2009) [HRI Neg.#09045/D3:045].



Plate 4.9. Area 4 - Selected prehistoric artifacts collected from the surface (left): small pebble jasper humped-back bifacial scraper, (center and right) pebble jasper early stage bifaces (Photographer: Josh Butchko, February 2010) [HRI Neg.#09045/D7:004].

(Glen Mellin Personal Communication December 2009). The subsoil (Context 2) was partially excavated but was found to be devoid of artifacts and showed no signs of cultural disturbance.

*Research from Phase IA:*

The background research indicated this area was part of the Rumsey Farm giving full control of the Sandy Branch headwaters to the Rumsey family from 1742 to 1836.

*Predictive Model Assessment:*

The sensitivity predictive model formulated by A.D. Marble rated this area as moderate for prehistoric sites and moderate and low for historic sites. The Hunter Research, Inc. Phase IA report felt this area had a high sensitivity for prehistoric sites as it is located on a well-drained flat terrace above a reliable source of water.

*Key Artifacts:*

**Prehistoric** (Plate 4.9)

- Two brown pebble jasper middle stage bifaces
- A small brown jasper bifacially worked humped end and side scraper
- A thermally reddened jasper narrow bladed projectile point mid-section
- A rounded cobble with a small ground pit and reddened surface possibly used as a pivot to start fires
- Quartz cores
- High quality Limonite debitage
- Thermally altered rock fragments

**Historic**

None of special interest

*Interpretation:*

Prehistoric artifacts from this site are similar to those observed elsewhere along the project corridor. The tool kit is represented by a broken/ discarded projectile point, exhausted quartz cores, scraping and expedient cutting tools (made from local jasper pebbles), debitage (resulting from the production and curation of tools), with thermally altered rocks (for heating and cooking food).

**AREA 5  
(FIGURE 4.7; PLATES 4.10 THROUGH 4.13)**

**Archaeological Resources Assigned Delaware Site Numbers: Sandy Branch Prehistoric Site 2, 7NC-F-123, N14503**

*Area-specific Field Methods:*

This area lies adjacent to the Middletown High School baseball fields and is planted in well-manicured grass that could not be plowed. A total of 59 shovel tests were placed along a 50-foot grid, followed by three excavation units each measuring 2.5 feet by 10 feet. A total of 68 artifacts were recovered from this area through these combined methods.

*Shovel Tests:*

Eleven shovel tests produced prehistoric artifacts. No historic artifacts were recovered from shovel testing. The positive tests lie along the wood line and along a low rise adjacent to the Middletown High School baseball fields overlooking a small tributary of the northern branch of the Sandy Branch.



Plate 4.12. Area 5 - Field crew (John Ferenbach and Tim Hitchens) shovel testing looking southwest (Photographer: Sue Ferenbach, December 2009) [HRI Neg.#09045/D2:002].

*Excavation Units:*

Excavation Unit 1 was located along the crest of this low rise overlooking a small tributary. Context 1 consisted of a former plowzone composed of a sterile silty loam with small pebbles. The subsoil (Context 2), a silty clay loam, showed no signs of cultural disturbance.

Excavation Unit 2 was located along the wood line adjacent to the northern branch of the Sandy Branch. Context 1, a silty loam, was a former a plowzone. Prehistoric artifacts recovered from the plowzone consisted of debitage (quartz, chert, jasper and quartzite) secondary and tertiary flakes and one piece of thermally altered rock. The subsoil (Context 2), a silty clay loam, showed no signs of cultural disturbance.

Excavation Unit 3 was located immediately southeast of Shovel Test 508 just south of Excavation Unit 2 along the wood line. Context 1 was same former plowzone observed in Excavation Unit 2. Prehistoric artifacts recovered from the plowzone consist of debitage (secondary and tertiary flakes of Brandywine quartzite, quartzite, quartz, jasper, and chert), and three pieces of thermally altered rock. The subsoil (Context 2), a silty clay loam was sterile and showed no signs of cultural disturbance.

*Research from Phase IA:*

The background research indicated this area was also part of the Rumsey Farm.

*Predictive Model Assessment:*

The sensitivity predictive model formulated by A.D. Marble rated this area as moderate for prehistoric sites and moderate and low for historic sites. The Hunter Research, Inc. Phase IA report felt this area had a high sensitivity for both prehistoric and historic sites as it

is located on a well-drained flat terrace at the confluence of the Sandy Branch and an unnamed branch of the Sandy Branch.

*Key Artifacts:*

**Prehistoric** (Plate 4.13)

A quartz narrow bladed projectile point with a straight stem

Multiple pieces of Brandywine quartzite debitage

**Historic**

None of special interest

*Interpretation:*

Prehistoric artifacts from this site are similar to those observed elsewhere along the project corridor. The presence of Brandywine quartzite is important to our understanding of this local lithic resource and possible links to an unknown exchange network.

*Future Research:*

Brandywine Quartzite

Like limonite, this lithic type is not well understood in the state of Delaware and the region. It was first noted by Glen Mellin at the Pollack Woods site and its use may be contemporary with Hell Island ceramics of the Webb and Delaware Park Complexes of the Woodland I period. The Pollack Woods site report mentions a high amount of quartzite but does not mention that it is a specific type of quartzite local to the state of Delaware (University of Delaware Center for Archaeological Research 1995).

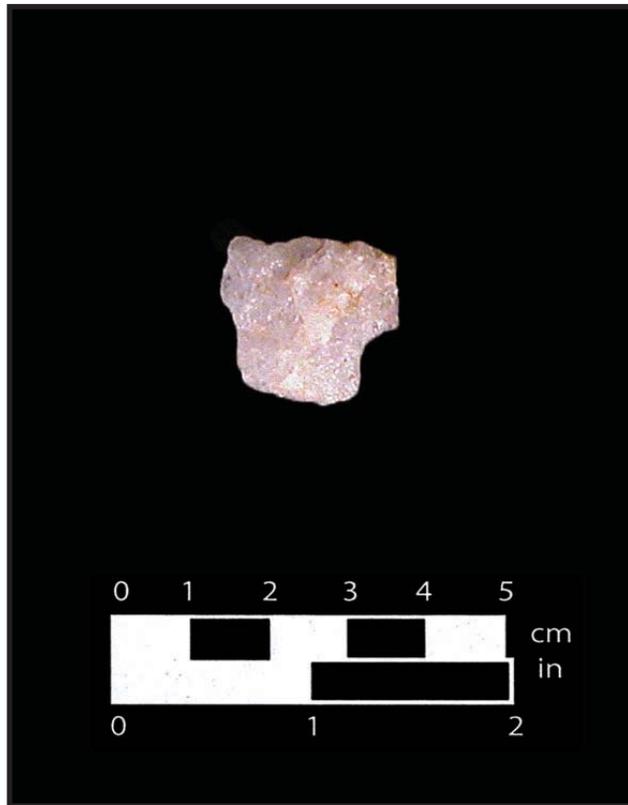


Plate 4.13. Area 5 - Proximal end of a quartz narrow-bladed, straight stemmed projectile point (Photographer: Josh Butchko, February 2010) [HRI Neg.#09045/D7:005].



Plate 4.14. Area 6 - Field crew (Dan O'Toole and Jim Martin) consulting with Ian Burrow during shovel testing looking southeast (Photographer: Sue Ferenbach, December 2009) [HRI Neg.#09045/D2:006].

**AREA 6  
(FIGURE 4.8; PLATES 4.10, 4.11, 4.14 AND  
4.15)**

**Archaeological Resources Assigned Delaware Site  
Numbers: Shell Button Historic / Prehistoric Site,  
7NC-F-124, N14504**

*Area-specific Field Methods:*

Visibility in this area was very good after plowing; between 75 and 85 percent. An area close to the unnamed branch of the Sandy Branch that had been left fallow for the last couple of years was not plowed and was examined through shovel testing. Artifact clusters identified in the surface collection were then tested employing 45 shovel tests and three excavation units each measuring 2.5 feet by 10 feet. A total of 1032 artifacts were recovered from this area.

*Artifact Clusters:*

Shell button blanks, consisting mainly of *Trochus* shells, were found clustered near the southwest end of the cornfield at the north end of Area 6 along a low knoll. A few artifacts dating to the late 18th and early 19th century along with prehistoric artifacts were also recovered from this same area.

*Shovel Tests:*

Thirteen shovel tests produced prehistoric artifacts while 17 shovel tests produced historic artifacts. Some tests near the downward slope of the small tributary of the northern branch of the Sandy Branch exhibit unusually thick deposits with historic artifacts suggesting this area may have been utilized for historic refuse disposal.

*Excavation Units:*

Excavation Unit 1 was located near the wood line along a low rise adjacent to the confluence of a small un-named tributary of the northern branch of the Sandy Branch and the northern branch of the Sandy Branch. Context 1 was a former clayey loam plowzone that had been disturbed by construction vehicles during the installation of storm sewer lines. Prehistoric artifacts recovered from the plowzone consist of a quartz core fragment, and a well-worn ceramic sherd with sand temper. The subsoil (Context 2), a silty clay, showed no signs of cultural disturbance.

Excavation Unit 2 was located along the crest of a low rise overlooking a small tributary of the northern branch of the Sandy Branch. Adjacent Shovel Test 617 had produced red brick fragments from a thick buried fill deposit, thought to be a possible feature. Context 1 consisted of a silty loam former plowzone. Prehistoric material from the plowzone consists of a single piece of thermally altered rock. Historic artifacts comprise redware, creamware, red brick fragments, and coal. Historic artifacts may reflect disposal of household refuse in a gully. The subsoil (Context 2), a silty clay, showed no signs of cultural disturbance.

Excavation Unit 3 was located in a cornfield within a cluster of *Trochus* and Green Snail shell button blanks. Context 1, an active plowzone, consisted of a sandy loam. A single piece of thermally altered rock was the only prehistoric artifact recovered from the plowzone. Historic artifacts recovered from the plowzone consist of an iron washer, redware, brick and *Trochus* shells. The subsoil (Context 2), a sandy clay, showed no signs of cultural disturbance.

*Research from Phase IA:*

The Phase IA research indicates this area is part of the Indian Range plantation. Owners important to the understanding of the material culture were David Witherspoon (1749 to 1752) Barnett Van Horn (1752 to circa 1777) and the Gibson and Derrickson families from 1839 through 1916.

*Predictive Model Assessment:*

The sensitivity predictive model formulated by A.D. Marble rated this area as moderate for prehistoric sites and low for historic sites. The Hunter Research, Inc. Phase IA report felt this area had a high sensitivity for both prehistoric and historic sites as it is located on a well-drained flat terrace above the headwaters of the Sandy Branch.

*Key Artifacts:*

**Prehistoric** (Plate 4.15)

A three-quarter grooved axe, pecked, ground and grooved. Bit end has been re-sharpened by flaking, Archaic and Clyde Farm/Barker's Landing Complexes of the Woodland I period

A large black chert equilateral triangular projectile point, Late Carey Complex

Quartz straight stemmed late-stage biface (mended from two pieces)

Two quartz cores

A chert tested cobble core

A quartzite hammerstone

A quartzite pitted stone

Debitage (quartz, jasper and chert)

Ceramic sherd

Thermally altered rock fragments

**Historic** (Plates 4.16 and 4.17)

Topshell (*Trochus niloticus*) button blanks

Green snail or (*Turbo marmoratus*) button blanks (Paris 2010)

Redware (clear lead glazed, slip-trailed)

Engine turned refined redware

Grey bodied salt glazed stoneware

Ironstone granite china

Vessel glass (pale violet, and pale aqua, milk glass and amber)

Lamp chimney glass

Window glass

18th-century brass button

Cast iron kettle spout

Brass finial

Brick (some glazed)

*Interpretation:*

The three-quarter grooved axe is a rare item. Full grooved axes were used for thousands of years until they were replaced by the three-quarter grooved axe during the Late Archaic/Woodland I period. The three-quarter grooved axe had an advantage over the full-grooved in that the flat edge allowed a wedge to be set in the haft of the handle to tighten the axe when it became loose. Stone axes were used for a variety of tasks, such as deadening trees, constructing shelters, making dugout canoes and gross butchering of large animals. Eventually, three-quarter grooved axes were replaced by celts, which were more efficient (Kraft 2001:106-110).

The re-sharpening of the bit end of this item by flaking rather than by the traditional pecking, grinding and polishing appear to demonstrate a lack of understanding of the original manufacturing process and suggests the re-worker of the axe was not the person who made it. Since the bit shows no signs of wear following re-sharpening, the ax may have been discarded.

Exotic shells from the Indo-Pacific Oceans with round holes cut out are waste material from a mother-of-pearl shell-button cottage industry typical of the

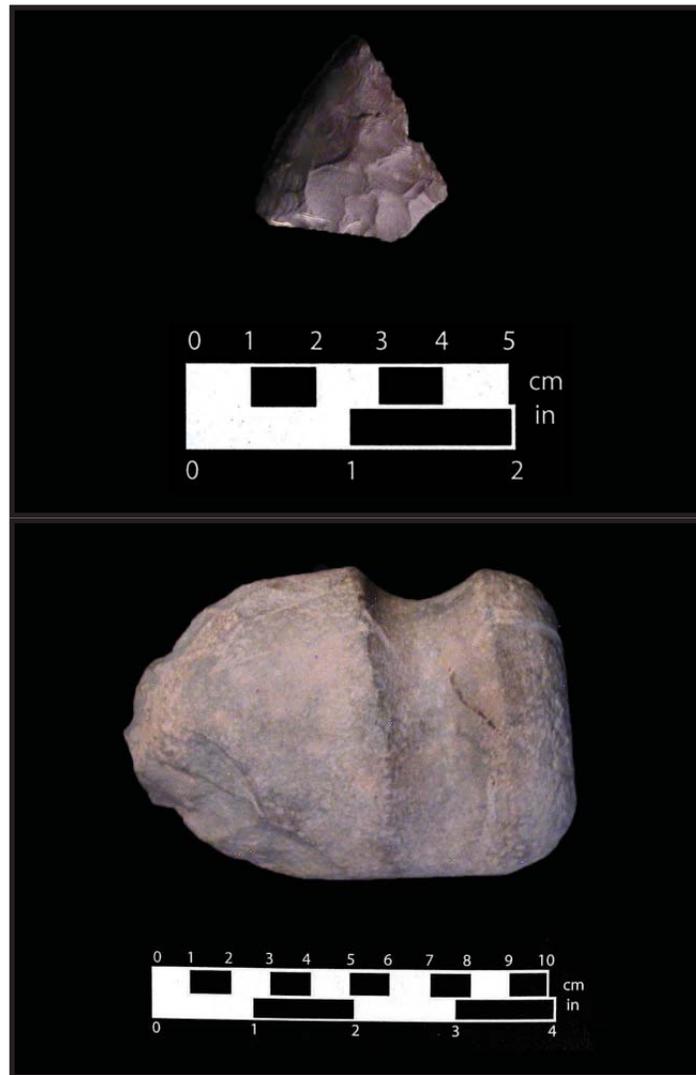


Plate 4.15. Area 6 - Selected Prehistoric Artifacts. (Top): A large black chert equilateral triangular projectile point, Late Carey Complex of the Woodland I period. (Bottom): A three quarter grooved axe, pecked ground and grooved with the bit end resharpened by flaking, Archaic and Clyde Farm/Barker's Landing Complexes of the Woodland I period (Photographer: Josh Butchko, February 2010) [HRI Neg.#09045/D7:006].



Plate 4.16. Area 6 - Selected Historic Artifacts. (Top): A grey-bodied stoneware storage jar shoulder/rim sherd dating to the second half of the 19th century, a red earthenware body sherd with white slip/clouded decoration under clear lead glaze dating to the 18th century. (Bottom): A solarized pale violet beverage bottle with a crown top closure from the late 19th –early 20th century, a center portion from an 18th century brass button with an eye cast in place (Photographer: Josh Butchko, March 2010) [HRI Neg.#09045/D7:025].



Plate 4.17. Area 6 - Shell button blanks. (Top): A green snail or green turban *Turbo marmoratus*. (Bottom) A topshell *Trochus niloticus* exhibiting holes resulting from the extraction of button blanks (Photographer: Josh Butchko, February 2010) [HRI Neg.#09045/D7:024].

southern part of the state in the late 19th and early 20th centuries. The discovery of this material here is apparently unique in rural New Castle County at this point, and could contribute to the understanding of this industry.

Two types of shell were found during the Phase IB. *Trochus niloticus* (PHYLUM – Mollusca, CLASS – Gastropoda, SUBCLASS – Prosobranchia, ORDER – Archaeogastropoda, SUPER-FAMILY – Trochacea, FAMILY – Trochidae, GENUS – *Trochus*, and SPECIES – *niloticus*) is commonly known as the Topshell. The Topshell is found in tropical and subtropical waters between the eastern Indian Ocean and the western Pacific Ocean and grows to a maximum diameter of 15 cm (about five inches).

*Turbo marmoratus* (PHYLUM – Mollusca, CLASS – Gastropoda, SUBCLASS – Prosobranchia, ORDER – Archaeogastropoda, FAMILY – Turbinidae, GENUS – *Turbo*, and SPECIES – *marmoratus*) is commonly known as Green Snail or Green Turban. These were identified by David Parris, Curator of Natural History at the New Jersey State Museum. The habitat of the green snail is from the Western Indian Ocean to the Western and South Pacific Ocean. It grows to a maximum diameter of 22 cm or about 8.5 inches. Both species can be found in shallow water along coral reefs (Kitutani and Yamakawa 1999).

## **AREA 7 (FIGURE 4.9 AND 4.10; PLATES 4.18 THROUGH 4.20)**

**Archaeological Resources Assigned Delaware Site Numbers: Bunker Hill Road Historic / Prehistoric Site, 7NC-F-126, N14506 (North of Road); Bunker Hill Road Historic Site South, 7NC-F-125, N14505 (South of Road)**

### *Area-specific Field Methods:*

Visibility in this area was very good, ranging between 80 and 95 percent. Artifact clusters were tested through 155 shovel tests. A total of 620 artifacts were recovered from this area. The area is divided into two sections: North and South, separated by Bunker Hill Road.

### *Artifact Clusters:*

South of Bunker Hill Road a series of extensive linear clusters, consisting exclusively of thermally altered rocks and red brickbats, were observed on the surface within Area 7 South and in the area in between Areas 6 and 7 (Plate 3.14). These clusters were sampled and tested using 20 standard shovel tests. Examination of historic maps and aerial photographs failed to provide any clues to their date or purpose.

North of Bunker Hill Road both prehistoric and 18th-century artifacts are clustered on a low knoll adjacent to the road.

### *Shovel Tests:*

A total of 11 shovel tests produced prehistoric artifacts while 59 shovel tests produced historic artifacts.

### *Research from Phase IA:*

The Phase IA research indicates this area is part of the Indian Range. Owners critical to the understanding of the material culture were David Witherspoon (1749 to 1763) and his widow Mary and her new husband Jesse Higgins (1763 to 1791). The research also highlights the historical importance of Bunker Hill Road as a part of the early road network in the vicinity.



Plate 4.19. Area 7 - A thermally fractured rock and red brick cluster (Cluster #2) (Photographer: Sue Ferenbach, January 2010) [HRI Neg.#09045/D5:099].



Plate 4.20. Area 7 - Field crew (Joelle Browning and Glen Keeton) shovel testing looking southwest (Photographer: Sue Ferenbach, January 2010) [HRI Neg.#09045/D5:032].

*Predictive Model Assessment:*

The sensitivity predictive model formulated by A.D. Marble rated this area as nil for prehistoric sites and moderate and low for historic sites. The Hunter Research, Inc. Phase IA report felt this area had sensitivity for probable late 17th-century sites associated with Indian Range and the early road system.

*Key Artifacts:*

**Prehistoric** (Plate 4.21)

A yellow-brown jasper Jack's Reef corner notched projectile point Webb Complex of the Woodland I period

A yellow-brown jasper narrow blade projectile point with a rounded stem Beavertail like, Delmarva Adena Complex of the Woodland I period

A quartz narrow bladed, contracting stemmed projectile point

Two blocky chunks/cores of Brandywine quartzite

**Historic**

Buff-bodied Staffordshire ware

Buff-bodied tin enameled earthenware (delftware)

White salt glazed stoneware

Creamware

Midlands mottled buff-bodied earthenware

Agateware

Redware (black glazed, clear lead glazed and slip-trailed)

Olive green vessel glass

Red brick (some "glazed")

*Interpretation:*

Area 7 North produced prehistoric artifacts suggesting repeated short-term occupations during the Woodland I period from the Webb Complex through to the Delmarva Adena Complex. This site is over 1,000 feet from the nearest source of water. Marshall Becker cites a reference from the 17th century that

suggests there may have been a Native American overland route between the upper Chesapeake Bay and the Delaware Bay in this area, possibly explaining a site so far from the nearest water source (Becker 2010).

Historic artifacts in Area 7 North indicate that a house, possibly a tenement, was situated on a knoll located on the north side of Bunker Hill Road during the 18th century. This property was owned by David Witherspoon from 1749 until his death in 1763 and then by his wife Mary and her second husband Jesse Higgins until 1791. David Witherspoon's property was large (440 acres) and contained at least one house. In 1749 when he acquired the portion of land that is now part of Parcel 157 he paid an additional sum of "three shillings sterling for some improvements mentioned to be made thereon" (Cecil County Circuit Court Patent Records TI3/262). These improvements are not specified, although the amount (three shillings) suggests that they are minimal.

*Future Research:*

The function and date of the linear clusters of brick and stone in Area 7 South remain puzzling. Further local oral historical research is planned to establish if these are recent phenomena.

Additional research into the Witherspoon family may shed some light on the 18th-century occupation on the knoll north of Bunker Hill Road in Area 7 North.



Plate 4.21. Area 7 - Selected Prehistoric Artifacts (left): jasper narrow-bladed rounded stemmed- beaver tail like projectile point. (center) A jasper Jack's Reef corner-notched projectile point. (right) A quartz narrow-bladed, stemmed projectile point (Photographer: Josh Butchko, February 2010) [HRI Neg.#09045/D7:007].

**AREA 8  
(FIGURE 4.11; PLATES 4.22 AND 4.23)**

**Archaeological Resources Assigned Delaware Site Numbers: None**

*Area-specific Field Methods:*

Visibility in this area was also very good, again ranging between 80 and 95 percent. A portion of the alignment passed through a wooded area that was tested with 32 shovel tests. A total of 377 artifacts were recovered from this area.

*Artifact Clusters:*

Although artifacts were recovered from the plowed field, no real clustering was observed. Historic artifacts dating from the late 19th century to the third quarter of the 20th century were observed along the perimeter of the woods with some extension into the adjacent plowed field.

*Shovel Tests:*

Four shovel tests produced prehistoric artifacts while produced historic artifacts.

*Research from Phase IA:*

The Phase IA research indicates this area was part of the Maple Grove and Black Marsh Tracts.

*Predictive Model Assessment:*

The sensitivity predictive model formulated by A.D. Marble rated this area as high and moderate for prehistoric sites and low for historic sites. The Hunter Research, Inc. Phase IA report felt this area had a high sensitivity for prehistoric sites as it is located on well-drained soils at the headwaters of the Black Marsh.

*Key Artifacts:*

**Prehistoric** (Plate 4.23)

A rhyolite narrow-bladed expanding-stem projectile point

**Historic**

Salt-glazed stoneware crock fragments

Pale aqua beverage bottle fragments

Pale aqua canning jar fragments

*Interpretation:*

Prehistoric artifacts recovered from this area were lightly scattered over a large vicinity and probably do not represent much more than a very short term transient foray or perhaps lost or discarded items while passing through the area. Historic artifacts date from the latter half of the 19th century through the third quarter of the 20th century are thought to be related to household and farm refuse discarded along the interior perimeter of the woods.

**AREA 9  
(FIGURES 4.12 AND 4.13; PLATES 4.24 THROUGH 4.31)**

**Archaeological Resources Assigned Delaware Site Numbers: Area 9 Prehistoric Site, 7NC-F-127, N14507; Cardon / Holton Farmstead, 7NC-F-128, N14508**

*Area-specific Field Methods:*

Visibility in this area was again very good at 85 to 95 percent. A White Spectrum metal detector was employed to survey the areas where historic artifacts were clustered on the surface. Artifact clusters were tested employing 18 shovel tests and one excavation unit measuring 2.5 feet by 10 feet. A total of 2,546 artifacts were recovered from this area.

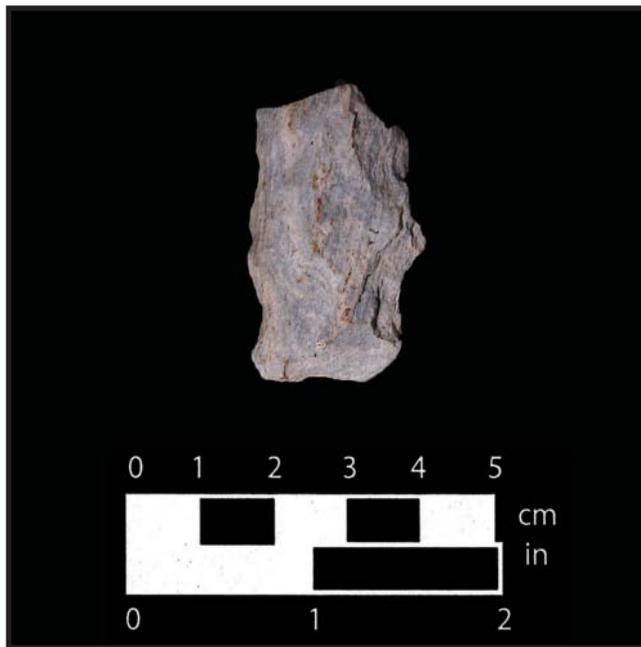


Plate 4.23. Area 8 - A Rhyolite expanding stemmed projectile point with w transverse mid-section fracture (Photographer: Josh Butchko, February 2010) [HRI Neg.#09045/D7:008].

*Artifact Clusters:*

Prehistoric artifacts dating to the Late Archaic and Woodland I period were found in clusters along two low linear knolls located on the north and south sides of a relict stream head flowing into the Black Marsh (Figure 4.12). Historic artifacts dating to the second and third quarters of the 18th century were coincident with the prehistoric site on the north side of the relict stream head. A second historic artifact cluster, closer to the dirt farm lane, dates to the second half of the 19th century.

*Shovel Tests:*

One shovel test produced prehistoric artifacts. Four shovel tests produced historic artifacts.

*Excavation Units: (Figure 4.13; Plates 4.27 and 4.28)*

Excavation Unit 1 was placed near the perimeter of the dense cluster of 18th-century artifacts on the low knoll north of the relict stream head. Context 1, an active silty loam plowzone, yielded over 185 artifacts dating from the early to mid-18th century. A few prehistoric artifacts dating to the Late Archaic period were also recovered. Prehistoric artifacts consisted of a narrow bladed quartz projectile point, a quartz late stage biface, debitage (chert and jasper) and thermally altered rock fragments.

Historic artifacts consisted mainly of ceramics including redware (black glazed, clear lead glazed, mottled, copper oxide and scraffito), Jackfield, buff-bodied Midlands mottled, agateware, buff bodied tin-enamelled, Borderware, buff-bodied Staffordshire ware, dipped white salt-glazed stoneware, and Westerwald grey-bodied stoneware with sprigged floral decoration. Other historic artifacts recovered from the plowzone consist of white clay tobacco pipe stems and bowls, window glass, olive green bottle glass,

wrought nails, daub, brick, fish scales, pig's teeth and bones and unidentifiable medium mammal bones. There was also a piece of a fossilized squid.

With the plowzone removed a large dark circular stain (contexts 3/5) was apparent (Plates 3.19 and 3.20). The soil (context 3) from the stained area within the unit was excavated down follow the cut [5] of the shallow feature, which extended 0.6 feet below the plowzone base. The soil had a greasy feel and contained a large amount of ash and charcoal. Over 500 artifacts were recovered from the fill of this feature. In contrast to the plowzone, the majority was faunal material. Items of note from the feature include the upper and lower portions of a pig skull, multiple fish scales, eggshell fragments, and charred peach pits. The subsoil in the base of the feature was burnt. This soil was excavated as a separate context [4]. No artifacts were recovered from this layer. Soil samples were taken from three places within the feature and a fourth outside the feature as a control sample. These should be fully processed during any Phase II or data recovery investigations. Floated portions of the soil samples recovered additional fish scales, bones and eggshell.

*Research from Phase IA:*

The Phase IA research indicates this area is part of Riley's Industry in 1685 to circa 1700. Owners critical to understanding the material culture are William Carden circa 1720-1760 and the Holton Family 1838-1886. The research also points out the importance of unnamed cart road, running nearby in a northeasterly direction from Choptank Road, as a part of the early road network.

*Predictive Model Assessment:*

The sensitivity predictive model formulated by A.D. Marble rated this area as moderate and high for prehistoric sites and low for historic sites. The Hunter

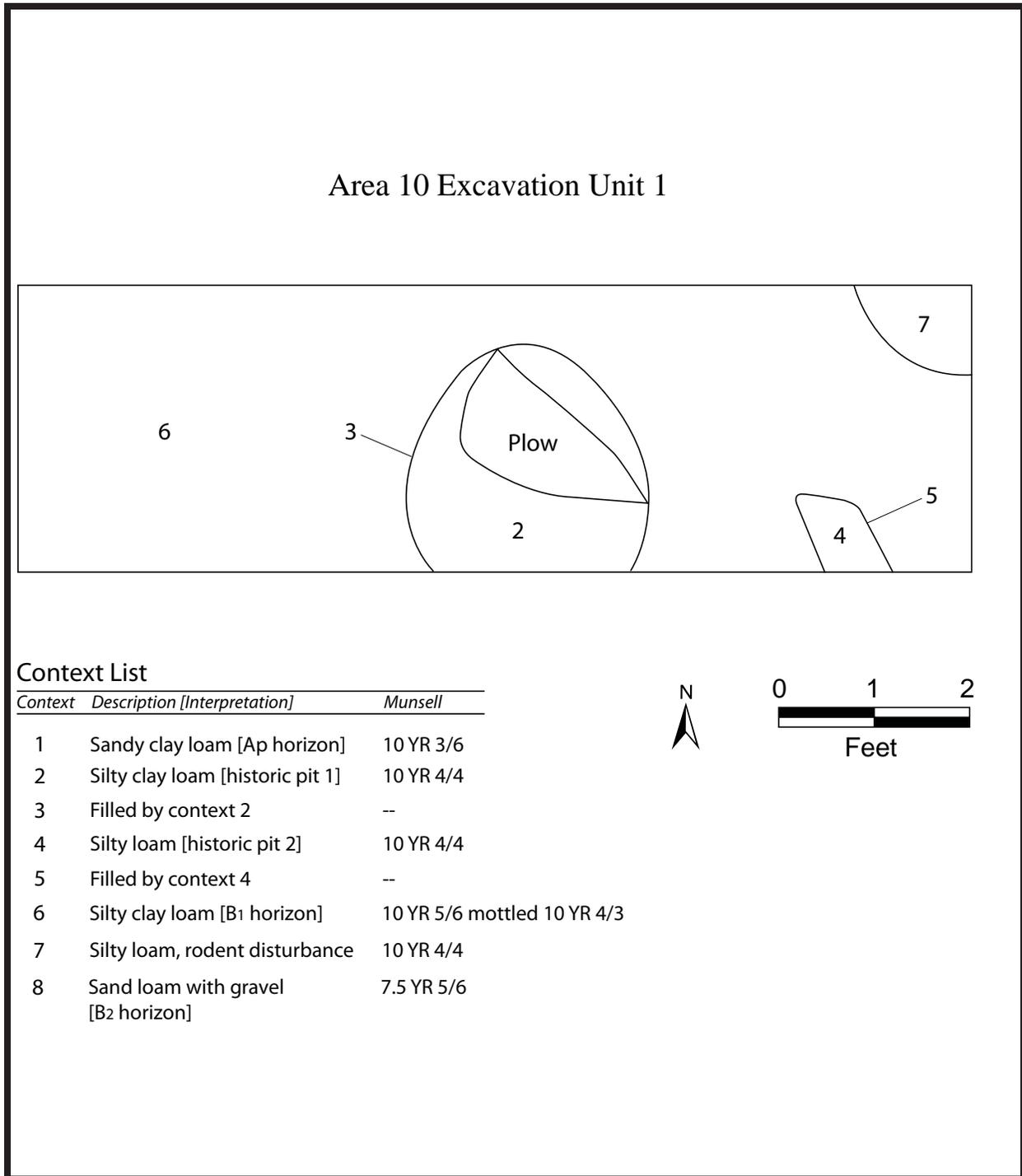


Figure 4.13. Area 10 - Excavation Unit 1 Plan



Plate 4.27. Area 9 - Excavation Unit 1 smokehouse feature in plan view (Photographer: Tim Hitchens, December 2009) [HRI Neg.#09045/D3:153].



Plate 4.28. Area 9 - Excavation Unit 1 north profile of smokehouse feature (Photographer: Tim Hitchens, December 2009) [HRI Neg.#09045/D3:180].

Research, Inc. Phase IA report felt this area had a high sensitivity for both prehistoric and historic as it is located on well-drained soils at the headwaters of the Black Marsh and historic sites associated with the early cart road network.

*Key Artifacts:*

**Prehistoric** (Plate 4.29)

Limonite mid-section from a broad late stage biface, possibly Meadowood  
 A large Jasper equilateral triangular projectile point, Late Carey Complex  
 Jasper narrow bladed projectile point  
 Jasper knife and biface  
 Quartz narrow bladed side notched projectile point  
 Multiple quartz cores  
 Quartz graver  
 Exotic chert narrow bladed projectile point (Possibly a Meadowood point)  
 Argillite flake blank/core  
 Debitage (quartz, jasper, chert, rhyolite and argillite)  
 Thermally altered rocks

**Historic** (Plates 4.30 and 4.31)

White salt glazed stoneware (dipped type)  
 Scratch blue white salt-glazed stoneware  
 Rhenish grey-bodied salt glazed stoneware with incised and sprigged decorations  
 Jackfield ware  
 Redware (black glazed, clear lead glazed, manganese glazed, slip trailed, mottled slip, copper oxide, opaque yellow wash, scraffito)  
 Manganese mottled buff-bodied earthenware  
 Buff-bodied Staffordshire ware with combed decoration  
 Buff-bodied tin enameled earthenware (delftware)  
 Wheildon ware (clouded ware)  
 Whiteware  
 White clay tobacco pipe fragments  
 Daub  
 Red brick

Olive green vessel glass  
 Pale aqua vessel glass  
 Window glass  
 Fish scales and bones  
 Pig bones  
 Charred peach pits  
 Eggshell fragments  
 Gray spall-type gunflint musket size  
 Brass button (hollow cast)  
 Brass book hinge  
 Brass straight pin  
 Cast iron cauldron fragments (ear)  
 An iron handle from a non-ferrous vessel (possibly a brass or copper kettle/pot)  
 Wrought iron oxen shoe

*Interpretation:*

Prehistoric artifacts from this site are similar to those observed elsewhere along the project corridor and are conventionally interpreted as the remains of tool kits left behind from short-term hunting camps near spring heads and headwaters along the mid-peninsula ridge in central Delaware. This tool kit is represented by broken and discarded projectile point, exhausted quartz cores, scraping, cutting and engraving tools, debitage (resulting from the production and curation of tools); thermally altered rocks (for heating and cooking). One unusual item is a greenish-gray chert midsection from a projectile point. This has the flat cross section and well controlled pressure flaking characteristic of the Meadowood projectile points more commonly found in northern Pennsylvania, southern New York and northern New Jersey. The Meadowood culture, which dates to the Woodland I period *circa* 900 to 400 B.C., is known for elaborate burial practices and exotic grave goods such as cooper beads, gorgets, bird stones and caches of chert blades. Burials are typically situated on low natural hills, setting which are present along the project corridor. The Meadowood tradition overlaps with another intrusive culture, the



Plate 4.29. Area 9 - Selected Prehistoric Artifacts. Top row (left to right): A quartz bifacial engraving tool, a large Jasper equilateral triangular projectile point, Late Carey Complex of the Woodland I period. Bottom row (left to right): An exotic chert narrow bladed projectile point (Possibly a Meadowood point), a limonite mid-section from a broad late stage biface (Photographer: Josh Butchko, February 2010) [HRI Neg.#09045/D7:011].

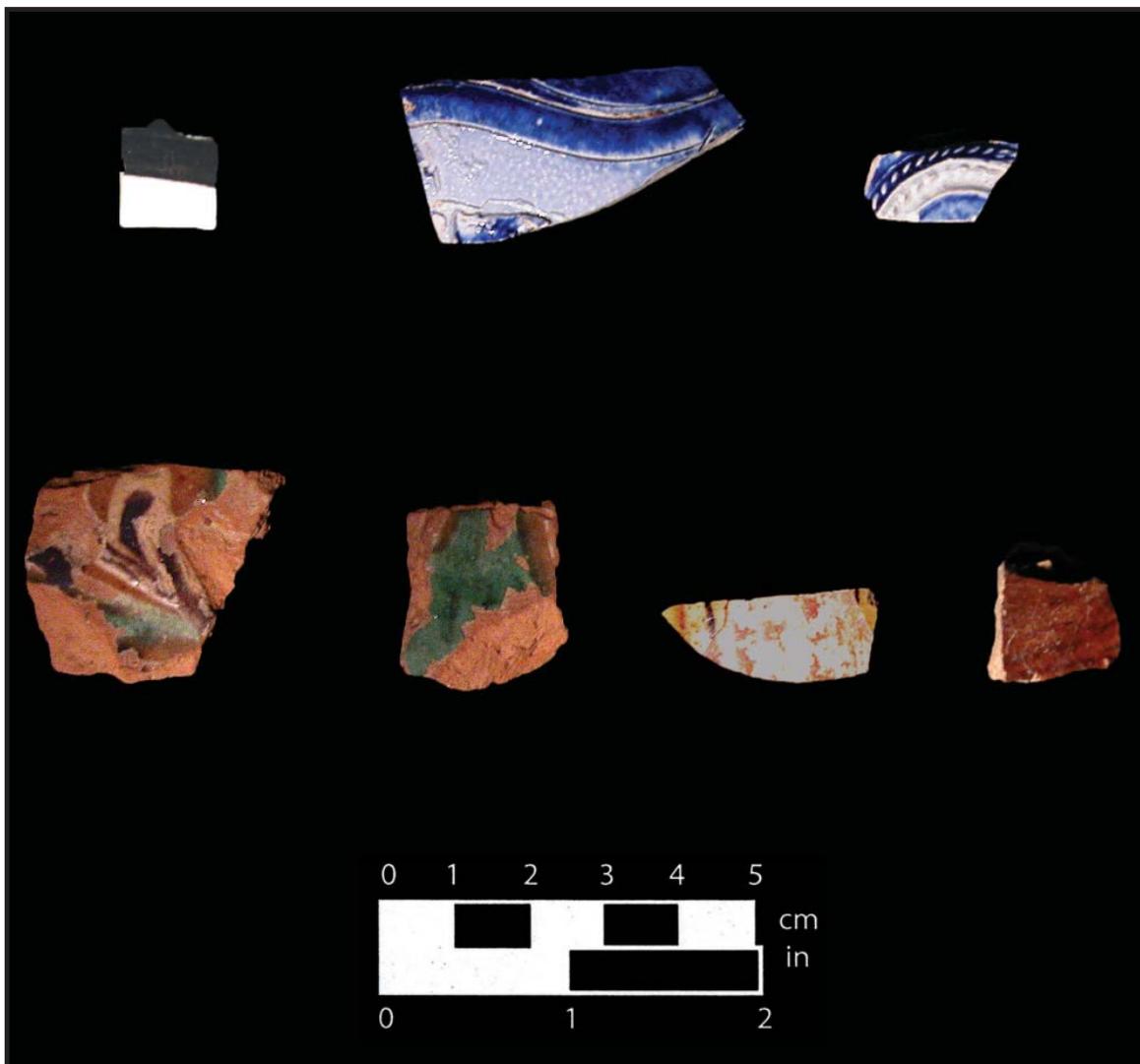


Plate 4.30. Area 9 - Selected historic ceramic artifacts. Top row (left to right): Dipped white salt glazed stoneware rim sherd, two Rhenish grey-bodied salt glazed stoneware body sherds with incised and sprigged decorations infilled with cobalt blue. Bottom row (left to right): two redware plate/platter body sherds with marbled brown and white slip with copper oxide under clear glaze, a buff-bodied Staffordshire ware body sherd with combed decoration, manganese mottled or Midlands mottled buff-bodied earthenware (Photographer: Josh Butchko, February 2010) [HRI Neg.#09045/D7:009].



Plate 4.31. Area 9 - Selected Historic Artifacts: Top row (left to right): A grey spall-type gunflint musket size, a brass book hinge. Bottom row (left to right): A cast iron cauldron ear, a wrought iron oxen shoe (Photographer: Josh Butchko, February 2010) [HRI Neg.#09045/D7:010].

Adena, which is better expressed in Delaware. The association of Meadowood with Adena cultures has been noted elsewhere in the Middle Atlantic.

Two historic artifact clusters were located within this area. In the first, artifacts date to the second and third quarters of the 18th century when William Carden (*circa* 1720-1760) owned the property. The cluster of 18th-century artifacts may well reflect the site of William Carden's house. The site falls near an unnamed cart road leading away from Bohemia Landing. A single ox shoe recovered from the site recalls the use of these roads in the late 1600s "...Sloops also of 30 tons are carried overland in this place on certain sleds drawn by oxen and launched again into the water on ye other side" (Benjamin 1679, cited in Hunter Research, Inc. 2009:4-9).

The evidence from the feature partially excavated in Excavation Unit 1 suggest that it is the remains of a smokehouse associated with William Carden. Eggshell fragments were recovered from the feature. Before being placed in a smokehouse, some meats were salted in a brine solution. A hen egg was placed in the solution to check the salinity. When the egg floated the solution contained enough salt. Hard woods were generally chosen to smolder with fruitwood added for flavor. The remains of hardwood charcoal and charred peach pits recovered from the feature likely represent this process. The greasy texture of the soil could have resulted from fat dripping from the hanging meats over a long period of time. Soil samples taken from the feature and away from the feature (control sample) can test this hypothesis. One-inch soil cores projected the limits of the feature to be six feet north/south by 6.8 feet east/west leaving about 50 percent unexcavated.

The second cluster of artifacts dates to the second half of the 19th century, when the Holton family owned the property. This cluster contained a small array of domestic artifacts is thought to be the possible loca-

tion of "another dwelling on the farm" where African-American servants and farm laborers were living (Herman 1984:6).

*Future Research:*

Although few Meadowood projectile points are reported from Delaware, this may in part be due to the fact that they have not been recognized. Once their characteristics are understood they are easily identified. It is considered likely that unrecognized Meadowood projectile points will be found in private collections and may even be in the Delaware State Museum collections.

At this point we know very little about William Carden, what more is there to learn about him? Was he merely a farmer or did he play a bigger role in local history?

What is the precise course of the un-named cart road? Does it connect with the know cart road to Reedy Island?

Charcoal remains found in the possible smokehouse could be researched identified as to species.

**AREA 10  
(FIGURES 4.14 AND 4.15; PLATES 4.32  
THROUGH 4.35)**

**Archaeological Resources Assigned Delaware Site  
Numbers: Holton / Cann Historic Site, 7NC-F-129,  
N00107**

*Area-specific Field Methods:*

As with adjacent areas, visibility in this area between 85 and 95 percent. A White Spectrum metal detector was again employed to survey the areas where historic artifacts were clustered on the surface. Artifact clus-

ters were then tested through six shovel tests and two excavation units each measuring 2.5 feet by 10 feet. A total of 1,813 artifacts were recovered from this area.

*Artifact Clusters:*

Prehistoric artifacts dating to the Woodland I period were found in clusters along a low linear knoll located flanked by relict stream heads leading into the Black Marsh. Historic artifacts dating to the first half of the 19th century were clustered in the same position as the prehistoric site.

*Shovel Tests:*

Only two shovel tests produced prehistoric artifacts while five shovel tests produced historic artifacts.

*Excavation Units: (Figure 4.15; Plates 4.32 and 4.33)*

Excavation Unit 1 was located near the center of the historic artifact cluster in an area where the metal detector had encountered a strong anomaly beneath the plowzone. Context 1, an active sandy clay loam plowzone, contained a few sherds of redware and whiteware with vessel glass (olive) and flat window glass (pale aqua). Removal of the plowzone revealed a dark yellowish brown circular stain (Contexts 2 and 3) and a large fin-shaped piece of cast iron in the center of the unit (Plate 4.32). Two other smaller amorphous stains (Contexts 4/5 and 7), possibly postholes, were present near the east wall of the unit. Context 3 which extended 0.65 feet below the plowzone was excavated from the cut (Context 2) of the pit revealing a large cast iron moldboard plowshare embossed "OLIVER CHILLED". This plowshare was manufactured by the Oliver Chilled Plow Works of South Bend, Indiana circa 1880 to 1929. Lying under the plowshare were sections of four different types of barbed wire (Plate 4.33), burnt brickbats, and angular cobbles. Context 4, which extended down 0.35 feet below the base of the plowzone within the cut [Context 5], contained

small bits of brick and charcoal flecking. Context 7 went off in different directions and was clearly a rodent disturbance. All three features were cut through a mottled silty loam deposit [6] ranging from 0.25 to 0.6 feet thick. This deposit may represent the rodent disturbed soil from under a building. Context 6 had developed directly over the sterile sandy loam B horizon [8].

Excavation Unit 2 was placed along the low knoll south of Excavation Unit 1 closer to the woods in an area where thermally altered rock fragments and quartz debris were present. Context 1, an active silty loam plowzone, yielded one chert flake and one thermally altered rock fragment. Historic material dating to the first half of the 19th century consisted of redware, whiteware, vessel glass cut nails and red brick fragments. The subsoil [2], a clayey sand with gravel, showed no signs of cultural disturbance.

*Research from Phase IA:*

The Phase IA research indicates this area is part of the Boyce Boaz Tract (1783 to 1785). Owners critical to understanding the material culture were William Cann circa 1812-1836 and the Holton Family 1838-1886. The research also points out the importance of unnamed cart road running northeast from Choptank Road as a part of the early road network.

*Predictive Model Assessment:*

The sensitivity predictive model formulated by A.D. Marble rated this area as moderate for prehistoric sites and high for historic sites. The Hunter Research, Inc. Phase IA report felt this area had a high sensitivity for a historic house site (William Cann house) shown on the 1836 Orphan's Court map (Hunter Research, Inc. 2009:Figure 4.29)

*Key Artifacts:*



Plate 4.32. Area 10 - Excavation Unit 1 top of a shallow pit feature showing a cast iron plow blade manufactured by the Oliver Chilled Plow Works of South Bend, Indiana c. 1880 to 1929 (Photographer: Dan O'Toole, December 2009) [HRI Neg.#09045/D3:145].



Plate 4.33. Area 10 - Excavation Unit 1 a cache of barbed wire found underneath of the plow blade (Photographer: Dan O’Toole, December 2009) [HRI Neg.#09045/D3:163].

**Prehistoric** (Plate 4.34)

A large Cohansey quartzite – Smyrna Beach stone equilateral triangular projectile point, Late Carey Complex of the Woodland I period

Normanskill grey chert narrow bladed contracting stemmed projectile point

A narrow bladed quartz projectile point tip

Jasper and quartz cores

Quartz spokeshave

Debitage (quartz with some jasper)

A single ceramic sherd, sand tempered Hell Island type of the Webb and Delaware Park Complexes of the Woodland I period.

**Historic** (Plate 4.35)

Grey-bodied salt glazed stoneware with hand painted cobalt decoration

Pearlware (blue shell edge)

Whiteware (annular mocha, blue, black and purple transfer print, sponge, and hand painted polychrome floral decoration)

Yellowware

Redware (clear lead, manganese, black and slip-trailed)

Vessel glass (pale aqua and olive)

Iron horse shoe

Cast iron cauldron fragments

An iron pulley

An iron adz head

An iron pontil

Assorted iron hardware

A cast iron moldboard plow embossed “OLIVER CHILLED” produced by the Oliver Chilled Plow Works of South Bend, Indiana *circa* 1880-1929

Four different types of barbed wire (first patented in 1867)

A cast brass finial

A brass flask cap

A U.S. Indian Head penny dated 1900

An over-fired brickbat with a large dog’s partial paw impression

*Interpretation:*

Prehistoric artifacts from this area are similar to those from Area 9: lost or discarded projectile points, exhausted quartz cores, scraping, and cutting tools, debitage (resulting from the production and curation of tools) with thermally altered rocks (for heating and cooking). In this area the frequency of thermally altered rock fragments is proportionately higher than other areas.

Historic artifacts recovered from this area are certainly related to the William Cann house site *circa* 1812-1836. In 1836 this lot is described as having “an old cabin [sic] on the premises, not in tenable condition and not worth repair. There is no other building thereon” (New Castle County Orphans Court Case Files, William Cann, 1835-1840). Jacob Harman possibly built the house as early as 1785. The land was then described as “a certain messuage or tenement and a piece of parcel of land” (New Castle County Deed G2/251).

**AREA 11  
(FIGURE 4.16; PLATES 4.36 THROUGH 4.38)**

**Archaeological Resources Assigned Delaware Site Numbers: None**

*Area-specific Field Methods:*

Consecutive rains after plowing and disking made conditions suitable for surface collection, but the quick growth of the winter wheat soon reduced visibility to less than 80 percent across the field. Artifact clusters were tested employing six shovel tests. A total of 52 artifacts were recovered from this area.



Plate 4.34. Area 10 - Selected Prehistoric Artifacts. (left): A large Co-hansey quartzite – Smyrna Beach stone equilateral triangular projectile point, Late Carey Complex of the Woodland I period. (right): A Normanskill grey chert narrow bladed contracting stemmed projectile point (Photographer: Josh Butchko, February 2010) [HRI Neg.#09045/D7:013].



Plate 4.35. Area 10 - An over-fired red brick bat with a large dog's partial footprint (Photographer: Josh Butchko, February 2010) [HRI Neg.#09045/D7:012].



Plate 4.37. Area 11 - Field crew (Glen Mellin, Tim Hitchens, Joelle Browning, Jim Martin and Glen Keeton) conducting a surface collection looking east (Photographer: Sue Ferenbach, November 2009) [HRI Neg.#09045/D3:133].



Plate 4.38. Area 11 - Selected Artifacts (left): thermally reddened jasper narrow-bladed, straight stemmed projectile point with a distal fracture. (right) A solarized pale violet bottle neck and closure fragment (Photographer: Josh Butchko, February 2010) [HRI Neg.#09045/D7:014].

*Artifact Clusters:*

A light scatter of historic artifacts was clustered near the eastern edge of this area.

*Shovel Tests:*

No prehistoric artifacts were produced from shovel testing while only three historic artifacts were produced from two shovel tests (a sherd each of white-ware and redware from Shovel Test 1101 and a small red brick fragment from Shovel Test 1102).

*Research from Phase IA:*

The Phase IA research indicates this area is part of the original Boyce Boaz Tract (1783 to 1824). An owner critical to understanding the material culture was John W. Callahan (1842 to 1855).

*Predictive Model Assessment:*

The sensitivity predictive model formulated by A.D. Marble rated this area as nil for prehistoric sites and high for historic sites. The Hunter Research, Inc. Phase IA report felt this area had a high sensitivity for historic sites based on a house (Callahan) shown in the general vicinity on the 1849 Rea and Price map.

*Key Artifacts (Plate 4.38):*

**Prehistoric**

A red jasper narrow bladed, straight stemmed projectile point

A single Brandywine quartzite flake

**Historic**

Solarized pale violet vessel glass

*Interpretation:*

Prehistoric artifacts from this area were limited to a few pieces. The only diagnostic artifact, a stemmed projectile point, may have served multiple functions.

Historic artifacts may be from the periphery of a sheet midden related to the nearby former J.W. Callahan house site, located to the east of the current alignment. This house site is shown as early as an 1836 as a two-story building with a chimney at one end on a plot of William Cann's land. Callahan owned the property from 1842-1855.

**AREA 12  
(FIGURE 4.17; PLATES 4.39 AND 4.40)**

**Archaeological Resources Assigned Delaware Site Numbers: None**

*Area-specific Field Methods:*

As in Area 11, the growth of the winter wheat quickly reduced visibility to less than 80 percent across the surveyed area. Identified artifact clusters were tested employing six shovel tests. A total of 90 artifacts were recovered from this area.

*Artifact Clusters:*

Although artifacts were recovered from the plowed field, no clustering was discernable.

*Shovel Tests:*

Prehistoric artifacts were not recovered. Three shovel tests produced historic artifacts (Shovel Test 1202 yielded window glass, Shovel Test 1203 redware and Shovel Test 1206 slag [discarded]).



Plate 4.39. Area 12 - Field crew crew (Glen Mellin, Tim Hitchens, Joelle Browning, Jim Martin, Dan O'Toole and Glen Keeton) conducting a surface collection looking north (Photographer: Sue Ferenbach, November 2009) [HRI Neg.#09045/D3:075].

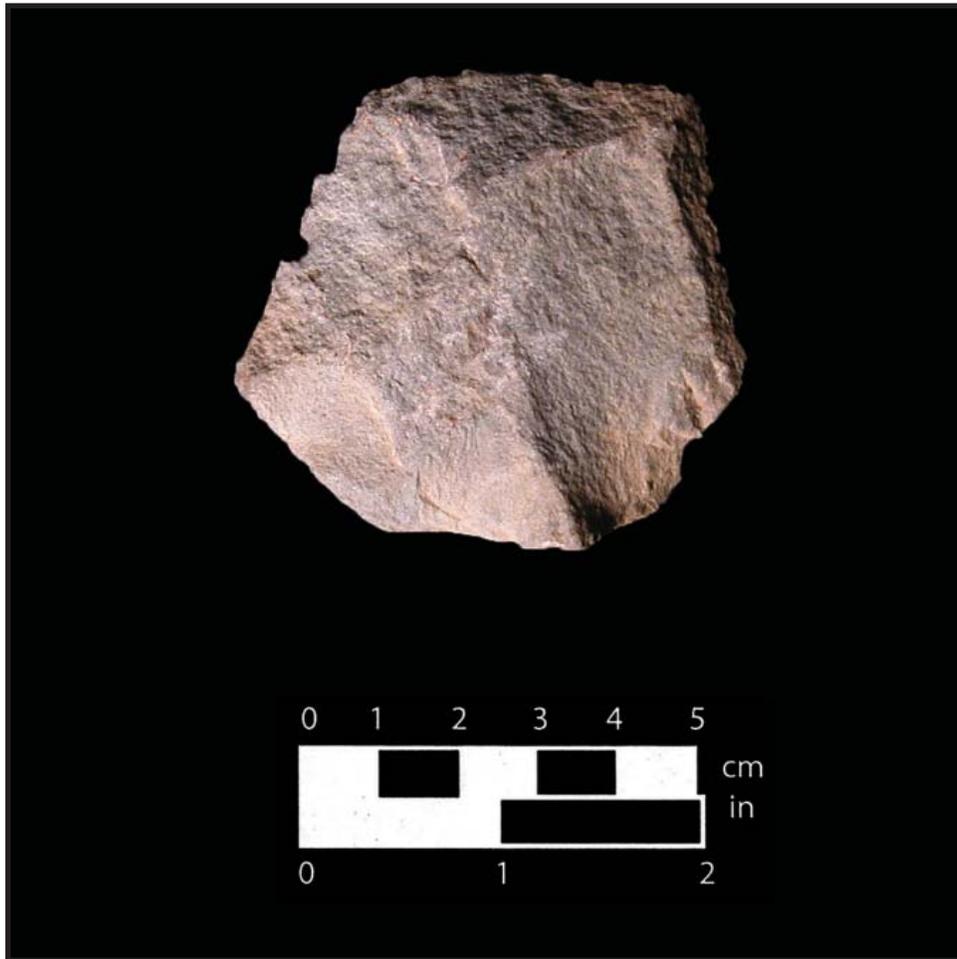


Plate 4.40. Area 12 - A large grey argillite flake blank (Photographer: Josh Butchko, February 2010) [HRI Neg.#09045/D7:015].

*Research from Phase IA:*

The Phase IA research indicates this area is part of the original Boyce Boaz Tract (1783 to 1824). An owner critical to understanding the material culture was John W. Callahan (1842 to 1855).

*Predictive Model Assessment:*

The sensitivity predictive model formulated by A.D. Marble rated this area as nil for prehistoric sites and low for historic sites. The Hunter Research, Inc. Phase IA report felt this area had some sensitivity for prehistoric sites situated near the headwaters of the Black Marsh and choose this area as a test of the A.D. Marble model. The results support the A.D. Marble assessment.

*Key Artifacts (Plate 4.38):*

Prehistoric

A large argillite flake blank

A quartz core

Two quartz biface fragments

A very small piece of ceramic, sand tempered (unidentified)

Thermally altered rocks

Historic

Grey bodied salt-glazed stoneware with brushed cobalt blue decoration

*Interpretation:*

Although prehistoric materials from this area were limited they reflect the remains of a tool kit left behind at a short-term hunting camp near spring heads and headwaters along the mid-peninsula ridge in central Delaware. Historic artifacts recovered from this area are likely outliers related to the John W. Callahan Farm (1842-1855) located nearby to the west outside of the project corridor.

**AREA 13**

**(FIGURES 4.18 AND 4.19; PLATES 4.41, 4.42 AND 4.43)**

**Archaeological Resources Assigned Delaware Site Numbers: Armstrong Tenant Historic / Prehistoric, 7NC-F-131, N14510; Cann Tenant/Amos Bell House Site 7NC-F-160, N5282**

*Area-specific Field Methods:*

**North side of Armstrong Corner Road:** Artifact clusters identified in surface collection were tested with 11 shovel tests. A total of 176 artifacts were recovered from this area. Severe weather conditions and prolonged below-freezing temperatures caused the soils to freeze to an average depth of eight inches. Testing under these circumstances normally leads to a loss of information from the frozen soils. In order to maintain the field schedule the crew employed an innovative method of excavating the shovel tests (Plate 4.41). John Ferenbach purchased a hand-held torch of the type normally used in roofing, and attached it with a four-foot hose to a propane tank. He then took an 18-inch diameter domed metal smoker lid and cut a small hole in the top in which the lit torch was inserted. Within a few minutes the soils began to thaw and the warm soils could be shoveled into screens for sifting. This process took about 15 minutes per shovel test and used about \$1.75 in propane per test.

*Artifact Clusters:*

Non-diagnostic Prehistoric material, and historic artifacts dating to the first half of the 19th century, were loosely clustered around the head of a relict stream which drains into the Spring Mill Branch.



Plate 4.41. Area 13 - John Ferenbach and Dan O'Toole shovel testing with the aid of a propane torch looking southeast (Photographer: Sue Ferenbach, January 2010) [HRI Neg.#09045/D5:111].

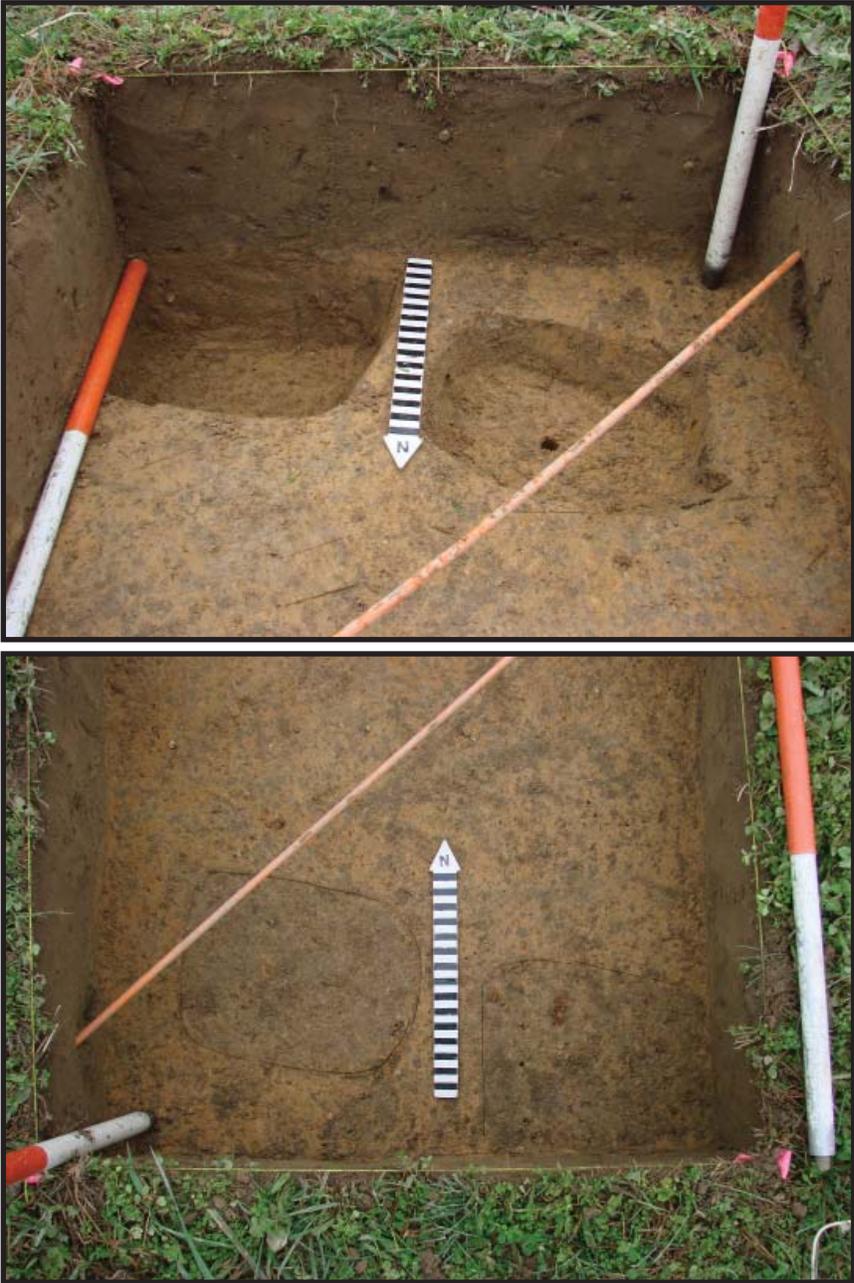


Plate 4.42. Area 13 Cann Tenant/Amos Bell Site (7NC-F-160, N5282) . Two views of Excavation Unit 1 A. General view of unit facing north, with unexcavated dark fill (context 5) of rectangular post visible in southwest corner, and unexcavated dark fill (context 3) of rectangular post visible in southeast corner. 10070 D3.001, November 2010. B. Rectangular post cuts 4 (on left) and 6 (on right) after excavation. View facing south. 10070 D3.009, November 2010.

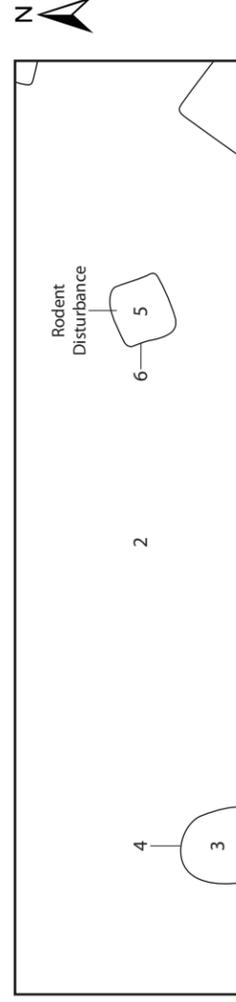
### Excavation Unit 1 Plan View



#### Context List

Context	Description [Interpretation]	Munsell
3	Silty loam [historic post hole]	10 YR 5/4
4	Cut containing context 3	--
5	Silty loam [historic post hole]	10 YR 5/4
6	Cut containing context 5	--

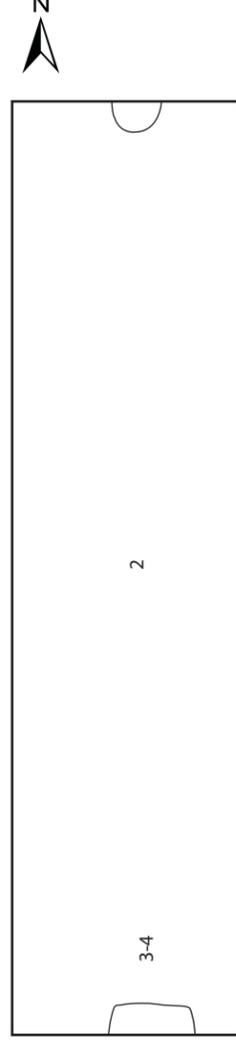
### Excavation Unit 2 Plan View



#### Context List

Context	Description [Interpretation]	Munsell
1	Sand loam [Pz horizon]	10 YR 3/4
2	Silty loam [B horizon]	10 YR 6/4
3	Sand loam [historic post hole]	10 YR 3/3
4	Cut containing context 3	--
5	Silty loam	10 YR 3/3
6	Cut containing context 5	--
7	Silty loam [historic post hole]	10 YR 3/4
8	Cut containing context 7	--

### Excavation Unit 3 Plan View



#### Context List

Context	Description [Interpretation]	Munsell
1	Silty loam [Pz horizon]	10 YR 3/4
2	Silty loam [B horizon]	10 YR 5/6
3	Silty loam [historic post hole]	10 YR 4/4
4	Cut containing context 3	--
5	Silty loam [historic post hole]	10 YR 4/4
6	Cut containing context 5	--



Figure 4.19. Plans of Excavation Units 1 through 3, showing historic postholes

*Shovel Tests:*

Four shovel tests produced prehistoric artifacts while nine shovel tests produced historic artifacts.

**South Side of Armstrong Corner Road:** The portion of Area 13 on the south side of Armstrong Corner Road was tested in November 2010. The former Amos Bell house (a “free black”) is thought to have been in this general location. The current house and septic system have disturbed much of the property, but the front yard was considered to retain some integrity. Thirty-three shovel tests and three excavation units were placed here.

Shovel Testing recovered 209 artifacts from the 33 tests. The highest densities were in the northeast corner of the site immediately south of Armstrong Corner Road and east of the driveway to the modern house. Shovel Tests 24 and 30 had the highest recovery. Nineteen undiagnostic prehistoric items were recovered, comprising debitage and thermally altered rock. The remainder of the artifacts comprised building materials and late 18th- and 19th-century ceramics

The three excavation units (Figure 4.18) were placed in the northeastern portion of the tested area. Excavation Units 1 and 2 were east of the driveway and Excavation Unit 3 to the west. All located historic posthole features. A total 1,082 artifacts were recovered

Excavation Unit 1 (Figure 4.19; Plate 4.42) exposed a mottled clay loam B horizon (context 2) at a depth of about 1 foot, generally overlain by a silty loam plowzone (context 1). At the southern end of the unit two rectangular flat-bottomed pit features (fill 3, cut 4; fill 5, cut 6) were identified. These features had been cut into context 2 and the silty loam fills were virtually identical to the overlying plowzone context 1. Both the plowzone and the fills yielded historic artifacts in some quantity, a total of 568 being recovered. In

order of frequency redware, whiteware, pearlware and creamware made up the bulk of the recovered ceramics, pointing to an occupation centering on the first half of the 19th century. Brick fragments (129 examples) and 22 pieces of window glass suggest the presence of a building nearby.

Similar features and stratigraphy were recorded in Excavation Units 2 and 3 (Figure 4.20), with a total of two postholes and one rodent disturbance in Excavation Unit 2, and two postholes in Excavation Unit 3. A total of 305 artifacts were recorded from Excavation Unit 2 and 209 from Excavation Unit 3. Historic Ceramic frequencies were the same as those for Excavation Unit 1.

*Research from Phase IA:*

The Phase IA research indicates this area is part of the original Boyce Boaz Tract (1783 to 1785). An owner critical to understanding the material culture was Amos Bell (1838 to 1865).

*Predictive Model Assessment:*

The sensitivity predictive model formulated by A.D. Marble rated this area as nil for prehistoric sites and high and low for historic sites. The Hunter Research, Inc. Phase IA report felt this area had sensitivity for historic sites (Amos Bell house) associated with the early road (Armstrong Corner Road) network. The area tested supports the A.D. Marble model and the Hunter research historic assessment.

*Key Artifacts (Plate 4.43):*

**Prehistoric**

- Large Newark jasper middle stage biface
- A chert pebble core
- Quartz shatter
- Thermally altered rock fragments



Plate 4.43. Area 13 - A Newark jasper middle/late stage biface (Photographer: Josh Butchko, February 2010) [HRI Neg.#09045/D7:016].

### Historic

Redware (clear lead glazed, manganese glazed, black, and slip-trailed)

Grey-bodied stoneware

Pearlware (hand painted blue decoration)

Whiteware

Pale aqua vessel glass

### *Interpretation:*

Although prehistoric materials from this area were limited they probably reflect the presence of short-term hunting camps near a relict springhead along the mid-peninsula ridge in central Delaware. At this site the tool kit is represented by a cutting tool, a chert pebble core (refurbishing the tool kit), and thermally altered rocks for heating and cooking.

Historic artifacts recovered from around the relict springhead suggest a small tenant dwelling occupied this area for a short term during the first half of the 19th century. Work at the Cann Tenant/Amos Bell Site (7NC-F-160, N5282) shows the presence of shallow, probably truncated, posthole features and 19th- and 20th-century artifacts in a sheet- midden configuration.

Testing of the Cann Tenant/Amos Bell House Site 7NC-F-160, N5282 on the south side of Armstrong Corner Road pointed to an occupation primarily in the first half of the 19th century with one or more structures lying near the road. The documentary evidence suggests that this data may relate to the William Cann ownership of 1816-1834 rather than to the potentially more historically significant Amos Bell. Bell, who bought the land in 1838 and lived here until after 1849, was living in a house further west of this location by 1853 (Hunter Research Inc. 2009:Figure 4.33).

### AREA 14

(FIGURE 4.20; PLATES 4.43-4.45)

**Archaeological Resources Assigned Delaware Site Numbers: None**

### *Area-specific Field Methods:*

This small area, too small for individual plowing, was shovel tested only, employing 17 tests along a 50-foot grid. The locations of these tests were mapped using a handheld Topcon GMS-2 data collector with a built-in GPS unit. A total of 43 artifacts were recovered from this area.

### *Shovel Tests:*

Shovel Tests 1404 and 1413 produced small bits of thermally altered rocks and a small probable jasper flake. Nine shovel tests produced historic artifacts dating from the late 19th century through the 20th century.

### *Research from Phase IA:*

The Phase IA research indicates this area is part of the original Boyce Boaz Tract (1783 to 1785). An owner critical to understanding the material culture was Amos Bell (1838 to 1865).

### *Predictive Model Assessment:*

The sensitivity predictive model formulated by A.D. Marble rated this area as nil for prehistoric sites and low for historic sites. The Hunter Research, Inc. Phase IA report felt this area had some sensitivity for historic sites associated with the early road network. The A.D. Marble model is supported here.



Plate 4.45. Area 14 - Field crew (Tim Hitchens, John Ferenbach and Jim Martin) shovel testing looking south (Photographer: Sue Ferenbach, November 2009) [HRI Neg.#09045/D2:012].

*Key Artifacts:*

**Prehistoric**

Two small thermally altered rock fragments

One small jasper flake

**Historic**

None of special interest

*Interpretation:*

The few prehistoric materials recovered from this area are non-diagnostic and are considered probable examples at best. Historic artifacts from this area are also few. They date from the late 19th century through the 20th century and originate from upper disturbed horizons related to recent construction.

**AREA 15  
(FIGURE 4.21; PLATES 4.46 AND 4.47)**

**Archaeological Resources Assigned Delaware Site Numbers: Armstrong Brickyard Site, 7NC-F-132, N14511**

*Area-specific Field Methods:*

This area was also too small for individual plowing, and was tested by 15 tests along a 50-foot grid, and one excavation unit measuring 2.5 feet by 10 feet. A total of 830 artifacts were recovered from this area.

*Shovel Tests:*

Two shovel tests produced prehistoric artifacts. Thirteen shovel tests produced historic artifacts. Under-fired brickbats encountered in Shovel Test numbers 1506, 1511 and 1512 are from a possible brick clamp that was further investigated.

*Excavation Unit: (Plate 4.47)*

Excavation Unit 1 was placed near Shovel Test 1511, which had encountered a possible brick clamp. In anticipation of an impending weekend snow storm the unit was covered with thermal pads to prevent the ground from freezing and the unit was marked out with tall pin flags. As expected, the area was hit with 20 inches of snow, which eclipsed our marker flags. The crew cleared the general area and quickly relocated the marker flags. The snow was then cleared down to the surface of the unit and a surrounding area for sifting the soils.

Excavation into Context 1, an active plowzone, did not encounter any of the predicted brickbats. The removal of the plowzone caused the melting snow from the surrounding area to rush into the open unit. It was decided to proceed using three round shovel test-like holes positioned two at either end and one in the center to remove the subsoil. It was hoped that these holes would act like a sump so that one end or the other could be fully examined, but all three holes immediately encountered a dense deposit of brickbats down to 2.2 feet below the surface. A soil sample was taken back to the lab for flotation. Artifacts recovered from the sample consisted of small brick fragments (mainly underfired), small bits of coal, coal slag and clinker, the latter providing evidence that the brickyard was coal fired. The only other artifacts recovered from the subsoil were a pale aqua canning jar fragment embossed "PAT NOV 26" (1867), a single sherd of ironstone granite china, and an oyster shell.

*Research from Phase IA:*

The Phase IA research indicates this area is part of the Armstrong Farm 1820 to the present. The development of Armstrong's Corner included a brickyard owned by Benjamin Armstrong in 1878.



Plate 4.47. Area 15 - Excavation Unit 1 showing super saturated soils looking east (Photographer: William B. Liebeknecht, December 2009) [HRI Neg.#09045/D5:46].

*Predictive Model Assessment:*

The sensitivity predictive model formulated by A.D. Marble rated this area as nil for prehistoric sites and high and moderate for historic sites. The Hunter Research, Inc. Phase IA report felt this area had a high sensitivity for historic sites around Armstrong Corner.

*Key Artifacts:*

**Prehistoric**

None of special interest

**Historic**

Hand formed bricks (red, salmon, and yellow fire-brick?)

Canning jar fragments

*Interpretation:*

Excavation Unit 1 came down on an impenetrable deposit of bricks bats below the plowzone extending 2.2 feet below the surface. This may represent the clamp, drying beds or storage area within the Armstrong Brickyard *circa* 1875. The Armstrong brickyard was making bricks using wooden molds a technology that was by 1875 outdated. Coal to fire the brickyard clamps would have been readily available via the nearby rail line. Brickyards as seen in other areas have served as places of employment for free African Americans (Orr and Baton 2010).

*Future Research:*

Brickyards, as documented in other areas, served as places of employment for free African Americans (Orr and Barton 2010). Were any members of the African American community employees of the brickyard? Where did the clay to make the bricks originate from? How long was the brickyard in business?

**AREA 16**  
**(FIGURE 4.22; PLATES 4.48 AND 4.49)**

**Archaeological Resources Assigned Delaware Site Numbers: None**

*Area-specific Field Methods:*

Another area too small for individual plowing, 16 was examined through 40 tests along a 50-foot grid, and one excavation unit measuring 2.5 feet by 10 feet. A total of 107 artifacts were recovered from this area.

*Shovel Tests:*

One shovel test produced prehistoric artifacts while 29 shovel tests out of 40 shovel tests produced historic artifacts. The artifacts were evenly scattered across the boundaries of Area 16, suggesting they were part of a sheet midden that has been impacted by decades of cultivation.

*Excavation Units:*

Excavation Unit 1 was located near a shovel test that had produced 19th-century artifacts. Context 1, an active sandy loam plowzone, contained a secondary jasper flake and a black chert projectile point tip. The plowzone also contained small fragments of redware, window glass vessel glass (clear and pale aqua), small bits of red brick, and coal. These artifacts are suggestive of a well-trampled sheet midden deposit. The subsoil (Context 2), a clayey loam, showed no signs of cultural disturbance.

*Research from Phase IA:*

The Phase IA research indicates this area is part of the Armstrong Farm, 1820 to the present. A house belonging to the Armstrong family was in this general location during most of the 19th century.



Plate 4.48. Area 16 - Field crew (Tim Hitchens and Glen Mellin) shovel testing looking west (Photographer: Sue Ferenbach, November 2009) [HRI Neg.#09045/D2:011].

*Predictive Model Assessment:*

The sensitivity predictive model formulated by A.D. Marble rated this area as nil for prehistoric sites and high and moderate for historic resources. The Hunter Research, Inc. Phase IA report felt this area had a high sensitivity for historic sites (Mrs. Armstrong house).

*Key Artifacts:*

**Prehistoric**

A single possible jasper flake was recovered from Shovel Test 1634

A chert projectile point tip from EU1, Context 1

A jasper flake from EU1, Context 1

**Historic**

Whiteware (annular mocha, blue transfer and plain)

Ironstone granite china

Redware

Flat window glass

Vessel glass (pale aqua and clear)

Cut nails

Brick (some glazed)

*Interpretation:*

Prehistoric artifacts are represented by only a couple of artifacts suggesting some sort of unidentified transient behavior. Historic artifacts recovered from this area may be at the periphery of a sheet midden related to the nearby former house owned by Mrs. Elizabeth Armstrong.

**AREA 17  
(FIGURE 4.23; PLATES 4.50 THROUGH 4.53)**

**Archaeological Resources Assigned Delaware Site Numbers: Spring Mill Branch Prehistoric Site 2, 7NC-F-146, N14526; Dale Historic Site 7NC-F-134; N14513**

*Area-specific Field Methods:*

Stakes left in this area by survey crews conducting soil borings confused the farmer and a two-acre portion of the field intended for plowing and disking was left unplowed. Consecutive rains made conditions suitable for surface collection on the plowed portion of the field. The unplowed areas exhibited less than perfect visibility of only about five percent, but was both intensively surface collected and shovel tested (Plate 4.50). Twenty-four shovel tests examined observed artifact concentrations. As was the case in Area 13, severe weather conditions and prolonged temperatures below freezing caused the soils to freeze to an average depth of eight inches. Soils were again successfully subjected propane thawing. A horse corral located on the adjacent property, Parcel 196, was inaccessible during this phase of work and should be tested when the property is acquired by the State of Delaware. A total of 1,472 artifacts were recovered from this area.

*Artifact Clusters:*

Historic artifacts dating the Samuel and William Dale period (1854 to 1915) were found in three distinct clusters. The first contained mainly red brickbats, the second an array of domestic artifacts such as ceramics, glass and metal, and the third a large number of red brick with glass and ceramic artifacts.



Plate 4.50. Area 17 - Field crew (Bill Liebeknecht, Glen Mellin, Tim Hitchens, Joelle Browning, Jim Martin, Dan O'Toole and Glen Keeton) testing under low visibility condition looking north (Photographer: Sue Ferenbach, January 2010) [HRI Neg.#09045/D5:091].

*Shovel Tests:*

Only two shovel tests produced prehistoric artifacts while all 14 shovel tests produced historic artifacts.

*Research from Phase IA:*

The Phase IA research indicates this area was part of Noxon's Adventure 1734 to *circa* 1798. The ownership of African Americans Samuel Dale (1854 to 1873) and his son William Dale (1873 to 1915) provide the focus of historical and archaeological interest.

*Predictive Model Assessment:*

The sensitivity predictive model formulated by A.D. Marble rated this area as moderate and low for prehistoric sites and high and low for historic sites, based on "S. Dale" depicted on the 1849 Rea and Price map. The Hunter Research, Inc. Phase IA report felt this area had high sensitivity for prehistoric sites near the creek and high sensitivity for a documented pre-Civil War free black homestead.

*Key Artifacts:*

**Prehistoric** (Plate 4.51)

Thermally altered rock fragments (possibly historic)  
Quartz chopper  
Quartz biface fragment  
Quartz and jasper cores  
Two quartzite hammerstones

**Historic** (Plates 4.52 and 4.53)

Ironstone granite china  
Whiteware (cut sponge, blue shell edge and annular decorations)  
Redware (manganese, clear lead and black glazed)  
Porcelain (European)  
Grey-bodied salt-glazed stoneware  
Buff-bodied stoneware (Bristol slip glaze)  
Yellowware (plain and flint enameled)

Porcelain doll hand (well-worn, possibly a charm. Plate 4.53)

White clay tobacco pipe fragments  
Pale aqua vessel glass fragments  
Solarized pale violet beverage bottle closure  
Red brick  
Slate pencil fragment  
Cut nails  
Iron spikes  
Iron hoe blade

*Interpretation:*

Historic artifact clustering suggests the presence of at least three buildings related to the Samuel/William Dale site dating from 1854 to 1915, a house, a well or springhouse and an outbuilding of some kind. This site was occupied by two generations of free blacks both pre- and post American Civil War. This site is also important in that unlike other nucleated pre-Civil War free black communities it is isolated from other free black houses as the Dale family owned 20 acres, 36 perches of land (a similar acreage to another African-American, Amos Bell, who also lived in this community). A better understanding of the dynamics of this community is needed.

*Future Research:*

The role in which Samuel Dale, free black landholder, played in his community needs further exploration through church records and oral interviews. The possibility of the presence of a midwife at the site also needs to be examined. Samuel Dale's will of 1870 indicates there were houses on the north part of the farm. Was this the second dwelling for his son William, or was it a vague reference to other building on the farm such as a spring house or well house?



Plate 4.51. Area 17 - A large quartzite bifacial chopper (Photographer: Josh Butchko, February 2010) [HRI Neg.#09045/D7:019].

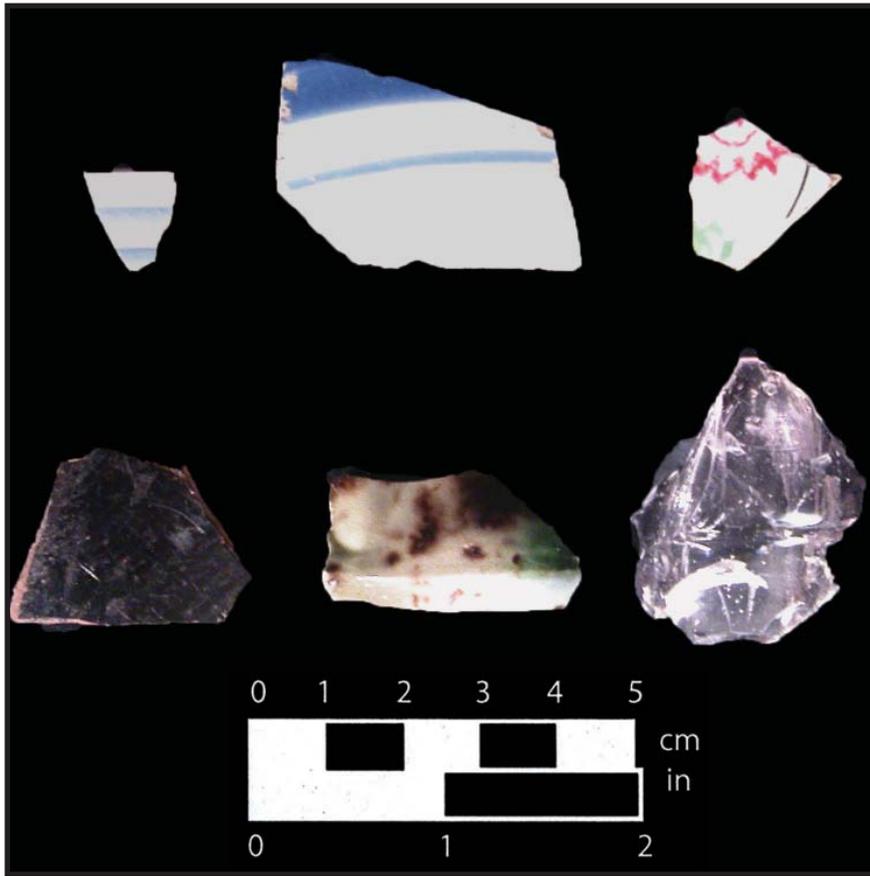


Plate 4.52. Area 17 - Selected Historic Artifacts. Top row (left to right): an ironstone granite china hollowware rim sherd with blue annual decoration, a buff-bodied stoneware hollowware body sherd with Bristol slip and blue annular decoration, whiteware body sherd with interior polychrome cut sponge decoration. Bottom row (left to right): a redware hollowware body sherd with interior/exterior manganese glaze, a yellowware hollowware base sherd with flint enameled glaze, a solarized pale violet blob-top beverage bottle closure (Photographer: Josh Butchko, February 2010) [HRI Neg.#09045/D7:018].

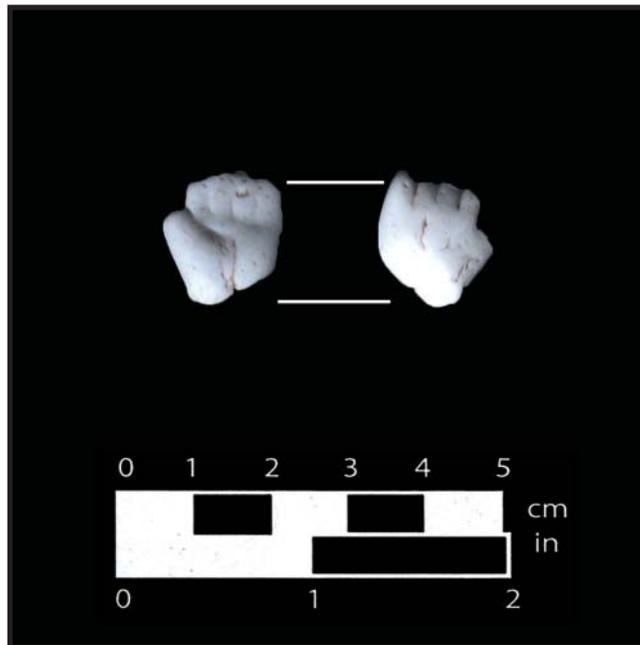


Plate 4.53. Area 17 - Porcelain doll hand with well-worn edges possibly a charm carried in a bag rubbing against other items for an extended period of time (Photographer: Josh Butchko, February 2010) [HRI Neg.#09045/D7:017].

**AREA 18  
(FIGURE 4.24; PLATE 4.54)**

**Archaeological Resources Assigned Delaware Site Numbers: None**

*Area-specific Field Methods:*

Artifact clusters identified in surface collection in the southern portion of the area were further examined through five propane-torch assisted shovel tests. A total of 13 shovel tests were deployed in the undisturbed areas north and west of the Staats farmhouse complex. The recent demolition of the Staats farmhouse complex heavily disturbed the immediate area around the house and garage.

*Artifact Clusters:*

Loose and low density clusters of prehistoric and historic artifacts were observed across the plowed field along low knolls.

*Shovel Tests:*

Three shovel tests produced prehistoric artifacts. Ten produced historic artifacts.

*Research from Phase IA:*

The Phase IA research indicates this area was part of the John Taylor Tract from 1680 to 1717.

*Predictive Model Assessment:*

The sensitivity predictive model formulated by A.D. Marble rated this area as moderate and low for prehistoric sites and moderate for historic sites. The Hunter Research, Inc. Phase IA report felt this area had a high sensitivity around the standing Staats Farm House, which had been documented during the architectural survey

*Key Artifacts*

**Prehistoric**

A chert pebble core

**Historic**

Grey-bodied salt glaze stoneware

Rockingham ware

Ironstone granite china

Redware

Vessel glass (clear, pale aqua and pale violet)

Brick

*Interpretation:*

Prehistoric artifacts are non-diagnostic and are scattered across a large area. Historic artifacts date to the period of the Staats farm house *circa* 1900-2009, which was heavily disturbed by recent demolition of the house and outbuildings.

**AREA 19  
(FIGURES 4.25 THROUGH 4.28; PLATES  
4.55 THROUGH 4.60,)**

**Archaeological Resources Assigned Delaware Site Numbers: Armstrong / Rogers House Site, 7NC-F-135, N14332**

*Area-specific Field Methods:*

This area is located across two residential properties on the east side of the current alignment of U.S. Route 301. These yards are planted in grass, shrubs and gardens, which are well maintained. A portion of the property within a horse corral was unavailable for testing during this phase of work and was finally tested in early 2011. Another area behind Parcel 205 was heavily disturbed by a septic field installed by the present owners and was not tested. In an effort to cause the least disruption to the well-manicured lawns



Plate 4.54. Area 18 - Field crew (Glen Mellin and Tim Hitchens) shovel testing looking northeast (Photographer: Sue Ferenbach, December 2009) [HRI Neg.#09045/D3:188].

a program of shovel testing was initiated. A total of 44 shovel tests along a 50-foot grid, and three excavation units each measuring 2.5 feet by 10 feet were excavated. A total of 708 artifacts were recovered from this area.

In the horse corral area at the southern end of the area an additional 63 shovel tests and two excavation units (4 and 5) recovered a further 2,350 artifacts.

*Shovel Tests:*

A grand total of 47 of 107 shovel tests produced prehistoric artifacts. Historic Artifacts were recovered from all of the 107 tests.

*Excavation Units: (Figures 4.25-4.28; Plates 4.55-4.60)*

Excavation Unit 1 was positioned adjacent to the fence around the horse corral in an area where shovel tests had produced both historic and prehistoric artifacts. Context 1, a poorly drained silty loam plowzone, contained both prehistoric and historic artifacts. Prehistoric artifacts consisted of blocky and secondary flakes of jasper and quartz. Historic ceramics consisted of creamware, pearlware (green and blue shell edge), whiteware (blue shell edge sponge, sprig, annular, variegated wave and loop-mocha, and blue transfer printed decorations), English ironstone granite china, and Chinese export porcelain. Glass comprised vessel glass (pale aqua, aqua, clear, and olive), olive green case/snuff bottle fragments, aqua flat glass widow light fragments. There were also cut nails and numerous red brick fragments.

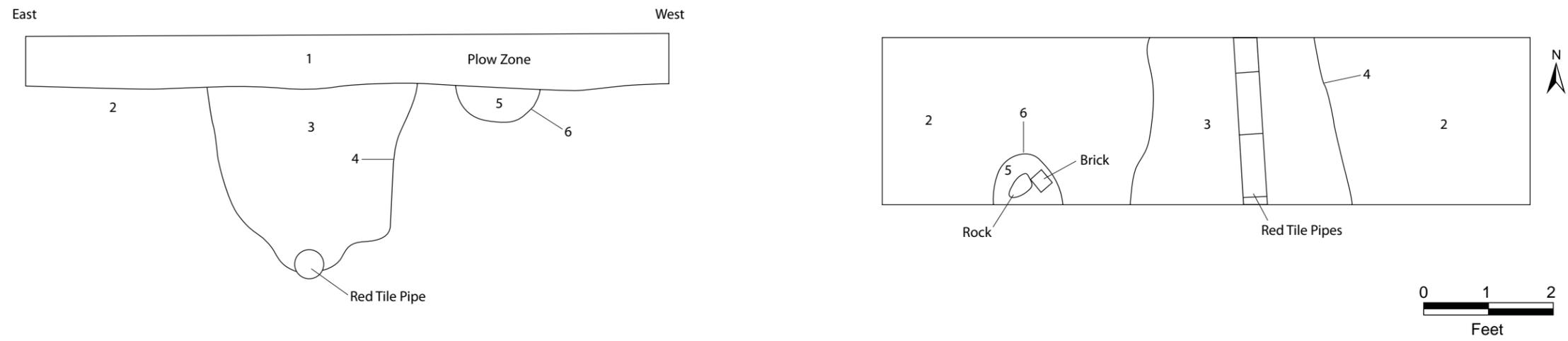
Once the plowzone (context 1) had been removed, a large dark linear trench-like stain (Contexts 3-4) was apparent in the center of the unit and a small circular stain (Contexts 5/6) was present along the south wall in the western half of the unit. The fill (Context 3) was removed from cut [4] of the trench, down to 3.8 feet below the surface. At this depth three contiguous

four-inch by 12-inch sections of a red terra cotta drain were found running north/south towards the Spring Mill Branch (Plate 3.43). The top of the drain was 3.4 feet below the existing surface. The fill [3] contained undecorated creamware, pearlware and whiteware, manganese glazed redware, vessel glass (olive), an olive green case/snuff bottle fragment, aqua flat glass widow light fragments, a cast iron cauldron fragment, a cut nail and numerous red brick fragments. Context 6 is a cut for a one-foot diameter posthole containing a large rock and a half of a brick at the bottom, evidently to provide for drainage so that the wooden post would not rot. Both features were cut through a sterile silty loam B-horizon (Context 2).

Excavation Unit 2 was located in the front yard west of the extant house on Parcel 203 between Shovel Tests 1933 and 1944. Context 1, a silty loam with pebbles and gravel, was a former plowzone containing both prehistoric and historic artifacts. Prehistoric artifacts from here comprised seven jasper flakes, a thermally altered jasper pebble, a tested jasper pebble, a quartz core fragment, and two pieces of thermally altered quartzite. Historic artifacts comprised a single sherd of pearlware, two small sherds of redware, two pale aqua crown top bottle fragments (likely Coca-cola) a small piece of roofing slate, and several small red brick fragments.

A second plowzone (Context 2), consisting of silty loam with pebbles and gravel, lay directly under the upper plowzone [1]. Context 2 contained both prehistoric (tested chert and jasper pebbles, and several pieces of jasper, chert and quartz debitage) and historic materials (single sherds each of creamware, agateware, and whiteware, two redware sherds, vessel glass (pale aqua, pale violet and clear), cut nail fragments, and several small red brick fragments. Context 2 overlay a silty clay loam (Context 3). One small chunk of glazed red brick was recovered from the top of Context 3 was probably intrusive, perhaps trampled in from Context 2.

Area 19 Excavation Unit 1  
South Profile and Plan

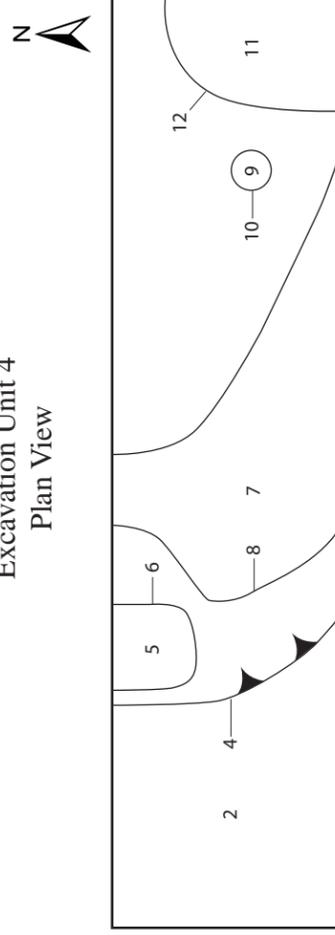


Context List

Context	Description [Interpretation]	Munsell
1	Silty loam [A horizon]	10 YR 4/4
2	Silty loam [B horizon]	10 YR 5/6
3	San loam [historic pit]	10 YR 5/3
4	Filled by Context 3	--
5	Sand loam [historic post hole]	10 YR 5/3
6	Filled by Context 5	--

Figure 4.26. Area 19 - Excavation Unit 1, Plan and South Profile.

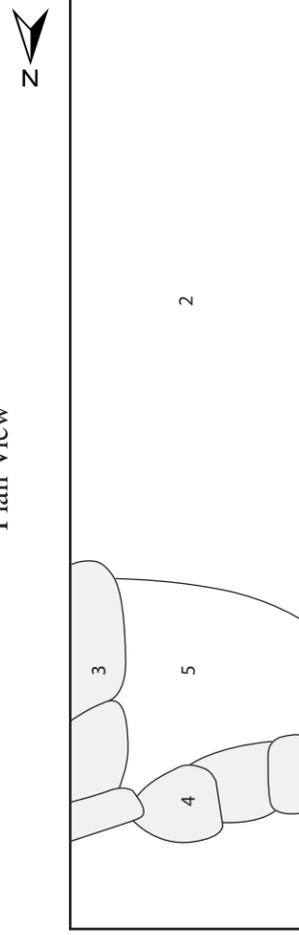
Excavation Unit 4  
Plan View



Context List

Context	Description [Interpretation]	Munsell
1	Silty loam [Ap horizon]	10 YR 4/3
2	Silty clay loam [subsoil]	10 YR 5/4
3	Silty loam [historic fill]	10 YR 3/4
4	Cut containing context 3	--
5	Loam with gravel [post hole]	10 YR 5/3
6	Cut containing context 5	--
7	Loam with gravel [historic feature]	10 YR 4/3
8	Cut containing context 7	--
9	Silty loam with gravel [post hole]	10 YR 4/3
10	Cut containing context 9	--
11	Sand with gravel [historic pit]	10 YR 4/3
12	Cut containing context 11	--

Excavation Unit 5  
Plan View



Context List

Context	Description [Interpretation]	Munsell
1	Silty loam [Ap horizon]	10 YR 4/4
2	Silty loam with brick and rock rubble	10 YR 5/3
3	Stone foundation	--
4	Stone foundation	--
5	Coarse, wet silty sand [C horizon]	10 YR 5/8



Figure 4.28. Area 19 Horse Paddock: Plan of Excavation Units 4 and 5



Plate 4.56. Area 19 - Field crew (Glen Mellin and Tim Hitchens) shovel testing looking south (Photographer: Sue Ferenbach, November 2009) [HRI Neg.#09045/D2:032].

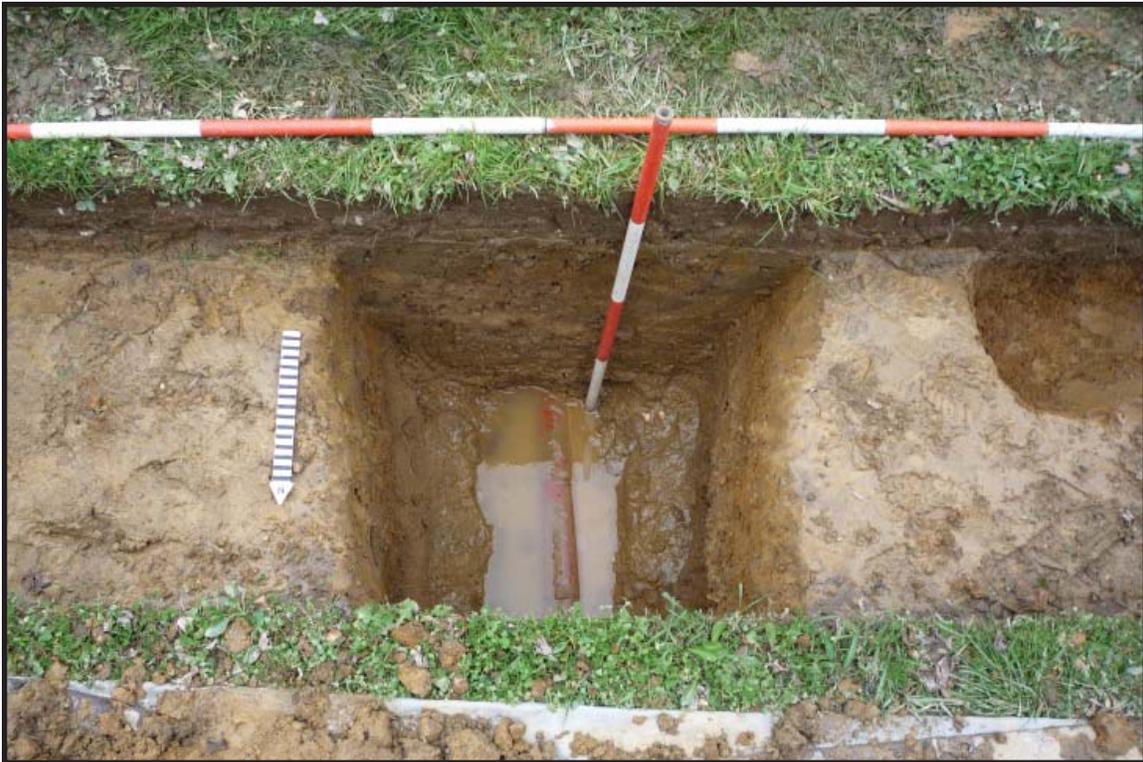


Plate 4.57. Area 19 - Excavation Unit 1 showing terra cotta drain feature within an excavated trench looking south (Photographer: Glen Keeton, November 2009) [HRI Neg.#09045/D4:009].



Plate 4.58. Area 19 - Excavation Unit 3 field crew (Bill Liebeknecht, Glen Mellin, Tim Hitchens, Joelle Browning, Dan O'Toole and Glen Keeton) under the direction of Ian Burrow excavating under winter conditions looking west (Photographer: Sue Ferenbach, December 2009) [HRI Neg.#09045/D5:049].



Plate 4.59. Area 19 Horse Paddock - Excavation Unit 4 facing east. Complex historic features exposed. 10070 D4:043 February 2011

Excavation Unit 3 (Plate 4.58) was located north of the extant house on Parcel 205 in the side yard between Shovel Tests 1906 and 1911. Context 1 appears to be a half of a foot of modern topsoil-fill containing modern artifacts such as pull tabs, clay pigeon fragments, aluminum beer cans, wire nails and beer bottle fragments. Mixed in with the modern materials were a few late 19th-century artifacts such as whiteware, a pale aqua window light fragment and two cut nails. Context 1 capped a former clay loam plowzone [2] which contained a small amount of prehistoric materials consisting of a chert flake and two thermally popped pieces of jasper, and historic artifacts dating from the late 18th through late 19th centuries: small sherds of tin-enameled earthenware, whiteware, ironstone granite china, redware, a pale violet restricted bottle neck, a pale aqua window light fragment, a chunk of slag and several pieces of red brick.

Below the buried plowzone the subsoil [3], a loamy clay, was cut by a two-inch wide plow scar (Contexts 4 and 5) located near the southern end.

Excavation Units 4 and 5 (Plate 4.59, Figure 4.29) were excavated in May 2011 and were placed 50 feet apart about 100 feet east of Route 301 on the gentle slope down to the creek to the south. Excavation Unit 4, the northern of the two, encountered a portion of a large pit feature [11,12] at the eastern end, a substantial post hole [5,6], a small post hole [9,10], and a complex series of cut and fill features [3/4; 7/8] that could not be fully elucidated within the 2.5 by 10 foot unit. A total of 1063 artifacts were recovered from the unit. Historic ceramics range in date from the mid-18th through late 19th century. Brick fragments (768 examples) were also recovered. The 19 prehistoric lithics include a biface.

Excavation Unit 5 encountered intersecting east-west [4] and north-south [3] stone wall foundations at its northern end, with a building rubble scatter within a silty loam [2] to the south. The artifact count from

this unit was much lower, at 129, suggesting that the structural features here represent a 19th-century outbuilding. Ceramics were chiefly redware and whiteware.

*Research from Phase IA:*

The Phase IA research indicates this area was part of the John Taylor Tract (1680 to 1717). Owners critical to the understanding of the material culture were Alexander Armstrong (1739 to 1799), Cornelius Armstrong (1799 to 1824), and James Rogers (1824 to 1850).

*Predictive Model Assessment:*

The sensitivity predictive model formulated by A.D. Marble rated this area as nil for prehistoric sites and high for historic sites. The Hunter Research, Inc. Phase IA report also felt this area had a high sensitivity for historic sites (the Rogers house site is shown on the 1849 map).

*Key Artifacts:*

**Prehistoric**

Debitage (jasper, chert, quartz)  
Thermally altered rock fragments

**Historic** (Plate 4.60)

Creamware  
Pearlware (blue and green shell edge)  
Whiteware (blue shell edge, sprig, annular blue, variegated wave and loop-mocha, transfer printed and sponge decorations)  
Ironstone granite china  
Chinese export porcelain with underglazed hand painted decoration  
Buff-bodied tin enameled earthenware  
Vessel glass (pale aqua, aqua with an iron pontil and olive)  
Olive green case or snuff bottle fragments

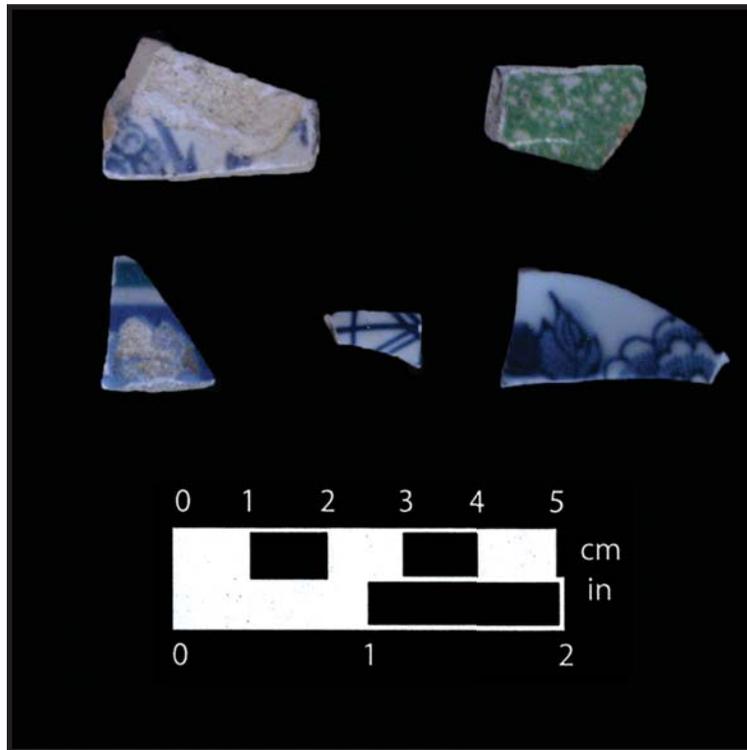


Plate 4.60. Area 19 - Selected Historic Artifacts. Top row (left to right): ironstone granite china sherd with blue transfer printed decoration, whiteware hollowware rim sherd with green sponge decoration. Bottom row (left to right): whiteware rim sherd with aqua and blue annular decoration, pearlware body sherd with hand-painted blue geometric decoration, ironstone granite china body sherd with flow blue floral decoration (Photographer: Josh Butchko, February 2010) [HRI Neg.#09045/D7:020].

Pale aqua window light fragments  
Cast iron cauldron fragment  
Iron horseshoe  
Slate

*Interpretation:*

No diagnostic prehistoric artifacts were recovered from this area but the amount of debitage and lack of tools suggests something different is happening at this site compared to the other sites within Section 2.

Historic artifacts dating to the late 18th century and the first half of the 19th century are likely from the Cornelius Armstrong (1799 - 1824)/James Rogers (1824 - 1850) occupations. The building identified in Excavation Unit 5 in the horse corral is probably a 19th-century outbuilding. The complex features in Excavation Unit 4 are associated with both 18th- and 19th-century artifacts.

**AREA 20  
(FIGURE 4.29; PLATE 4.61)**

**Archaeological Resources Assigned Delaware Site Numbers: None**

Traditional Phase IB testing was not conducted in this area as the railroad line is active. The alignment was documented through digital photography. No historic features were observed on the section of track to be crossed by the proposed alignment

*Research from Phase IA:*

This property can be traced back to the John Taylor Tract (1680 to 1717). Chartered in 1836, the Delaware Railroad is shown on maps as early as 1850 although construction is reported not to have started in 1854. The railroad opened in December 1856. This line is currently part of the Norfolk and Southern Railroad.

**AREA H  
(FIGURE 4.30; PLATES 4.62 AND 4.63)**

**Archaeological Resources Assigned Delaware Site Numbers: William Cann Outbuilding, 7NC-F-130, N14509**

*Area-specific Field Methods:*

This area was plowed and disked by the farmer at the same time as Areas 9 and 10. While en route to Area 12 from Area 10, the field team noted artifacts but no collection was made with the exception of a single glass trade bead dating to the 17th century. Due to the age of the bead, archaeologists from DelDOT were notified of the find and its location between designated collection areas. A decision was made to surface collect the area during this phase of work if sufficient time and budget allowed at the end of the programmed fieldwork. The area was surface collected and the artifacts were recorded using the handheld GPS unit. A half-day metal detector survey failed to turn up further artifacts. A total of 378 artifacts were recovered from this area.

*Artifact Clusters:*

Artifacts in this area were loosely scattered across a low rise of land along the east side of a intermittent stream which appears to have been channelized into field drains leading south into Black Marsh. Prehistoric artifacts were more frequent closer to the perimeter of the woods. Historic artifacts are present along the entire flat, but are not clustered in a discernable pattern indicative of a house.

*Research from Phase IA:*

Research indicates this area was originally part of John Riley's Industry plantation (1685 - circa 1700). The 1740 *Map of Bohemia Landing and Adjacent*



Plate 4.61. Area 20 - Norfolk and Southern Railroad looking north (Photographer: Sue Ferenbach, November 2009) [HRI Neg.#09045/D2:022].

*Lands at the Head of the Bohemia River* (reproduced in Hunter Research, Inc. 2009:Figure 4.3) depicts an un-named cart road passing directly through this area.

*Predictive Model Assessment:*

The sensitivity predictive model formulated by A.D. Marble rated this area as low to nil for prehistoric sites and low for historic sites. Based on known historic routes of transportation in the area no further investigations were recommended in the Hunter Research, Inc. Phase IA report. The artifact recovery here is therefore a corrective to relying overmuch on the predictive modeling

*Key Artifacts:*

**Prehistoric** (Plate 4.62)

- A narrow bladed black chert stemmed projectile point
- A narrow bladed quartz stemmed projectile point (distal end missing)
- A brown jasper Jack's Reef pentagonal projectile point reworked into a graver on the distal end, Webb Complex of the Woodland I period
- Two quartz biface fragments
- Two quartz cores
- Debitage (quartz, jasper, quartzite and chert)
- Thermally altered rocks

**Historic** (Plate 4.63)

- One drawn type turquoise glass trade bead (Kidd and Kidd type 11a40), *circa* 1625 -1675.
- One 18th-century gilt spun coat button with the eye cast in place
- Redware (clear glazed, black glazed, manganese glazed and slip trailed)
- Chinese export porcelain
- Grey-bodied stoneware (some with brushed cobalt decoration)
- Creamware
- Pearlware
- Ironstone granite china

- Whiteware
- Red brickbats
- Horseshoes

*Interpretation:*

The earliest historic artifact from this area, the turquoise glass trade bead, may reflect 17th-century contact with Native Americans at this location. It may also be an indication that the later un-named cart route may have originated as an Indian pathway. Later 18th- and early 19th-century artifacts from this area may be related to an outbuilding associated with the nearby William Cann house site of *circa* 1820-1836 in Area 10, or perhaps an earlier owner or tenant.

**AREA J**  
**(FIGURES 4.31 AND 4.32; PLATE 4.64)**

**Archaeological Resources Assigned Delaware Site Numbers: Noxon's Tenant Historic Site, 7NC-F-133, N14512**

*Area-specific Field Methods:*

The eastern portion of this area was plowed and disked by the farmer at the same time as Areas 13 and 17. Access was not obtained for the western section until May 2011. While the crew were en route to Area 17 from Area 13, ceramic artifacts dating to the 18th century were noted and flagged for further evaluation. Archaeologists from DelDOT were once again immediately notified of the finds and their location outside designated collection areas. As in Area H, a decision was made to conduct a surface collection during this phase of work only if sufficient time and budget allowed at the end of fieldwork. As time and budget were remaining at conclusion of the fieldwork the area was surface collected and the artifacts were recorded using the handheld GPS unit. A brief half-day metal detector survey recovered a limited amount of 18th-

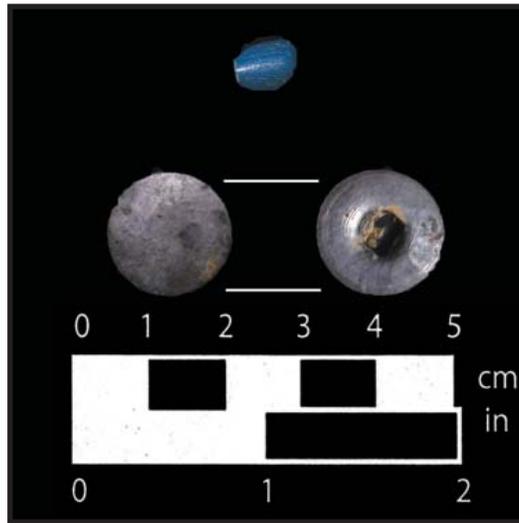


Plate 4.62. Area H - Selected Prehistoric Artifacts. (top): A drawn type turquoise glass trade bead (Kidd & Kidd type 11a40), circa 1625-1675. (bottom): An 18th century gilt spun coat button with the eye cast in place (Photographer: Josh Butchko, February 2010) [HRI Neg.#09045/D7:021].

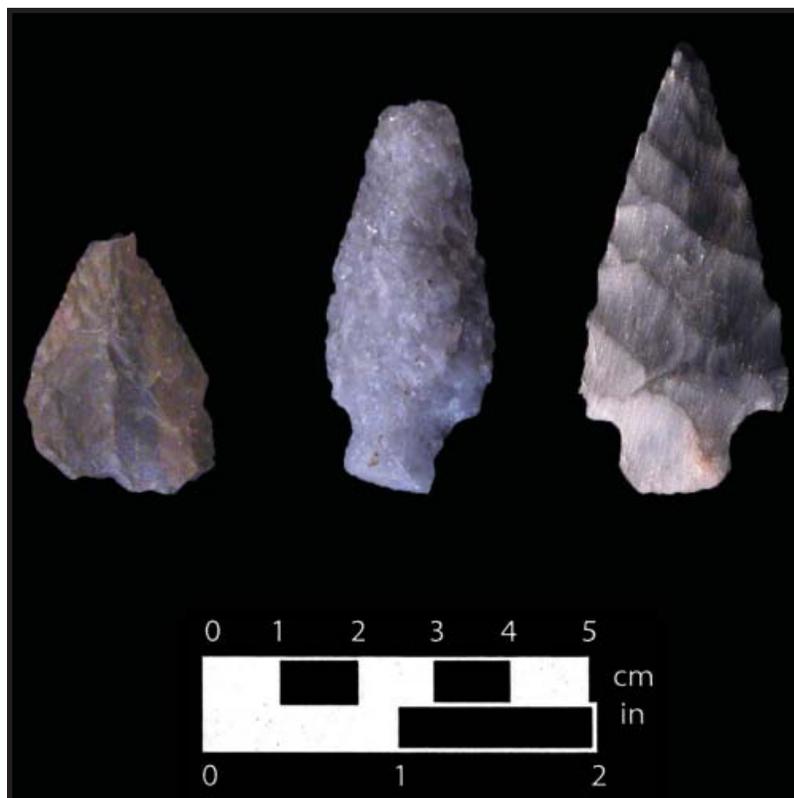


Plate 4.63. Area H - Selected Historic Artifacts. (left to right): Brown jasper Jack'Reef pentagonal projectile point reworked into a graver on the distal end, Webb Complex of the Woodland I period, (center) a narrow bladed quartz stemmed projectile point (distal end missing), (right) narrow bladed black chert stemmed projectile point (Photographer: Josh Butchko, February 2010) [HRI Neg.#09045/D7:022].

century materials, most notably cast iron cauldron fragments. A total of 314 artifacts were recovered from this area.

In the western section, surveyed in May 2011, the long-established pasture conditions required the placement of a shovel test grid over the "L"-shaped parcel.

*Artifact Clusters:*

Prehistoric artifacts were lightly scattered across a low knoll near Station 426. Artifacts consisted of a thermally altered chert pebble core, a chalcedony pebble core, and debitage (jasper and Onondoga chert, often associated with the Meadowood culture).

A cluster of artifacts dating from *circa* 1740 to 1760 were observed on the surface of the same low knoll near Station 426. This site extends northwest across two converging hedgerows into a grassy meadow field. Only the plowed portion of the field was subjected to surface collection. Artifacts consisted mainly of ceramics with some structural materials such as brick.

*Shovel Testing in Western Meadow Area, May 2011 (Figure 4.32)*

A total of 153 shovel tests were placed in this area. In the southeastern portion these were spaced at 25 foot intervals since this area was adjacent to the dense 18th-century artifact concentration identified during the surface collection survey.

Surprisingly, only 485 artifacts were recovered from the tests. Diagnostic ceramics were chiefly pearlware and whiteware.

*Excavation Unit in Western Meadow Area, May 2011*

A single 2.5 by 10 foot excavation unit (Excavation Unit 1) was placed in the southeast angle of the meadow area with the purpose of identifying features and artifacts relating to the dense artifact surface-collection scatter to the southeast. This unit encountered an unmodified soil profile below a well-developed plowzone. A total of 87 artifacts were recovered: 55 ceramic items and the bulk of the remainder building material (chiefly brick). Diagnostic ceramics were dominated by whiteware (with 15 redware and 2 pearlware sherds).

*Research from Phase IA:*

Phase IA research indicates this area is situated at the intersection of the John Riley's Industry (1685 - 1700), Noxon's Adventure (1734 to *circa* 1798) and the John Taylor Tract (1680 to 1717).

*Predictive Model Assessment:*

The sensitivity predictive model formulated by A.D. Marble rated this area as low to nil for prehistoric sites and low to high for historic sites. Based on the area's distance from water (over 400 feet) and known historic routes of transportation no further investigations were recommended in the Hunter Research, Inc. Phase IA report.

*Key Artifacts:*

**Prehistoric**

- A chert pebble core
- A chalcedony pebble core
- Debitage (jasper and Onondoga chert, typically associated with Meadowood cultures)

**Historic** (Plate 4.64):

- White salt glazed stoneware
- Scratch blue white salt-glazed stoneware



Plate 4.64. Area J - Selected Historic Artifacts. Top row (left to right): a redware porringer base/body sherd with black glaze, a redware hollowware body sherd with interior/exterior manganese glaze. Middle row (left to right): a redware porringer base sherd with a white slip ground under a clear lead glaze, a redware plate body sherd with white slip and copper oxide decoration under clear lead glaze, a redware hollowware body sherd with interior clouded decoration under clear lead glaze. Bottom row (left to right): A cast iron cauldron body fragment, two white salt-glazed stoneware teabowl base sherds with scratch blue decoration (Photographer: Josh Butchko, February 2010) [HRI Neg.#09045/D7:023].

Redware (clouded, black glazed, clear lead glazed, slip-trailed and copper oxide)  
Jackfield ware  
Chinese export porcelain.  
Cast iron cauldron fragments  
Red brick fragments (some with “glazed” headers).

the testing methods deployed, or reflects differential post 18th-century land use on either side of the property line represented by the hedgerow.

*Interpretation:*

Prehistoric materials lightly scattered across the knoll are non-diagnostic. During the initial survey it was predicted that the site would extend northwest into the meadow tested in May 2011, but the low density of artifact recovered from the latter area suggests this may not be the case.

The location of this 18th-century site both at the intersection of three early properties (Boaz Boyce Tract 1783, Noxon’s Adventure 1734 and the John Taylor Tract 1680) and apparently near the intersection of the cart road to Reedy Island and an un-named cart road shown on the 1740 Bohemia Landing map is interesting. There is at least a possibility that this is a place (a tavern?) providing services to the surrounding area. As with the prehistoric component, there is a marked reduction in historic artifact recovery in the meadow area immediately to the northwest tested in May 2011, even allowing for the different techniques employed between the two locations.

*Future Research:*

The potential importance of the early cart-road network for the understanding of the colonial settlement pattern in this part of the drainage divide is once again emphasized by the data from this area. Phase II field investigations should focus on the artifact cluster identified on the knoll during surface collection survey. Further work should also be undertaken on the adjacent portion of the meadow to establish if the observed drop-off in artifact density represents actual landscape usage in the 18th century, is a function of