

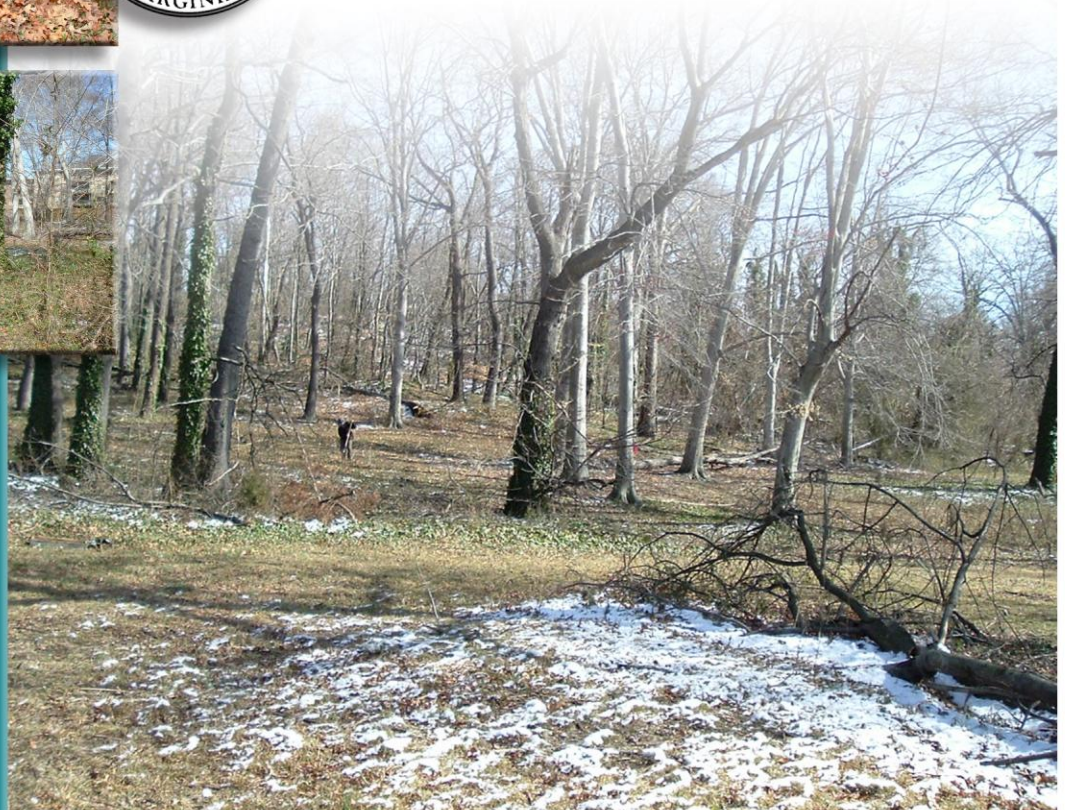


**PHASE I ARCHAEOLOGICAL SURVEY OF THE
NORTH HILL PROPERTY IN
FAIRFAX COUNTY, VIRGINIA**



Prepared For:
**Fairfax County Department of Housing and
Community Development**
3700 Pender Drive, #100
Fairfax, Virginia

May 2008



Prepared By:
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6110 Frost Place
Laurel, Maryland 20707

Paul P. Kreisa, PhD.
Principal Investigator

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May 2008

MANAGEMENT SUMMARY

Under contract to the Fairfax County Redevelopment and Housing Authority, Greenhorne & O'Mara conducted a Phase I archaeological assessment and intensive site survey of the North Hill property south of Alexandria along U.S. Route 1 in Fairfax County, Virginia. Greenhorne & O'Mara conducted the work at the approximately 33-acre property to assist the Fairfax County Redevelopment and Housing Authority in meeting county requirements as well as possible requirements under Section 106 of the NHPA of 1966, as amended. The background and archaeological investigations for this project were conducted between January and March 2008.

Background research indicated that no previously recorded archaeological sites were located within the North Hill property. However, models of prehistoric site location created for northern Virginia suggested that prehistoric Native American sites were likely to be present on uplands adjacent to drainages, such as those that are present throughout the property. Historic maps suggested that few structures were likely present within the North Hill property prior to the 1930s. Prior to World War II, a few residences and perhaps businesses were located within the North Hill property along U.S. Route 1. However, aerial photographs indicate the presence of a post-World War II mobile home park at this property, with perhaps as many as 500 mobile homes, that was occupied into the 1980s.

The archaeological investigations at the North Hill property resulted in the excavation of 1,279 shovel tests and the recovery of 1,388 artifacts. Most of these artifacts date to the twentieth century and are present throughout the property. The locations of an additional 20 prehistoric Native American pieces of chipping debris are widely scattered across the property. Finally, 28 artifacts dating to the early nineteenth century were located in a ca. 20-x-15 foot area. These artifacts likely represent the remains of a tenant house. No additional archaeological investigations are recommended at the location of the twentieth century or prehistoric Native American artifacts. In both instances, intact subsurface deposits appear to be lacking. However, given the density of material associated with the early nineteenth century artifacts, the Fairfax County Park Authority may request additional test excavations or the preservation of this location. Continued consultation with the Fairfax County Park Authority concerning this site is recommended.

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1.0 INTRODUCTION

This Phase I archaeological survey report has been prepared to document the results of investigations undertaken at the North Hill property in Fairfax County, Virginia, conducted prior to proposed development (Figure 1). The North Hill property represents the northern 33 acres of the former Woodley Nightingale property. The Fairfax County Redevelopment and Housing Authority contracted with Greenhorne and O'Mara, Inc. (G&O) to conduct this Phase I archaeological survey of the North Hill property. The Fairfax County Park Authority requested that a Phase I archaeological survey of the North Hill property be undertaken prior to the proposed development of this parcel.

The G&O archaeological survey of the North Hill property involved a review of previously compiled geological, historic and topographic map information and regional archival and historical background research, the excavation of screened shovel test pits across the subject property, the analysis of all artifacts recovered during field investigations, and the preparation of a report documenting the results of investigations. The investigations conducted at the North Hill property were designed to meet the standards of the Secretary of the Interior, as specified in the *Secretary of the Interior's Standards and Guidelines for Archaeological and Historic Preservation* (Federal Register 1983), and the Virginia Department of Historic Resources, as specified in the *Guidelines for Conducting Cultural Resource Survey in Virginia: Additional Guidance for the Implementation of the Federal Standards Entitled "Archeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines (48 FR 44742, September 29, 1983)"* (VDHR 2003).

1.1 Project Area Description

The North Hill redevelopment project is proposed for the 33-acre parcel located adjacent to U.S. Route 1 and to the south of Interstate 495 in southeast Fairfax County, Virginia (Figures 1 and 2). While conceptual plans have not been finalized, it is envisioned that approximately 65 affordable housing units will be located within approximately 11-acres of the across the south portion of the property while the north will be developed as a passive recreation park. Prior to 1981, the North Hill property had been a mobile home trailer park with approximately 500 units. Currently, much of the area surrounding the parcel is suburban, with businesses, apartment buildings, single-family homes, schools, and mobile home parks located nearby.

The North Hill property is roughly rectangular in shape, covering an area that measures 420 m (1,378 ft) east-west by 320 m (1,050 ft) north-south (134,400 m², or 33 acres). The parcel is bounded to the west by U.S. Route 1, to the south by Dart Drive, to the north by an apartment building complex, and to the east by additional apartment buildings. An unnamed branch of Little Hunting Creek is located near the eastern property boundary. Paul Spring Run, also a tributary of Little Hunting Creek, is located approximately 400 m (1,312 ft) to the north. The tract consists of a portion of an upland landform that slopes to the south, southwest, and southeast. The landform is generally highest in elevation in the north portion of the parcel and lowest along the south, west, and east project boundaries.



Figure 1. General location of the North Hill property (designated by star).

Currently, the North Hill property is forested, although a narrow strip along U.S. Route 1 is more park-like in nature. As will be discussed in greater detail in Section 3 of this report, the property had been used as a trailer park through 1981, at which time the county purchased and demolished the park. Its previous use as a trailer park resulted in the construction of a complicated network of roads across most of the property, as well as concrete and gravel pads and retaining walls associated with trailer sites. The roads and concrete pads were in place at the time of the Phase I archaeological survey.

1.2 Geology and Soils

The North Hill project area is located within the Virginia portion of the Coastal Plain (Figure 3). The Coastal Plain begins at sea level along Chesapeake Bay and its associated inlets in northern

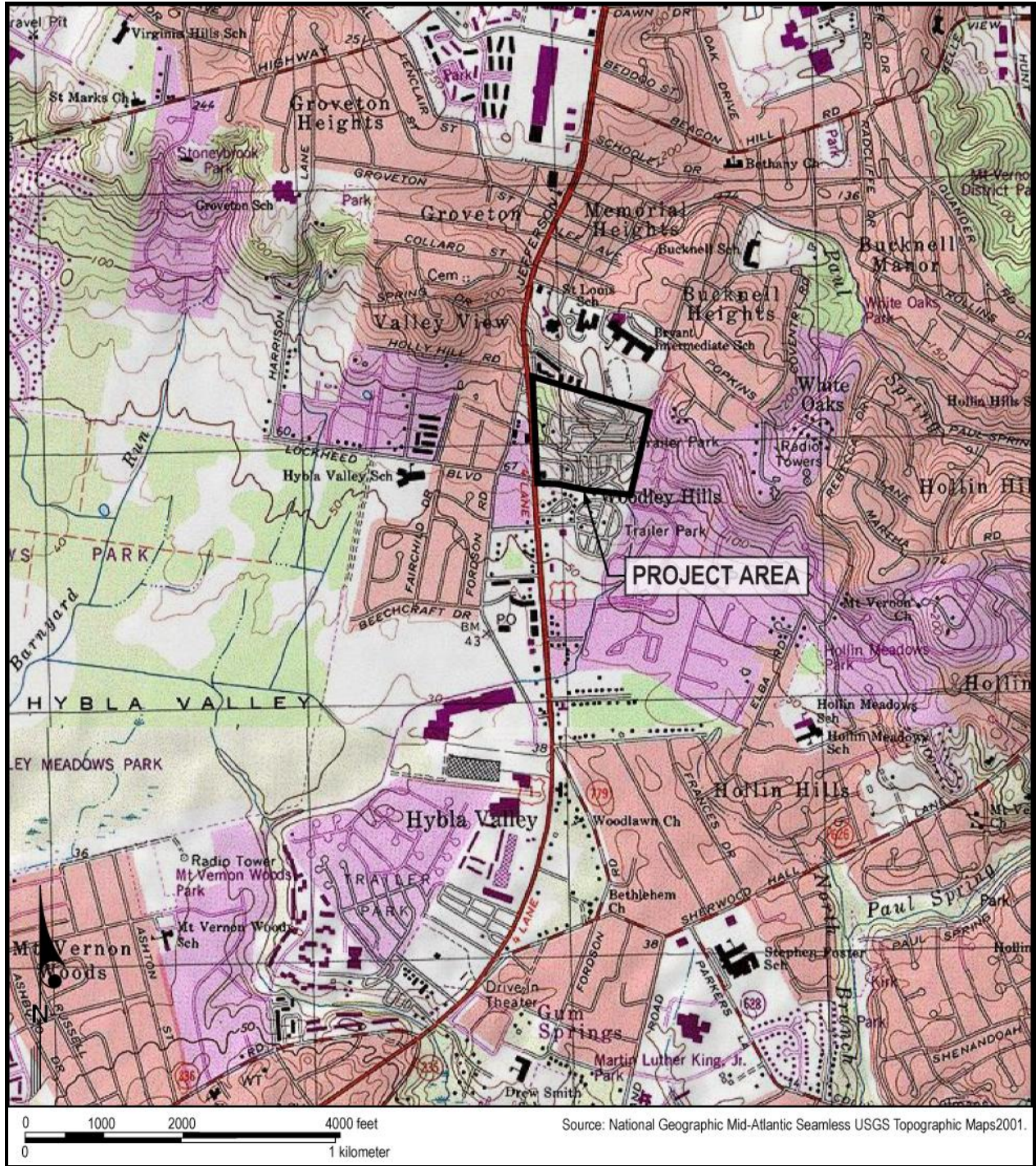


Figure 2. Project area plotted on USGS 7.5-minute Alexandria quadrangle (CD version dated 2001).

Virginia, and extends westward towards the Fall Line, where it intersects with the Piedmont Region. The Coastal Plain began to form after the initial formation of the Atlantic Ocean from sediments eroded from the Appalachian Highlands. The Coastal Plain, while of low relief, is

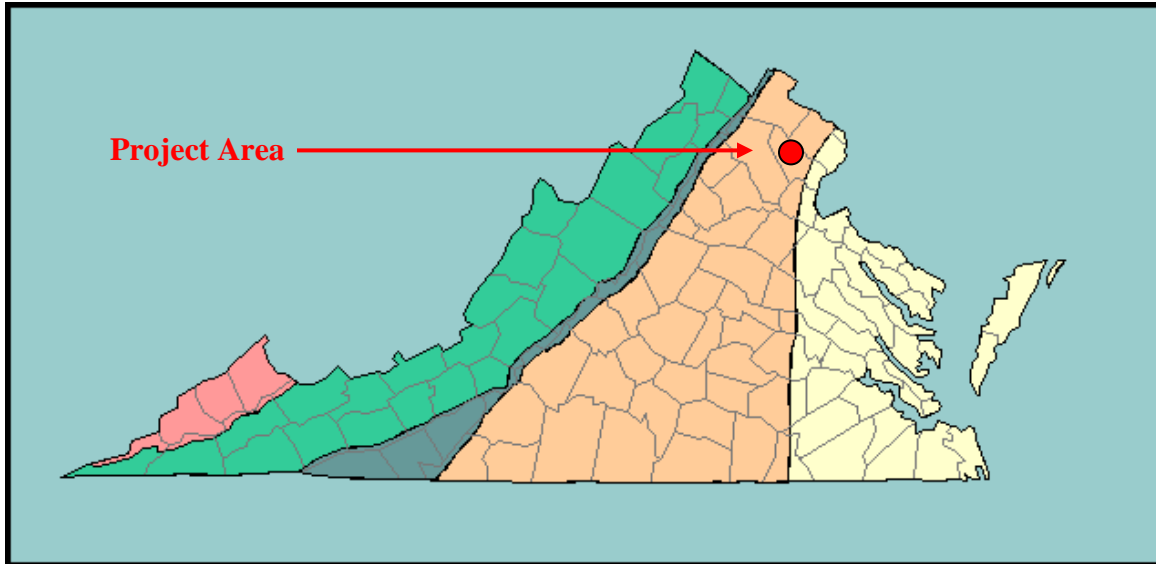


Figure 3. Virginia physiographic provinces.

Punctuated by marine terraces. Stream cutting during the Pleistocene Epoch also led to the dissection of the Coastal Plain into several distinct peninsulas in northern Virginia. The USDA NRCS Web Soil Survey 2.0 identified two soil types within the North Hill parcel, aside from narrow disturbed areas along U.S. Route 1 and Dart Drive. Most of the parcel is mapped as Kingstowne-Sassafras-Marumcuso complex, 7 to 15 percent slopes, soils. Kingstowne soils are most prevalent in this complex and have sandy clay loam to 10 cm below surface, followed by clay loam. Sassafras soils have sandy loam to 23 cm below surface, followed by sandy clay loam. Marumcuso soils are similar in profile to Sassafras soils. A small area along the northern boundary of North Hill is mapped as Kingstowne-Sassafras-Neabsco complex, 2 to 7 percent slopes, soils. Neabsco soils are similar in profile to both the Sassafras and Marumcuso soils.

1.3 Report Organization

Following this Introduction, the report is presented in six additional sections: Research Methods; Cultural Background; Reconnaissance and Research Design; Results of Phase I investigations; and Summary and Recommendations. References Cited complete the body of the report. The qualifications of key personnel are presented in Appendix A and inventories of materials recovered during the Phase I investigation is presented in Appendix B. Finally, site forms are included in Appendix C.

2.0 RESEARCH METHODS

The methods used to conduct this Phase I cultural resources survey of the North Hill property for the proposed affordable housing and park development include background and archival research, a field visit to the proposed location, an intensive screened shovel-test survey conducted in an attempt to locate archaeological artifacts or sites present within the ca. 33-acre property, and the analysis of all artifacts recovered during the field investigations. The methods employed are described in greater detail below.

2.1 Background Research

The identification of the potential for archaeological resources within the North Hill project area began with archival and background research. The initial literature search consisted of a review of existing surveys and identified historic properties. This determined the level of previous identification studies and the nature of historic properties in and around the proposed development and included a review of files and maps online and at the offices of the Fairfax County Park Authority, the Virginia Department of Historic Resources, and the National Register of Historic Places (NRHP).

Background research entailed discussions with individuals and organizations knowledgeable about local history and resources. County histories and historic maps were consulted. Contract reports documenting the results of previous archaeological investigations conducted in the vicinity of the proposed residential and park development were also reviewed as part of the background research conducted for this project, as were the historical property and archaeological site files of the Fairfax County Park Authority (located at the James Lee Community Center) and the Virginia Department of Historic Resources. The site files at both locations were reviewed to determine whether any archaeological sites in or near the subject property had previously been registered. Historic maps and aerial photographs were consulted to identify occupants and patterns of land use associated with the subject parcel. The background research was conducted in January 2008.

2.2 Field Survey

The testing approach for this survey was based on a Scope of Work provided by the Fairfax County Redevelopment and Housing Authority and in accordance with the *Secretary of the Interior's Standards and Guidelines for Archaeological and Historic Preservation* (Federal Register 1983) and the *Guidelines for Conducting Cultural Resource Survey in Virginia: Additional Guidance for the Implementation of the Federal Standards Entitled "Archeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines (48 FR 44742, September 29, 1983)"* (VDHR 2003).

Following a general pedestrian reconnaissance of the area of potential effects for the North Hill project an intensive site survey was conducted between January and March 2008. In areas of low surface visibility, which characterized the entire parcel, shovel test transect lines spaced at 7.5-m (24.6 ft) intervals were flagged. Shovel test pits within individual transects were then excavated in 7.5-m intervals. The number of shovel tests in each line was influenced by the nature of the

topography, soils, cultural or noncultural disturbance, and property boundaries. The shovel tests were manually excavated and measured approximately 35 cm (13.8 inches) in diameter. Shovel tests were excavated to at least 10 cm (3.9 inches) into B or C strata subsoil (generally 20 cm [7.9 inches] to 30 cm [11.8 inches] below surface). All fill removed was screened by stratum through ¼-inch mesh hardware cloth. Soil profiles for each of the shovel tests were documented and minimally included soil color, texture, and depth of soil strata. Upon completion of excavation and screening, the shovel test pits were backfilled.

The identification of a site or isolate resulted in additional documentation. Upon discovery of a site or isolate, the location was assigned a temporary field number. When appropriate, site limits were then defined by excavating bracketing shovel tests at 3-m (10 ft) intervals around the initial positive test. Placement of bracketing shovel tests was determined in consultation with Mr. Michael Johnson of the Fairfax County Park Authority Cultural Resource Management and Protection Section. A sketch map depicting the location and the shovel tests was drawn, and the location was placed on a USGS 7.5' quadrangle map. Finally, field notes were recorded for each site. Sufficient data was collected to complete site forms and to provide a preliminary historical significance evaluation. Based on the results of the field and laboratory investigations, site forms were completed for all archaeological sites located within the subject property.

2.3 Laboratory Analysis

Where appropriate, items are bagged and labeled with their respective provenience information and removed from the field. In the Greenhorne & O'Mara Archaeology Laboratory each artifact is washed, catalogued, and analyzed and is then described by material type, observable color and other diagnostic characteristics. Following tabulation, any temporally or functionally determinant attributes are factored into a general description of the assemblage present in the project area. The catalog and provenience information are entered into an electronic spreadsheet using Microsoft Excel software. A more detailed discussion of the definitions used for the analysis of the North Hill property artifacts is presented below.

2.31 Historic Period Artifacts

The descriptive categories for historic materials include a wide variety of artifacts, many of which are useful temporal and functional indicators. The most important of these is the household ceramic category. The artifact descriptions are based on Price (1981), Mansberger (1988), Noël Hume (1991), South (1977), Greer (1981), Deiss (1981), and the web site of the Maryland Archaeological Conservation Laboratory (2002). The interpretive grouping of the artifact categories is based on South (1974, 1977) with modifications.

Ceramics. The initial division of household ceramics is into earthenware, stoneware, and porcelain categories. Tableware vessels such as plates, cups, saucers, bowls, and serving vessels tend to be more finely made while food preparation and storage vessels such as crocks, mixing bowls, jugs, and butter churns are often made of coarser fabrics. Stoneware vessels tend to have dense paste that ranges from light to dark in color. The earlier types, both imported and American made, are salt-glazed. Eighteenth-century earthenwares tend to have reddish to buff- or cream-colored pastes with brownish to black lead glazes and simple decoration. Some, such as

Staffordshire-type slipware and tin-glazed earthenware have lighter-colored glazes. Creamware has a hard, but slightly porous paste and a cream-colored body with a yellowish to greenish cast to the glaze where it pools. Pearlware has a soft paste and an overall bluish cast to the glaze that is not necessarily limited to puddling in crevices. Whiteware tends to have soft paste while ironstone is nearly vitrified. Porcelain artifacts are vitrified, have a fine paste, are translucent, and are white in color. Decorative treatments of whiteware, ironstone, and porcelain include handpainting, transfer printing, and decal decoration. Another decorative treatment of refined ceramics is the use of relief or molded designs.

Ceramics are further subdivided into type categories on the basis of decorative treatment or, in the case of stoneware, the slip applied to interior and exterior surfaces. These ware and type categories have proven to be important temporal indicators. Chronological ranges associated with each ware and decorative treatment are based on the Maryland Archaeological Conservation Laboratory (2002), Noël Hume (1991), and South (1977:210–212). Table 1 includes date ranges for ceramics based on the above sources for ceramics that were manufactured during the eighteenth and early nineteenth centuries. Date ranges for ceramics manufactured during the nineteenth and twentieth centuries are listed in Table 2.

Glass. Glass artifacts such as bottles, tablewares, and furnishings (e.g., lamps) also provide temporal and functional information for historical archaeological sites. Bottles are especially important since techniques employed in their manufacture are datable (Lorrain 1968; McKearin and Wilson 1978). The turn of the twentieth century marks a change in glass manufacturing methods; bottles that are entirely machine-made originate at that time. Bottle glass can be divided into two categories. These are bottles that are entirely machine-made and those made with other techniques, including hand blowing. Mansberger (1988:231–234) presents a detailed table describing the manufacturing attributes of glass and associated date ranges. Table 3 provides date ranges for glass manufacturing attributes based on the work of Deiss (1981).

Metal. Metal artifacts represent a wide variety of activities at historic sites. Nails, screws, and machinery parts are commonly recovered. Less common are furniture and building hardware and tools. Buttons and buckles from clothing are also common. Nails can be useful temporal indicators at historic sites. Iron hand-wrought nails were used before 1800. They were made individually by blacksmiths, and the rosehead shape is most common. Iron machine-cut nails were first manufactured about 1790. The shafts of these “Type A” examples were machine-made while the head was attached manually. They were manufactured until about 1830. The “Type B” machine-cut nails were made entirely by machine and were made from about 1820–1900. The economically viable mass production of steel in the 1880s led to the manufacture of wire-drawn nails, which were in common use from about 1890 and are still made today. By 1886, about 10 percent of the nails being produced were steel wire-drawn examples. By 1894, more than 50 percent of the nails were wire-drawn, and by 1913, 90 percent were of wire-drawn steel (Visser 2006). In general, wire-drawn nails became prevalent in the United States around 1900, and their presence on a site indicates a post-1900 occupation, just as the presence of machine-cut nails indicates a nineteenth-century occupation (Edwards and Wells 1993:58, 60).

Table 1. Selected early ceramic types and date ranges at historic sites.

<i>Ceramic Type</i>	<i>MACL (2002)</i>	<i>Date Range</i>	
		<i>Noël Hume (1991)</i>	<i>South (1977)</i>
Earthenware			
Tin-glazed	ca. 1500s–1790s	ca. 1560s–1800	ca. 1580s–1800
Border wares	ca. 1600–1710s		
North Devon	ca. 1630s–1820s	ca. 1680–1770s	ca. 1650–1775
Staffordshire-type slipware	ca. 1660s–1810s	ca. 1650–1770s	
Manganese mottled	ca. 1670s–1780		
Buckley-type	ca. 1690s–1780s	ca. 1720s–1775	ca. 1720–1775
Astbury-type	ca. 1720s–1750s	ca. 1720s–1750	ca. 1725–1750
Jackfield-type	ca. 1740s–1800	ca. 1745–1790	ca. 1740–1780
Luster decorated			ca. 1790–1840
Creamware	ca. 1740s–1820	ca. 1750–	ca. 1750–1820
Pearlware		ca. 1780s–	
Shell edge			ca. 1780–1830
Embossed edge			ca. 1800–1820
Blue handpainted			ca. 1780–1820
Polychrome handpainted			ca. 1795–1815
Annular			ca. 1790–1820
Transfer printed			ca. 1795–1840
Porcelain			
Chinese	ca. 1550s–		ca. 1574–
English	1742–		ca. 1745–
Stoneware			
Rhenish (blue and gray)	ca. 1570s–1770s		ca. 1650–1775
English dry-bodied	ca. 1670s–1780s		
English brown	ca. 1675–1775	ca. 1690–1775	ca. 1690–1775
Nottingham-type	ca. 1690s–1790s		ca. 1700–1810
White salt-glazed	ca. 1700–1770s	ca. 1720–1770s	ca. 1715–1795
White salt-glazed (scratch blue)		ca. 1740s–1770s	ca. 1744–1775

Note: MACL = Maryland Archaeological Conservation Laboratory.

Table 2. Selected later ceramic types and date ranges at historic sites.

<i>Type</i>	<i>Date Range</i>			
	<i>South (1977:212)</i>	<i>Price (1981:42)</i>	<i>Mansberger (1988)</i>	<i>Greer (1981)</i>
Creamware	ca. 1750–1820		1762–1820	
Pearlware				
Shell edge (blue/green)	ca. 1780–1830	ca. 1810–1830	1780–1830	
Embossed edge ¹	ca. 1800–1820	ca. 1810–1830	1800–1830	
Blue handpainted	ca. 1780–1820	ca. 1810–1830	1780–1830	
Polychrome handpainted	ca. 1795–1815	ca. 1810–1825	1780–1830	
Annular ²	ca. 1790–1890	ca. 1810–1830	1790–1830	
Transfer printed ³	ca. 1795–1840	ca. 1810–1830	1790–1830	
Whiteware				
Undecorated		ca. 1845–1870+	1830–1900	
Shell edge		ca. 1830–1860	1830–1860	
Embossed edge		ca. 1830–1850(?)	1840–1900	
Blue handpainted		ca. 1830–1860(?)	1830–1850	
Polychrome handpainted		ca. 1825–1860	1830–1860	
Annular ²		ca. 1830–1870+	1830–1860	
Transfer printed ⁴		ca. 1825–1870+	1830–1860	
Sponge		ca. 1835–1865	1840–1870	
Lusterware			1830–1860	
Handpainted and transfer printed			1840–1860	
Ironstone				
Undecorated		ca. 1845–1870+	1840–1900	
Embossed			1840–1910	
Tea Leaf (handpainted and luster)			1860–1900	
Transfer printed			1880–1920	
Decal			1890–1940	
Yellowware			1850–1930	
Redware			1820–1900	
Utilitarian Stoneware				
Salt glazed				ca. 1700s–1900
Salt/Albany glazed				ca. 1850–1900
Albany glazed				ca. 1820–1920
Albany/Bristol glazed				ca. 1880s–1920
Bristol glazed				ca. 1920+

¹ including feather and scale patterns² including mocha and worm designs³ including Willow pattern⁴ including flow designs

Table 3. Glass manufacturing attributes.

<i>Attribute</i>	<i>Date Range</i>	<i>Attribute</i>	<i>Date Range</i>
Manufacturing technique		Finishes continued	
Free-blown	to mid-1830s	Improved tool	
Dip mold	to 1860	Cork	early 1870s–ca. 1915
Two-piece mold	1818–early 1870s	Baltimore loop seal	1885–ca. 1915
Pressed	1820s to present	Hutchinson	1885–ca. 1915
Blown three-piece mold	ca. 1810–1830s	Lightning	1875–ca. 1915
Three-piece, dip bottom mold	early 1830s–ca. 1905	Crown	1905–ca. 1920
Three-piece, plate bottom mold	1858–ca. 1915	Machine made	
Turn mold	1880–ca. 1905	Cork	1903–ca. 1915
Machine-made	1903 to present	Crown	1903 to present
Finishes		Lightning	1903 to present
Fire polished	to mid-1850s	Pry-off	1929 to present
Applied string	to mid-1840s	Goldy cap	1897–ca. 1920
Folded	to early 1870s	Lug	1906 to present
Flanged	to early 1870s	Screw threads	1903 to present
Applied tool		Glass composition	
Cork	late 1820s–early 1870s	Flint or lead (clear)	1770 to present
Wax seal	1855–1880	Soda-lime (moderately clear)	1860 to present
Internal threads	1860–early 1870s	With manganese oxide (amethyst)	1880–ca. 1918
Blob	early 1870s–ca. 1880	With selenium (yellow)	1915 to present
Hutchinson	1879–early 1890s	Embossing and labeling	
Lightning	1875–early 1890s	English block style lettering	to present
Crown	1892–1910	Screen-painted labeling	mid-1930s to present
Ground rim with screw threads	1858–ca. 1915	Embossed “Federal Law Prohibits...”	1933–1964
		Figured flasks	1840–early 1870s

Source: Deiss (1981:92–96).

Bone. Bone items represent the remains of subsistence activities or utilitarian objects such as combs and buttons. The methods of analysis vary, depending in which of these categories the artifacts fall.

Structural. Structural elements include such items as brick, concrete blocks, foundation stones, ceramic tile, and mortar. They suggest the former presence of structures and can provide details regarding construction techniques and materials.

It is clear from this description that each category contains a wide variety of artifact types and functions. In this form, however, it is difficult to make meaningful interpretations regarding site

function from the artifact assemblage. To do so, the classificatory system developed by South (1977) has been employed. Modifications have been made to reflect artifact assemblages typical of eighteenth- and nineteenth-century sites in the Mid-Atlantic region. In this classification system, historic artifacts are organized into Artifact groups. South (1977) has defined nine such groups: Kitchen, Architecture, Activities, Arms, Personal, Clothing, Furniture, Tobacco Pipe, and Bone. Materials then are divided into Artifact classes within these groups and further subdivided into Material, Ware, and Type categories such as those described above.

The *Kitchen* group includes artifacts typically associated with food preparation and consumption. Within this group South (1977) has defined eight Artifact classes: Ceramics, Wine Bottle, Case Bottle, Pharmaceutical Bottles, Tumbler, Glassware, Tableware, and Kitchenware. In this report, the faunal material, representing food remains, is included in the Kitchen group.

The *Architecture* group includes artifacts associated with the construction and subsequent demolition of buildings rather than activities performed in and around structures. South (1977) defines five Artifact classes for this group, Window Glass, Nails, Spikes, Construction Hardware, and Door Lock Parts. A class of Construction Materials has been added to those original classes. Construction Materials include such items as bricks, foundation stones, concrete blocks, roofing slate, and composition shingles (or rolled roofing) used in the building of structures.

The *Activities* group contains a wide range of artifact classes relating to a variety of activities taking place at sites that are not included in other artifact groups. South (1977) has defined 12 such artifact classes: Construction Tools, Farm Tools, Toys, Fishing Gear, Stub-stemmed pipes, Colono-Indian Pottery, Storage Items, Ethnobotanical, Stable and Barn, Miscellaneous Hardware, Other, and Military Objects.

The *Arms* group includes artifacts that are either integral parts of firearms or used in their manufacture. South (1977) defines three Artifact classes for this group: Musket Balls, Shot, and Sprue; Gunflints and Gunspalls; and Gun Parts and Bullet Molds.

The *Personal* group includes those artifacts likely belonging to individuals that were, as the term suggests, for personal use. South (1977) identifies three artifact classes for this group: Coins, Keys, and Personal Items. We have combined the Tobacco Pipe class with this group.

The *Clothing* group includes artifacts related to the manufacture and use of clothing. South (1977) defines eight Artifact classes for this group: Buckles, Thimbles, Buttons, Scissors, Straight Pins, Hook and Eye Fasteners, Bale Seals, and Glass Beads.

The *Furniture* group includes artifacts used in the manufacture of furniture. South (1977) has defined only one Artifact class, Furniture Hardware, for this group. Lamp glass has been added to this group.

3.22 Prehistoric Artifacts

Typically, the most common material class of prehistoric artifacts that is found during investigations is lithic remains. Lithic remains can be subdivided into various categories, such as

debitage and tools. Debitage (flaking debris) categories comprise a majority of all the chipped-stone remains. These categories include block shatter, broken flakes, and whole flakes. The whole-flake classification was used for items characterized by the presence of a bulb of percussion on the ventral surface and a striking platform. The whole flakes were further divided into primary, secondary, and tertiary flake types based on the amount of visible cortex present: ≥ 50 percent, < 50 percent and > 0 percent, and 0 percent, respectively. Secondary characteristics also were assessed. Primary flakes tend to have a pronounced bulb of percussion, secondary flakes have a less pronounced bulb, and tertiary flakes are generally smaller than the other two flake types and often have a reduced or no bulb of percussion. Broken flakes are debris items that lack a platform or bulb of percussion or are too small to place accurately within the whole flake category. Block shatter has irregular shapes that lack flake and core characteristics. Bifacial thinning flakes have a distinct lip on their bulb of percussion, an angled striking platform, and distinctive negative flake scars on their dorsal surface. Related todebitage are cores, the parent stones from which flakes are removed.

Formally flaked stone tools initially were divided into unifacial and bifacial categories. Unifaces show evidence for retouch only on one surface. Bifaces demonstrate retouch on both their dorsal and ventral surfaces. When possible, each tool is assigned to a more detailed morphological-functional use category. Unifaces are most commonly classified as scrapers; the particular type is determined by the placement of the edge modification. Bifaces can be placed into a number of distinct categories. Among these are such items as projectile points, drills, knives, scrapers, and thick and thin bifaces. The most recognizable of the chipped-stone tools are projectile points. Projectile points are symmetrically thinned bifaces that show evidence of hafting. These items have been examined in detail for comparison with projectile point types known from the eastern United States and are particularly important for the placement of sites within a cultural and temporal context (see for example Bell 1958, 1960; Justice 1987; Perino 1968, 1971).

The other tool types are largely descriptive in nature. Perforators are typically small, narrow, often bifacial tools. Knives are larger, thin bifaces with a low edge angle to facilitate cutting while scrapers have a higher edge angle to facilitate scraping. Thick and thin bifaces are not finished tools but represent stages in tool manufacture. A thick biface is one that has been modified, is not a finished implement, and is in need of further modification. Typically, the thick biface can be modified into a number of different tool types (Bradley 1975). Thin bifaces are the result of further modification of thick bifaces. They also are not finished implements, but their morphology indicates that they can be further modified into only a single tool category (Bradley 1975). Thin and thick bifaces were differentiated based on flake morphology.

In analyzing the chipped-stone tools and lithic debris, both core-reduction and bipolar models were followed (Collins 1975; see also Bradley 1975; Hayden 1980). Collins (1975) defines five stages of chipped-stone manufacture and use for the core-reduction model. These stages consist of acquisition of raw materials, core preparation–initial reduction, primary trimming, secondary trimming, and use–maintenance–modification. Each of these categories, called activity sets (except for raw material acquisition), is associated with waste by-products and objects that are further used or modified. Core preparation–initial reduction is a stage in which the core is shaped and flakes are detached. Suitable flakes may be retained and further used with the core being discarded, or both can be retained for additional modification. End-products of this stage are

primary flakes, block shatter, discarded cores, and thick bifaces. The next stage, primary trimming, is used to shape the object. Flakes can be retouched into usable tools, or thick bifaces can be flaked into a thin biface. These activities result in the production of secondary flakes, retouched flakes, thin bifaces, and items broken during manufacture. Following primary trimming is the secondary trimming of thin bifaces. This stage produces tertiary flakes, finished tools, and items broken during processing. Finally, the tools are used, maintained, and perhaps modified. Bifacial thinning flakes are the most important waste by-product of tool maintenance activities, although they also could be produced while thinning thick bifaces.

Following this model, the following considerations have been made in the analysis of lithics. Cores, primary flakes, and block shatter are classified as evidence of initial-stage reduction activities. Secondary flakes, tertiary flakes, and thick and thin bifaces evidence later-stage reduction activities. Bifacial thinning flakes are indicative of tool-maintenance activities. Since broken flakes can be produced by a number of prehistoric and modern processes, they were not considered when characterizing the lithic tool production activities at the site.

Less common, or perhaps less well recognized, is the use of a bipolar technique (Hayden 1980; Jeske and Lurie 1993). In this technique, small cobbles are generally not well-suited for use in the direct hammer or core reduction technique described above, although a bipolar technique can be used to manipulate these items. When using a bipolar technique, the cobble is placed on an anvil and struck. This action yields bipolar debris and, eventually, a spent core. The flakes can be discarded, used as is, or further modified into tools. The bipolar technique also produces pitting in anvil stones due to the striking force used.

The other class of lithic artifacts, ground-stone tools, consists of pecked and ground items generally made from metamorphic or igneous rock. Included in this category are items that are intentionally formed, such as celts and axes, and unintentionally formed, such as hammerstones, grinding stones, and pitted stones. Intentionally formed artifacts consist of items that were modified for a specific use. Unintentionally formed items have areas of pitting, battering, or smoothing that were caused through use. Definitions of the individual artifact categories are based on those used by other researchers (e.g., Brose 1970; Petraglia et al. 1998; Stewart 1986).

3.0 CULTURAL BACKGROUND

This section presents a general outline of prehistoric and historic cultural developments in the Mid-Atlantic region in general and in Fairfax County in particular. This overview is based on a series of prehistoric contexts and other regional reports that provide a framework for the description and analysis of all known or expected archaeological resources, and the basis for evaluating the significance of those resources (VDHR 1991). The Historic Context is based on previously published histories of Fairfax County, while that for the subject property is based on a review of several historic maps and aerial photographs, and discussions with individuals knowledgeable about the history of the parcel.

3.1 Prehistoric Context

The Council of Virginia Archaeologists has developed a series of prehistoric contexts that provide a framework for the description and analysis of known or expected archaeological resources, and a basis for evaluating the significance of those resources. These contexts are organized by region and time period, and provide much of the basis for the prehistoric Native American context presented below (Figure 4).

Paleoindian Period (12,000 – 10,000 BC). The Paleoindian Period exhibits a pattern of cultural adaptation based on environmental conditions that marked the shift from the Late Pleistocene to the Early Holocene. During this period of glacial warming, the climate was considerably colder and wetter than at present. The vegetation consisted of spruce and pine, infused with grasslands (Boyd 1989).

Prehistoric settlements consisted of small hunting camps that were “tethered” to sources of high quality lithic raw materials. The primary means of subsistence in the tundra and mountainous regions was large game such as mammoth, mastodon, caribou, bison, moose, elk, and deer. In the archaeological record, early Paleoindian sites are usually characterized by the presence of large, fluted, lanceolate shaped projectile points such as Clovis, while later Paleoindian components are identified with projectile point types such as Dalton/Hardaway. Clovis points have been found throughout North America, from the West to the East Coast, and as far north as Nova Scotia. Preferred lithic materials for these projectile points were high-quality cryptocrystalline stones such as specific varieties of jasper and chert.

Paleoindian hunter-gatherers probably traveled long distances to obtain food and the raw materials for tool production, as has been shown by studies of lithic procurement systems centered on the Thunderbird site in Virginia and other Mid-Atlantic sites (Custer 1984; Gardner 1977). A study of fluted projectile points in northwestern Pennsylvania showed that most were made of cherts imported from 250 miles away (Lantz 1985). At the Lamb site in western New York, one Clovis point was made of Knife River chert from North Dakota, over 1,000 miles away, and other Clovis points were made of chert from Indiana, a distance of 400 to 500 miles away. Evidently the local Onondaga chert was not being used (Gramly 1988). It is likely that many Paleoindian sites have not been discovered or documented because they are located on submerged portions of the continental shelf (Kraft and Chacko 1978). Post-glacial rise in sea level and sedimentation of the Piedmont zone of the Potomac River may have destroyed or

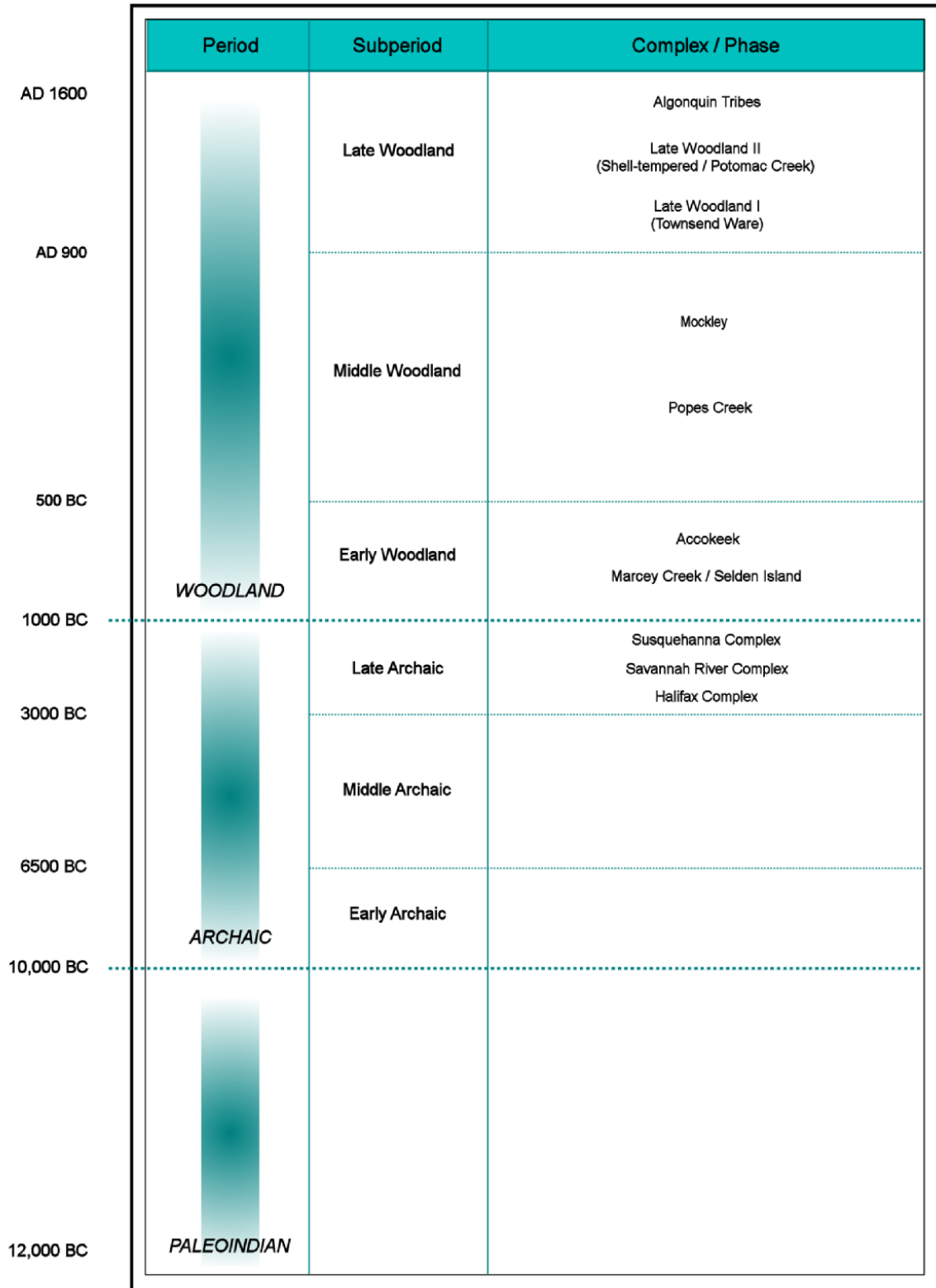


Figure 4. Temporal sequence of northern Virginia.

obscured many sites. While extensive surveys have located Paleoindian sites and isolated finds, it is evident that occupation was minute compared to other temporal periods.

Early Archaic Period (9000 – 6500 BC). During the Early Archaic period, environmental conditions were not drastically different from that during the previous Paleoindian period. Glacial recession continued and deciduous forests expanded, possibly leading to a greater proliferation of game species. The biggest difference in tool kits between the Paleoindian and Early Archaic periods seems to be in point types. Based on point types found at the Thunderbird and Fifty sites in the Shenandoah Valley, Gardner (1974) proposed a continuum for the Early Archaic period from corner-notched (Palmer, Kirk and Amos point types) to side-notched (Warren and Kessell point types) to stemmed points (Kirk Stemmed point type). There was also a change in the techniques used to attach projectiles and knives to shafts that emphasize notched hafts. The use of different projectile point styles possibly appears to reflect a shift in hunting strategies to accommodate more varied game selection, such as bear, white-tailed deer, squirrel, otter and fowl (DeSanto et al. 1982).

Foraging and hunting also expanded into more diverse ecological niches. In the Monocacy River valley of Maryland, most sites tend to be concentrated around the river, in order to exploit various food resources (Kavanagh 1983). Surveys on Lowes Island concluded that Early Archaic sites tended to be located on fans and marsh edges, indicating riverine resource exploitation (Larson et al. 1980).

Both Gardner (1974) and Custer (1980) have hypothesized that during the Early Archaic and Middle Archaic periods in portions of the Mid-Atlantic region, people banded together into macro-base camps, or groups of families in the spring and summer, and divided into smaller, micro-base camps in the fall and winter months. The larger base camps were located in the valley floodplains while the smaller autumn and winter encampments were located in upland regions.

Middle Archaic Period (6500 – 3000 BC). The Middle Archaic was marked by changes in the environment and subsistence strategies. During this period, a warmer and drier climate led to a period marked by an increase in summer drought, sea level rise, grassland expansion into the Eastern Woodlands, and the appearance of new plant species (Carbone 1976; Hantman 1990). Hemlock and oak trees gradually replaced spruce. The differences in elevation throughout the Ridge and Valley physiographic region allowed for a number of deciduous trees including oak, chestnut, and hickory to appear (Custer 1990). A greater variety of plant resources allowed for an increase in general foraging as a supplement to hunting (Kavanagh 1982). Shellfish is introduced into the diets of the Middle Archaic people and there is a significant increase in the consumption of hickory nuts. Settlements consisted of small base camps located in or near inland swamps that were convenient to seasonally available subsistence resources, as well as smaller temporary upland hunting camps.

The warming trend declined between, 4000 and 3500 B.C. and the archeological record indicates a rise in population within the Mid-Atlantic region. Components dating to Paleoindian and Early Archaic periods are almost nonexistent at Middle Archaic sites, as according to Gardner (1989) “the local ecology of very few sites was able to transcend the changes between the Pleistocene

and latter part of the Early Holocene." Tool types, which were common to Paleoindian and Early Archaic lithic assemblages, such as unifacial tools and formal end scrapers, decreased substantially during the Middle Archaic (Egloff and McAvoy 1990). The bifurcate tradition of projectile points began at this time, and ground stone tools also became widely utilized as subsistence and settlement patterns shifted. Some projectile point styles dating to this period include Stanly Stemmed/Neville, Morrow Mountain I and II, Guilford, and Halifax (Coe 1964; Ritchie 1971; Justice 1987; Reinhart and Hodges 1990).

Late Archaic Period (3000 – 1000 BC). The Late Archaic environment is characterized by a warmer and drier climate, a continued rise in sea level, and the "reappearance of open grassy areas" (Carbone 1976) as well as the establishment of the faunal communities seen today. Seasonal hunting and foraging patterns continued, but exploitation of riverine resources rapidly became an important part of the subsistence base. The rise in sea level created a high salinity environment within the Chesapeake Bay. The first large semi-sedentary base camps were established along rivers and streams. Several sites located in the Piedmont Uplands, along the Potomac near the Fall Line, are considered to be fishing camps (Gardner 1987).

Several Late Archaic complexes or cultures have been identified in large portions of Virginia. These include the Halifax complex, the Savannah River complex, and the Susquehanna Complex (Figure 4). The last two cultures are associated with the latter portion of the Late Archaic in what is sometimes called the Transition Period. The Halifax complex is generally associated with Halifax points. Sites attributed to this culture are divided between riverine and non-riverine locales (Mouer 1991). Savannah River sites are generally found near waterways and are associated with Savannah River broadspear points (Mouer 1991; McLearn 1991). These points are generally quartzite and were probably multipurpose tools. Sandstone and soapstone bowls are also associated with this complex. Soapstone vessels and rhyolite broadspear points characterize the Susquehanna Complex in the northern Shenandoah Valley.

Rhyolite and quartzite continued to be a commonly employed lithic material, and rock shelter sites may be associated with rhyolite procurement (Kavanagh 1982). It was during the Late/Terminal Archaic and Early Woodland periods that rhyolite was transported the greatest distance from the sources in the Catoctin Mountains of Maryland down to the Coastal Plain. However, the potential network that may have facilitated this trade is still largely unknown (Kavanagh 1982). This network is associated with the production of preforms or quarry blades. These blades were used to make large-stemmed projectile points at locales away from the source quarries. This phenomenon was first described by Holmes (1890a, 1890b, 1897) who noted its presence at terrace sites along the Potomac River in Washington, D.C. This distribution implied a more riverine and sedentary settlement system. In Virginia, quarrying and processing sites have recently been excavated, and tool reduction strategies have been reconstructed employing refitting techniques (Petraglia et al. 1990).

Early Woodland Period (1000 – 500 BC). The Early Woodland period is marked by the introduction of ceramics, increased sedentism and changes in tool kits. Quartzite broadspear points are quickly replaced by "small lanceolate, notched, and stemmed forms made on quartz, chert, and various other lithic materials" (McLearn 1991:113). Fishtail point types appeared along the Potomac River.

Phases defined for the Early Woodland period in the Mid-Atlantic region include Marcey Creek, Selden Island, and Accokeek (Figure 4). Due to a lack of data, these cultures are identified by the ceramic types. The steatite or soapstone-tempered Marcey Creek and Selden Island varieties are the earliest ceramics in Virginia. Marcey Creek vessels are probably copied from the stone bowls of the Late Archaic period. They possess flat bases, a protruding heel and vertical walls and may be net or fabric impressed. Selden Island wares are often cord-impressed. Accokeek wares are tempered with sand or crushed quartz. These vessels are often marked with oblique cord impressions and are associated with fishtail and corner-notched point types. In particular, Accokeek ceramics are often affiliated with Piscataway, Calvert and Rossville points (Wesler et al. 1981).

Gardner (1982) has proposed that the settlement-subsistence system in portions of the Mid-Atlantic region during this period focused on a series of base camps where the populations aggregated to exploit seasonal resources. These base camps, often located at the junction of fresh water and brackish water streams, focused on harvesting anadromous fish in the spring and early summer and exploiting estuarine resources in the fall and early winter. Smaller camps would be established seasonally in areas where there was high potential for other resources. Barber (1991) argues for an increase in sedentism as a result of stabilized sea levels that created additional stable environments.

Middle Woodland Period (500 BC – AD 1000). The Middle Woodland period is marked by changes in lithic production, an increased reliance on ceramics, and greater complexity of society as suggested by the construction of burial mounds (Stewart 1992). Bifaces were fashioned from flakes removed from cores rather than performs or blanks. This technology required greater skill and implies that tools were being crafted by specialists. Projectile point types associated with Middle Woodland period in Virginia are Potts, Rossville, Fox Creek, Selby Bay, and Jack's Reef. Small triangular points first seen in this period may indicate that the bow and arrow was being used by the Middle Woodland peoples. The presence of non-local rhyolite, argillite, and jasper at a few sites suggests that localized exchange networks may have been in place between the Coastal Plain and areas near both western Maryland and the New Jersey Fall Line (Barse and Beauregard 1994). Other characteristics of the Middle Woodland period include pit storage features and shell middens, and the diversification of ceramic vessel forms, size, and decoration.

The local Middle Woodland population utilized a wide spectrum of wild, seasonal resources while the settlement system was focused on central base camps with storage facilities and widespread procurement sites (Curry and Kavanagh 1991). There is no substantial evidence of agriculture during this time, even though the shift to centralized base camps may have set the stage for the development of horticulture.

Several phases have been defined for northern Virginia during the Middle Woodland period based on particular characteristic ceramic types (Figure 4). The major ceramic type in the region is the shell-tempered Mockley, which evolved from the sand-tempered Popes Creek (Barse and Beauregard 1994:14). At this time, base-camp settlements located at freshwater/brackish water junctions were abandoned in favor of broader floodplain sites where maximum resource exploitation of tidal and non-tidal aquatic resources was possible (Davis et al. 1997). Site size also decreased during this period. Projectile point types associated with the Mockley phase are

Fox Creek, Selby Bay, and Jack's Reef. The presence of non-local rhyolite, argillite, and jasper at a few sites suggests that localized exchange networks may have been in place between the Coastal Plain and areas near both western Maryland and the New Jersey Fall Line (Barse and Beaugard 1994:15).

The establishment of stable agriculture during the Late Woodland period led to the development of sedentary floodplain village communities. Hunting, gathering, and fishing were still practiced, but to a lesser extent than earlier. Ceramic decoration, tempering materials and embellishment appear to be very important at this time. Triangular projectile points are also diagnostic of this time period and are generally made of chert in the northern Shenandoah Valley. Late Woodland villages contain concentrated activity areas and were located farther away from water than villages occupied during earlier periods.

Late Woodland Period (AD 900 – 1600). The Late Woodland in northern Virginia is characterized by use of the bow and arrow, increased sedentism, the spread of dispersed hamlets, the growth of villages, rapid population growth, and movement of populations ultimately into less desirable locations (Turner 1992). There is a settlement shift from inner flood plains and flood plain levees presumably for agricultural reasons. In the latter half of the period, a climatic shift reduced the growing season, placing stress on agricultural productivity. After AD 1500, there was an increase in social and political activity among native tribes in Maryland and Virginia, and it has been suggested that an alliance of coastal plain Algonquian groups had formed prior to European contact (Potter 1993).

Cultures in the Late Woodland period are again largely defined according to ceramic types due to a lack of archaeological data (Figure 4). Predominant Coastal Plain ceramics of the period are the fabric-impressed Townsend series and the cord-marked Potomac Creek series (Figure 6) (Turner 1992). Ceramic decoration and embellishment appear to have been very important at this time. Triangular projectile points are associated with the period. An associated change in settlement pattern appears to be a function of the colder, drier climate during the Little Ice Age which began around A.D. 1400. Houses were arranged in a circle and surrounded by walls or palisades. Large rectangular structures appear and there is a decrease in the number and size of settlements away from floodplains. Features include pits, fire-cracked rock clusters and post-molds.

3.2 Historic Context

The historic context presented here is based largely on the discussion in Lautzenheiser et al. (2001). With the initial British exploration of the area during the early seventeenth century, a tribe called the Dogue and part of the Algonquian Federation, was found to be located in Fairfax County (Brown 1994; Waltemyer 1995). Settlement in the region first began on the Maryland side of the Potomac River in the 1630s, being hampered by hostilities with the Native Americans on the Virginia side of the river. European diseases and force soon defeated the tribe and opened the area to British settlement. As the settlers began to move inland from the Potomac River, one route used was called the Potomac Path, a trail that was soon developed into a road (Harrison 1987; Sweig 1992; Waltemyer 1995). This trail is in the same general area as U.S. Route 1 to Telegraph Road. U.S. Route 1 south of Telegraph Road was later built to service the Potomac

River plantations. The Potomac Path became a major transportation route between Alexandria and Fredericksburg.

Initially, Fairfax County was held as a proprietary by a group of English investors and only later was it left to the Fairfax family. During the period prior to 1649 the county was part of the larger Northumberland County, but with population growth, this large tract was divided a number of times. Fairfax County was formed in 1742 and originally included Loudon and Arlington Counties as well as several independent cities, including Alexandria (Burke 1957) (Figure 5). Prior to the American Revolution most residents of the county were engaged in growing tobacco (Sweig 1992). Just prior to the Revolution in 1773, the population of the county was just over 8,300. The American Revolution had little direct effect on Fairfax County, other than making imported goods harder to acquire. Troops did traverse through the county, but no major engagements took place. By the end of the war in 1782, over 8,700 people were living in Fairfax County, with over 3,600 being enslaved African-Americans (Sweig 1992).

With the end of the war, Alexandria became the major population center in Fairfax County. Alexandria was a prosperous port and commercial center, and many of the county roads passed through the town (Sweig 1992). But in 1791, part of the county inclusive of Alexandria was ceded to the federal government to create the District of Columbia. However, with the national capital mainly developed on the Maryland side of the Potomac River, the land in Virginia was returned in 1847 (Artemel 1992; Netherton and Netherton 1992). Instead of re-incorporation into Fairfax County, the areas formed Arlington County and the City of Alexandria. Tobacco continued to be an important crop during this time in Fairfax County, although the port of Alexandria shipped wheat and flour grown in Maryland and Virginia as well (Sweig 1992).

For much of the first half of the nineteenth century Fairfax County witnessed declines in agricultural output. Soil exhaustion and changes in the national economy have been identified as causes of this downturn. Prior to the 1840s, many fields were fallow and planters were emigrating from the county in search of new land. Beginning in the 1840s, however, northerners began to purchase the farms and plantations in Fairfax County, causing economic activity to increase (Hickin 1992). Marketing to urban areas, fishing, and the sale of slaves became important.

Fairfax County witnessed no major battles during the ensuing Civil War, but it succumbed to major devastation nonetheless. The county was situated in the unenviable position between Union forces surrounding Washington, D.C., to the north and Confederate forces to the south in Manassas and Centreville. The county was used as a major staging area by both armies, leading to the widespread disruption of markets, transportation, and livelihoods. The Civil War left Fairfax County with a depressed economy and with residents attempting to deal with new economic and social relations. Agriculture in the county diversified, with dairying, livestock, and poultry becoming important, as was fruit and vegetables (Hickin 1992).

By the 1870s, the establishment of additional rail lines connected Fairfax County to several major ports and population centers (Reed 1992). In addition, population growth in Washington, D.C., opened additional markets for agricultural produce from the county. The economy recovered from the effects of the Civil War and by the beginning of the twentieth century,

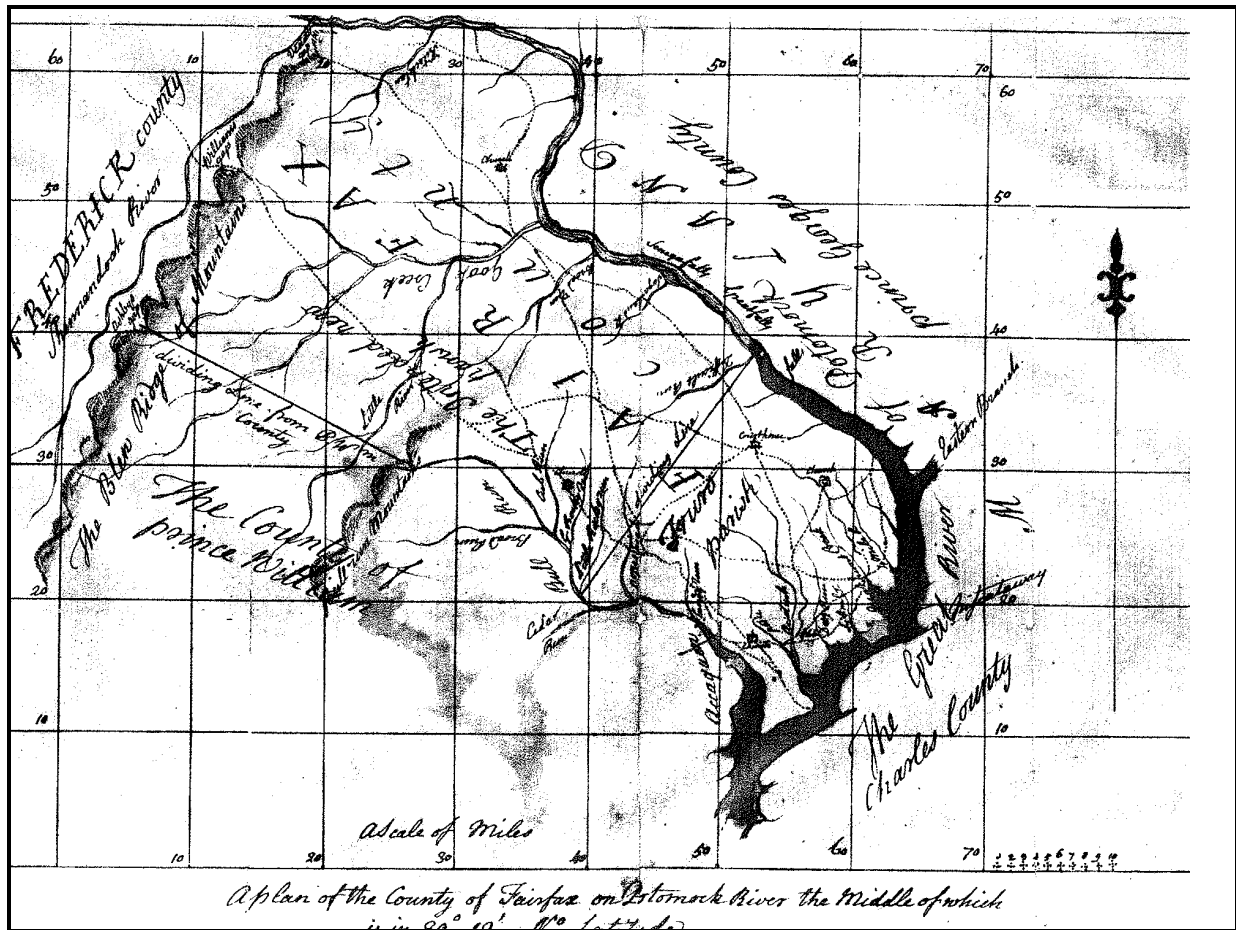


Figure 5. 1740s map of Fairfax County (Anonymous ca. 1740s).

significant growth was being achieved. Fairfax County became a major dairy producer, and this in turn led to additional improvements in transportation routes, both roads and rails, linking the county to Washington, D.C.

By 1917 the United States entered World War I, and Fairfax County was affected by the establishment of Camp A.A. Humphreys, soon to be renamed Fort Belvoir (Lautzenheiser et al. 2001). While the land purchases displaced many residents, the establishment of the base, covering 3,300 acres in 1918, provided a major economic stimulus for the Fairfax County economy. The economic stimulus of the military establishment was welcome, given that the farm economy began to decline after World War I. Farm commodity prices fell, and like other rural areas of the United States, it can be argued that the agricultural sector of Fairfax County entered a depression earlier than other sectors in the nation. When the farm economy began to improve at the eve of World War II, a new trend began to impact rural residents. World War II and its aftermath brought an influx of new residents, associated with the expansion of the federal government and military establishments, to the county (Netherton 1992).

The period after World War II has seen the transformation of Fairfax County from a rural area with an agriculturally-based economy to an urban area closely tied to Washington, D.C. This transformation has caused the rapid development of area infrastructure such as roads, airports, and water and sewer systems, among others, to accommodate the newly constructed subdivisions. As a measure of this growth, the Fairfax County population rose from just under 41,000 in 1940 before World War II to nearly 1 million residents 60 years later. Today, Fairfax County is one of the most affluent counties in Virginia and has become a major business center and travel destination (Lautzenheiser et al. 2001). The North Hill property evidences a number of these trends, especially with regards to the succession of land uses from plantation and farm in a rural setting to an urbanized environment during or shortly after World War II. The land use associated with this parcel is discussed in greater detail in the following section.

3.3 Project Area History

Fortunately, a number of maps and aerial photographs that depict the location of the North Hill property between the 1700s and 2000s are available for review. This series of maps and aerial photographs were examined prior to the initiation of field work in an attempt to determine whether the remains of structures were likely to be present within the survey tract. The initial map examined dates to the 1740s but does not depict the location of structures (Figure 5). Next is a map of a compilation of landholdings that date to the middle of the eighteenth century (Mitchell 1987) (Figure 6). The North Hill property appears to be located within a tract of land owned by William Clifton. The next available map is the Hopkins map of 1879 (Figure 7). This map indicated that a school house and a domestic residence described as being of the Shelton estate were located near the project area. Following is a less detailed 1886 map (Shipman 1886) (Figure 8). This map, too, indicates the presence of a structure within or near the project area. Similarly, an 1894 Hopkins map suggests that structures to the north and south are either within or near the project area (Figure 9). It should be noted that these maps do not provide sufficient detail to allow any degree of certainty as to whether these structures are actually located within the North Hill property.

Several twentieth century aerial photographs and maps trace the more recent development and use of the North Hill property. A 1937 aerial photograph appears to depict the presence of at least one structure, in the southwest corner of the tract, along U.S. Route 1 (Figure 10). The remainder of the tract is tree-covered, and the surrounding landscape appears to be rural. However, the 1942 Alexandria Southwest 15-minute USGS topographic quadrangle depicts eight structures along U.S. Route 1 and a ninth structure along the northern edge of the property (Figure 11). A 1954 aerial photograph indicates that the land use of the property had begun to change (Figure 12). A quite large building is present in the southwest corner of the property, while numerous structures, most likely mobile homes, are scattered throughout the south half and northeast quarter of the property. The northwest quarter of the property remains largely forested. By 1988 the parcel is almost completely covered by mobile homes (Figure 13) At one time approximately 500 mobile homes covered the parcel. In 1981, the Fairfax County Redevelopment and Housing Authority purchased the parcel and removed the mobile homes. The removal of the mobile homes can be seen in the 2002 aerial photograph (Figure 14).

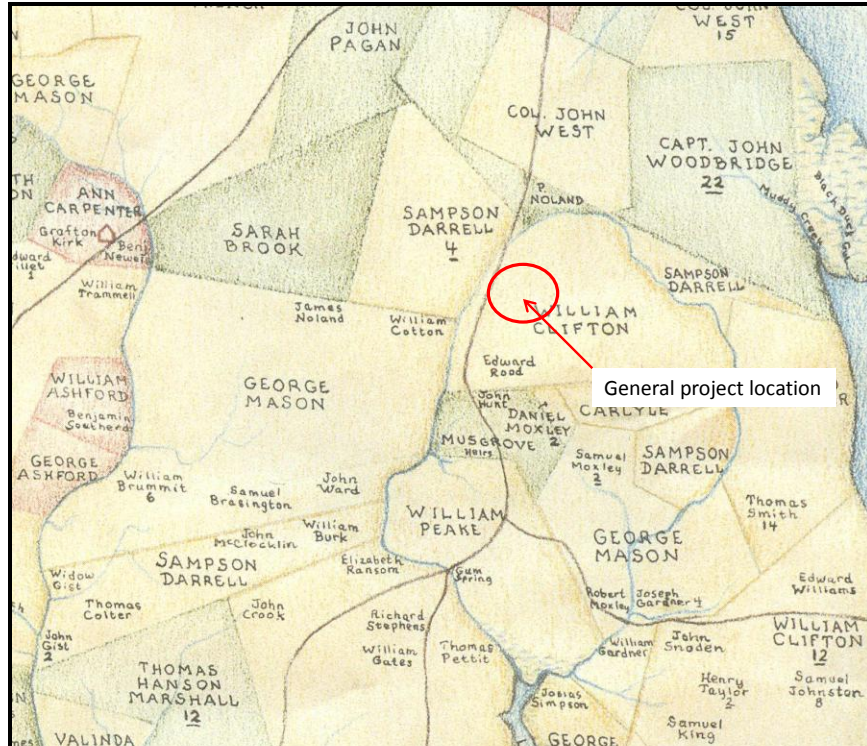


Figure 6. Compilation of 1760 landowners in the vicinity of the project area (Mitchell 1987).

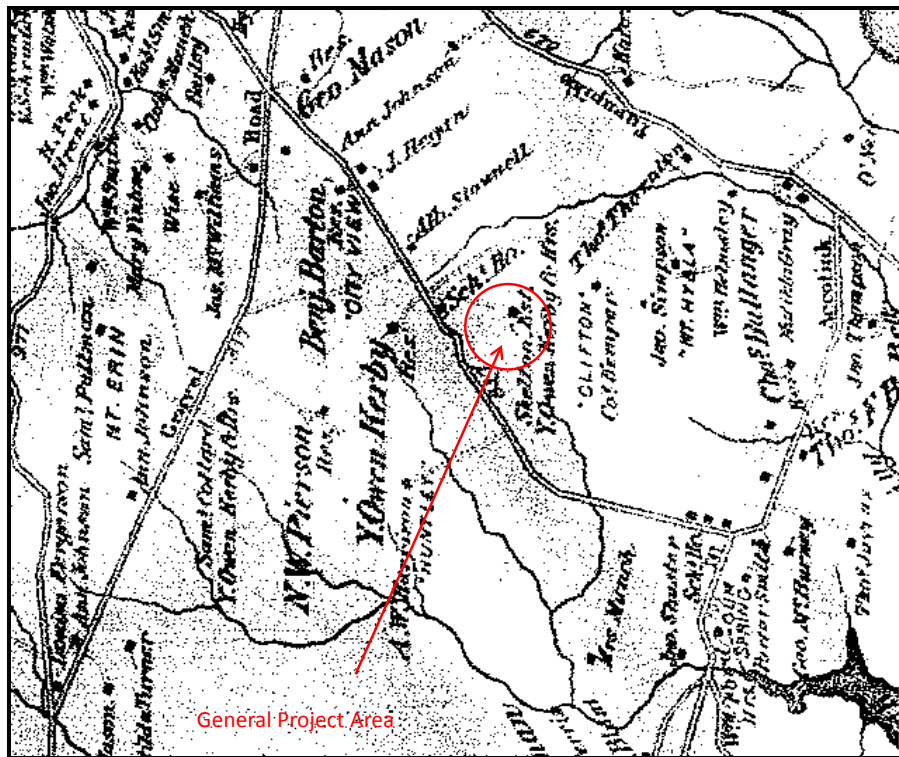


Figure 7. 1879 Hopkins map of the project area (Hopkins 1879).

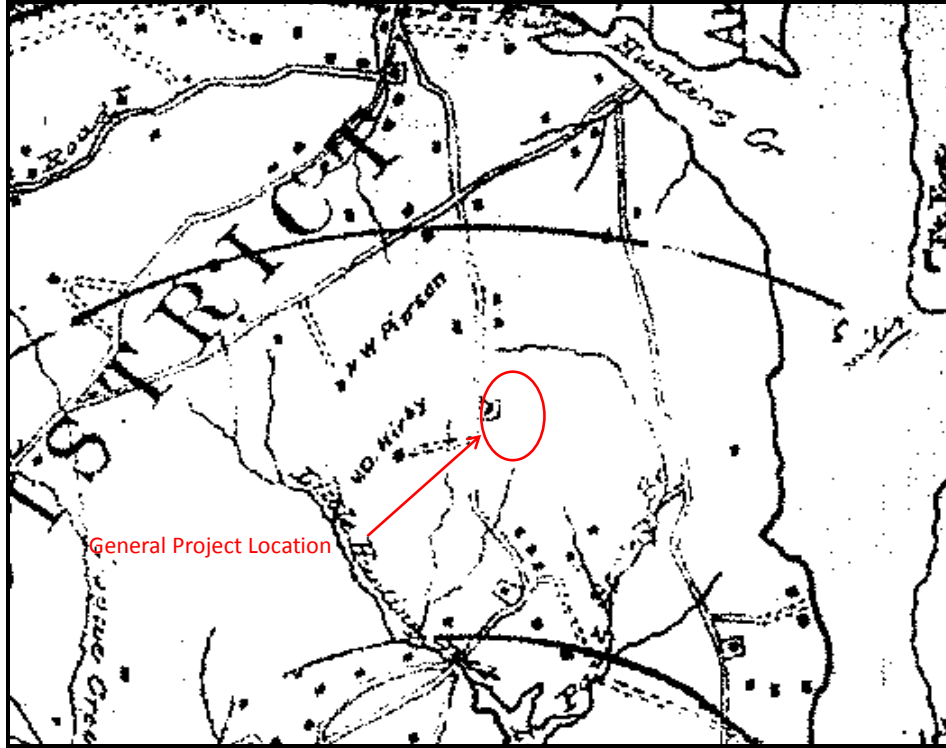


Figure 8. 1886 map of the project area (Shipman 1886).

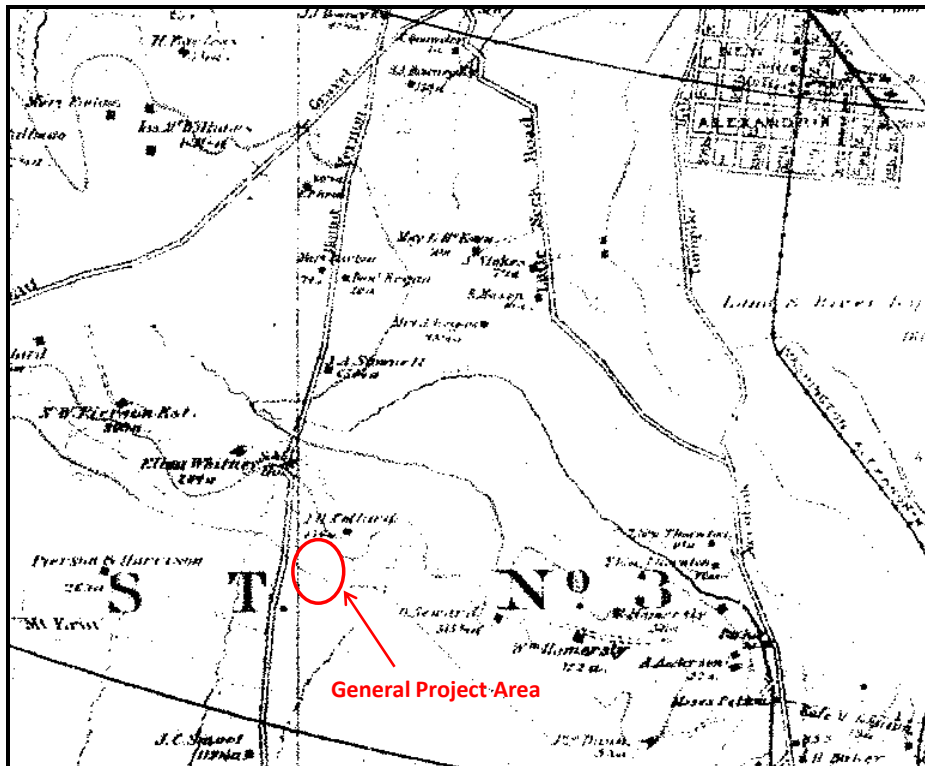


Figure 9. 1894 Hopkins map of the project area (Hopkins 1894).

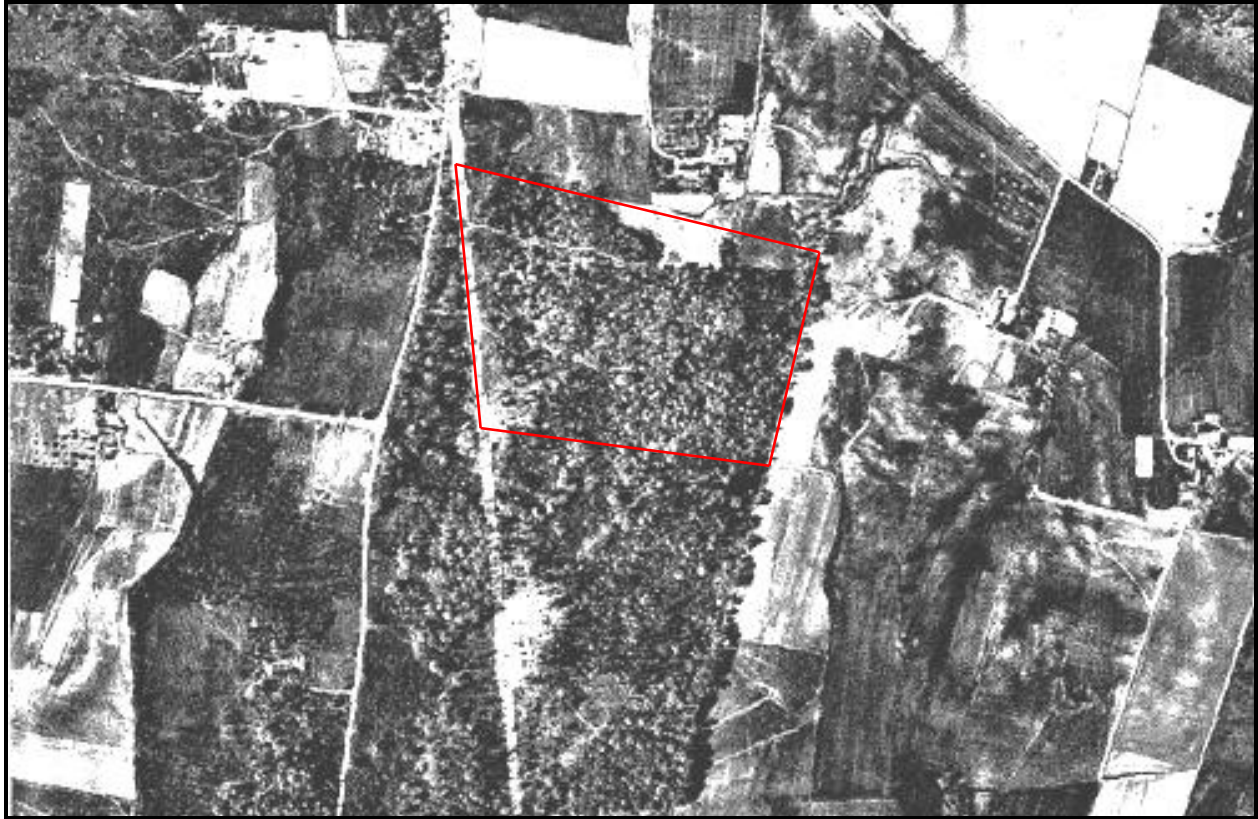


Figure 10. 1937 aerial photograph of the project area.

3.4 Previous Investigations

A review of archeological surveys conducted in the vicinity of the project area was conducted at the James Lee Community Center of the Fairfax County Park Authority and the Virginia Department of Historic Resources in Richmond. The review indicates that four projects have been conducted within approximately 1-mile of the project area. Johnson and Chatelain (1979) report on the results of an investigation conducted prior to the construction of the Lockheed Boulevard-Van Dorn Street connector road to the north of the project area. This survey located two prehistoric sites, a prehistoric quarry, an historic residential site, and a cemetery. Both prehistoric sites were found in elevated locations above tributary streams. McCarron and Schemmer (1991) conducted the Tavenner Lane project prior to the construction of an apartment building for Fairfax County Department of Housing and Community Development. The project area, totaling 2.2-acres, is to the west of the North Hill site. No archaeological sites were found. McCarron (1991) documents investigations at the 11.5-acre Village at Gum Springs, located to the north of the current project area. A concrete foundation dating to the mid-twentieth century was located at the tract. Finally, a survey along U.S. Route 1 was conducted and documented by Lautzenheiser et al. (2001). No archaeological sites were identified by this survey.

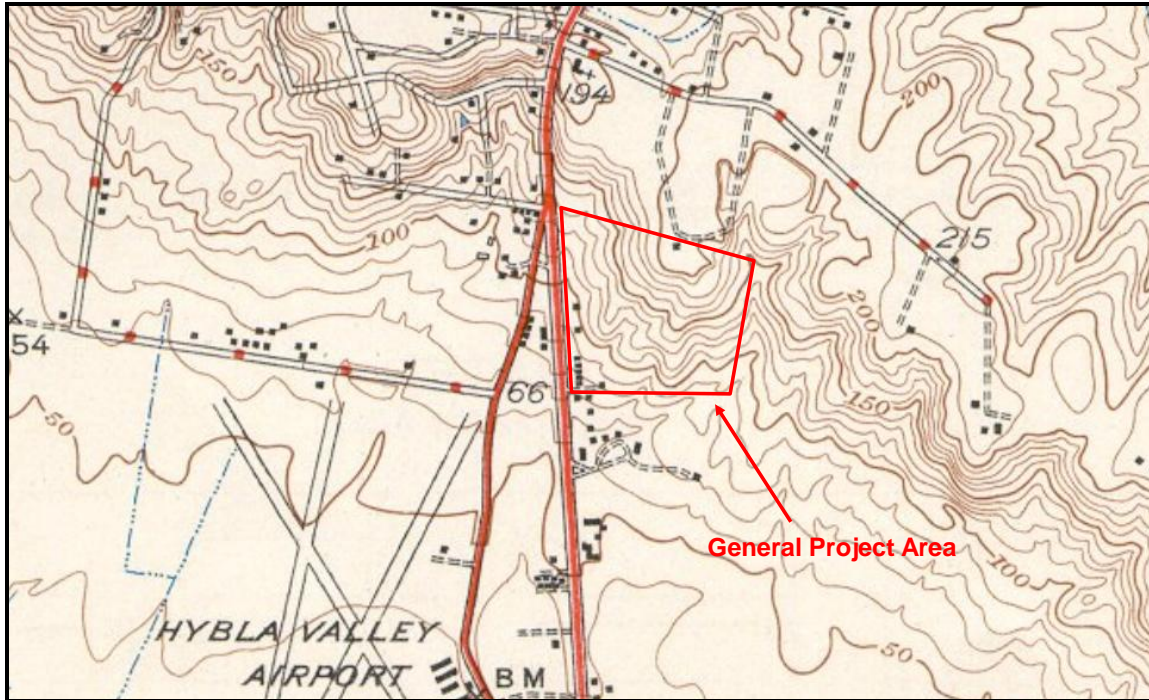


Figure 11. 1942 Alexandria USGS 15-minute quadrangle with project area depicted.



Figure 12. 1954 aerial photograph of the project area.



Figure 13. 1988 aerial photograph of the project area.

As a result of the survey efforts, a total of eight archaeological sites has been identified within approximately 1 mile of the North Hill property (Table 4). These include seven sites with Historic period components and 1 with a Prehistoric period component (Table 4). The historic components range in date from the nineteenth to the twentieth centuries and include the remains of farms, domestic sites, and indeterminate site types. The Historic period sites tend to be located in upland or sloped settings. The single prehistoric site is a lithic scatter located in an upland setting.

A review of historic resources surveyed within one mile of the North Hill property indicates that 19 such properties are present (Table 5). These include 15 residential structures, some with associated farm outbuildings, and 4 commercial structures. One property dates to the eighteenth century, while three date to the nineteenth century. The remaining 15 properties were constructed during the twentieth century. Three properties have been determined eligible for listing in the National Register of Historic Places while the other 16 are not eligible.



Figure 14. 2005 aerial photograph of the project area.

Table 4. Archaeological sites within 1 mile of the project area.

<i>Site Number</i>	<i>Time Period</i>	<i>Site Type</i>	<i>Landform</i>
44FX0405	19 th century	Trash pit	Upland slope
44FX0413	Undet. prehistoric	Undetermined	Upland
44FX1149	Undetermined historic	Cemetery	Upland
44FX1150	Undetermined historic	Cemetery	Upland
44FX1740	19 th century-1 st quarter	Domestic dwelling/farm complex	Upland slope
44FX1971	20 th century-1 st quarter	Farmstead	Terrace
44FX2677	19 th century-3 rd quarter	Military earthworks	Upland slope
44FX2704	19 th century-3 rd quarter	Domestic dwelling	Hill

Table 5. Architectural sites within 1 mile of the project area.

<i>Structure Number</i>	<i>Name/Characteristics</i>	<i>Date of Construction</i>	<i>NRHP Status</i>
029-0117	Huntley, 2-story brick, Federal style house and farm complex with springhouse, ice house, tenant house, root cellar, etc.	1820	Eligible
029-0170	Sherwood Farm, 2.5-story frame Italian Villa dwelling	1859	Eligible
029-0227	Oakwold, 2.5-story Colonial style house and farm complex with tenant house, chicken house, and storage buildings	1873	Not eligible
029-5147	House, 7024 Richmond Highway, 2-story brick Colonial Revival with side-gable roof	1941	Not eligible
029-5148	House, 7020 Richmond Highway, 1.5-story brick, cross-gable roof	1941	Not eligible
029-5149	Monsignor Walsh Hall, 1-story brick office building; 1-story frame meeting hall	1940;1925	Not eligible
029-5150	House, 3101 Collard Street, 1.5-story brick Colonial Revival, gambrel roof	1936	Not eligible
029-5151	House, 3100 #2 Collard Street, 1.5-story brick Tudor Revival, gable roof	1940	Not eligible
029-5152	Walker House, 1.5 story brick Tudor Revival, gable roof	1942	Not eligible
029-5153	Hatmaker House, 1 story frame Tudor Revival, cross-gable roof	1925	Not eligible
029-5154	House, 6835 Richmond Highway, 1 story frame Bungalow/Craftsman, gable roof	1935	Not eligible
029-5155	House, 6831 Richmond Highway, 1 story frame Bungalow/Craftsman, gable roof	1930	Not eligible
029-5156	Pagett Property Management, 1 story brick garage; 2 story Colonial Revival commercial building with domestic origin	1934	Not eligible
029-5157	Hair Improvements, 1.5 story frame Bungalow/Craftsman with domestic origin, gable roof	1925	Not eligible
029-5158	Whiz Cleaners, 1 story brick Art Moderne style commercial building	1946	Not eligible
029-5159	Fairview Motel, 1 story brick guest building; 1.5 story Bungalow/Craftsman style single dwelling	1960;1930	Not eligible
029-5160	Alexandria Motel, Two 1 story brick guest buildings; 1.5 story frame motel office with domestic origin	1940;1930	Not eligible
029-5409	Ben Mae Manor, 2 story wooden foursquare dwelling later altered and encapsulated in stone	1785	Not eligible
029-5471	Hollin Hills Historic District, 463 single-family dwellings of modular construction	1946	Eligible

4.0 RECONNAISSANCE AND ASSESSMENT

The initial assessment of the study area involved a general reconnaissance and inspection of the North Hill property to evaluate the various local landforms for archaeological sensitivity, a comparison of those landforms to those that have been recognized as being likely locations of prehistoric Native American sites based on models that have been formulated for the Mid-Atlantic region in general and specifically for northern Virginia, and a detailed analysis of period maps and aerial photographs to identify likely locations of historic structures. Relevant criteria included topography/slope, distance to water, and degree of ground disturbance and/or historic development over time. The results of this assessment are presented below.

4.1 Site Location Models

Prior to the commencement of the archaeological survey conducted at the North Hill property, Greenhorne & O'Mara conducted an assessment of the property to identify areas that had a potential for the presence of previously unidentified prehistoric Native American and Historic period archaeological sites. Four factors were taken into consideration during this initial assessment: the guidelines for conducting archaeological surveys in Virginia issued by the Department of Historical Resources, which indicate that slopes of greater than 15 percent are considered to have a low potential for archaeological sites; a general walkover of the property to better understand its topographic characteristics; a review of nineteenth-century maps and twentieth century maps and aerial photographs to identify the location of structures on the property; and the application of a general model of prehistoric site location to the physiographic characteristics of the North Hill property. The model of prehistoric site location applied to the project tract is based upon the overviews provided in a series of historic contexts published by the Council of Virginia Archaeologists. These contexts were summarized in Section 3.

Contexts for each of the time periods emphasize the importance of sources of water, whether rivers, streams, marshes, or swamps, to prehistoric Native American site location throughout Virginia, including northern Virginia. Turner (1989:77) suggests that major population clusters during the PaleoIndian period occur in the south and west of Virginia, not in northern Virginia. In fact, as of 1988, no PaleoIndian projectile points as identified in the state site file had been found in Stafford County. In areas where sites have been found, PaleoIndian base camps and hunting stations have been found in uplands near major creeks or rivers or adjacent to swamps. During the succeeding Early Archaic and Middle Archaic time periods, populations evidently began to take greater advantage of floodplain settings. Surveys in northern Virginia locations identified Early Archaic and Middle Archaic sites on terrace formations above rivers and creeks, and on ridgetops overlooking these waterways. Fewer sites have been found in uplands away from waterways (Parker 1990:111). Klein and Klatka (1991:155) suggest that this pattern remains unchanged during the Late Archaic period, although by the Early Woodland period, the numbers of sites found in riverine settings increases. Finally, Hantman and Klein (1992:144) indicate that by the Late Woodland period, sites become increasingly clustered along rivers or at the confluence of rivers and streams, in large part due to access to fertile soils. The Middle Woodland period is, in contrast, more dispersed.

These patterns suggest that floodplain, terrace, and upland settings that overlook waterways have the highest potential for prehistoric Native American sites in the North Hill property. Slopes greater than 15 percent and flat upland areas greater than 150 m from a break in slope downward toward a waterway appear to have the least potential for prehistoric Native American archaeological sites.

4.2 Assessment Results

Based on the model discussed above, as well as the locations of previously identified archaeological sites located within 1-mile of the project area (see Section 3.4), the North Hill tract can be divided into areas of high and low probability. Areas of high probability for the presence of prehistoric Native American archaeological sites include the upland landforms that are in closest proximity to drainages, for the most part present in the northern and eastern sections of the property. Historic period sites, based on an overview of the nineteenth and twentieth century maps and aerial photographs, should be present throughout the property. Nineteenth century and pre-1950s sites appear to be located along U.S. Route 1 and perhaps along the north property boundary. Post-1940s sites, associated with the mobile home community, should be present throughout the parcel. Based on the Scope of Work provided by the Fairfax County Redevelopment and Housing Authority, G&O conducted an intensive shovel test survey at 7.5-m intervals across the entire parcel. The only areas not investigated by shovel test pits were generally small and discontinuous. These included a few areas of excessive slopes (greater than 15 percent), areas associated with a drainage present along the eastern property boundary, and disturbed areas, mainly associated with mobile home locations (concrete and gravel pads and retaining walls) but also associated drainage improvements along U.S. Route 1. The locations of specific shovel test pits not excavated are depicted on the survey tract area maps in Section 5.

5.0 RESULTS OF FIELD INVESTIGATIONS

Field investigations were undertaken by a crew from G&O between January and March 2008. Upon arrival at the project area, it was noted that the property was divided into a number of smaller parcels by a complex road system associated with its previous use as a mobile home park. These areas ranged from flat at lower elevations along U.S. Route 1 to more elevated upland landforms in the center and eastern portions of the parcel (Figure 2). Most areas were forested with an especially luxuriant growth of English ivy, except in areas along U.S. Route 1, which was grass-covered and generally open with few trees (Figure 13). The investigations included an initial general reconnaissance of the property followed by the systematic excavation of screened shovel tests. Shovel tests were excavated at 24.6-foot (7.5-m) intervals in areas that were not previously disturbed and in non-sloped areas (see Section 4.2). The excavation of shovel tests was necessitated due to the lack of adequate surface visibility across the entire parcel (Figure 15). The results of field investigations conducted at the North Hill property are discussed below.

5.1 Archaeological Survey

A total of 1,806 shovel test locations was established within 24 survey tracts across the 33-acre North Hill property, inclusive of a number of bracketing test locations (Figure 16; Table 6). Of the 1,806 test locations established, shovel test pits were excavated at 1,279 locations, while the remaining 527 locations were not investigated due to excessive slope (e.g., greater than 15 percent), the presence of a drainage, or prior disturbance (often the presence of concrete or gravel pads [Figure 17]). These investigations resulted in the recovery of artifacts in all 24 areas. Both historic as well as prehistoric artifacts were found across the North Hill property. The results of the field investigations conducted at the North Hill property between January and March 2008 are presented below by survey tract. The location of the survey tracts are depicted in Figure 16, while an overview of the results by survey tract is presented in Table 6. No standing structures are currently present within the North Hill property.

Area A

Area A is located in the southwest corner of the North Hill property (Figure 14). This approximately 1-acre area is situated at the northeast corner of the intersection of Dart Drive and U.S. Route 1. Area A is bounded to the west by U.S. Route 1, to the south by Dart Drive, to the north by survey Area D, and to the east by survey Area B. Areas A and B are divided by an asphalt road. This area consists of flat to gently sloping uplands that descend in elevation to the south and west toward U.S. Route 1. Most of the area is in a park-like setting, with scattered trees and a grass-covered lawn along U.S. Route 1. Tree density increases from west to east. At the time of investigation all of Area A consisted of a grass- or ivy-covered and partially forested tract with poor surface visibility.

The historic maps and aerial photographs discussed in Section 3 indicate that Area A once was the location of several structures and mobile homes (see Figures 9-11). The 1942 Alexandria



Figure 15. General views of the project area: top, typical interior area; bottom, open area along U.S. Route 1.

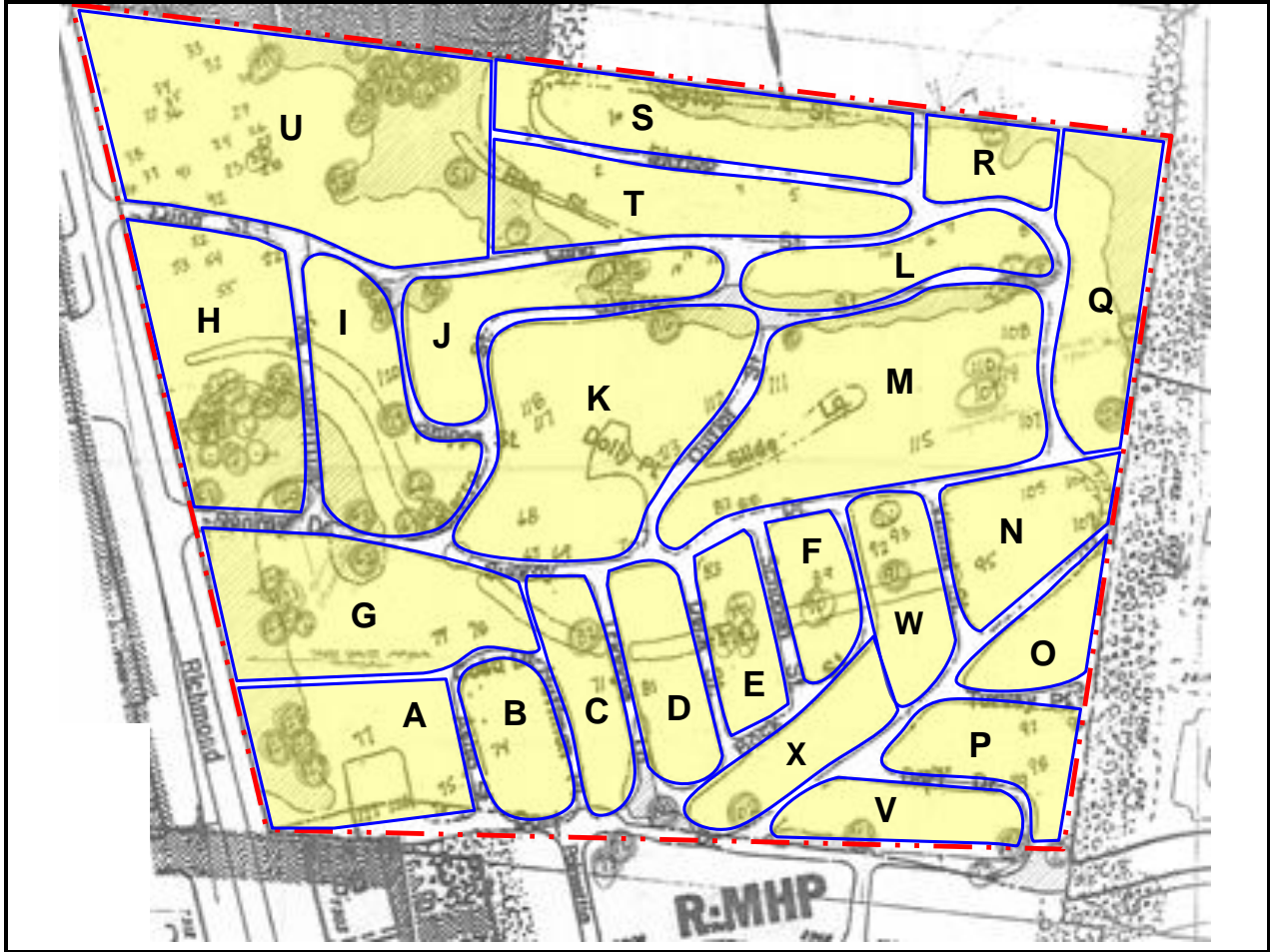


Figure 16. Locations of survey areas within the North Hill property.

USGS 15-minute quadrangle indicates the presence of perhaps as many as five structures in Area A fronting U.S. Route 1 and an additional structure along what would become Dart Drive (Figure 9). The 1954 aerial photograph depicts the presence of one large structure and perhaps two smaller structures fronting U.S. Route 1 as well as numerous mobile homes to the west (Figure 10). By 1988 only mobile homes were present in Area A (Figure 11).

Because of the lack of adequate surface visibility, Area A was investigated by the excavation of shovel test pits conducted at 24.6-foot (7.5-m) intervals. A total of seven transects, oriented east to west, was established in Area A with 6 to 10 tests each. This yielded a total of 63 shovel test locations, and, of this total, 48 were excavated (Figure 18; Table 6). The remaining 15 locations were not investigated due to the presence of concrete pads and sidewalks.

The shovel test profiles in Area A evidenced a great deal of variability in terms of soil textures, depths of horizons, presence of gravel, and soil color (Figure 19), although in all cases two strata were recorded. The initial stratum ranged from 5 cm to 20 cm thick. It was variously described as brown (10YR4/3), dark grayish brown (10YR4/2) or dark brown (10YR3/3) silt loam or sandy

Table 6. Results of shovel test excavations by survey area.

Area	Number of Locations	Number Excavated	Number Positive	Locations Not Excavated		
				Concrete Pad	Slope	Other Disturbed
A	63	48	25	15	0	0
B	36	29	8	7	0	0
C	37	29	6	8	0	0
D	47	37	6	10	0	0
E	40	33	11	7	0	0
F	33	26	19	6	1	0
G	102	75	35	16	11	0
H	101	83	29	6	0	12
I	96	58	15	21	16	1
J	63	37	21	11	15	0
K	158	102	45	42	14	0
L	60	39	18	18	1	2
M	177	124	45	20	23	10
N	49	35	11	12	0	2
O	24	14	4	9	0	1
P	47	34	7	13	0	0
Q	94	71	7	4	9	10
R	28	21	7	0	2	5
S	63	35	8	27	0	1
T	97	65	15	16	15	1
U	271	205	54	7	32	27
V	46	28	4	17	0	1
W	43	29	13	13	0	1
X	31	22	7	9	0	0
Total	1,806	1,279	420	314	139	74

loam. In instances, quantities of gravel were also present in this stratum. The second stratum consisted of yellowish brown (10YR5/4) or strong brown (7.5YR5/6) sandy clay or sandy clay loam, once again at times with gravel. In five instances, the initial horizon was underlain by yellowish brown sand (10YR5/4) or grayish brown (10YR5/2) silt loam. Gravel density precluded excavations beyond the initial soil horizon at a few of the tests.

The excavations conducted in Area A yielded a sizeable artifact assemblage, totaling 130 items, recovered from 25 positive shovel tests. This figure yields an average of almost 5.2 artifacts per positive test, or 2.7 artifacts per test excavated. Positive shovel tests are scattered throughout the survey tract, although 14 of the 25 positive tests were located in the western half of the tract. Based on the review of historic maps and aerial photographs for Area A, artifacts from the western half of the survey tract along U.S. Route 1 are more likely to be associated with structures while those found in the east half are more likely to be associated with mobile homes. The specific provenience for each artifact recovered from Area A can be found in Appendix B.



Figure 17. Concrete pads within the project area: top, typical pad with scatter of concrete blocks; bottom, close up view of concrete pad.

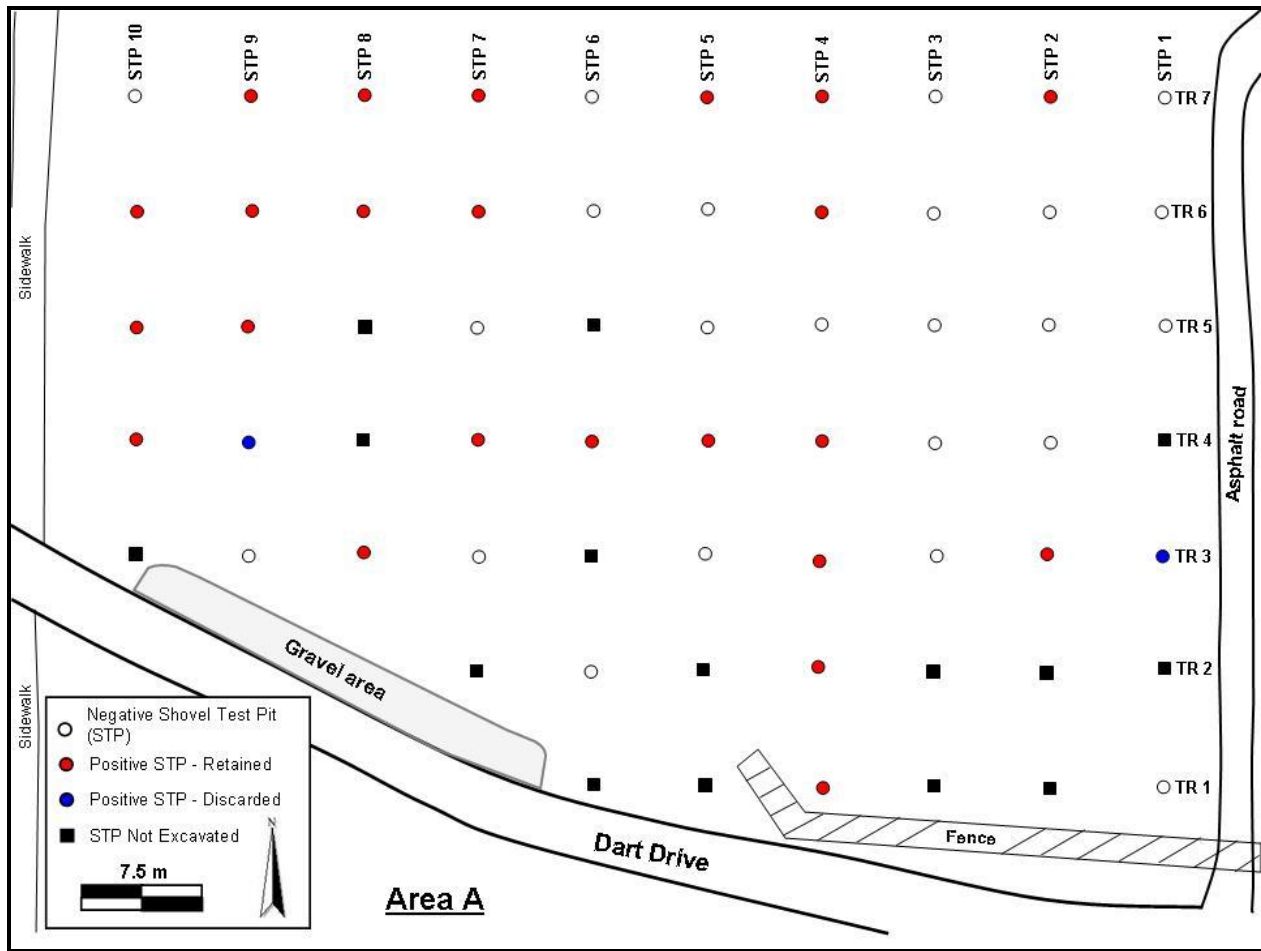


Figure 18. Location of shovel test pits in Area A.

Bottle and unidentified vessel glass was the most common artifact type, totaling 79 (brown bottle n=34; clear vessel n=35; clear bottle n=9; milk glass n=1). All identifiable bottle glass was machine-made, and several examples of Coca-Cola bottle fragments were recovered. Architectural materials were also common. These included tile fragments (ceramic n=13; asbestos n=2; other tile n=4), brick (n=4), window glass (n=13), and unidentified nails (n=2). The ceramic tile and brick fragments were clustered in the west half of Area A and were likely associated with the structures depicted on historic maps and aerial photographs dating to the 1940s and 1950s. Other items included can pull tabs (n=2), mirror glass (n=1), unidentified flat glass (n=5), and unidentified metal (n=3). The final artifact recovered from Area A was a quartzite bipolar flake indicative of a prehistoric Native American occupation.

Area B

Area B is located in the southwest quarter of the North Hill property (Figure 16). This approximately 0.5-acre area is situated along Dart Drive and to the east of U.S. Route 1.

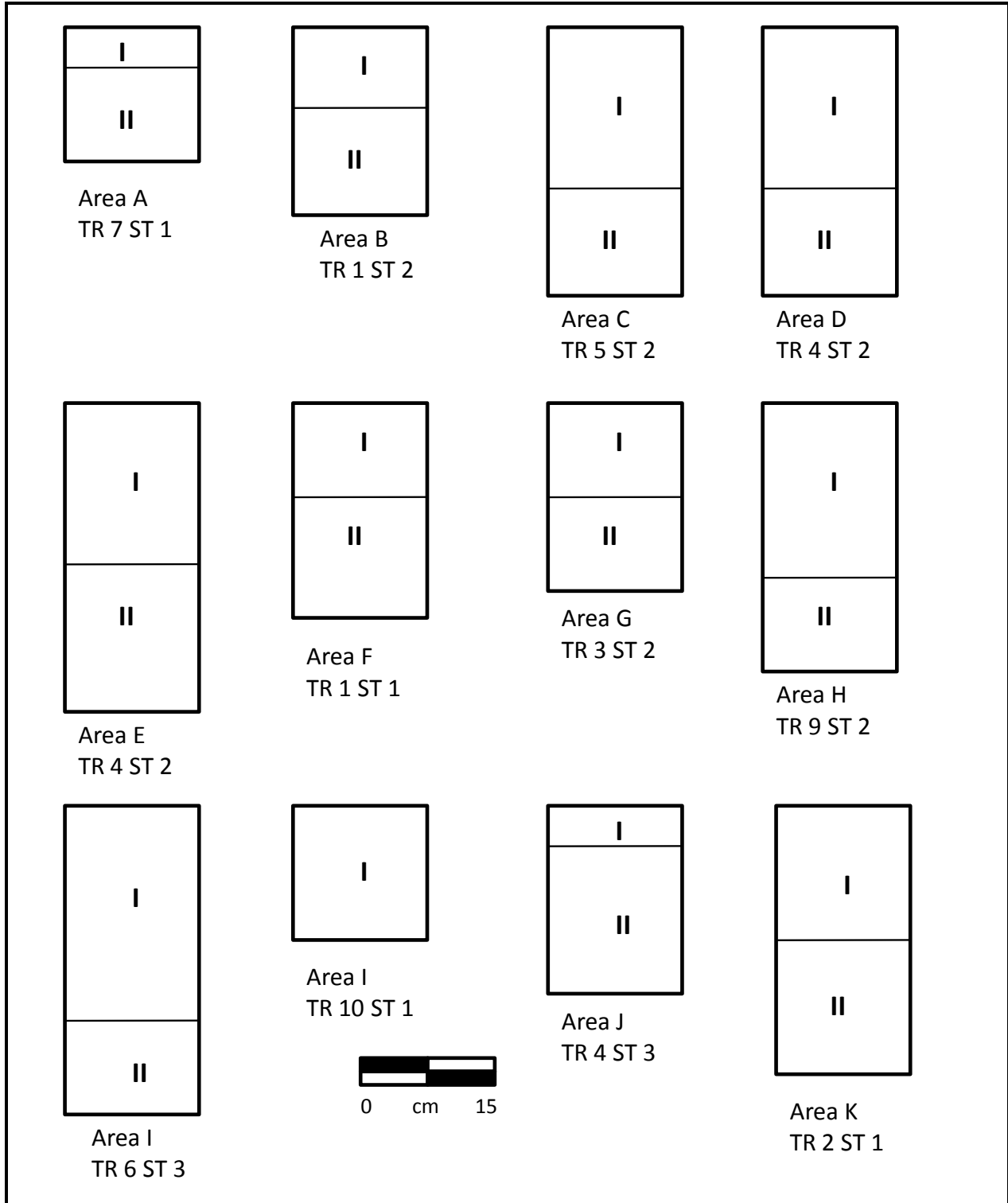


Figure 19. Shovel test profiles from Areas A through K.

Area B is bounded to the west by survey Area A, to the south by Dart Drive, to the north by survey Area G, and to the east by survey Area C. Asphalt roads bound Area B to the north, east and west as well. This area consists of flat to gently sloping uplands that descend in elevation to the south and west. Most of the area is forested and covered by English ivy and other types of undergrowth. At the time of investigation all of Area B had poor surface visibility.

The historic maps and aerial photographs discussed in Section 3 indicate that Area B once was the location of numerous mobile homes (see Figures 9-11). The 1942 Alexandria USGS 15-minute quadrangle indicates that no structures were present in Area B at that time (Figure 9). The 1954 and 1988 aerial photographs depict the presence of numerous mobile homes across the survey tract (Figures 10 and 11).

Because of the lack of adequate surface visibility, Area B was investigated by the excavation of shovel test pits conducted at 24.6-foot (7.5-m) intervals. A total of seven transects, oriented south to north, was established in Area B with 2 to 5 tests each. This yielded a total of 36 shovel test locations, and, of this total, 29 were excavated (Figure 20; Table 6). The remaining seven locations were not investigated due to the presence of concrete pads.

The survey Area B shovel test profiles exhibited two soil strata (Figure 19). The initial stratum was variously 5 cm to 20 cm thick and consisted of very dark grayish brown (10YR4/2) to dark

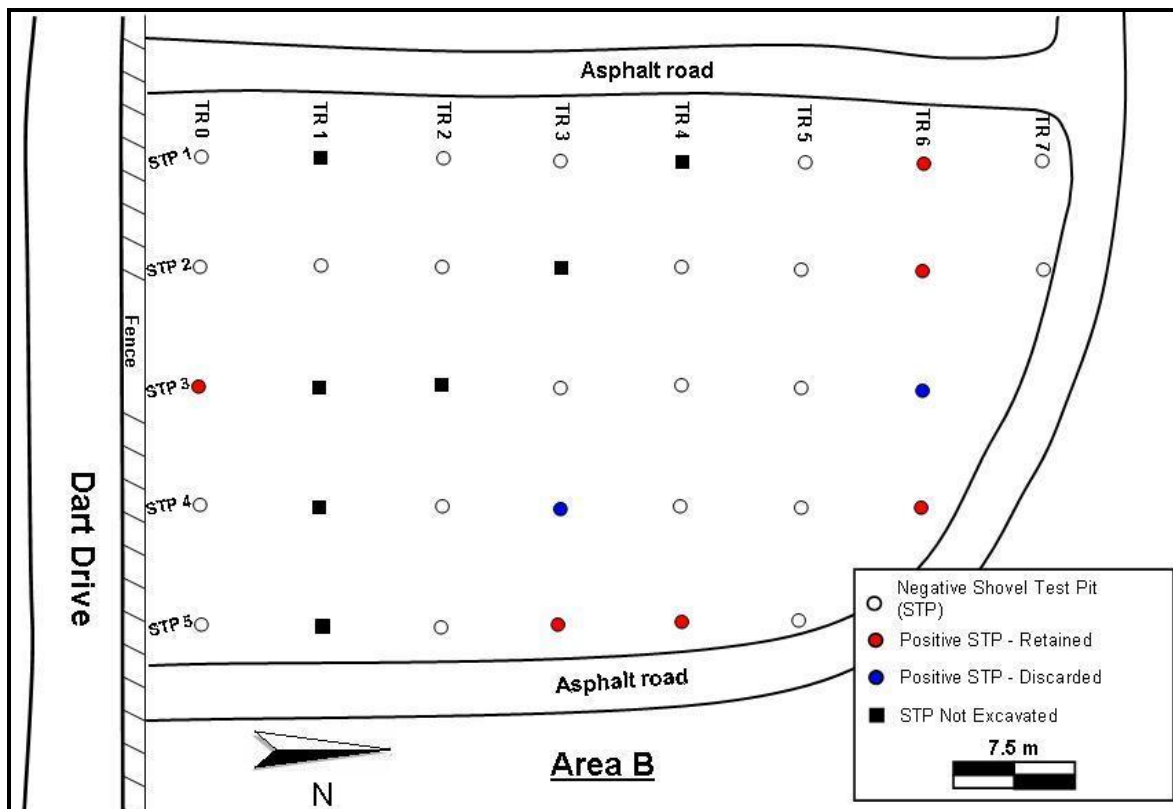


Figure 20. Location of shovel test pits in Area B.

brown (10YR3/3) sandy loam. It was followed by either dark yellowish brown (10YR4/4) to strong brown (7.5YR5/6) sandy clay or sandy clay loam. All artifacts recovered from Area B were found in the initial soil stratum.

The excavations conducted in Area B yielded a small artifact assemblage, totaling 14 items, recovered from eight positive shovel tests. This figure yields an average of almost 1.8 artifacts per positive test, or 0.5 artifacts per test excavated. Positive shovel tests tended to be concentrated along the asphalt roads that form the north and east boundaries of Area B. Based on the review of historic maps and aerial photographs for Area B, these artifacts are likely to be associated with mobile homes. The specific provenience for each artifact recovered from Area B can be found in Appendix B. Bottle glass was most common (n=10), and included green (n=2), clear (n=1), and possible cosmetics bottle glass (n=7). At least one of the bottles was machine-made with a screw-top lip. Unidentified clear vessel glass was also found (n=1), as was window glass (n=1) and an unidentified nail (n=1). Lastly, an undecorated ironstone body sherd was also recovered from Area B.

Area C

Area C is located in the southwest quarter of the North Hill property (Figure 16). This approximately 0.5-acre area is situated along Dart Drive and to the east of U.S. Route 1. Area C is bounded to the west by survey Area B, to the south by Dart Drive, to the north by survey Area K, and to the east by survey Area D. Asphalt roads bound Area C on all four sides. This area consists of flat to gently sloping uplands that descend in elevation to the south and west. Most of the area is forested and covered by English ivy and other types of undergrowth. At the time of investigation all of Area C had poor surface visibility.

The historic maps and aerial photographs discussed in Section 3 indicate that Area C once was the location of numerous mobile homes (see Figures 9-11). The 1942 Alexandria USGS 15-minute quadrangle indicates that no structures were present in Area C at that time (Figure 9). The 1954 and 1988 aerial photographs depict the presence of numerous mobile homes across the survey tract (Figures 10 and 11).

Because of the lack of adequate surface visibility, Area C was investigated by the excavation of shovel test pits conducted at 24.6-foot (7.5-m) intervals. A total of 12 transects, oriented south to north, was established in Area C with 3 to 4 tests each. This yielded a total of 37 shovel test locations, and, of this total, 29 were excavated (Figure 21; Table 6). The remaining eight locations were not investigated due to the presence of concrete pads.

The tests in survey Area C evidenced two soil horizons in profile (Figure 17). In these tests, the initial horizon consisted of 10 cm to 15 cm of dark grayish brown (10YR4/2) to dark brown (10YR3/3) sandy loam, at times with gravel. It was followed by yellowish brown (10YR5/6) or strong brown (7.5YR5/6) clay or sandy clay loam. In a few instances, this second horizon was described as brown (10YR5/3) sandy loam. In all instances the artifacts were restricted to the initial soil horizon.

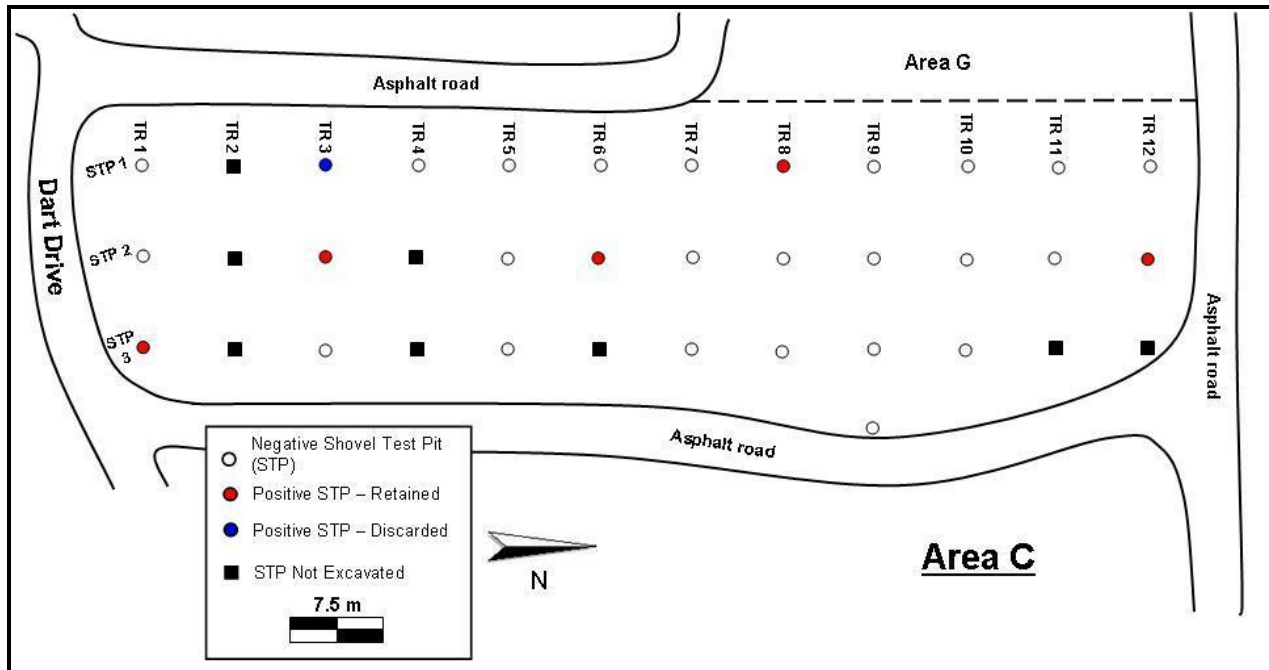


Figure 21. Location of shovel test pits in Area C.

The excavations conducted in Area C yielded a small artifact assemblage, totaling 10 items, recovered from six positive shovel tests. This figure yields an average of almost 1.7 artifacts per positive test, or 0.3 artifacts per test excavated. Positive shovel tests tended to be concentrated along the asphalt roads that form the boundaries of Area C or adjacent to concrete pads. Based on the review of historic maps and aerial photographs for Area C, these artifacts are likely to be associated with mobile homes. The specific provenience for each artifact recovered from Area C can be found in Appendix B. Unidentified clear vessel glass was found (n=4), as was window glass (n=1), linoleum (n=1), and a can opening key (n=1). Lastly, three prehistoric Native American broken flakes, all of quartzite, were found in Area C.

Area D

Area D is located in the southeast quarter of the North Hill property (Figure 16). This approximately 0.67-acre area is situated along Dart Drive and is to the east of U.S. Route 1. Area D is bounded to the west by survey Area C, to the south by Dart Drive and survey Area X, to the north by survey Area K, and to the east by survey Area E. Asphalt roads bound Area D on all four sides. This area consists of flat to gently sloping uplands that descend in elevation to the south and east. Most of the area is forested and covered by English ivy and other types of undergrowth. At the time of investigation all of Area D had poor surface visibility.

The historic maps and aerial photographs discussed in Section 3 indicate that Area D once was the location of numerous mobile homes (see Figures 9-11). The 1942 Alexandria USGS 15-minute quadrangle indicates that no structures were present in Area D at that time (Figure 9).

The 1954 and 1988 aerial photographs depict the presence of numerous mobile homes across the survey tract (Figures 10 and 11).

Because of the lack of adequate surface visibility, Area D was investigated by the excavation of shovel test pits conducted at 24.6-foot (7.5-m) intervals. A total of 12 transects, oriented south to north, was established in Area D with 3 to 4 tests each. This yielded a total of 47 shovel test locations, and, of this total, 37 were excavated (Figure 22; Table 6). The remaining eight locations were not investigated due to the presence of concrete and possible gravel pads.

Two soil horizons were defined in all but one of the shovel test profiles recorded in survey Area D (Figure 19). The initial horizon is 5 cm to 25 cm thick and described as dark grayish brown (10YR4/2) or dark brown (10YR3/3) sandy loam. The second horizon is described as yellowish brown (10YR5/4) or strong brown (7.5YR5/6) sandy clay loam, clay, or sandy loam. One soil profile evidenced three horizon, in which very dark grayish brown (10YR3/2) sandy loam transitioned to yellowish brown (10YR5/6) sand with gravel at 10 cm below surface. This in turn transitioned to strong brown (7.5YR5/6) sand at 15 cm.

The excavations conducted in Area D yielded a small artifact assemblage, totaling 10 items, recovered from six positive shovel tests. This figure yields an average of almost 1.7 artifacts per positive test, or 0.3 artifacts per test excavated. Positive shovel tests tended to be concentrated along the asphalt roads that form the boundaries of Area D. Based on the review of historic maps and aerial photographs for Area D, these artifacts are likely to be associated with mobile

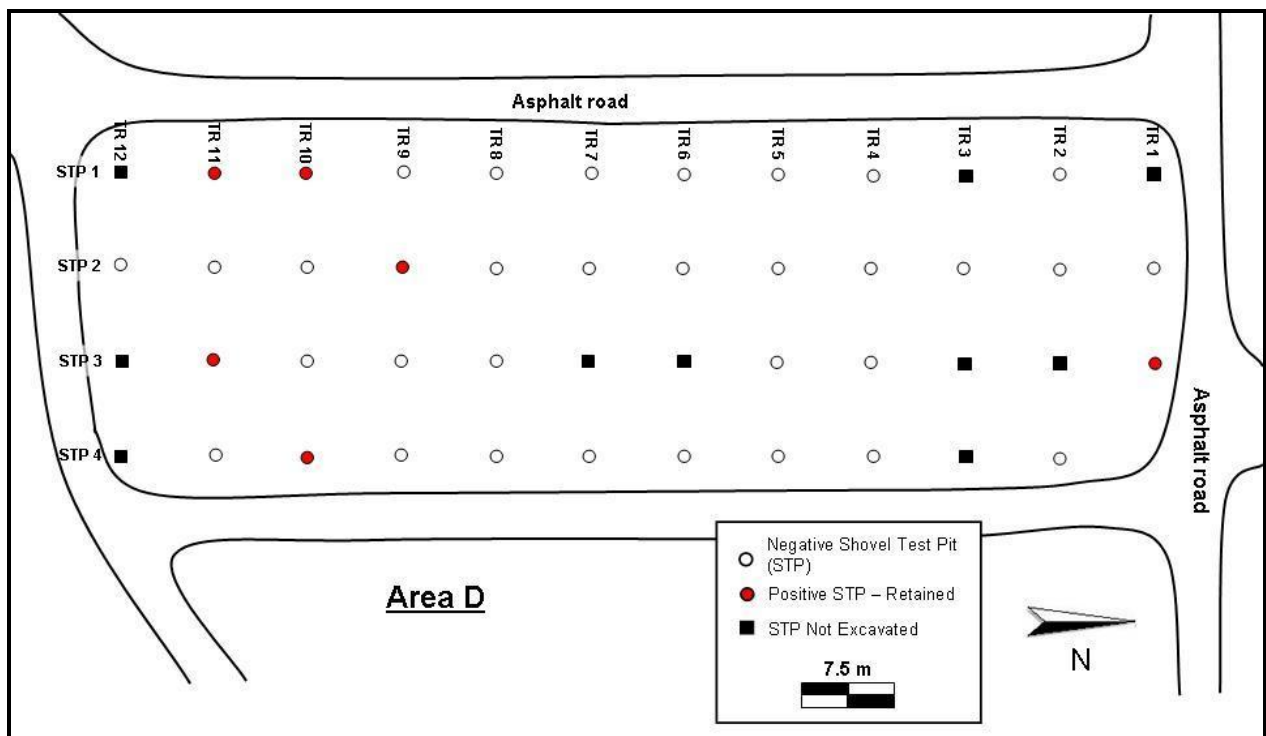


Figure 22. Location of shovel test pits in Area D.

homes. The specific provenience for each artifact recovered from Area D can be found in Appendix B. Historic artifacts recovered consist of bottle glass (green n=1; brown n=1; clear n=2), bone (large mammal n=1), window glass (n=1), wire-drawn nails (n=2), and unidentified metal (n=1). Lastly, one prehistoric Native American broken flake, made of quartzite, was found in Area D.

Area E

Area E is located in the southeast quarter of the North Hill property (Figure 16). This approximately 0.6-acre area is situated to the north of Dart Drive and east of U.S. Route 1. Area E is bounded to the west by survey Area D, to the south by survey Area X, to the north by survey Area M, and to the east by survey Area F. Asphalt roads bound Area D on all four sides. This area consists of flat to gently sloping uplands that descend in elevation to the south and east. Most of the area is forested and covered by English ivy and other types of undergrowth. At the time of investigation all of Area E had poor surface visibility.

The historic maps and aerial photographs discussed in Section 3 indicate that Area E once was the location of numerous mobile homes (see Figures 9-11). The 1942 Alexandria USGS 15-minute quadrangle indicates that no structures were present in Area E at that time (Figure 9). The 1954 and 1988 aerial photographs depict the presence of numerous mobile homes across the survey tract (Figures 10 and 11).

Because of the lack of adequate surface visibility, Area E was investigated by the excavation of shovel test pits conducted at 24.6-foot (7.5-m) intervals. A total of 11 transects, oriented west to east, was established in Area E with 3 to 4 tests each. This yielded a total of 40 shovel test locations, and, of this total, 33 were excavated (Figure 23; Table 6). The remaining seven locations were not investigated due to the presence of concrete and possible gravel pads.

Soil profiles recorded in survey Area E had two horizons (Figure 19). The upper horizon consisted of 5 cm to 20 cm of dark grayish brown (10YR4/2) or dark brown (10YR3/3) sandy loam, at times with gravel. It was followed by brown (10YR4/3), yellowish brown (10YR5/6), or strong brown (7.5YR5/6) clay, sandy clay loam, or silt, also with gravel. In two instances, the initial sandy loam horizon was not present. All artifacts recovered from Area E were found in the initial soil stratum.

The excavations conducted in Area E yielded 47 items, recovered from 11 positive shovel tests. This figure yields an average of almost 4.2 artifacts per positive test, or 1.4 artifacts per test excavated, in Area E. Positive shovel tests tended to be concentrated along the asphalt roads or near a concrete or gravel pad. Based on the review of historic maps and aerial photographs for Area E, these artifacts are likely associated with mobile homes. The specific provenience for each artifact recovered from Area E can be found in Appendix B. Kitchen group artifacts, the most common category at 23, consist entirely of glass. Included is clear vessel glass (n=14) and bottle glass (8 clear and 1 brown). Also common is Architecture group items (n=19). Window glass (n=8), brick (n=7), and shingles (n=2) were found, as were single examples of asbestos tile and a wire-drawn spike. The Activities group is represented by a single flower pot rim, while

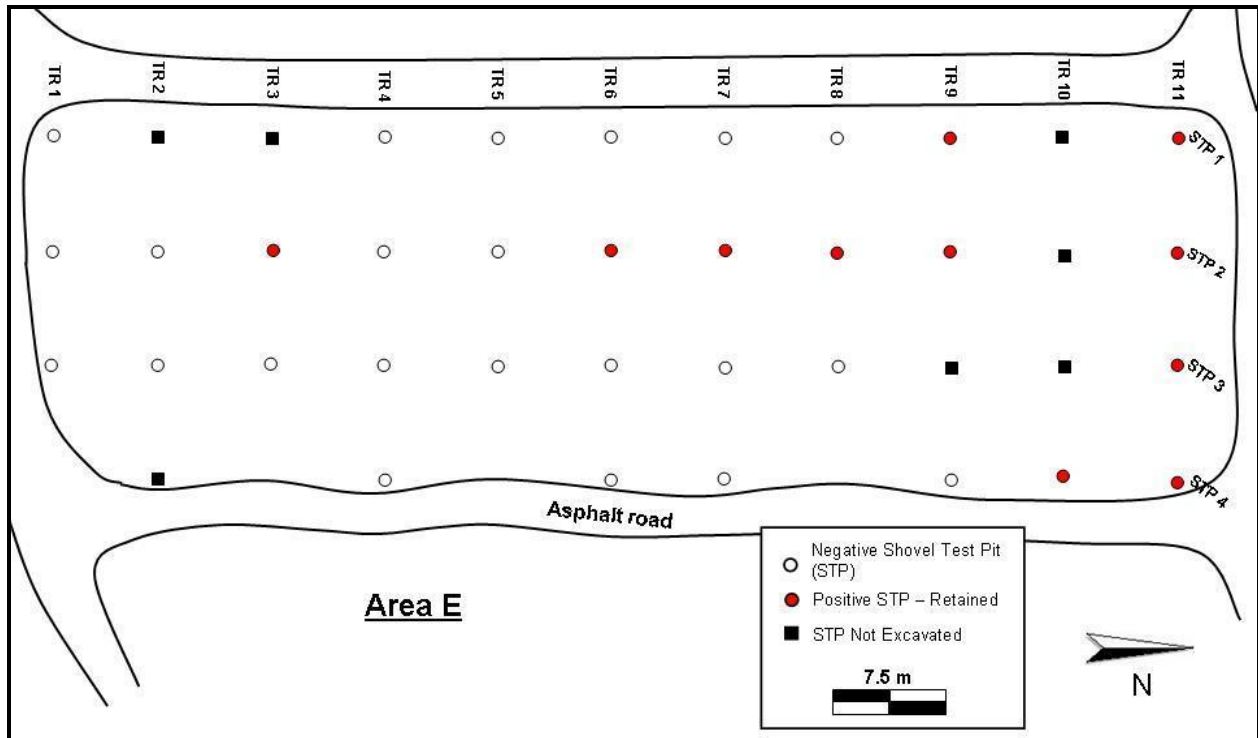


Figure 23. Location of shovel test pits in Area E.

unidentified artifacts include glass (n=2) and rubber (n=1). One prehistoric Native American bipolar flake, made of quartzite, was also found in Area E.

Area F

Area F is located in the southeast quarter of the North Hill property (Figure 16). This approximately 0.45-acre area is situated to the north of Dart Drive and east of U.S. Route 1. Area F is bounded to the west by survey Area E, to the east by surveys Area W, to the south by survey Area X, and to the north by survey Area M. Asphalt roads bound Area F on all four sides. This area consists of flat to gently sloping uplands that descend in elevation to the south and east. Most of the area is forested and covered by English ivy and other types of undergrowth. At the time of investigation all of Area F had poor surface visibility.

The historic maps and aerial photographs discussed in Section 3 indicate that Area F once was the location of numerous mobile homes (see Figures 9-11). The 1942 Alexandria USGS 15-minute quadrangle indicates that no structures were present in Area F at that time (Figure 9). The 1954 and 1988 aerial photographs depict the presence of numerous mobile homes across the survey tract (Figures 10 and 11).

Because of the lack of adequate surface visibility, Area F was investigated by the excavation of shovel test pits conducted at 24.6-foot (7.5-m) intervals. A total of nine transects, oriented west to east, was established in Area F with 2 to 4 tests each. This yielded a total of 33 shovel test

locations, and, of this total, 26 were excavated (Figure 24; Table 6). The remaining seven locations were not investigated due to the presence of concrete pads or excessive slope.

The survey Area F soil profiles all evidenced two horizons (Figure 19). The upper horizon consisted of 10 cm to 25 cm of dark brown (10YR3/3) sandy loam, at times with gravel. It was followed by yellowish brown (10YR5/6) or strong brown (7.5YR5/6) clay or sandy clay loam, also with gravel. All artifacts recovered from Area F were found in the initial soil stratum.

The excavations conducted in Area F yielded a sizeable artifact assemblage, totaling 106 items, recovered from 19 positive shovel tests. This figure yields an average of almost 5.4 artifacts per positive test, or 3.9 artifacts per test excavated test. Positive shovel tests tended to be concentrated in the northern portion of the survey area as well as along the asphalt roads that form the boundaries of Area F. Based on the review of historic maps and aerial photographs for Area F, these artifacts are likely associated with mobile homes. The specific provenience for each artifact recovered from Area F can be found in Appendix B. Most common are Architecture group items (n=52). These include tile (32 ceramic and 1 linoleum), window glass (n=10), brick (n=7), and single examples of a staple and a fuse. The Kitchen group (n=27) includes clear vessel glass (n=3) and bottle glass (21 clear, 2 brown, and 1 green). Examples of machine-made bottles are present. The Personal group includes four items, consisting of a ceramic figurine fragment and three 1-cent pieces. The coins date to 1963, 1976, and 1980. The Activities group is represented by one flower pot fragment while the Furniture group includes

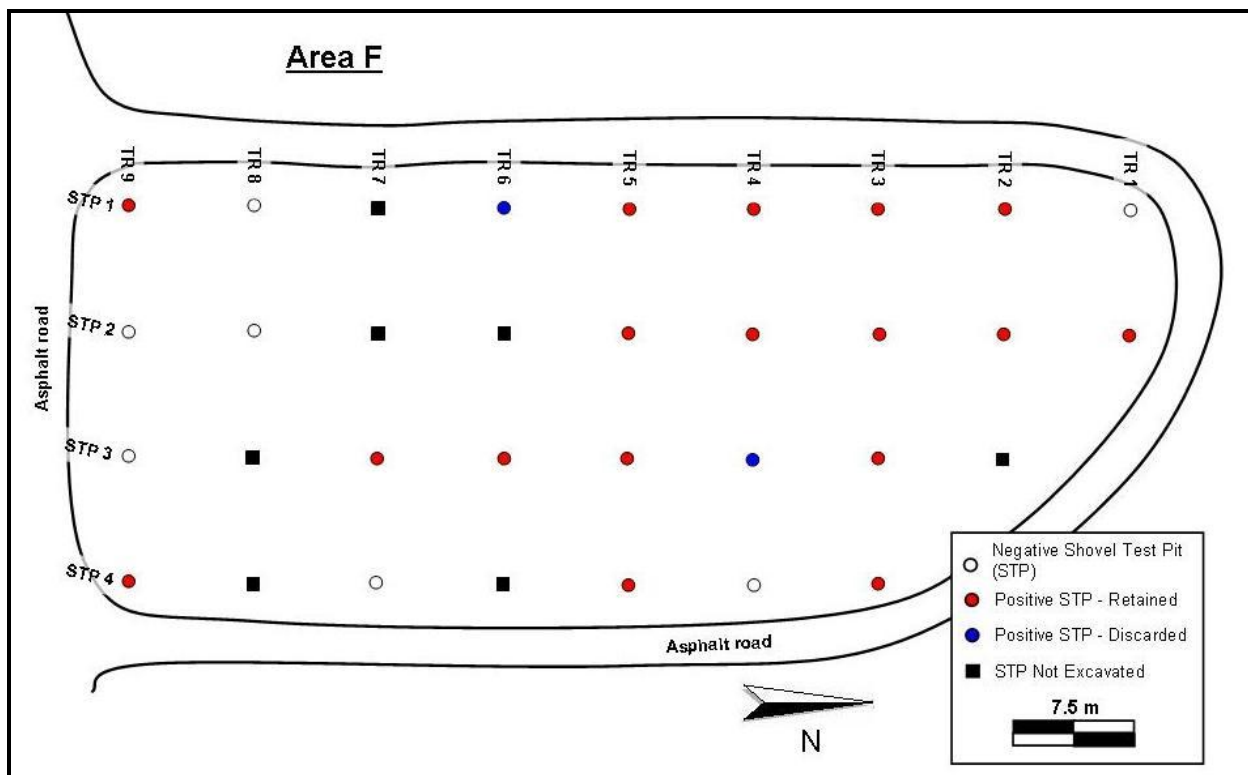


Figure 24. Location of shovel test pits in Area F.

one piece of light bulb glass. Finally, one prehistoric Native American bipolar flake, made of quartzite, was found in Area F.

Area G

Area G is located in the southwest quarter of the North Hill property (Figure 16). This approximately 1.4-acre area is situated to the north of Dart Drive and adjacent to and east of U.S. Route 1. Area G is bounded to the west by U.S. Route 1, to the south by survey Areas A and B, to the north by survey Areas H, I, and K, and to the east by survey Area C. Asphalt roads bound Area G on the south, north, and east sides. This area consists of flat to gently sloping uplands that descend in elevation to the south and west. Most of the area is in a park-like setting, with scattered trees and a grass-covered lawn along U.S. Route 1. Tree density increases from west to east. At the time of investigation all of Area G consisted of a grass- or ivy-covered and partially forested tract with poor surface visibility.

The historic maps and aerial photographs discussed in Section 3 indicate that Area G once was the location of structures as well as numerous mobile homes (see Figures 9-11). The 1942 Alexandria USGS 15-minute quadrangle indicates that minimally two structures were in or adjacent to Area G and were fronting U.S. Route 1 (Figure 9). The 1954 and 1988 aerial photographs depict the presence of a few mobile homes across the survey tract (Figures 10 and 11).

Because of the lack of adequate surface visibility, Area G was investigated by the excavation of shovel test pits conducted at 25-foot (7.5-m) intervals. A total of nine transects, oriented south to north, was established in Area G with 7 to 16 tests each. This yielded a total of 102 shovel test locations, and, of this total, 75 were excavated (Figure 25; Table 6). The remaining 27 locations were not investigated due to the presence of concrete or possible gravel pads (n=16) or excessive slope (n=11).

The survey Area G soil profiles evidenced two horizons (Figure 19). The upper horizon consisted of 5 cm to 25 cm of dark brown (10YR3/3), brown (10YR4/3), or dark grayish brown (10YR4/2) sandy loam, at times with gravel. It was followed by yellowish brown (10YR5/6) or strong brown (7.5YR5/6) clay or sandy clay loam, also with gravel. All artifacts recovered from Area G were found in the initial soil stratum.

A total of 189 artifacts was recovered from 35 positive tests excavated survey Area G. This yields an average of 5.6 artifacts per positive test, or 1.9 artifacts per test excavated. This artifact assemblage includes items assigned to the Architecture, Kitchen, and Personal groups, as well as prehistoric Native American and unidentified materials. Most common are Kitchen group items, totaling 106 artifacts. These include 71 pieces of bottle glass (18 clear, 20 brown, 33 green), including a number of machine-made bottles. Clear vessel glass (n=32) is common and also includes machine-made pieces. Less common items include pull tabs (n=1), metal cans (n=1), and tableware (n=1). Architecture group items were also relatively common, with 54 items recovered. Window glass (n=40), brick (n=8), and tile (n=4, ceramic and unidentified material) were present, as were single pieces of shingle and a door hinge. The Personal group is represented by two items, a plastic toy soldier and a fragment of a glass ashtray. Unidentified

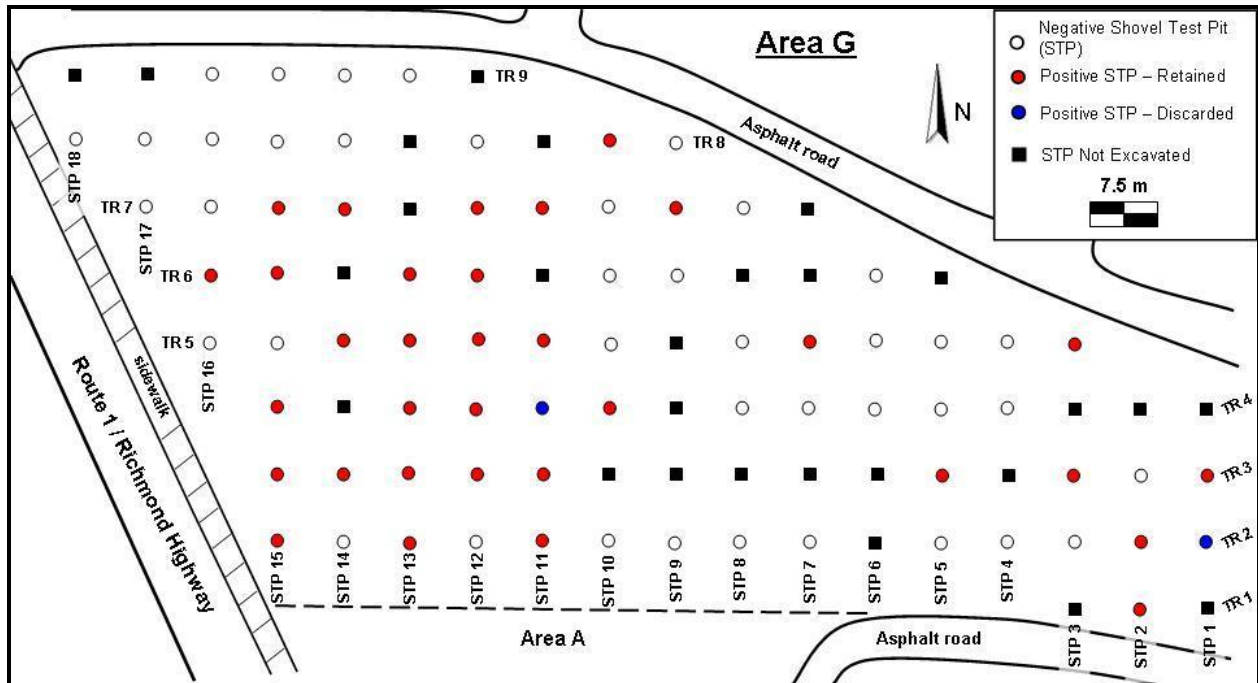


Figure 25. Location of shovel test pits in Area G.

materials include metal (n=18), plastic (n=9), and glass (n=4). Lastly, a single prehistoric Native American flake, a broken quartzite flake, was found in survey Area G.

Area H

Area H is located in the center-west portion of the North Hill property (Figure 17). This approximately 1.4-acre area is situated to the north of Dart Drive and adjacent to and east of U.S. Route 1. Area H is bounded to the west by U.S. Route 1, to the south by survey Area G, to the north by survey Area U, and to the east by survey Area I. Asphalt roads bound Area H on the south, north, and east sides. This area consists of flat to gently sloping uplands that descend in elevation to the south and west. Most of the area is in a park-like setting, with scattered trees and a grass-covered lawn along U.S. Route 1. Tree density increases from west to east. At the time of investigation all of Area H consisted of a grass- or ivy-covered and partially forested tract with poor surface visibility.

The historic maps and aerial photographs discussed in Section 3 indicate that Area H once was the location of structures as well as numerous mobile homes (see Figures 9-11). The 1942 Alexandria USGS 15-minute quadrangle indicates that one or two structures were in or adjacent to Area H and were fronting U.S. Route 1 (Figure 9). The 1954 and 1988 aerial photographs may depict the presence of a few mobile homes across the survey tract (Figures 10 and 11).

Because of the lack of adequate surface visibility, Area H was investigated by the excavation of shovel test pits conducted at 25-foot (7.5-m) intervals. A total of 17 transects, oriented east to west, was established in Area H with 4 to 7 tests each. This yielded a total of 101 shovel test

locations, and, of this total, 83 were excavated (Figure 26; Table 6). The remaining 18 locations were not investigated due to the presence of concrete or possible gravel pads (n=6) or other disturbances, primarily grading and the installation of a drainage system along US Route 1 (n=12).

Most tests in survey Area H evidenced two soil horizons in profile (Figure 19). In these tests the initial horizon consisted of 10 cm to 20 cm of very dark grayish brown (10YR3/2) to dark brown (10YR3/3) sandy loam, at times with gravel. It was followed by yellowish brown (10YR5/6) or strong brown (7.5YR5/6) clay or sandy clay loam, also with gravel. Excavations were not extended into the second soil horizon at a number of locations due to the density of gravel. Finally, all artifacts recovered from Area H were found in the initial soil stratum.

The excavations conducted in Area H yielded a large artifact assemblage, totaling 114 items recovered from 29 positive shovel tests. This figure yields an average of 4.1 artifacts per positive test, or 1.4 artifacts per test excavated. Positive shovel tests tended to be concentrated along the asphalt roads and near concrete pads, although clusters in the center and southern portions of the area were also present. Based on the review of historic maps and aerial photographs for Area H, these artifacts are likely to be associated with mobile homes. The specific provenience for each artifact recovered from Area H can be found in Appendix B. A total of 89 artifacts were assigned to the Kitchen group, consisting of bottle glass (31 clear, 18 green, 14 brown), clear vessel glass (n=24), undecorated ironstone (n=1), and pull tabs (n=1). Architecture group artifacts include window glass (n=14) and linoleum (n=3), while the

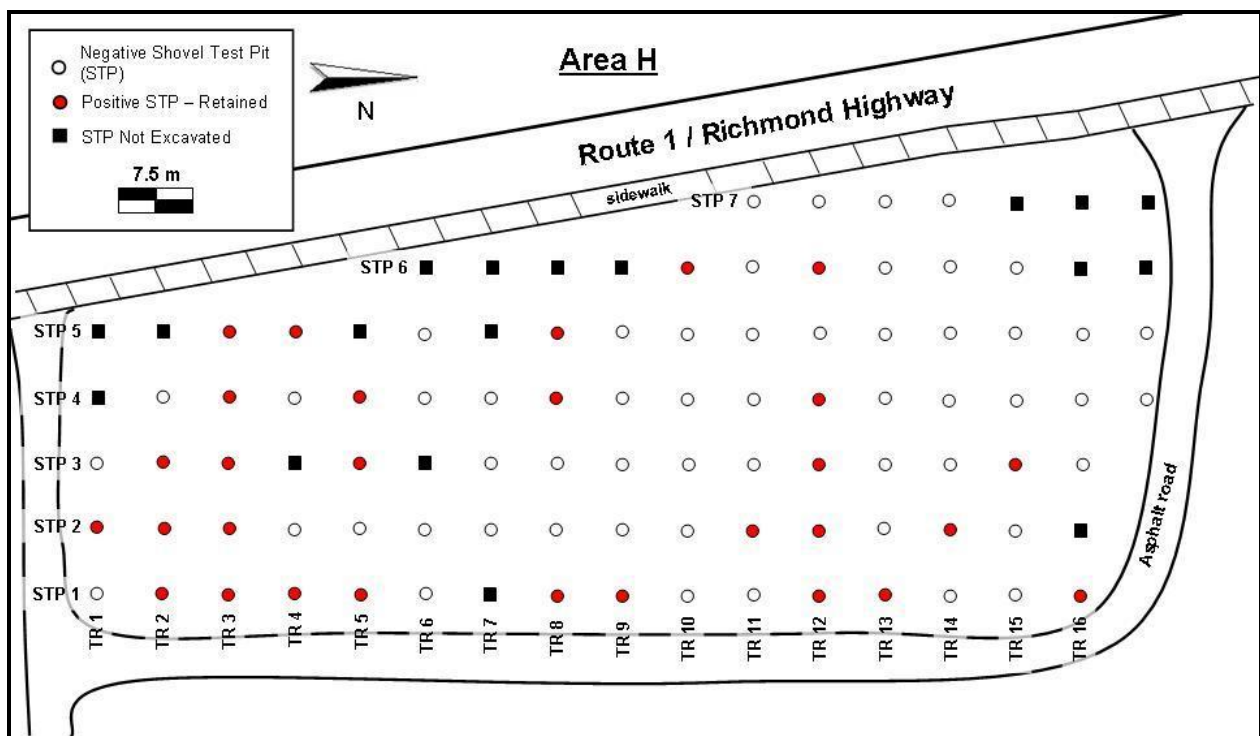


Figure 26. Location of shovel test pits in Area H.

Furniture group consisted of a light bulb base (n=1) and mirror glass (n=1). Unidentified artifacts were made of glass (n=7), metal (n=2), and plastic (n=1). Finally, one prehistoric Native American broken flake was recovered from Area H. This flake was made of white quartz.

Area I

Area I is located in the center-west portion of the North Hill property (Figure 16). This approximately 1.3-acre area is situated to the north of Dart Drive and east of U.S. Route 1. Area I is bounded to the west by survey Area H, to the south by survey Area G, to the north by survey Area U, and to the east by survey Areas J and K. Asphalt roads bound Area I on all sides. This area consists of flat to gently sloping uplands that descend in elevation to the south and west. Most of the area is forested and covered by English ivy and other types of undergrowth. At the time of investigation all of Area I had poor surface visibility.

The historic maps and aerial photographs discussed in Section 3 indicate that Area I once was the location of numerous mobile homes (see Figures 9-11). No structures are present in the vicinity of Area I on the 1942 Alexandria USGS 15-minute quadrangle (Figure 9). However, the 1954 and 1988 aerial photographs depict the presence of mobile homes across the survey tract (Figures 10 and 11).

Because of the lack of adequate surface visibility, Area I was investigated by the excavation of shovel test pits conducted at 25-foot (7.5-m) intervals. A total of 18 transects, oriented east to west, was established in Area I with 1 to 9 tests each. This yielded a total of 97 shovel test locations, and, of this total, 58 were excavated (Figure 27; Table 6). The remaining 39 locations were not investigated due to the presence of concrete or possible gravel pads (n=22) and excessive slope (n=16).

Two different soil profiles were documented in survey Area I. In most of the tests the initial horizon consisted of 5 cm to 20 cm of very dark grayish brown (10YR3/2) to dark brown (10YR3/3) sandy loam, at times with gravel (Figure 19). In a few instances, excavators could not penetrate this layer due to the gravel content. The first horizon was followed by yellowish brown (10YR5/6) or strong brown (7.5YR5/6) clay or sandy clay loam, also with gravel. The second profile exhibited an initial stratum of yellowish brown (10YR5/6) or strong brown (7.5YR5/6) clay or sandy clay loam, also often with gravel (Figure 19). While 15 cm or 20 cm of this stratum were excavated, no changes were noted. This profile is interpreted to be a typical profile that had the initial stratum removed. All artifacts found in Area I were recovered from the initial soil stratum.

The excavations conducted in Area I yielded a small artifact assemblage, totaling 26 items, recovered from 15 positive shovel tests. This figure yields an average of almost 1.7 artifacts per positive test, or 0.5 artifacts per test excavated. Positive shovel tests tended to be concentrated along the asphalt roads that form the boundaries of Area I. Based on the review of historic maps and aerial photographs for Area I, these artifacts are likely to be associated with mobile homes. The specific provenience for each artifact recovered from Area I can be found in Appendix B. Kitchen group items are most numerous, consisting of clear vessel glass (n=9) and

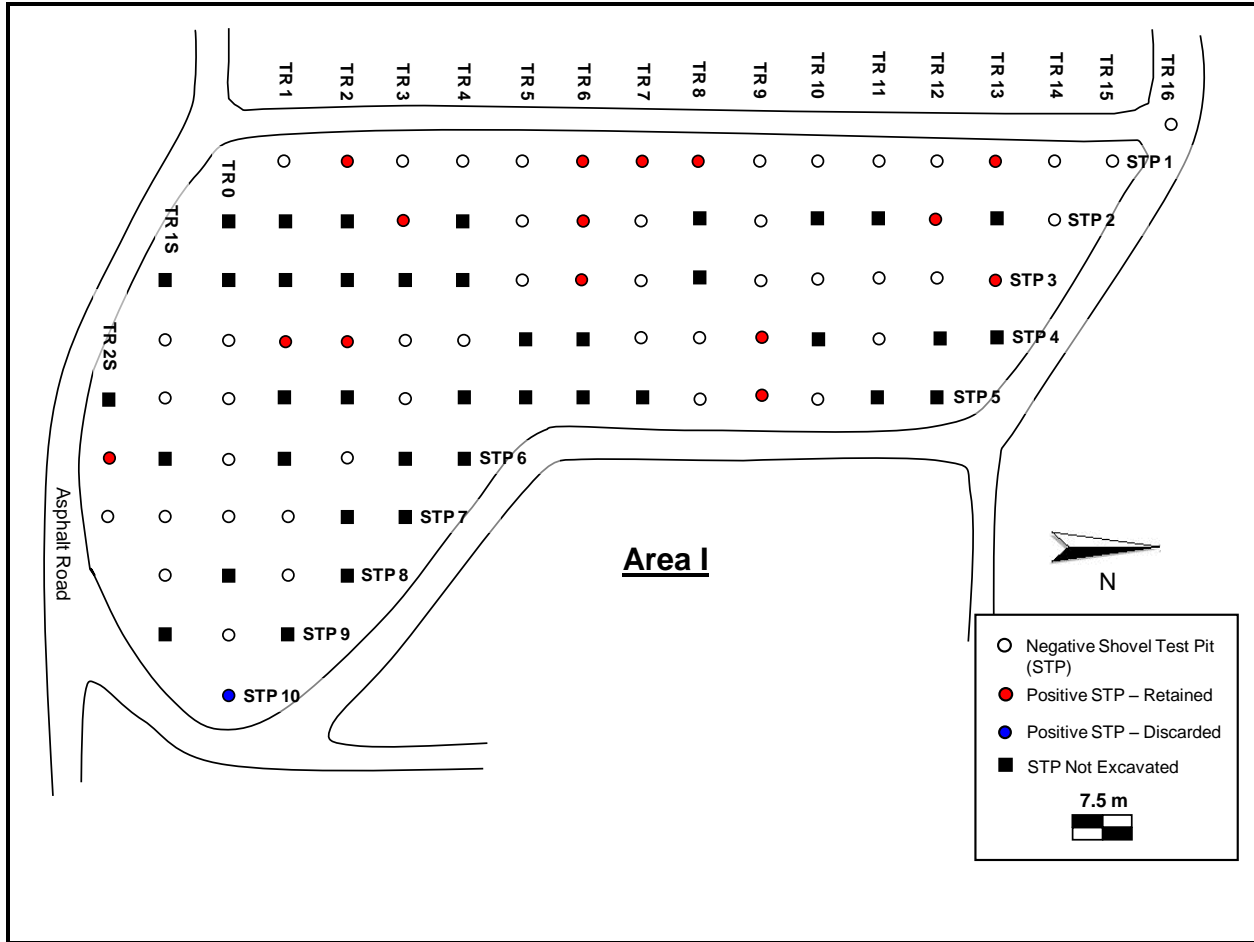


Figure 27. Location of shovel test pits in Area I.

bottle glass (2 brown, 1 green). Architecture group items include window glass (n=3), wire-drawn nails (n=3), and brick (n=1). The Clothing group is represented by one plastic button. Unidentified artifacts were made of glass (n=2), metal (n=1), and one is a screw. Two prehistoric Native American bipolar flakes were recovered in Area I. One is brown quartzite while the other is white quartzite.

Area J

Area J is located in the center-west portion of the North Hill property (Figure 16). This approximately 0.9-acre area is situated north of Dart Drive and east of U.S. Route 1. Area J is bounded to the west by survey Area I, to the south by survey Areas I and K, to the north by survey Areas U and T, and to the east by survey Areas K and L. Asphalt roads bound Area J on all sides. This area consists of flat to gently sloping uplands that descend in elevation to the south and west. Most of the area is forested and covered by English ivy and other types of undergrowth. At the time of investigation all of Area J had poor surface visibility.

The historic maps and aerial photographs discussed in Section 3 indicate that Area J once was the location of numerous mobile homes (see Figures 9-11). No structures are present in the vicinity of Area J on the 1942 Alexandria USGS 15-minute quadrangle (Figure 9). However, the 1954 and 1988 aerial photographs depict the presence of mobile homes across the survey tract (Figures 10 and 11).

Because of the lack of adequate surface visibility, Area J was investigated by the excavation of shovel test pits conducted at 25-foot (7.5-m) intervals. A total of eight transects, oriented east to west, was established in Area J with 3 to 13 tests each. This yielded a total of 62 shovel test locations, and, of this total, 35 were excavated (Figure 28; Table 6). The remaining 27 locations were not investigated due to the presence of concrete or possible gravel pads (n=11) or excessive slope (n=15).

The tests in survey Area J evidenced two soil horizons in profile (Figure 19). The initial horizon consisted of 5 cm to 15 cm of dark brown (10YR3/3) sandy loam. The initial horizon was followed by yellowish brown (10YR5/6) or strong brown (7.5YR5/6) sandy clay or sandy clay loam. In two instances plastic and glass artifacts were found in the second horizon.

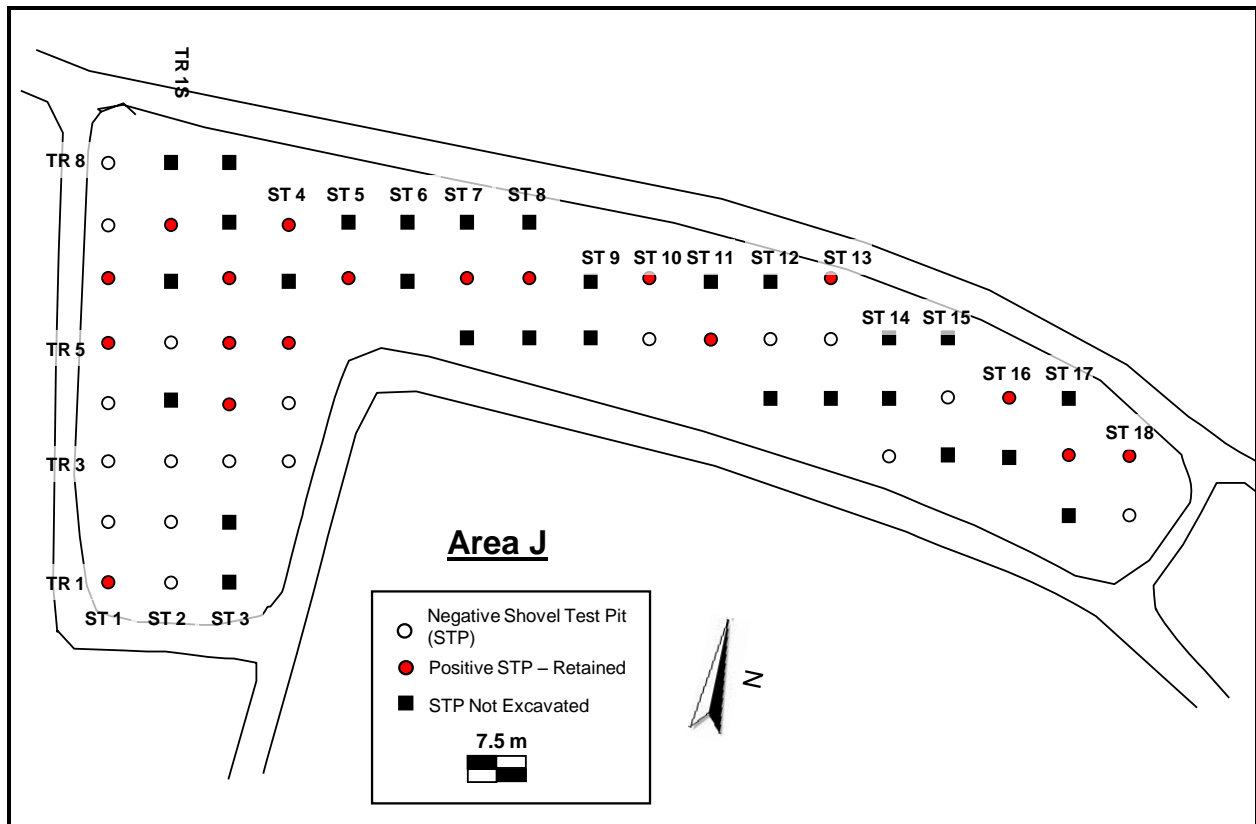


Figure 28. Location of shovel test pits in Area J.

The excavations conducted in Area J yielded a moderately-sized artifact assemblage that totals 61 items recovered from 21 positive shovel tests. This figure yields an average of 2.9 artifacts per positive test, or 1.6 artifacts per test excavated. Positive shovel tests were located near asphalt roads or concrete pads. Based on the review of historic maps and aerial photographs for Area J, these artifacts are likely to be associated with mobile homes. The specific provenience for each artifact recovered from Area J can be found in Appendix B. Unidentified items are most common, and include glass (n=27), plastic (n=6), rubber (n=2), and a screw (n=1). Kitchen group items consist of bottle glass (2 clear, 2 brown, 1 green), clear vessel glass (n=6), and pull tabs (n=1). The Architecture group is represented by window glass (n=2), wire-drawn nails (n=1) and brick fragments (n=1). Furniture group items consist of seven pieces of light bulb glass while one segment of a garden hose and one fragment of a flower pot were assigned to the Activities group.

Area K

Area K is located in the center-west portion of the North Hill property (Figure 19). This approximately 2.2-acre area is situated north of Dart Drive and east of U.S. Route 1. Area K is bounded to the west by survey Areas I and J, to the south by survey Areas G and C, to the north by survey Area J, and to the east by survey Area M. Asphalt roads bound Area K on all sides. This area consists of flat to gently sloping uplands that descend in elevation to the south and west. Most of the area is forested and covered by English ivy and other types of undergrowth. At the time of investigation all of Area K had poor surface visibility.

The historic maps and aerial photographs discussed in Section 3 indicate that Area K once was the location of numerous mobile homes (see Figures 9-11). No structures are present in the vicinity of Area K on the 1942 Alexandria USGS 15-minute quadrangle (Figure 9). However, the 1954 and 1988 aerial photographs depict the presence of mobile homes across the survey tract (Figures 10 and 11).

Because of the lack of adequate surface visibility, Area K was investigated by the excavation of shovel test pits conducted at 25-foot (7.5-m) intervals. A total of 14 transects, oriented north to south, was established in Area K with 2 to 15 tests each. This yielded a total of 159 shovel test locations, and, of this total, 102 were excavated (Figure 29; Table 6). The remaining 57 locations were not investigated due to the presence of concrete or possible gravel pads (n=42) or excessive slope (n=14).

Two different soil profiles were recorded in survey Area K (Figure 19). Most tests evidenced two soil strata. The initial stratum is dark brown (10YR4/2) or brown (10YR4/3) sandy loam that ranged from 5 cm to 20 cm thick. In most instances, strong brown (7.5YR5/6) or yellowish brown (10YR5/4) sandy clay follows. In a few instances the second stratum was described as pale brown (10YR6/3) sandy loam or sandy clay. In one instance the shovel test profile was comprised of strong brown (7.5YR5/6) sandy clay loam at the surface and extending to the base of excavations. While most artifacts found were from the initial soil horizon, in three instances glass or plastic was recovered from the second soil horizon.

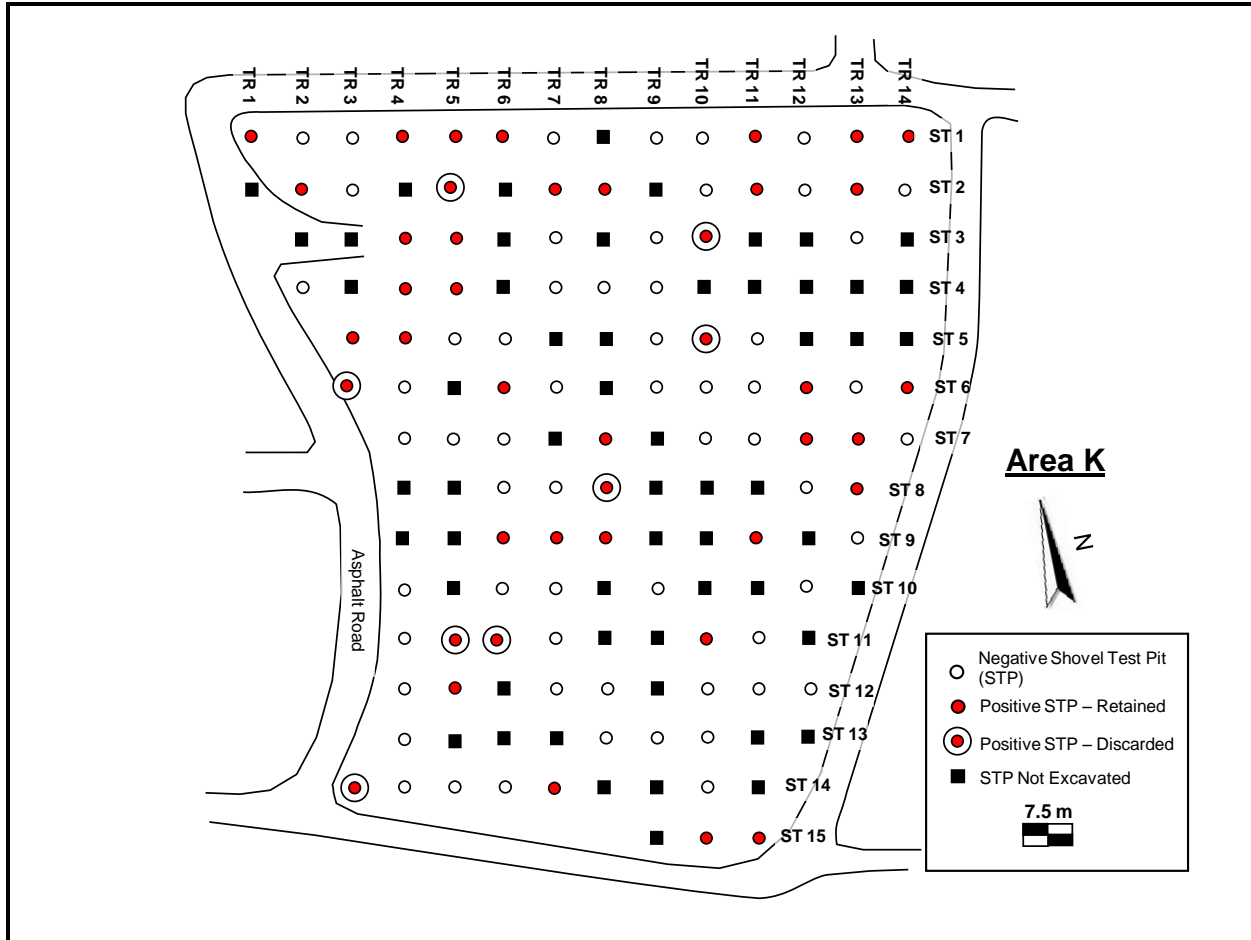


Figure 29. Location of shovel test pits in Area K.

Area K yielded a large artifact assemblage, totaling 93 items from 45 positive shovel tests. This figure yields and average of 2.1 artifacts per positive test, or 0.9 artifacts per test excavated. Positive shovel tests were located near asphalt roads or concrete pads. Based on the review of historic maps and aerial photographs for Area K, these artifacts are likely to be associated with mobile homes. The specific provenience for each artifact recovered from Area K can be found in Appendix B. Most common in the assemblage are Kitchen group artifacts. Items assigned to this group are clear vessel glass (n=31), bottle glass (9 brown, 5 green, 3 clear, 1 blue), animal bone (n=1), and ironstone (n=2, 1 undecorated, 1 with an unidentified black painted pattern). Architecture group artifacts are next most common and include window glass (n=13), wire-drawn nails (n=4), and brick (n=2). The Personal group is represented by one 1985 10-cent piece, and the Furniture group by one piece of light bulb glass. Unidentified materials consist of glass (n=7), plastic (n=6), metal (n=4), and screws (n=2). Lastly, one prehistoric Native American broken flake, of an unidentified material, was found in Area K.

Area L

Area L is located in the center-east portion of the North Hill property (Figure 16). This approximately 0.8-acre area is situated north of Dart Drive and east of U.S. Route 1. Area L is bounded to the west by survey Area J, to the south by survey Area M, to the north by survey Areas R and T, and to the east by survey Area Q. Asphalt roads bound Area L on all sides. This area consists of flat to gently sloping uplands that descend in elevation to the south and east. Most of the area is forested and covered by English ivy and other types of undergrowth. At the time of investigation all of Area L had poor surface visibility.

The historic maps and aerial photographs discussed in Section 3 indicate that Area L once was the location of numerous mobile homes (see Figures 9-11). No structures are present in the vicinity of Area L on the 1942 Alexandria USGS 15-minute quadrangle (Figure 9). However, the 1954 and 1988 aerial photographs depict the presence of mobile homes across the survey tract (Figures 10 and 11).

Because of the lack of adequate surface visibility, Area L was investigated by the excavation of shovel test pits conducted at 25-foot (7.5-m) intervals. A total of seven transects, oriented east to west, was established in Area L with 4 to 15 tests each. This yielded a total of 60 shovel test locations, and, of this total, 39 were excavated (Figure 30; Table 6). The remaining 21 locations were not investigated due to the presence of concrete or possible gravel pads (n=18), excessive slope (n=1), or other disturbances, including concrete debris and a circular concrete water drainage cap (n=2).

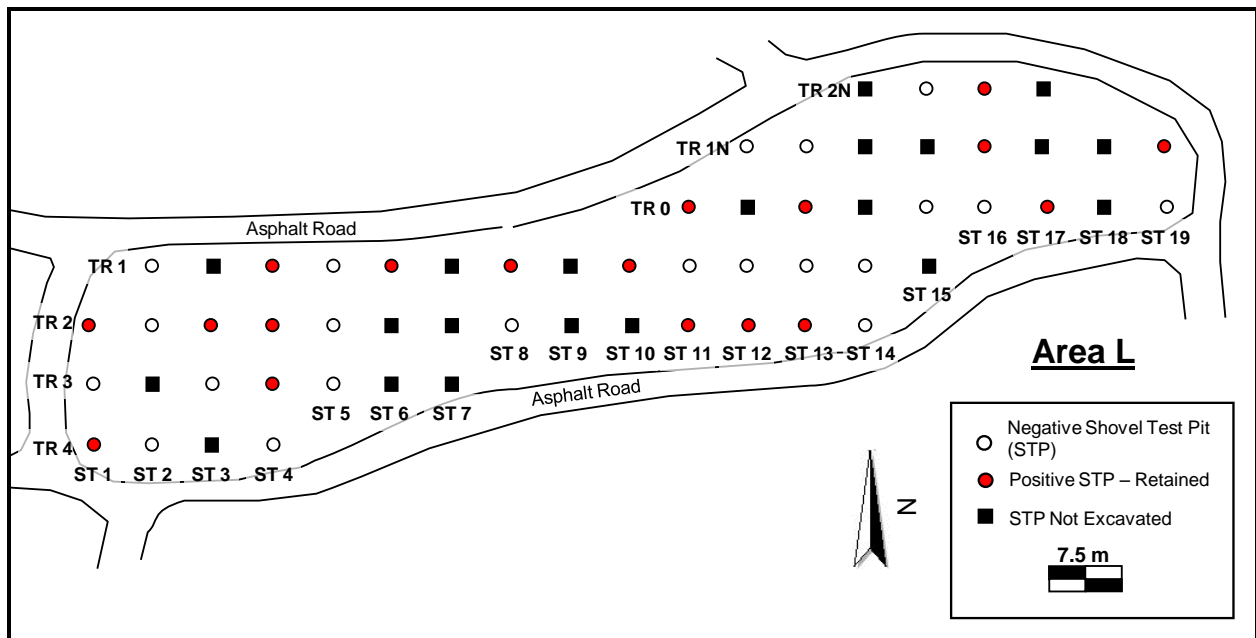


Figure 30. Location of shovel test pits in Area L.

The tests in survey Area L evidenced two soil horizons in profile (Figure 31). The initial horizon consisted of 5 cm to 15 cm of dark brown (10YR3/3) sandy loam and was followed by yellowish brown (10YR5/6) or strong brown (7.5YR5/6) sandy clay or sandy clay loam, often with gravel. All recovered artifacts were confined to the first soil horizon.

The excavations conducted in Area L yielded a large artifact assemblage that totals 58 items recovered from 18 positive shovel tests. This figure yields an average of 3.2 artifacts per positive test, or 1.5 artifacts per test excavated. Positive shovel tests were located near asphalt roads or concrete pads, although a few were also present near the center of the tract. Based on the review of historic maps and aerial photographs for Area L, these artifacts are likely to be associated with mobile homes. The specific provenience for each artifact recovered from Area L can be found in Appendix B. Most numerous in this assemblage were artifacts assigned to the Architecture group. These include window glass (n=20), wire-drawn nails (n=3), machine-cut nails (n=2), brick (n=1), and sanitary porcelain (n=1). The Kitchen group consisted of bottle glass (7 brown, 2 clear, 1 green), clear vessel glass (n=8), and pull tabs (n=2). Unidentified items were made from glass (n=6) and plastic (n=4). Finally, one prehistoric Native American bipolar flake, of white quartzite, was also found in Area L.

Area M

Area M is located in the center-east portion of the North Hill property (Figure 16). This approximately 2.3-acre area is situated north of Dart Drive and east of U.S. Route 1. Area M is bounded to the west by survey Area K, to the south by survey Areas E, F, N, and W, to the north by survey Area L, and to the east by survey Area Q. Asphalt roads bound Area M on all sides. This area consists of flat to gently sloping uplands that descend in elevation to the south and east. Most of the area is forested and covered by English Ivy and other types of undergrowth. At the time of investigation all of Area M had poor surface visibility.

The historic maps and aerial photographs discussed in Section 3 indicate that Area M once was the location of numerous mobile homes (see Figures 9-11). No structures are present in the vicinity of Area M on the 1942 Alexandria USGS 15-minute quadrangle (Figure 9). However, the 1954 and 1988 aerial photographs depict the presence of mobile homes across the survey tract (Figures 10 and 11).

Because of the lack of adequate surface visibility, Area M was investigated by the excavation of shovel test pits conducted at 25-foot (7.5-m) intervals. A total of 13 transects, oriented east to west, was established in Area M with 3 to 18 tests each. This yielded a total of 162 shovel test locations, and of this total, 109 were excavated (Figure 32; Table 6). The remaining 53 locations were not investigated due to the presence of concrete or possible gravel pads (n=19), excessive slope (n=23), or other disturbances (n=10). These other disturbances include such factors as road construction, standing water, drainages, and push piles of fallen trees. Subsequently, an additional 15 bracketing test locations were established in Area M.

Similar to many of the survey areas at the North Hill property, the initial soil horizon in the Area M shovel tests was described as brown (10YR4/3) or dark brown (10YR3/3) sandy

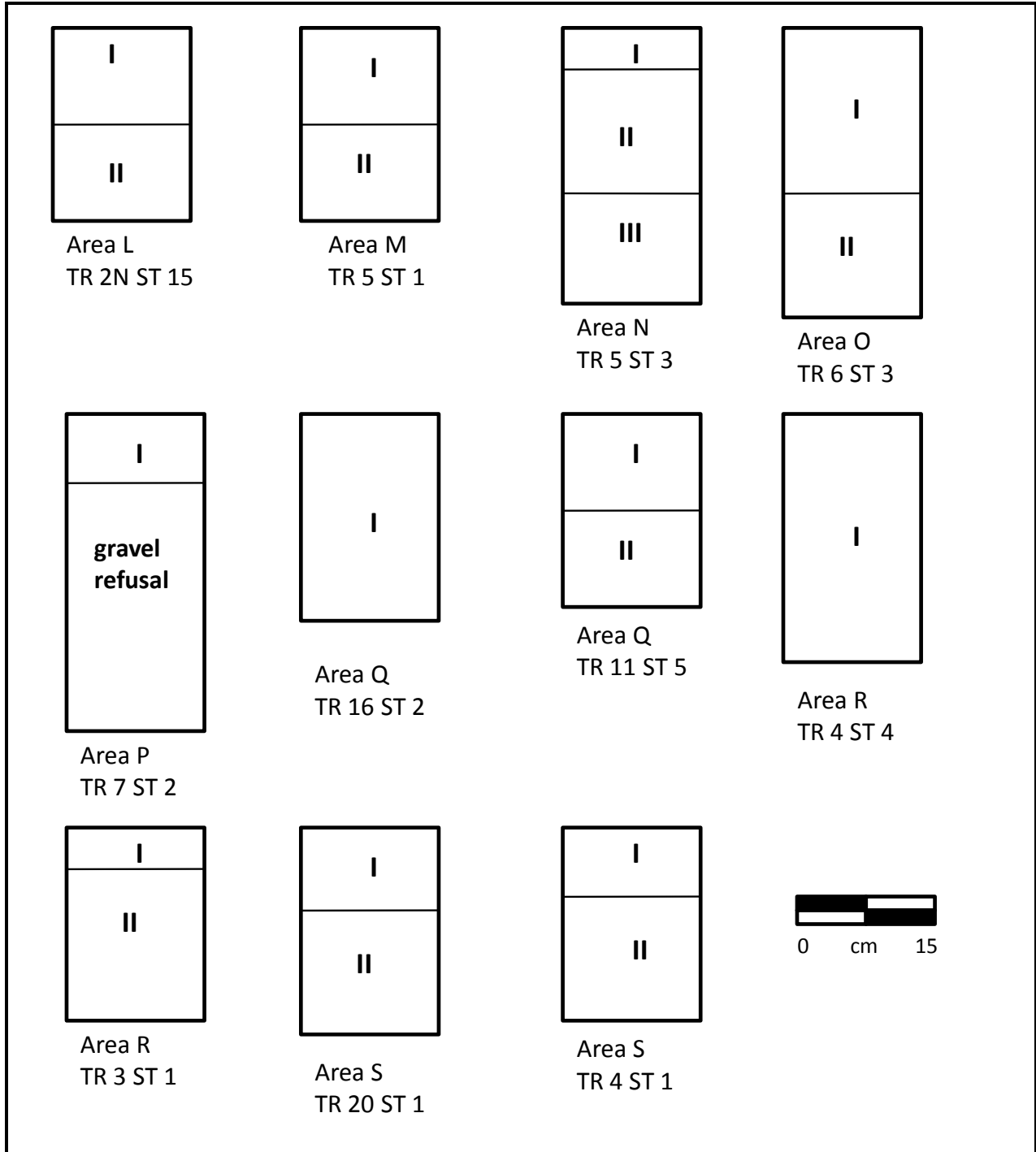


Figure 31. Shovel test profiles from Areas L through S.

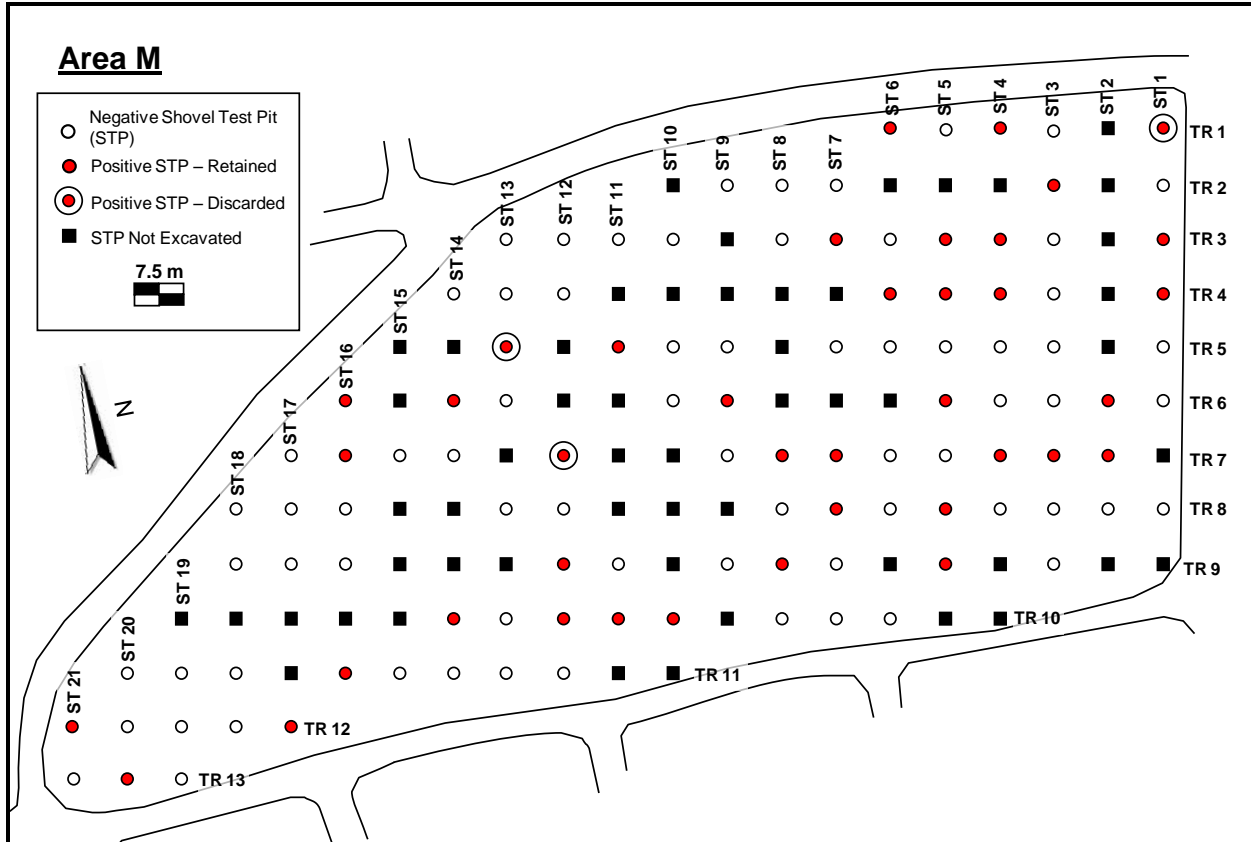


Figure 32. Location of shovel test pits in Area M.

loam (Figure 31). The stratum varied in thickness from 5 cm to 15 cm, and was at times described as having a gravel content. The following stratum was most often described as strong brown (7.5YR5/6) or yellowish brown (10YR5/4) sandy clay loam or sandy clay. In some instances, the second stratum was described as a sandy loam. All artifacts recovered from Area M were found in the initial soil horizon.

The excavations conducted in Area M yielded a large artifact assemblage that totals 129 items recovered from 45 positive shovel tests. This figure yields an average of 2.9 artifacts per positive test, or 1.0 artifact per test excavated. Positive shovel tests were located near asphalt roads or concrete pads, although a few were also present in the interior of the tract. Based on the review of historic maps and aerial photographs for Area M, most of these artifacts are likely to be associated with mobile homes. However, the Area M assemblage appears to also represent a domestic occupation that dates to the early nineteenth century. The location of these artifacts has been registered with the Virginia Department of Historic Resources as archaeological site 44FX3311. The later materials associated with the mobile homes will be discussed below separately from those associated with the early nineteenth century archaeological site. The specific provenience for each artifact recovered from Area M can be found in Appendix B.

The twentieth century artifacts found in Area M total 101 and are dominated by items assigned to the Kitchen group. These include clear vessel glass (n=29), bottle glass (8 clear, 7 green, 2

brown) (Figure 33), undecorated ironstone (n=1) (Figure 33), animal bone (n=1), and fiestaware-like (n=1, turquoise-colored; Figure 33). Architecture group material was also common and includes window glass (n=18), brick (n=7), wire-drawn nails (n=4) (Figure 33), mortar (n=1), ceramic tile (n=1), and electrical outlets (n=1). The Furniture group was represented by one piece of light bulb glass, the Personal group by one safety pin (Figure 33), and the Activities group by one glass marble (Figure 33) and one plastic guitar pick. Unidentified artifacts were made of plastic (n=6), glass (n=4), and metal (n=2). Finally, four prehistoric Native American artifacts were found in Area M. These include a bipolar flake (white quartzite), a tertiary flake (brown quartzite), a broken flake (white quartz), and a thin biface shaft section (white quartz).

The early nineteenth century archaeological site (44FX3311) consists of three original positive shovel tests and five additional positive bracketing tests located in the southeast portion of Area M (Figures 34 and 35). Early nineteenth century artifacts were recovered from the eight positive

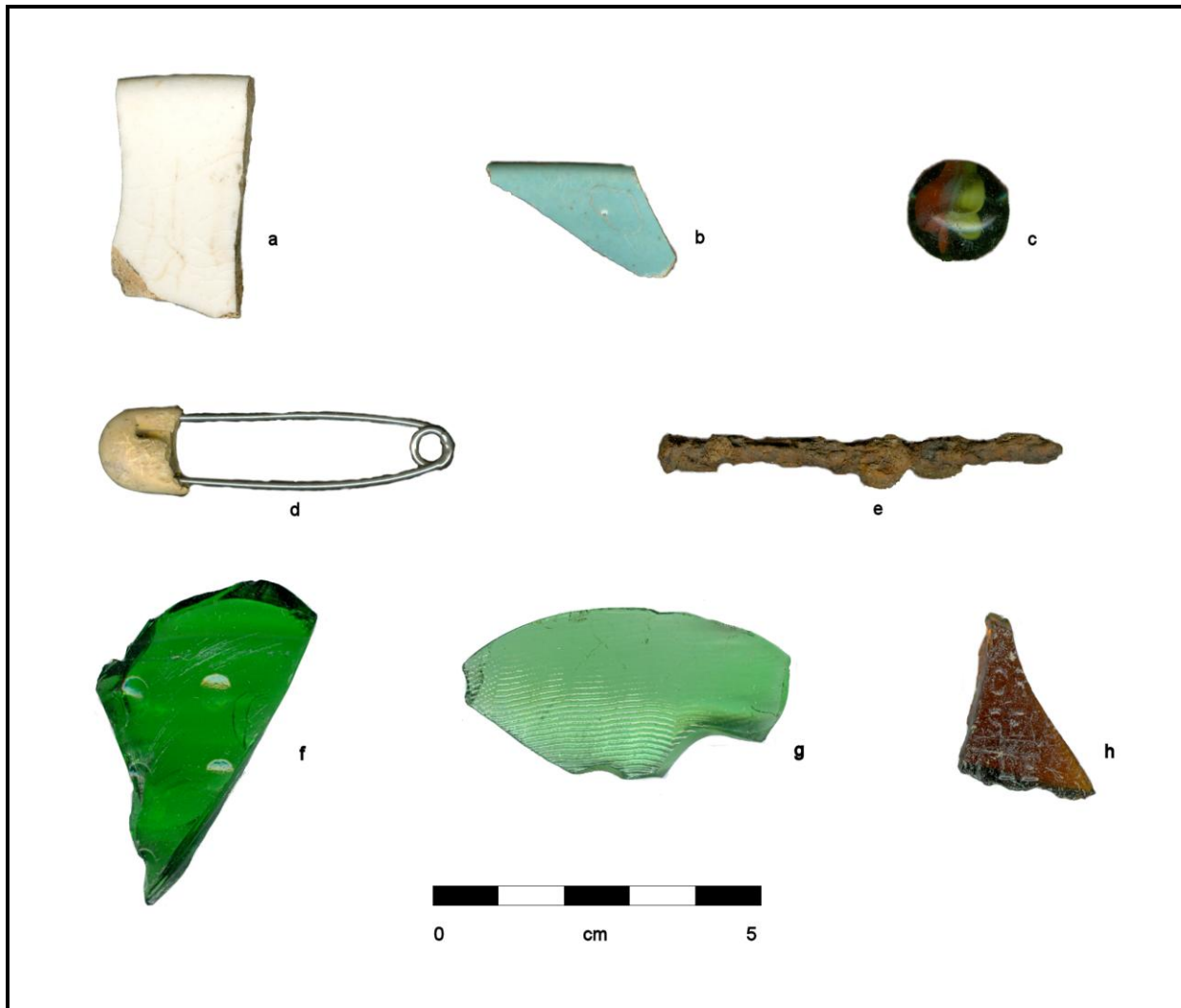


Figure 33. Selected twentieth century artifacts from Area M: a, undecorated ironstone; b, Fiestaware-like ceramic; c, marble; d, safety pin; e, wire-drawn nail; f-h, bottle glass.

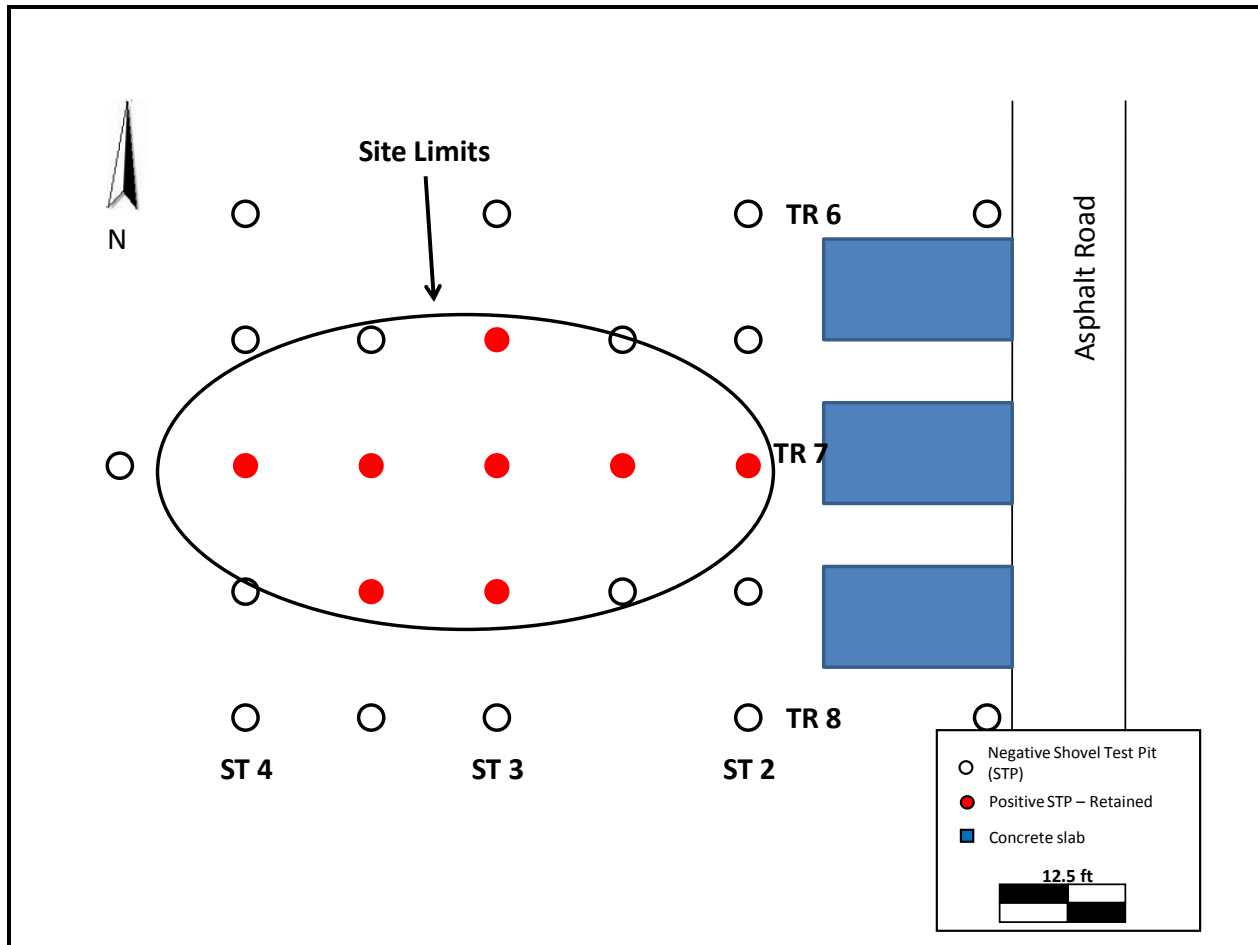


Figure 34. Sketch map of the 44FX3311 site area.

shovel tests that comprise this site. Spatially, the site consists of an area approximately 20 feet east-west by 15 feet north-south, and is located approximately 30 feet to the west of an asphalt road. A concrete pad is present between the road and the positive tests, while additional pads are present to the north and south of the positive tests. The areas associated with the pads to the north and south of the site appear to have been leveled. The site itself is flat to gently sloping and is forested with abundant English ivy present (Figure 36).

Positive tests within the site area tended to exhibit two soil strata (Figures 31 and 37). The initial stratum consisted of 5 cm to 15 cm of dark grayish brown (10YR4/2) sandy silt loam. Beneath is brown (10YR4/3) or yellowish brown (10YR5/4) sandy clay loam with gravel. Artifacts from the eight positive shovel tests located within the early nineteenth century archaeological site total 28, 23 of which were assigned to the Kitchen group. These materials include linear-decorated pearlware (n=2), including one saucer rim, hand-painted floral pearlware (n=3) (Figure 38), undecorated pearlware (n=4), undecorated creamware (n=2), undecorated whiteware (n=4), black and green banded whiteware (n=1) (Figure 38), seaweed pattern mochaware (n=1), hand-painted porcelain (n=1) (Figure 38), burnt earthenware (n=1), dry-bodied earthenware with black

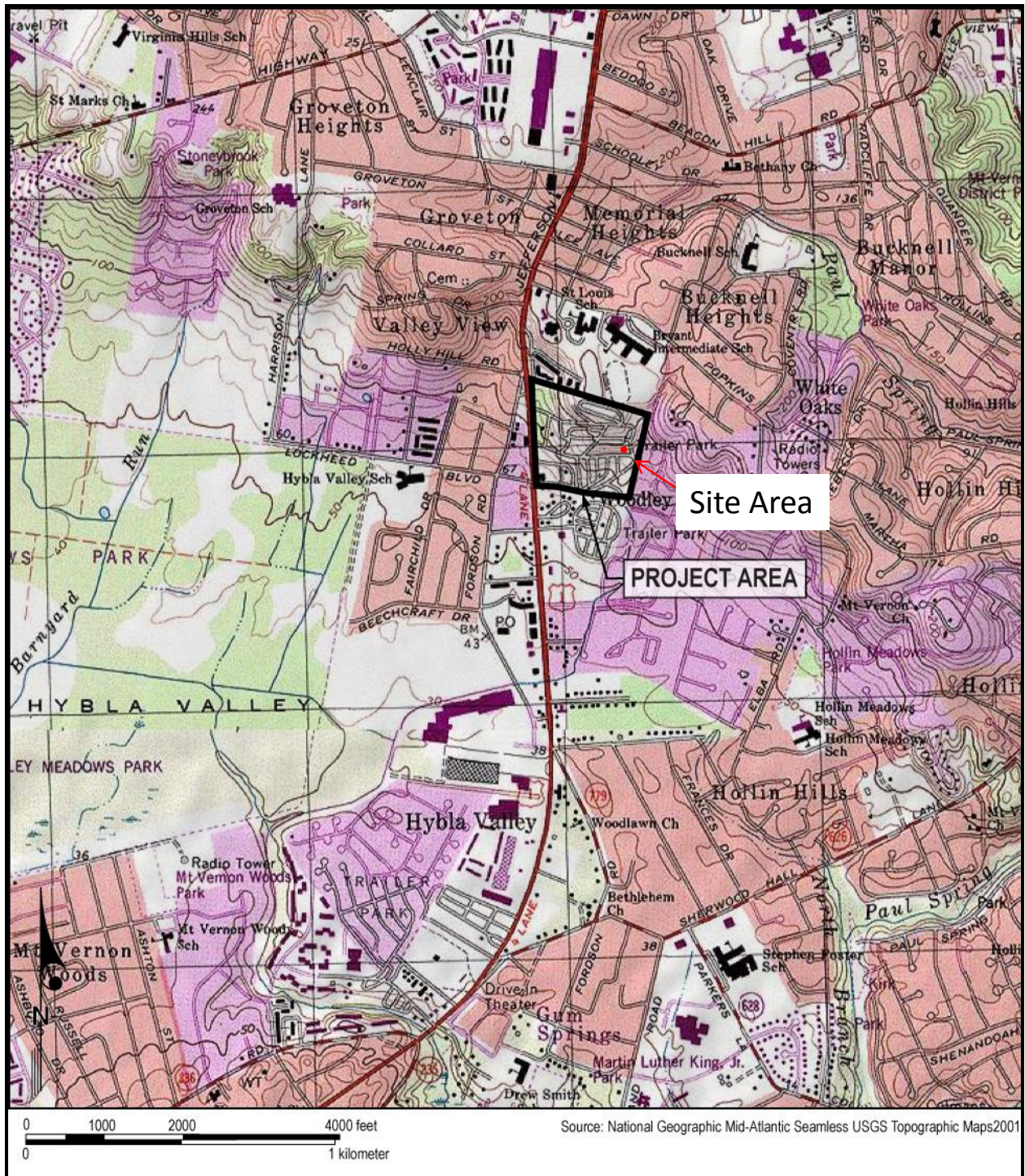


Figure 35. Location of 44FX3311.

glaze (n=2) (Figure 38), animal bone (n=1), and dark green bottle glass (n=1). Architecture group items include brick (n=3, although numerous other small fragments were not retained) and window glass (n=1). Lastly, one pipe stem was recovered (Figure 38). This pipe has a bore



Figure 36. General view of the early nineteenth century archaeological site area.



Figure 37. Wall profile of Area M TR 7.5 ST 3.5 shovel test.



Figure 38. Selected artifacts from 44FX3311: a, black and green banded whiteware; b, hand-painted floral pearlware; c, hand-painted porcelain; d; dry-bodied earthenware; e, pipestem.

diameter of 4/64-inch indicating its most likely period of manufacture as between 1750 and 1800 (Noel Hume 1991:298).

Area N

Area N is located in the southeast portion of the North Hill property (Figure 16). This approximately 0.7-acre area is situated north of Dart Drive and east of U.S. Route 1. Area N is bounded to the west by survey Area W, to the south by survey Area O, to the north by survey Areas M and Q, and to the east by private property. Asphalt roads bound Area N on three of the four sides—the east side of this project area is bounded by a fence. This area consists of flat to gently sloping uplands that descend in elevation to the south and east. Most of the area is forested and covered by English ivy and other types of undergrowth. At the time of investigation all of Area N had poor surface visibility.

The historic maps and aerial photographs discussed in Section 3 indicate that Area N once was the location of numerous mobile homes (see Figures 9-11). No structures are present in the vicinity of Area N on the 1942 Alexandria USGS 15-minute quadrangle (Figure 9). However, the 1954 and 1988 aerial photographs depict the presence of mobile homes across the survey tract (Figures 10 and 11).

Because of the lack of adequate surface visibility, Area N was investigated by the excavation of shovel test pits conducted at 25-foot (7.5-m) intervals. A total of nine transects, oriented west to east, was established in Area N with 2 to 8 tests each. This yielded a total of 49 shovel test locations, and, of this total, 39 were excavated (Figure 39; Table 6). The remaining 10 locations were not investigated due to the presence of concrete or possible gravel pads (n=12) or other disturbances, principally associated with road construction (n=2).

All but one test in survey Area N evidenced two soil horizons (Figure 31). In these tests the initial horizon consisted of 5 cm to 20 cm of dark grayish brown (10YR4/2) to dark brown (10YR3/3) sandy loam, at times with gravel. It was followed by yellowish brown (10YR5/6) or strong brown (7.5YR5/6) clay or sandy clay loam, also with gravel. One soil profile evidenced three horizon, in which a dark grayish brown (10YR4/2) transitioned to yellowish brown (10YR5/6) sand with gravel at 2 cm below surface. This in turn transitioned to strong brown (7.5YR5/6) sandy clay loam at 20 cm. The artifacts recovered from Area N were found in the initial soil stratum with one exception, a piece of glass found in the second stratum between 5 cm and 20 cm below ground surface.

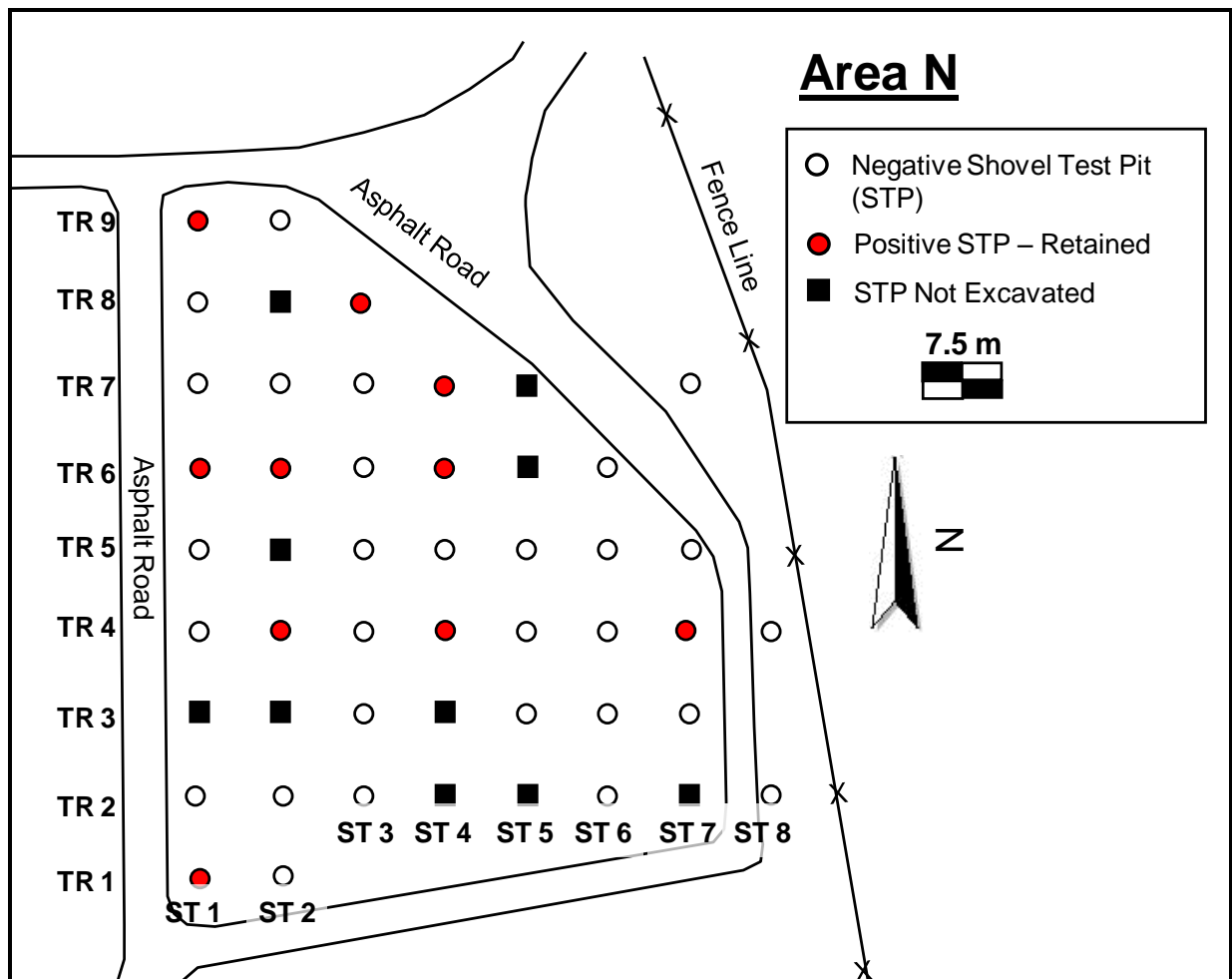


Figure 39. Location of shovel test pits in Area N.

The excavations conducted in Area N yielded a small artifact assemblage, totaling 20 items, recovered from 11 positive shovel tests. This figure yields an average of 1.8 artifacts per positive test, or 0.6 artifacts per test excavated. Most positive shovel tests were located along the asphalt roads or near concrete pads. Based on the review of historic maps and aerial photographs for Area N, these artifacts are likely to be associated with mobile homes. The specific provenience for each artifact recovered from Area N can be found in Appendix B. Unidentified artifacts were most common and consist of metal (n=5) and glass (n=3). Architecture group artifacts consist entirely of window glass (n=4) while the Kitchen group includes clear vessel glass (n=1) and oyster shell (n=1). The final category, the Activities group, is represented by flower pot fragments (n=6).

Area O

Area O is located in the southeast portion of the North Hill property (Figure 16). This approximately 0.3-acre area is situated north of Dart Drive and east of U.S. Route 1. Area O is bounded to the west and north by survey Area O, to the south by survey Area P, and to the east by private property. Asphalt roads bound Area O on three of the four sides—the east side of this project area is bounded by a fence. This area consists of flat to gently sloping uplands that descend in elevation to the south and east. Most of the area is forested and covered by English ivy and other types of undergrowth. At the time of investigation all of Area O had poor surface visibility.

The historic maps and aerial photographs discussed in Section 3 indicate that Area O once was the location of numerous mobile homes (see Figures 9-11). No structures are present in the vicinity of Area O on the 1942 Alexandria USGS 15-minute quadrangle (Figure 9). However, the 1954 and 1988 aerial photographs depict the presence of mobile homes across the survey tract (Figures 10 and 11).

Because of the lack of adequate surface visibility, Area O was investigated by the excavation of shovel test pits conducted at 25-foot (7.5-m) intervals. A total of seven transects, oriented south to north, was established in Area O with 1 to 5 tests each. This yielded a total of 24 shovel test locations, and of this total, 17 were excavated (Figure 40; Table 6). The remaining 7 locations were not investigated due to the presence of concrete or possible gravel pads (n=9) and a drainage feature (n=1).

The tests in survey Area O evidenced two soil horizons in profile (Figure 31). The initial horizon consisted of 5 cm to 30 cm of dark brown (10YR3/3) or dark grayish brown (10YR4/2) sandy loam, often with gravel. In a number of instances excavators could not dig below this horizon due to the high gravel content. When it was possible, the initial horizon was followed by yellowish brown (10YR5/6) or strong brown (7.5YR5/6) sandy clay or sandy clay loam. All artifacts found in Area O were recovered from the initial soil stratum.

The excavations conducted in Area O yielded a small artifact assemblage, totaling 6 items, recovered from four positive shovel tests. This figure yields an average of 1.5 artifacts per positive test, or 0.4 artifacts per test excavated. Positive shovel tests were located along the asphalt roads or near concrete pads, and a few were located near the center of the area. Based on

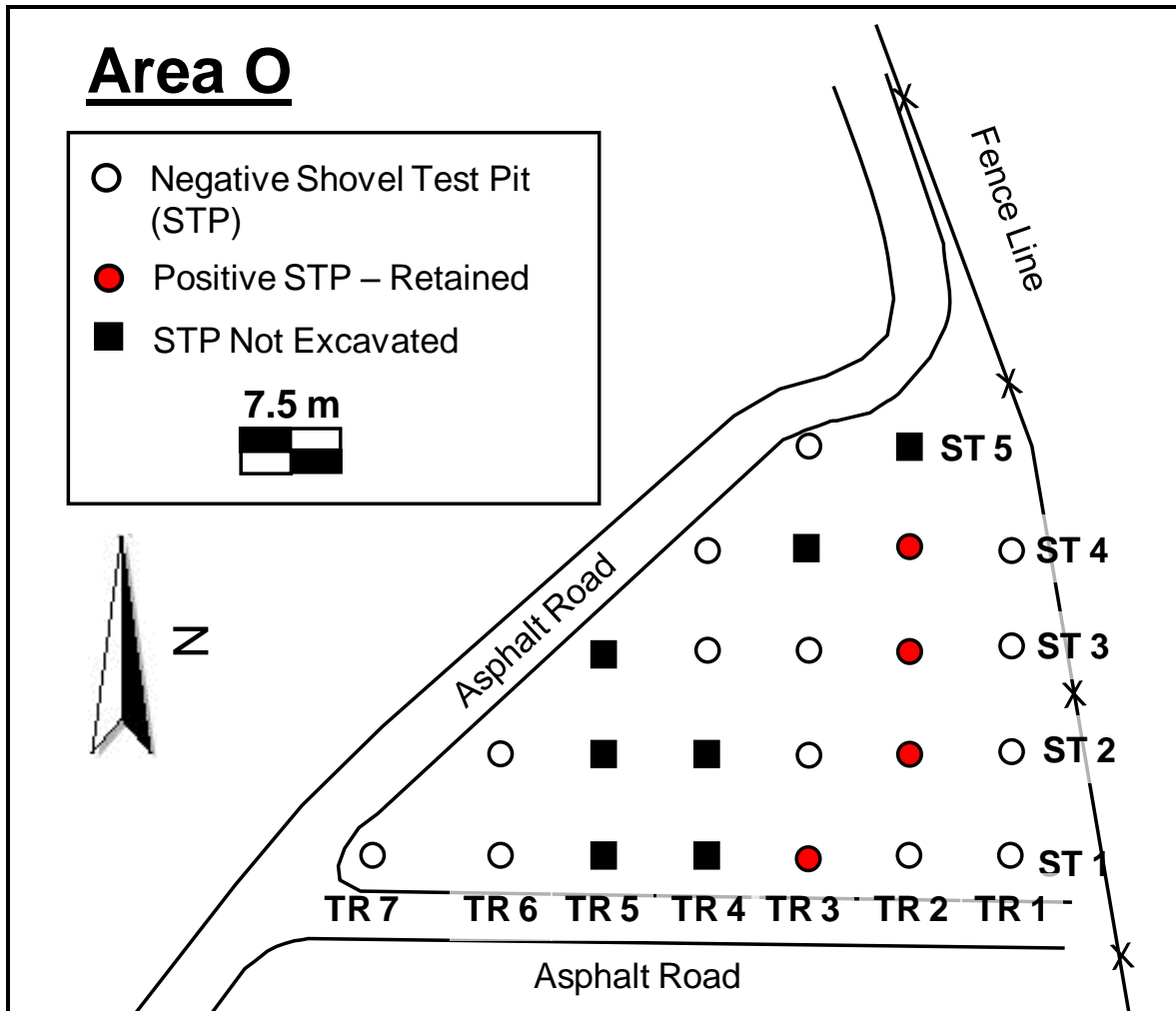


Figure 40. Location of shovel test pits in Area O.

the review of historic maps and aerial photographs for Area O, these artifacts are likely to be associated with mobile homes. The specific provenience for each artifact recovered from Area O can be found in Appendix B. Kitchen group artifacts are most common, and include bottle glass (1 brown, 1 green) and clear vessel glass (n=1). Architecture group items consist of window glass (n=1) and ceramic tile (n=1). Finally, one piece of unidentified plastic was also found in Area O.

Area P

Area P is located in the southeast corner of the North Hill property (Figure 16). This approximately 0.7-acre area is situated north of Dart Drive and east of U.S. Route 1. Area P is bounded to the west by survey Area X, to the north by survey Area O, to the south by Dart Drive, and to the east by private property. Asphalt roads bound Area P on two of the four sides—the east side of this project area is bounded by a fence while the south side is bounded by Dart Drive. This area consists of flat to gently sloping uplands that descend in elevation to the

south and east. Most of the area is forested and covered by English ivy and other types of undergrowth. At the time of investigation all of Area P had poor surface visibility.

The historic maps and aerial photographs discussed in Section 3 indicate that Area P once was the location of numerous mobile homes (see Figures 9-11). No structures are present in the vicinity of Area P on the 1942 Alexandria USGS 15-minute quadrangle (Figure 9). However, the 1954 and 1988 aerial photographs depict the presence of mobile homes across the survey tract (Figures 10 and 11).

Because of the lack of adequate surface visibility, Area P was investigated by the excavation of shovel test pits conducted at 25-foot (7.5-m) intervals. A total of nine transects, oriented east to west, was established in Area P with 2 to 11 tests each. This yielded a total of 47 shovel test locations, and of this total, 31 were excavated (Figure 41; Table 6). The remaining 16 locations were not investigated due to the presence of concrete or possible gravel pads (n=13).

Most tests in survey Area P evidenced two soil horizons in profile (Figure 31). In these tests the initial horizon consisted of 10 cm to 20 cm of dark grayish brown (10YR4/2) to dark brown (10YR3/3) sandy loam, at times with gravel. It was followed by yellowish brown (10YR5/6) or strong brown (7.5YR5/6) clay or sandy clay loam, also with gravel. However, in TR 3 ST 3 through 6, a single stratum of coarse yellowish brown (10YR5/6) sand was encountered, to between 25 cm and 30 cm below ground surface.

The excavations conducted in Area P yielded a small artifact assemblage, totaling 16 items, recovered from seven positive shovel tests. This figure yields an average of 2.4 artifacts per positive test, or 0.5 artifacts per test excavated. Positive shovel tests were located along the asphalt roads, near concrete pads, or in the center of the tract. Based on the review of historic maps and aerial photographs for Area P, these artifacts are likely to be associated with mobile homes. The specific provenience for each artifact recovered from Area P can be found in Appendix B. Architecture group artifacts are most common and consist entirely of window glass (n=5). Kitchen group artifacts include bottle glass (1 clear, 1 green, 1 brown) and clear vessel glass (n=1). The Activities group is represented by one plastic clothes pin fragment, while one plastic button comprises the Personal group. Unidentified artifacts were made from glass (n=3) and plastic (n=2), and also includes one screw.

Area Q

Area Q is located in the northeast corner of the North Hill property (Figure 16). This approximately 1.3-acre area is situated north of Dart Drive and east of U.S. Route 1. Area Q is bounded to the west by survey Areas L, M, and R, to the north and east by private property, and to the south by survey Area N. Asphalt roads bound Area P on its west and south sides—the east and north sides are bounded by a fence. This area consists of flat to gently sloping uplands that descend in elevation to the south and east, and areas of erosion are present through much of this survey area. Most of the area is forested and covered by English ivy and other types of undergrowth. At the time of investigation all of Area Q had poor surface visibility.

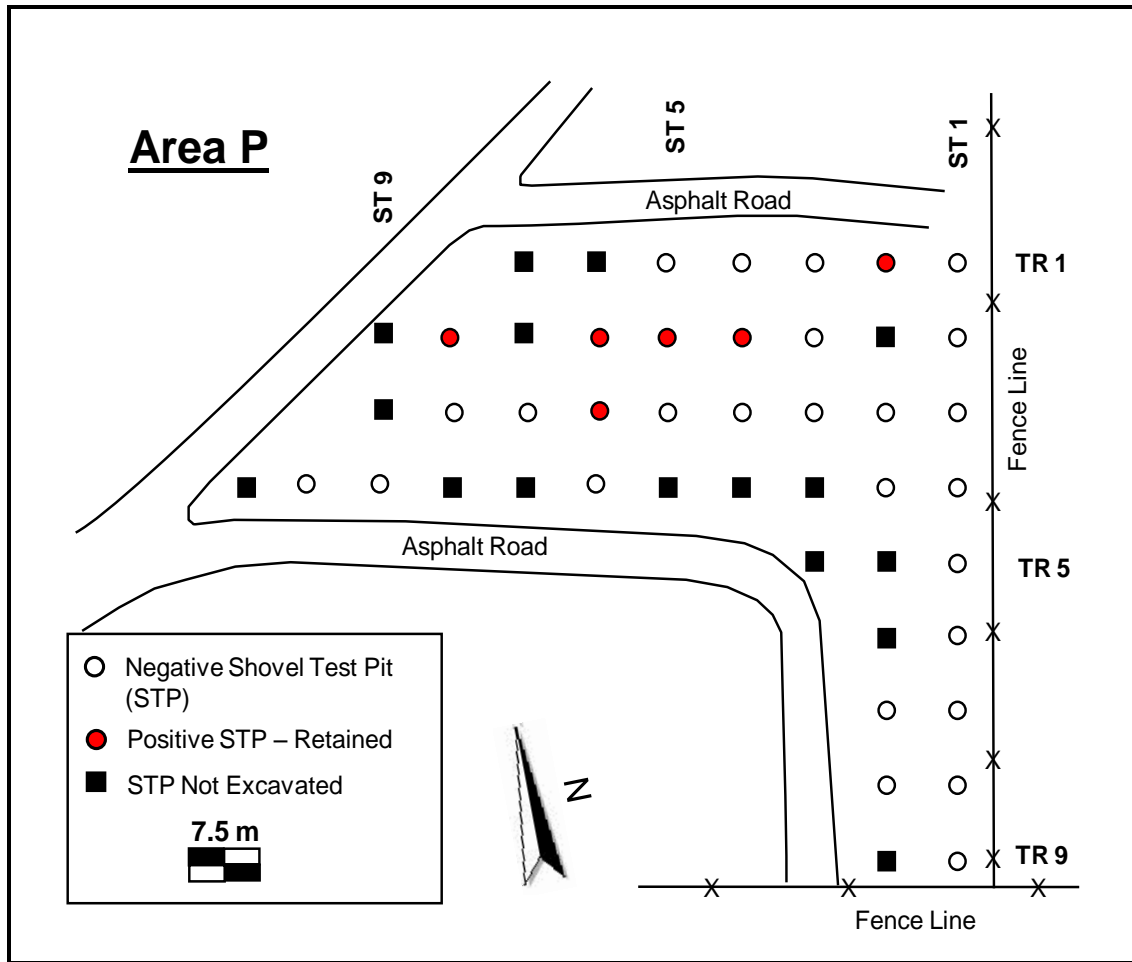


Figure 41. Location of shovel test pits in Area P.

The historic maps and aerial photographs discussed in Section 3 indicate that Area Q once was the location of numerous mobile homes (see Figures 9-11). No structures are present in the vicinity of Area Q on the 1942 Alexandria USGS 15-minute quadrangle (Figure 9). However, the 1954 and 1988 aerial photographs depict the presence of mobile homes across the survey tract (Figures 10 and 11).

Because of the lack of adequate surface visibility, Area Q was investigated by the excavation of shovel test pits conducted at 25-foot (7.5-m) intervals. A total of 20 transects, oriented west to east, was established in Area Q with 2 to 6 tests each. This yielded a total of 93 shovel test locations, and of this total, 68 were excavated (Figure 42; Table 6). The remaining 25 locations were not investigated due to the presence of concrete or possible gravel pads (n=4), excessive slope (n=9), or other disturbances (n=10). The other disturbances are mainly associated with a drainage that crosses portions of Area Q.

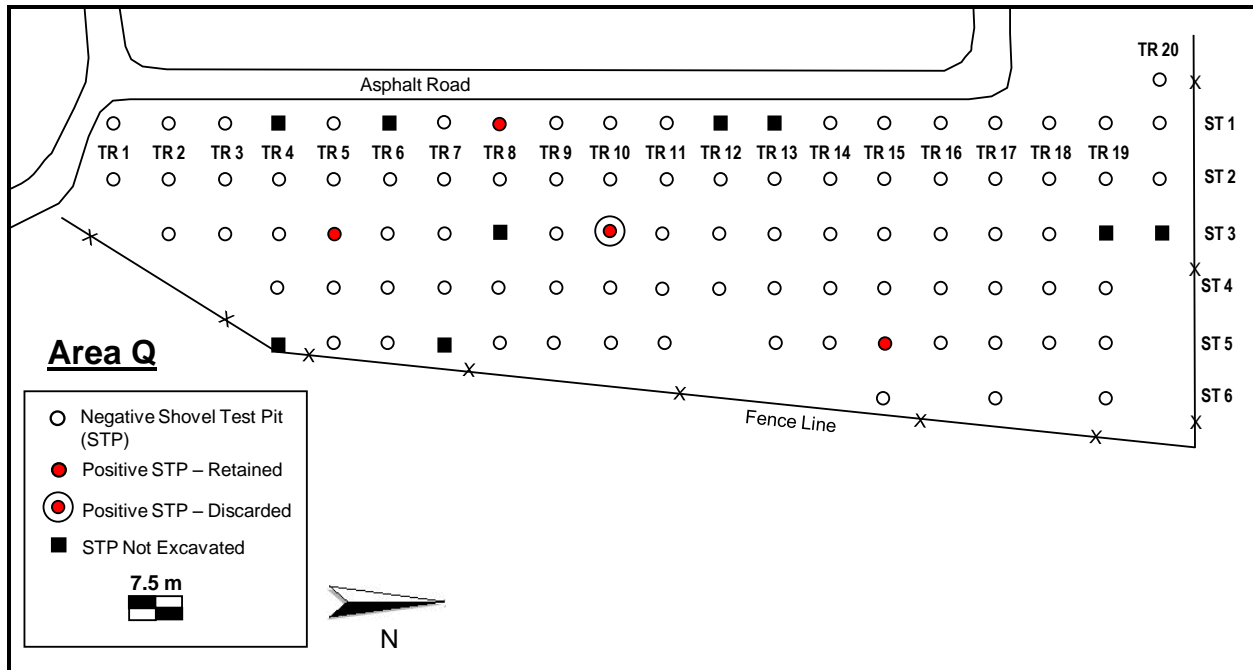


Figure 42. Location of shovel test pits in Area Q.

In general, two different soil profiles were recorded in survey Area Q. Many of the tests, often located in the center and northern portions of the tract, evidenced a single soil horizon (Figure 31). This horizon consisted of yellowish brown (10YR5/4), strong brown (7.5YR5/6), brown (10YR4/3), or dark brown (10YR4/2) sandy clay or clay to the base of excavations, often at 20 cm to 30 cm below ground surface. The second set of profiles, more common in the center to south of the tract, evidenced two soil strata (Figure 31). The initial stratum is dark brown (10YR4/2) or brown (10YR4/3) sandy loam. It typically ranged from 5 cm to 15 cm thick. In most instances, strong brown (7.5YR5/6) or yellowish brown (10YR5/4) sandy clay follows. In a few instances light olive brown (2.5YR5/4) silt loam followed, and at times this was intermixed with yellowish brown (10YR5/4) clay. All artifacts found were from the initial soil horizon.

The excavations conducted in Area Q yielded a small artifact assemblage, totaling 12 items, recovered from seven positive shovel tests. This figure yields an average of 1.3 artifacts per positive test, or 0.1 artifacts per test excavated. Positive shovel tests were generally widely scattered through the center of the tract. Based on the review of historic maps and aerial photographs for Area Q, these artifacts are likely to be associated with mobile homes. The specific provenience for each artifact recovered from Area Q can be found in Appendix B. Architecture group artifacts are most common, and include brick (n=2), wire-drawn nails (n=1), asbestos tile (n=1), and ceramic sewer pipe (n=1). The Kitchen group includes green bottle glass (n=1) and clear vessel glass (n=1). Unidentified artifacts were made of metal (n=1) and plastic (n=1).

Area R

Area R is located in the northeast portion of the North Hill property (Figure 16). This approximately 0.4-acre area is situated north of Dart Drive and east of U.S. Route 1. Area R is bounded to the west by survey Area S, to the north by private property, to the south survey Area L, and to the east by survey Area Q. Asphalt roads bound Area R on two of the four sides—the east side of this project area is bounded by survey Area Q while the north is bounded by a fence. This area consists of flat uplands. Most of the area is forested and covered by English ivy and other types of undergrowth. At the time of investigation all of Area R had poor surface visibility.

The historic maps and aerial photographs discussed in Section 3 indicate that Area R once was the location of numerous mobile homes (see Figures 9-11). No structures are present in the vicinity of Area R on the 1942 Alexandria USGS 15-minute quadrangle (Figure 9). However, the 1954 and 1988 aerial photographs depict the presence of mobile homes across the survey tract (Figures 10 and 11).

Because of the lack of adequate surface visibility, Area R was investigated by the excavation of shovel test pits conducted at 25-foot (7.5-m) intervals. A total of six transects, oriented south to north, was established in Area R with 2 to 6 tests each. This yielded a total of 28 shovel test locations, of which 21 were excavated (Figure 43; Table 6). The remaining seven locations were not investigated due to the presence of a drainage (n=5) or excessive slope (n=2).

Two different soil profiles were also recorded in survey Area R. Most of the tests evidenced a single horizon that consisted of yellowish brown (10YR5/4), strong brown (7.5YR5/6), brown (10YR4/3), or dark brown (10YR4/2) sandy clay or clay to the base of excavations, often at 20 cm to 30 cm below ground surface (Figure 31). The second set of profiles, fewer in number, evidenced two soil strata (Figure 31). The initial stratum is dark brown (10YR4/2) sandy loam. It typically ranged from 5 cm to 15 cm thick. It was followed by yellowish brown (10YR5/4) sandy clay. All artifacts in Area R were found in the initial soil horizon.

The excavations conducted in Area R yielded a moderately-sized artifact assemblage, especially considering the small size of this survey area. The assemblage totals 28 items recovered from seven positive shovel tests. This figure yields an average of 4.0 artifacts per positive test, or 1.3 artifacts per test excavated. Positive shovel tests were located near the center and eastern edge of the survey tract. Based on the review of historic maps and aerial photographs for Area R, these artifacts are likely to be associated with mobile homes. The specific provenience for each artifact recovered from Area R can be found in Appendix B. Kitchen group artifacts dominate the assemblage, and include bottle glass (6 brown, 6 clear), clear vessel glass (n=11), and pull tabs (n=1). The Architecture group consists of one asbestos tile fragment. Finally, unidentified artifacts include three pieces of glass.

5.193 Area S

Area S is located in the northeast portion of the North Hill property (Figure 16). This approximately 0.9-acre area is situated north of Dart Drive and east of U.S. Route 1. Area S is

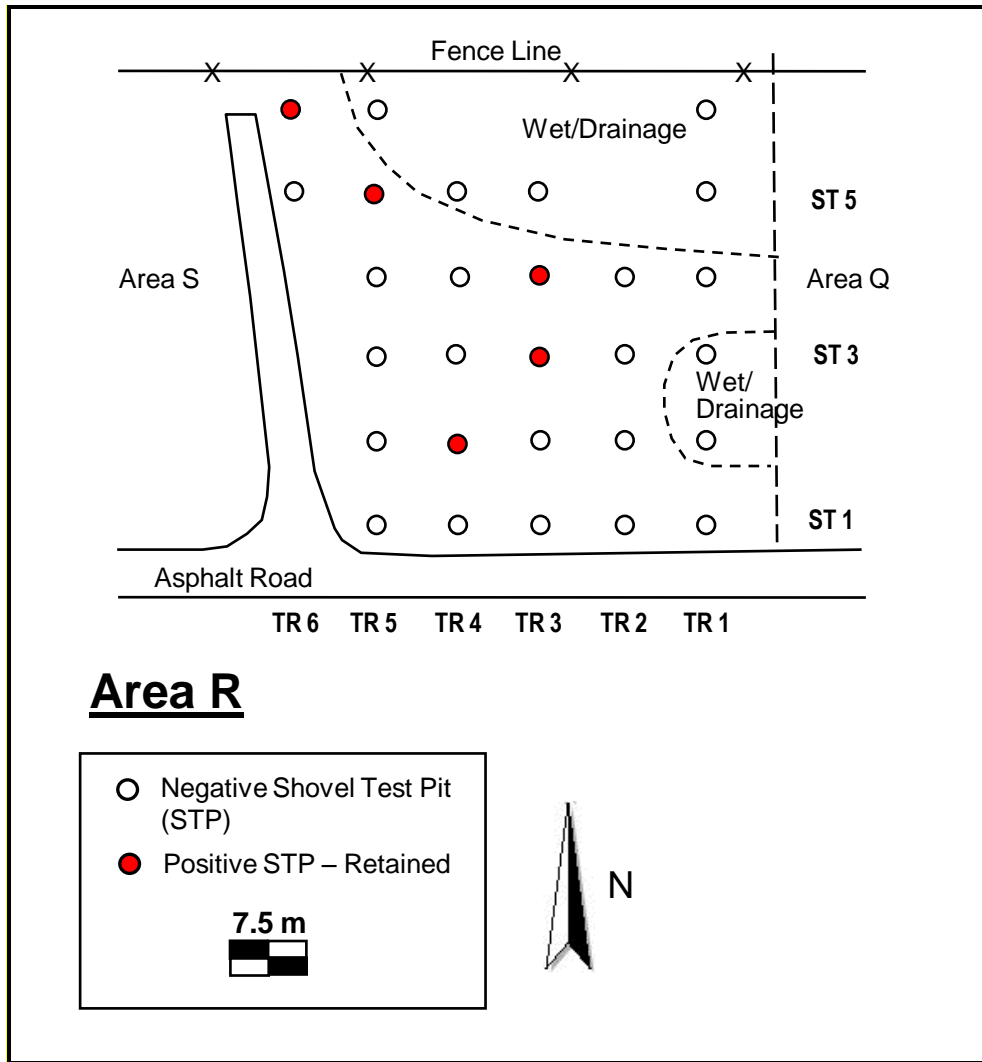


Figure 43. Location of shovel test pits in Area R.

bounded to the west by survey Area U, to the north by private property, to the south survey Area T, and to the east by survey Area R. Asphalt roads bound Area S on two of the four sides—the west side of this project area is bounded by survey Area U while the north is bounded by a fence. This area consists of flat uplands. Most of the area is forested and covered by English ivy and other types of undergrowth. At the time of investigation all of Area S had poor surface visibility.

The historic maps and aerial photographs discussed in Section 3 indicate that Area S once was the location of a structure and subsequently of numerous mobile homes (see Figures 9-11). The 1942 Alexandria USGS 15-minute quadrangle depicts a single structure in the vicinity of survey Area S, although based on subsequent aerial photographs, it appears that this structure is actually located to the north of the project area (Figure 9). The 1954 and 1988 aerial photographs depict the presence of mobile homes across the survey tract (Figures 10 and 11).

Because of the lack of adequate surface visibility, Area S was investigated by the excavation of shovel test pits conducted at 25-foot (7.5-m) intervals. A total of 23 transects, oriented south to north, was established in Area S with 1 to 3 tests each. This yielded a total of 63 shovel test locations, and of this total, 38 were excavated (Figure 44; Table 6). The remaining 25 locations were not investigated due to the presence of concrete or possible gravel pads (n=27) or other disturbances (n=1).

Two different soil profiles were also recorded in survey Area S. Most of the tests evidenced two soil strata (Figure 31). The initial stratum is dark brown (10YR4/2), brown (10YR4/3), or dark grayish brown (10YR4/2) sandy loam. It typically ranged from 5 cm to 15 cm thick. It was followed by yellowish brown (10YR5/4) or strong brown (7.5YR5/6) sandy clay. In a few instances, this second stratum was described as coarse sand, either brown (10YR4/3), yellowish brown (10YR5/4) or reddish brown (5YR5/4) in color. Gravel was often noted as present, and in a few instances, gravel content precluded excavation into the second soil horizon. In one instance, the shovel test had a profile that consisted of a single horizon of reddish brown (5YR5/4) clay, from the surface to the base of excavations at 28 cm below ground surface. All artifacts in Area S were found in the initial soil horizon.

The excavations conducted in Area S yielded a small artifact assemblage, totaling 12 items, recovered from eight positive shovel tests. This figure yields an average of 1.5 artifacts per positive test, or 0.3 artifacts per test excavated. Positive shovel tests were located along the asphalt roads or near concrete pads. Based on the review of historic maps and aerial photographs for Area S, these artifacts are likely to be associated with mobile homes. The specific provenience for each artifact recovered from Area S can be found in Appendix B. The

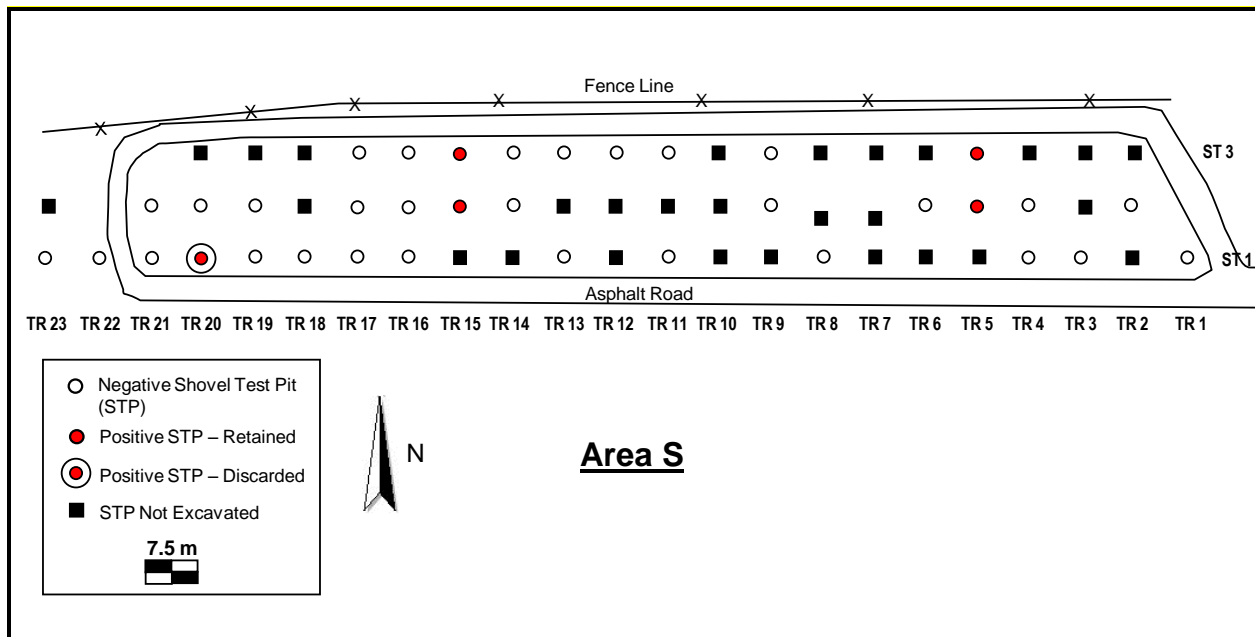


Figure 44. Location of shovel test pits in Area S.

unidentified materials collected include four pieces of plastic and one piece of metal. Activities group artifacts include one plastic toy watch dial and one plastic figurine fragment. The Architecture group is represented by one metal pipe joint, while the Kitchen group includes two clear glass vessel fragments and one green bottle glass fragment. Lastly, one prehistoric Native American broken flake, made from grey quartzite, was found in this area.

Area T

Area T is located in the northeast portion of the North Hill property (Figure 16). This approximately 1.4-acre area is situated north of Dart Drive and east of U.S. Route 1. Area T is bounded to the west by survey Area U, to the north by survey Area S, to the south survey Areas J and L, and to the east by survey Area R. Asphalt roads bound Area T on three of the four sides—the west side of this project area is bounded by survey Area U. This area consists of flat to at times steeply sloping uplands. Most of the area is forested and covered by English ivy and other types of undergrowth. At the time of investigation all of Area T had poor surface visibility.

The historic maps and aerial photographs discussed in Section 3 indicate that Area T once was the location of numerous mobile homes (see Figures 9-11). No structures are present in the vicinity of Area T on the 1942 Alexandria USGS 15-minute quadrangle (Figure 9). However, the 1954 and 1988 aerial photographs depict the presence of mobile homes across the survey tract (Figures 10 and 11).

Because of the lack of adequate surface visibility, Area T was investigated by the excavation of shovel test pits conducted at 25-foot (7.5-m) intervals. A total of 23 transects, oriented north to south, was established in Area T with 2 to 9 tests each. This yielded a total of 97 shovel test locations, and of this total, 65 were excavated (Figure 45; Table 6). The remaining 32 locations were not investigated due to the presence of concrete or possible gravel pads (n=16), excessive slopes (n=15), or other disturbances (n=1).

In most instances, the shovel test profiles from survey Area T evidenced an initial stratum of dark brown (10YR3/3) or brown (10YR4/3) sandy loam (Figure 46). A few were described as being grayish brown (10YR5/2). This initial stratum ranged in thickness from 5 cm to 25 cm, although most were 15 cm thick or less. The initial stratum was followed by strong brown (7.5YR5/6) or yellowish brown (10YR5/4) sandy clay or sandy clay loam. In a few instances, this second stratum was described as pale brown (10YR6/2) sandy clay. Gravel was present in the second stratum of many of the tests. Artifacts from Area T were restricted to the initial soil horizon.

The excavations conducted in Area T yielded a small artifact assemblage, totaling 40 items, recovered from 15 positive shovel tests. This figure yields an average of 2.7 artifacts per positive test, or 0.6 artifacts per test excavated. Positive shovel tests were located along the asphalt roads or near concrete pads. Based on the review of historic maps and aerial photographs for Area T, these artifacts are likely to be associated with mobile homes. The specific provenience for each artifact recovered from Area T can be found in Appendix B. Kitchen group artifacts are most common, and include clear vessel glass (n=9), bottle glass (4 green, 2 brown, 1

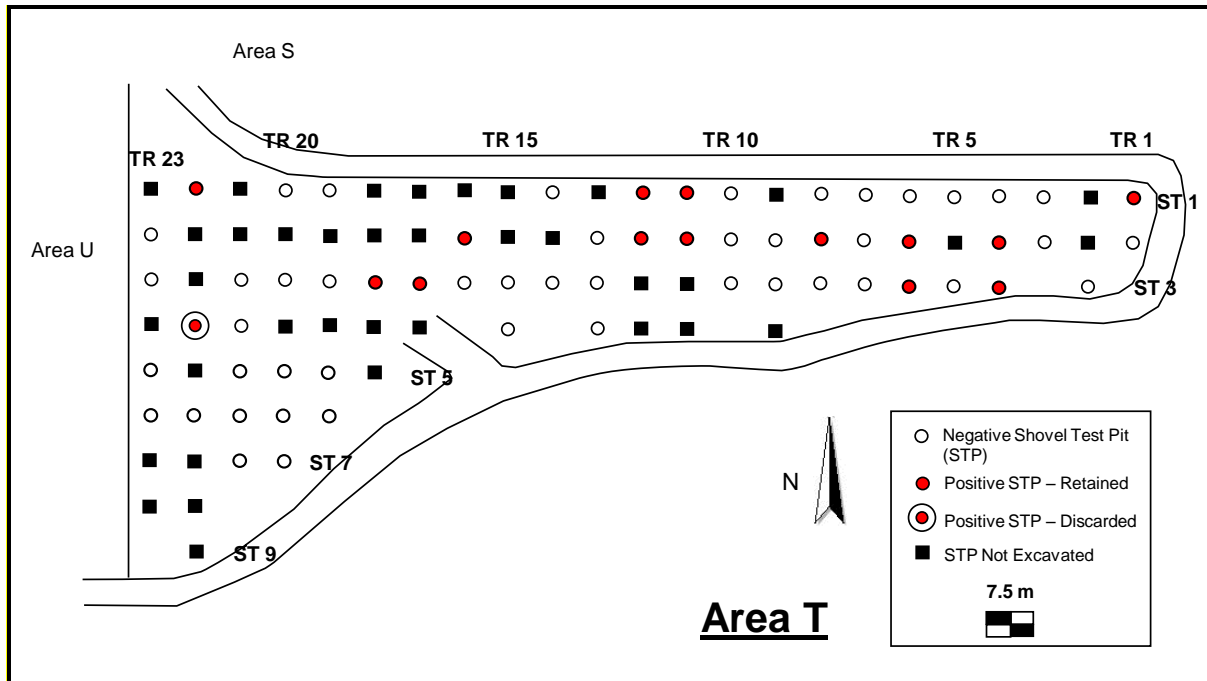


Figure 45. Location of shovel test pits in Area T.

clear), metal can fragments (n=2), and undecorated ironstone (n=1). The Architecture group is represented by shingles (n=2), brick (n=1), window glass (n=2), wire-drawn nails (n=1), and tacks (n=1), while the Personal group consists of one 1974 dime. The Clothing group is represented by one metal button. Unidentified artifacts are made of plastic (n=4), metal (n=3), and glass (n=5).

Area U

Area U is located in the northwest portion of the North Hill property (Figure 16). This approximately 3.8-acre area is situated north of Dart Drive and east of and adjacent to U.S. Route 1. Area U is bounded to the west by survey U.S. Route 1, to the north by private property, to the south survey Areas H, I, and J, and to the east by survey Areas S and T. Asphalt roads bound Area U on two of the four sides. This area consists of flat to at times steeply sloping uplands. Most of the area is forested and covered by English ivy and other types of undergrowth, although tree cover diminished near U.S. Route 1. At the time of investigation all of Area U had poor surface visibility.

The historic maps and aerial photographs discussed in Section 3 indicate that Area U once was for the most part devoid of mobile homes (see Figures 9-11). No structures are present in the vicinity of Area U on the 1942 Alexandria USGS 15-minute quadrangle (Figure 9). As well, the 1954 and 1988 aerial photographs depict few mobile homes within the survey tract (Figures 10 and 11).

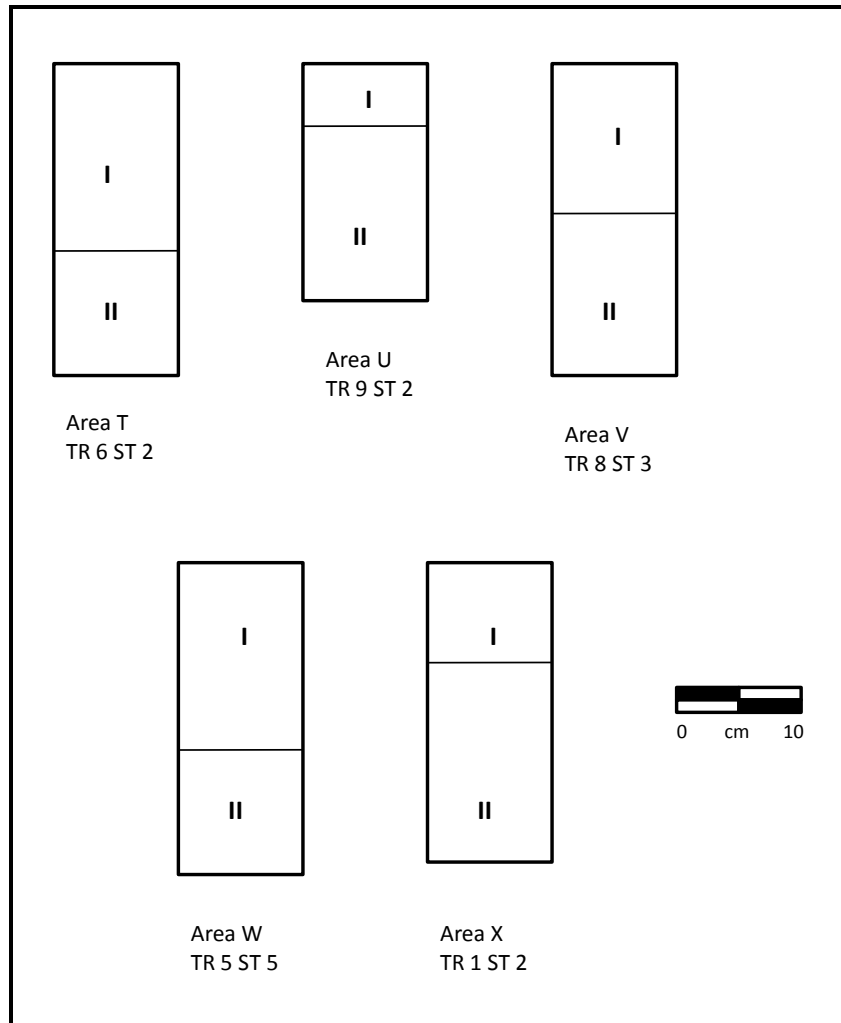


Figure 46. Selected soil profiles from Areas T through W.

Because of the lack of adequate surface visibility, Area U was investigated by the excavation of shovel test pits conducted at 25-foot (7.5-m) intervals. A total of 25 transects, oriented north to south, was established in Area U with 2 to 13 tests each. This yielded a total of 271 shovel test locations, and of this total, 205 were excavated (Figure 47; Table 6). The remaining 66 locations were not investigated due to the presence of concrete or possible gravel pads (n=7), excessive slopes (n=32), or other disturbances (n=27), mainly piles of construction debris (concrete slabs and cinder blocks).

The most common soil profile documented in the survey Area U test units consisted of two soil strata (Figure 46). In these tests the initial horizon consisted of 5 cm to 20 cm of dark grayish brown (10YR4/2) to dark brown (10YR3/3) sandy loam, at times with gravel. It was followed by yellowish brown (10YR5/6) or strong brown (7.5YR5/6) clay, sandy clay, or sandy clay loam, also with gravel. Variations on this pattern included tests with a second stratum of sand (light olive brown [2.5Y5/3], dark brown [10YR3/3], yellowish brown [10YR5/4], or grayish brown

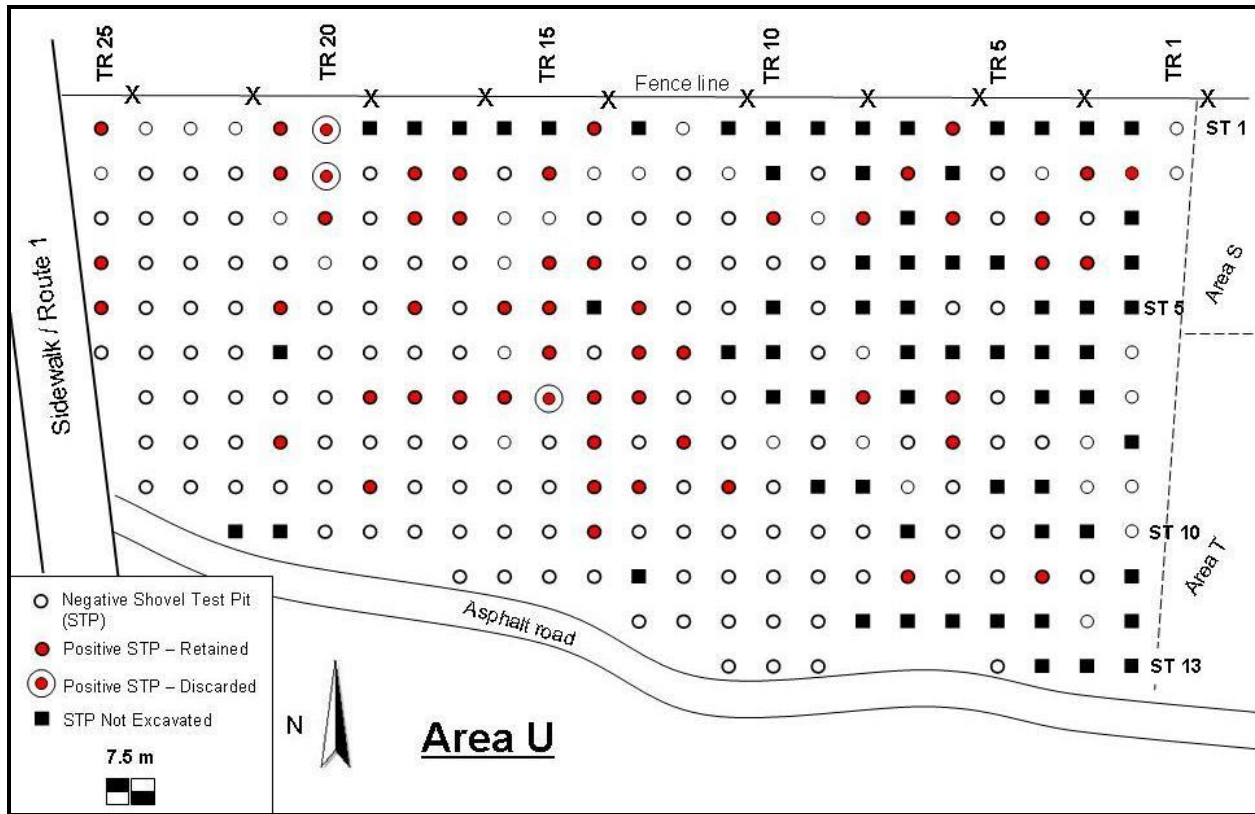


Figure 47. Location of shovel test pits in Area U.

[10YR5/2]), or a few tests where the initial stratum consisted of clay or sandy clay, which continued to the base of excavations.

The excavations conducted in Area U yielded one of the numerically largest survey area artifact assemblages recovered from the North Hill property, totaling 199 items, recovered from 54 positive shovel tests. This figure yields an average of 3.7 artifacts per positive test, or 0.9 artifacts per test excavated. Positive shovel tests were located along the asphalt roads or near concrete pads, and were especially common in the northern half and the center of the survey area. Based on the review of historic maps and aerial photographs for Area U, these artifacts are likely to be associated with mobile homes. The specific provenience for each artifact recovered from Area U can be found in Appendix B. Kitchen group items are most common, totaling 113. These include bottle glass (42 clear, 19 brown, 12 green), clear vessel glass (n=33), pull tabs (n=3), unidentified table glass (n=1), tumbler glass (n=1), brown transfer-print ironstone (n=1), and undecorated ironstone (n=2). Architecture group items include wire-drawn nails (n=13), window glass (n=18), ceramic tile (n=5), linoleum (n=3), and machine-cut nails (n=1). Two flower pot fragments were assigned to the Activities group, two light bulb glass fragments were placed in the Furniture group, while a 1959 one cent piece was placed in the Personal group. Unidentified artifacts totaled 38. These consist of metal (n=22), glass (n=11), plastic (n=2), and can fragments (n=3). Finally, a prehistoric Native American secondary flake made from pink quartzite and one possible piece of fire-cracked rock were also found in Area U.

Area V

Area V is located in the southeast portion of the North Hill property (Figure 16). This approximately 0.6-acre area is situated north of Dart Drive and east of U.S. Route 1. Area V is bounded to the west by survey Area X, to the north by survey Areas X and P, to the south by Dart Drive, and to the east by survey Area P. Asphalt roads bound Area V on three of the four sides. This area consists of flat uplands. Most of the area is forested and covered by English ivy and other types of undergrowth. At the time of investigation all of Area V had poor surface visibility.

The historic maps and aerial photographs discussed in Section 3 indicate that Area V once was the location of numerous mobile homes (see Figures 9-11). No structures are present in the vicinity of Area V on the 1942 Alexandria USGS 15-minute quadrangle (Figure 9). However, the 1954 and 1988 aerial photographs depict the presence of mobile homes across the survey tract (Figures 10 and 11).

Because of the lack of adequate surface visibility, Area V was investigated by the excavation of shovel test pits conducted at 24.6-foot (7.5-m) intervals. A total of 12 transects, oriented north to south, was established in Area V with 2 to 13 tests each. This yielded a total of 46 shovel test pit locations, and of this total, 28 were excavated (Figure 48; Table 6). The remaining 18 locations were not investigated due to the presence of concrete or possible gravel pads (n=17) or other disturbances (n=1).

The shovel test pit profiles in survey Area V all had a similar initial soil horizon (Figure 46). The initial soil horizon consisted of sandy loam that was variously 5 cm to 15 cm thick. Soil color was described as brown (10YR4/3), dark brown (10YR3/3), or dark grayish brown (10YR4/2). The second horizon varied in terms of both color and texture. Texturally, this horizon was described as coarse sand, sandy clay loam, sandy clay, and sandy loam. Color descriptions included yellowish brown (10YR5/4), light olive brown (2.5Y5/3), reddish brown

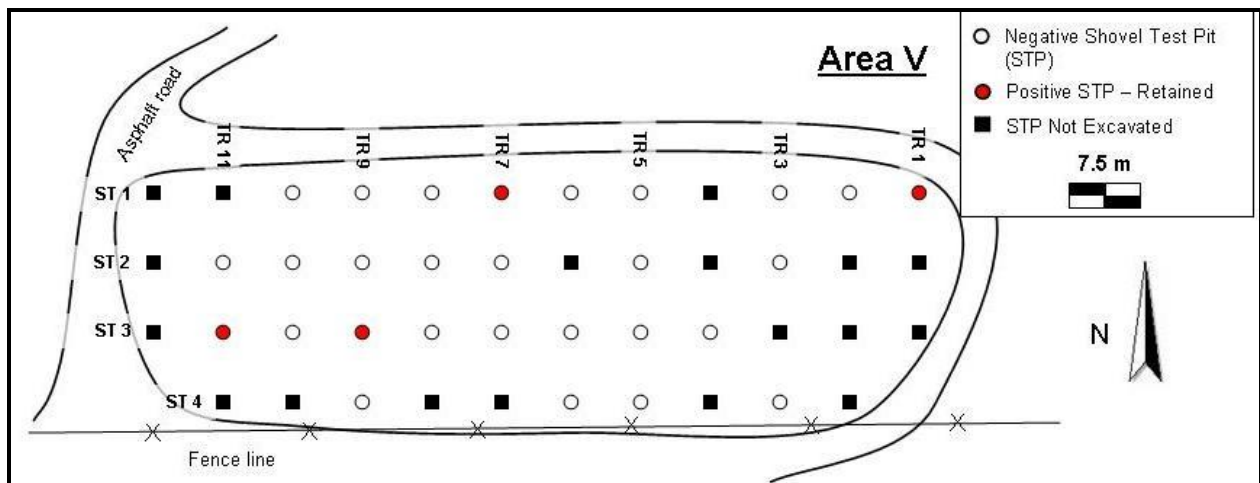


Figure 48. Location of shovel test pits in Area V.

(5YR5/4), and strong brown (7.5YR5/6). Soils from a few of the tests had large gravel contents. All but one artifact found in survey Area V was recovered from the initial soil horizon.

The excavations conducted in Area V yielded a small artifact assemblage, totaling 6 items, recovered from four positive shovel tests. This figure yields an average of 1.5 artifacts per positive test, or 0.1 artifacts per test excavated. Positive shovel tests were located along the asphalt roads or near concrete pads. Based on the review of historic maps and aerial photographs for Area V, these artifacts are likely to be associated with mobile homes. The specific provenience for each artifact recovered from Area V can be found in Appendix B. Architecture group artifacts are most common, and include window glass (n=3) and wire-drawn nails (n=1). The two other items found in Area V include an unidentified piece of plastic and a prehistoric Native American tertiary flake made of white quartzite.

Area W

Area W is located in the southeast portion of the North Hill property (Figure 16). This approximately 0.6-acre area is situated north of Dart Drive and east of U.S. Route 1. Area W is bounded to the north by survey Area M, to the west by survey Areas F and X, to the east and south by survey Areas N, O, and P. Asphalt roads bound Area W on three of the four sides. This area consists of flat to at times moderately sloping uplands. Most of the area is forested and covered by English ivy and other types of undergrowth. At the time of investigation all of Area W had poor surface visibility.

The historic maps and aerial photographs discussed in Section 3 indicate that Area W once was the location of numerous mobile homes (see Figures 9-11). No structures are present in the vicinity of Area W on the 1942 Alexandria USGS 15-minute quadrangle (Figure 9). However, the 1954 and 1988 aerial photographs depict the presence of mobile homes across the survey tract (Figures 10 and 11).

Because of the lack of adequate surface visibility, Area W was investigated by the excavation of shovel test pits conducted at 25-foot (7.5-m) intervals. A total of four transects, oriented north to south, was established in Area W with 9 to 12 tests each. This yielded a total of 43 shovel test locations, and of this total, 29 were excavated (Figure 49; Table 6). The remaining 18 locations were not investigated due to the presence of concrete or possible gravel pads (n=13) or other disturbances (n=1; standing water).

The tests in survey Area W evidenced two soil horizons in profile (Figure 46). The initial horizon consisted of 5 cm to 15 cm of dark brown (10YR3/3) or brown (10YR4/3) sandy loam. This horizon was followed by strong brown (7.5YR5/6) or light brownish gray (10YR6/2) clay, sandy clay or sandy clay loam, often with gravel. All recovered artifacts were confined to the first soil horizon, although structural materials (cinder block and brick) not collected were found in the second horizon.

The excavations conducted in Area W yielded a moderately-sized artifact assemblage, totaling 51 items, recovered from 13 positive shovel tests. This figure yields an average of 3.9 artifacts

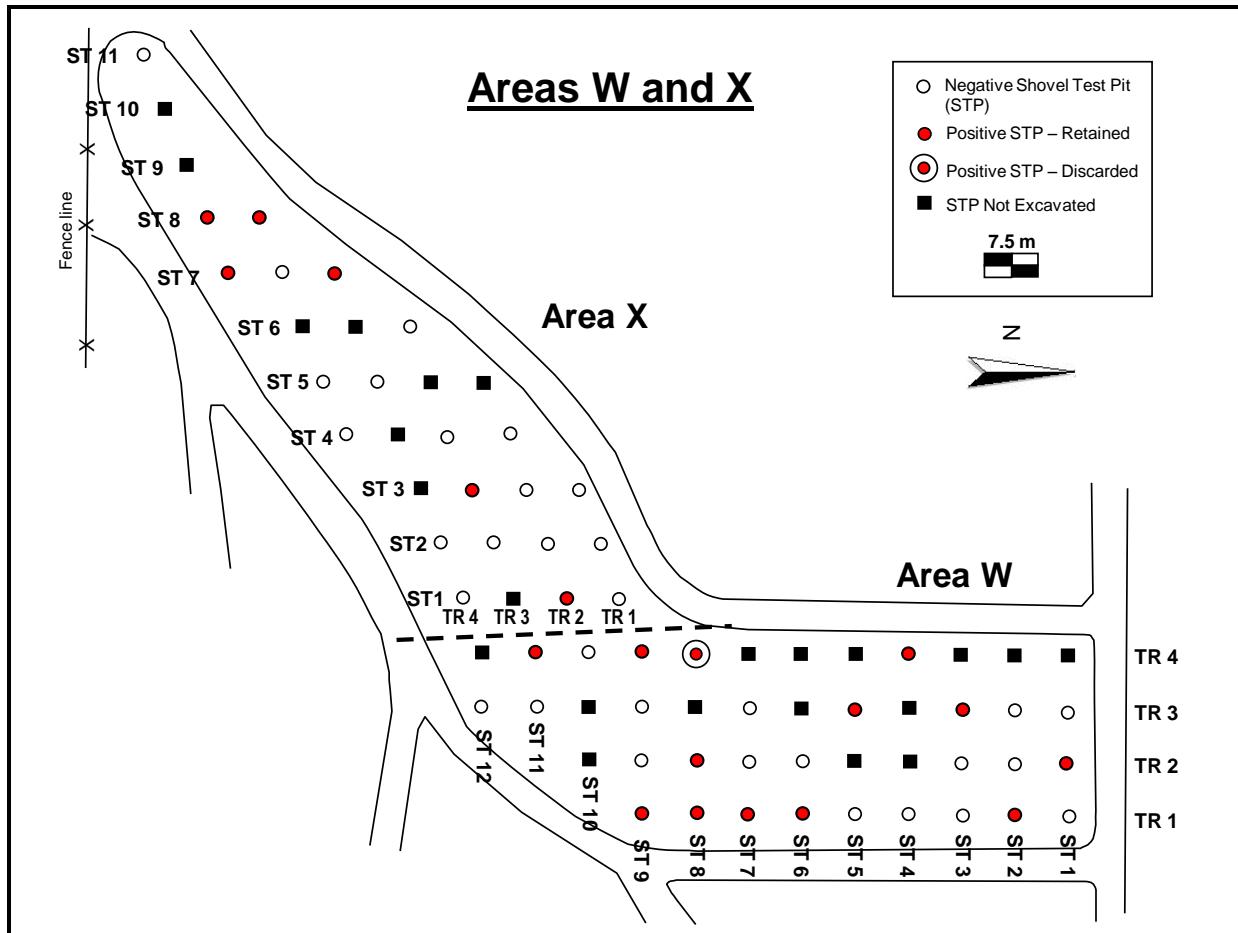


Figure 49. Location of shovel test pits in Areas W and X.

per positive test, or 1.7 artifacts per test excavated. Positive shovel tests were located along the asphalt roads or near concrete pads. Based on the review of historic maps and aerial photographs for Area W, these artifacts are likely to be associated with mobile homes. The specific provenience for each artifact recovered from Area W can be found in Appendix B. Of the 49 artifacts, 23 were assigned to the Kitchen group. These include clear vessel glass (n=8), bottle glass (10 green, 4 clear, 4 brown), and pull tabs (n=1). Architecture group items are next most common, and include window glass (n=9), wire-drawn nails (n=3), linoleum (n=1), brick (n=1), and electrical outlets (n=1). One plastic toy shovel handle was assigned to the Activities group. Finally, 10 artifacts were unidentified. These were made of metal (n=6), plastic (n=3), and glass (n=1; lost in the field).

5.193 Area X

Area X is located in the southeast portion of the North Hill property (Figure 16). This approximately 0.4-acre area is situated north of Dart Drive and east of U.S. Route 1. Area X is bounded to the west by Dart Drive, to the north by survey Areas D, E, and F, to the south survey Area V, and to the east by survey Areas W and P. Asphalt roads bound Area X on three of the

four sides. This area consists of flat to at times moderately sloping uplands. Most of the area is forested and covered by English ivy and other types of undergrowth. At the time of investigation all of Area X had poor surface visibility.

The historic maps and aerial photographs discussed in Section 3 indicate that Area X once was the location of numerous mobile homes (see Figures 9-11). No structures are present in the vicinity of Area X on the 1942 Alexandria USGS 15-minute quadrangle (Figure 9). However, the 1954 and 1988 aerial photographs depict the presence of mobile homes across the survey tract (Figures 10 and 11).

Because of the lack of adequate surface visibility, Area X was investigated by the excavation of shovel test pits conducted at 25-foot (7.5-m) intervals. A total of six transects, oriented northeast to southwest, was established in Area X with 3 to 7 tests each. This yielded a total of 31 shovel test locations, and of this total, 22 were excavated (Figure 49; Table 6). The remaining nine locations were not investigated due to the presence of concrete or possible gravel pads (n=9).

All but one of the shovel tests excavated in survey Area X evidenced two soil strata (Figure 46). The initial stratum consisted of dark brown (10YR3/3) sandy loam, although this horizon was described as sandy clay loam at a few tests. The initial horizon varied in depth between 5 cm and 15 cm. The second soil horizon was most often described as yellowish brown (10YR5/4) or strong brown (7.5YR5/6) sandy clay or sandy clay loam. These soils were described in a few tests as pale brown (10YR6/3) or olive brown (2.5Y4/4) sandy loam. One test, at TR 3 ST 2, had a third horizon consisting of dark yellowish brown (10YR4/4) sandy loam from 20 cm to 28 cm below ground surface. All artifacts found in this area were recovered from the initial soil horizon.

The excavations conducted in Area X yielded a small artifact assemblage, totaling 11 items, recovered from six positive shovel tests. This figure yields an average of 1.8 artifacts per positive test, or 0.5 artifacts per test excavated. Positive shovel tests were located along the asphalt roads or near concrete pads. Based on the review of historic maps and aerial photographs for Area X, these artifacts are likely to be associated with mobile homes. The specific provenience for each artifact recovered from Area X can be found in Appendix B. Unidentified artifacts are most common, and include metal (n=2), plastic (n=2), and a metal screw (n=1). Kitchen group artifacts include clear vessel glass (n=2), green bottle glass (n=1), and clear bottle glass (n=1). Architecture group artifacts are represented by one wire-drawn nail. Finally, a 1972 one cent piece was found and assigned to the Personal group.

6.0 SUMMARY AND RECOMMENDATIONS

Under contract to the Fairfax County Redevelopment and Housing Authority, Greenhorne & O'Mara conducted a Phase I archaeological assessment and intensive site survey of the North Hill property south of Alexandria along U.S. Route 1 in Fairfax County, Virginia. G&O conducted the work at the approximately 33-acre property to assist the Fairfax County Redevelopment and Housing Authority in meeting county requirements as well as possible requirements under Section 106 of the NHPA. The background and archaeological investigations for this project were conducted between January and March 2008.

Background research indicated that no previously recorded archaeological sites were located within the North Hill property. However, models of prehistoric site location created for northern Virginia suggested that prehistoric Native American sites were likely to be present on uplands adjacent to drainages, such as those that are present throughout the property. Historic maps and aerial photographs suggested that few structures were likely present within the North Hill property prior to the 1930s. Prior to World War II, a few residences and perhaps businesses were located within the North Hill property along U.S. Route 1. However, aerial photographs indicate the presence of a post-World War II mobile home park at this property, with perhaps as many as 500 mobile homes, that was occupied into the 1980s.

The investigations began with an initial general reconnaissance of the property followed by the systematic excavation of screened shovel tests at 7.5-m intervals. A total of 1,806 locations (inclusive of bracketing tests excavated in Area M) was established across the North Hill property, and of that total 1,279 shovel test pits were excavated. The difference included 314 locations not excavated due to the presence of concrete pads, 139 locations not excavated due to excessive slopes, and 74 locations not investigated due to other disturbances (drainages along the eastern parcel boundary and storm water improvements along U.S. Route 1, among other causes). The investigation of the North Hill property resulted in the excavation of 420 positive shovel tests and the collection and retention of 1,388 artifacts. Additional artifacts were noted as present but left in the field (brick, concrete, plastic, and packaging materials, for the most part). These artifacts can be divided into three groups: twentieth century materials, early nineteenth century materials, and prehistoric Native American materials.

Of the 1,388 artifacts recovered during field investigations, 1,329 artifacts (96 percent of the entire assemblage) likely date to the twentieth century. These artifacts consist mainly of bottle glass and clear curved glass (also likely bottle glass), accounting for 605 items or 45.5 percent of the items dated to the twentieth century. All bottle fragments that retained manufacturing attributes were observed to be machine-made, and the majority appeared to be beverage bottles (soda and beer). Also common were Architecture group items (n=379, 28.5 percent of the twentieth century assemblage). Most of this material consisted of brick fragments, window glass, and wire-drawn nails, although linoleum and ceramic tile was also present. The third common group of artifacts that likely date to the twentieth century is unidentified artifacts (n=299, 22.5 percent of the twentieth century assemblage). These include pieces of metal, glass, and plastic, for the most part, that could not be further identified. Only 46 items (3.5 percent of the twentieth century assemblage) do not fall into these three categories and consist of a wide range of artifact types. These materials were interpreted to be associated with the pre-World

War II structures (possibly a mix of commercial and residential buildings) along U.S. Route 1 and the post-World War II mobile homes that were present across most of the property. In consultation with Mr. Michael Johnson of the Fairfax County Park Authority, these find locations were not registered with the Virginia Department of Historic Resources as an archaeological site.

Early nineteenth century artifacts were found in one small part of survey Area M. A total of 28 artifacts (2 percent of the entire artifact assemblage) were recovered in an approximately 20-x-15 foot area. Artifacts were recovered from what appeared to be an undisturbed soil horizon between the surface and 20 cm below ground surface. No features or intact subsurface deposits were noted, and no above-ground structural remains are present. Artifacts recovered included decorated and undecorated pearlware, undecorated creamware, decorated and undecorated whiteware, decorated porcelain, bottle glass, animal bone, brick fragments, and a pipe stem. The ceramics are common to the period between ca. 1750 and 1850, while the pipe stem most likely dates to the period just prior to 1800. Based on the predominance of pearlware, the site could have been occupied during the first few decades of the nineteenth century. Similar artifact concentrations have been interpreted to represent tenant houses in northern Virginia (Bedell 2007). This location has been registered as archaeological site 44FX3311 with the Virginia Department of Historic Resources. It is possible that the Fairfax County Park Authority will request that the area either be preserved or that excavations be conducted prior to ground-disturbing activities associated with the development of the property.

Finally, 21 items (1.5 percent of the entire artifact assemblage) were identified as prehistoric Native Americans artifacts. This total includes nine broken flakes, seven bipolar flakes, two tertiary flakes, and one secondary flake. All of these items were made from either quartzite or quartz, and likely represent the testing of cobbles or expedient tool manufacturing activities. One item, made of quartz, appears to be a midsection fragment of a bifacial tool, and one possible piece of fire-cracked rock was also recovered. These items were widely scattered across the property, with a total of 19 shovel tests yielding prehistoric Native American artifacts (Figure 50). Aside from two shovel tests in which two prehistoric artifacts were recovered, no prehistoric artifact was closer to another prehistoric artifact than 22.5 m. In consultation with Mr. Michael Johnson of the Fairfax County Park Authority, these find locations were not registered with the Virginia Department of Historic Resources as an archaeological site. Instead, each is considered an isolated find.

In summary, the archaeological investigations at the North Hill property resulted in the excavation of 1,279 shovel tests and the recovery of 1,388 artifacts. Most of these artifacts date to the twentieth century and are present throughout the property. An additional 21 artifacts are prehistoric Native American pieces of chipping debris, and these, too, are widely scattered across the property. Finally, 28 artifacts dating to the early nineteenth century were located in a ca. 20-x-15 foot area. These artifacts likely represent the remains of a tenant house. No additional archaeological investigations are recommended at the location of the twentieth century or prehistoric Native American artifacts. In both instances, intact subsurface deposits appear to

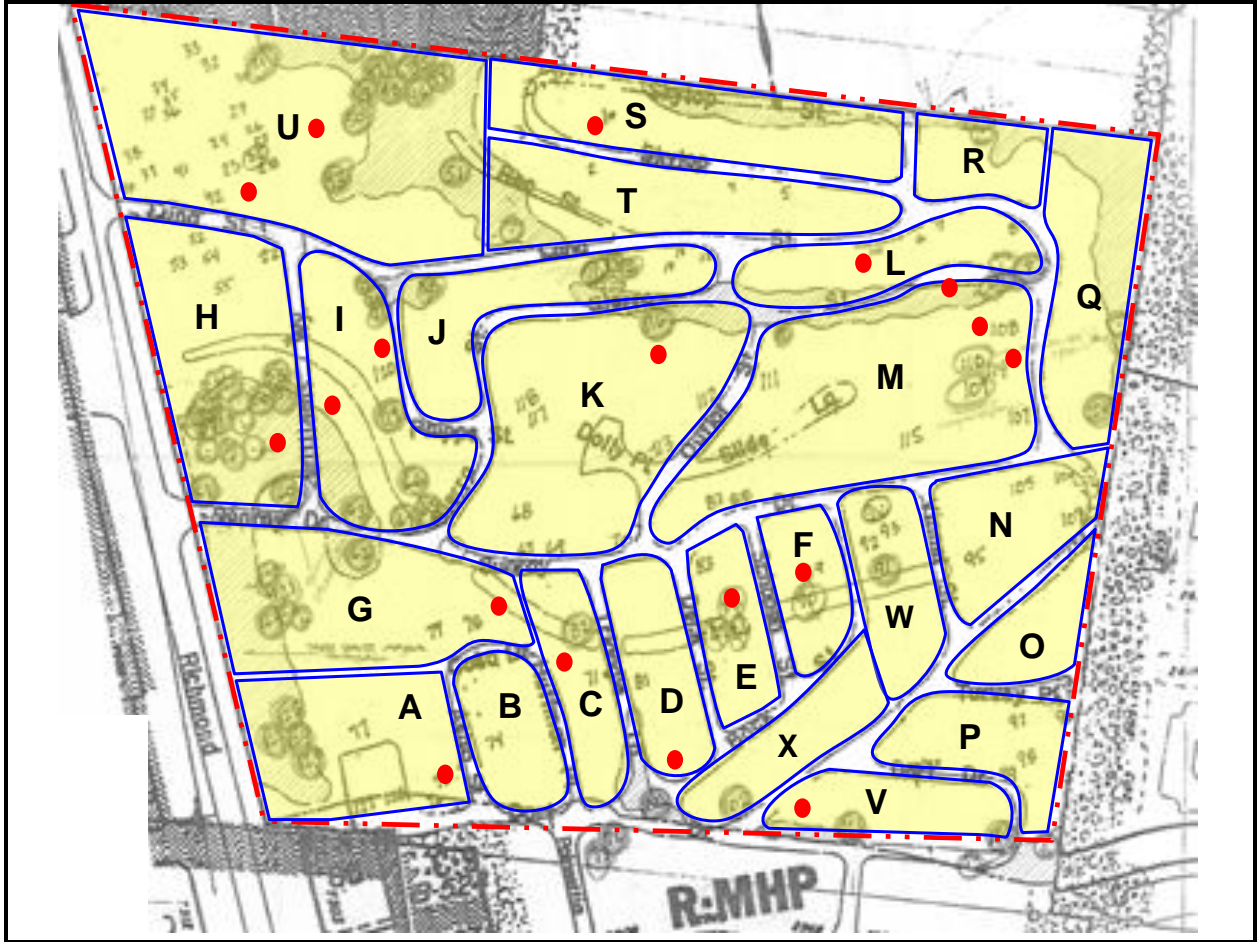


Figure 50. Locations of prehistoric Native American artifacts.

be lacking. However, given the density of material associated with the early nineteenth century artifacts, the Fairfax County Park Authority may request additional test, excavations or the reservation of this location. Continued consultation with the Fairfax County Park Authority concerning this site is recommended.

7.0 REFERENCES CITED

Anonymous

- 1740s *A Plan of the County of Fairfax on Potomack River*. Published in *The Cartography of Northern Virginia: Facsimile Reproductions of Maps Dating from 1608-1915*. Office of Comprehensive Planning, Fairfax, Virginia, 1981.

Artemel, J.

- 1992 Fairfax County: 1800-1840. In *Fairfax County, Virginia: A History*, edited by N. Netherton, pp. 152-250. Originally published 1978. 250th Anniversary Commemorative Edition. Fairfax County Board of Supervisors, Fairfax, Virginia.

Barber, Michael B.

- 1991 Evolving Subsistence Patterns and Future Directions: The Late Archaic and Early Woodland Periods. In *Late Archaic and Early Woodland Research in Virginia*, edited by Theodore R. Reinhart and Mary Ellen N. Hodges, pp. 253–258. Dietz Press, Richmond, Virginia.

Barse, P. William, and Alan D. Beauregard

- 1994 *Phase III Data Recovery at the Clifton Site (18CH358)*. KCI Technologies, Inc. Final report prepared for the Maryland Department of Transportation, Annapolis.

Bedell, John

- 2007 Tenant Farmers on the Potomac Frontier. Paper presented at the annual meeting of the Society for Historical Archaeology, Williamsburg, Virginia.

Bell, Robert E.

- 1958 Guide to the Identification of Certain American Indian Projectile Points. *Oklahoma Anthropological Society Special Bulletin* No. 1. Norman.
- 1960 Guide to the Identification of Certain American Indian Projectile Points. *Oklahoma Anthropological Society Special Bulletin* No. 2. Norman.

Boyd, C. Clifford

- 1989 PaleoIndian Ecology and Subsistence in Virginia. In *PelaeoIndian Research in Virginia: A Synthesis*, edited by J. Mark Wittkofski and Theodore R. Reinhart, pp. 141-158. Dietz Press, Richmond, Virginia.

Bradley, Bruce A.

- 1975 Lithic Reduction Sequences: A Glossary and Discussion. In *Lithic Technology: Making and Using Stone Tools*, edited by E. Swanson, pp. 5–13. Mouton, The Hague.

Brose, David S.

- 1970 *The Archaeology of Summer Island: Changing Settlement Systems in Northern Lake Michigan*. Anthropological Papers No. 41. Museum of Anthropology, University of Michigan, Ann Arbor.

Brown, G. B.

1994 *A History of Prince William County*. Historic Prince William, Inc., Prince William, Virginia.

Burke, E. C.

1957 History of Fairfax County. In *Historical Society of Fairfax County, Virginia, Inc., Yearbook* Vol. 5, 1956-1957, edited by K. S. Shands, J. C. Mackall, and R. A. Alden, pp. 1-13. Independent Printers, Vienna, Virginia.

Carbone, Victor

1976 *Environment and Prehistory in the Shenandoah Valley*. Unpublished Ph.D. dissertation, Department of Anthropology, The Catholic University of America, Washington, D.C.

Coe, J. L.

1964 The Formative Cultures of the Carolina Piedmont. *Transactions of the American Philosophical Society* 54.

Collins, Michael B.

1975 Lithic Technology as a Means of Processual Inference. In *Lithic Technology: Making and Using Stone Tools*, edited by E. Swanson, pp. 15-34. Mouton, The Hague.

Curry, D. C. and M. Kavanagh

1991 Middle to Late Woodland Transition in Maryland. *North American Archeologist* 12:3-28.

Custer, Jay F.

1980 Settlement-Subsistence Systems in Augusta County, Virginia. *Quarterly Bulletin of the Archeological Society of Virginia* 35:1-27.

1984 *Delaware Prehistoric Archaeology*. University of Delaware Press, Newark.

1990 Early and Middle Archaic Cultures of Virginia: Culture Change and Continuity. In *Early and Middle Archaic Research in Virginia*, edited by Theodore R. Reinhart and Mary Ellen N. Hodges, pp. 1-60. Dietz Press, Richmond, Virginia.

Davis, T., D. Whelan, K. Grandine, C. Capozzola, N. Sheehan, and S. Mallory

1997 *Phase I Archeological and Phase II Architectural Investigations for the Villages at Piscataway, Prince George's County, Maryland*. R. Christopher Goodwin & Associates, Inc. Final report submitted to Greenvest, L.C.

Deiss, Ronald W.

1981 *The Development and Application of a Chronology for American Glass*. Unpublished Master's thesis, Department of History, Illinois State University, Normal.

DeSanto, R., S. Walter and T. Rupp

1982 *A Paleoecological Profile of Providence, Rhode Island and Southern New England*. Northeast Corridor Improvement Project. On file, De Leuw Cather/Parsons, Washington, D.C.

Edwards, Jay D., and Tom Wells

- 1993 *Historic Louisiana Nails, Aids to the Dating of Old Buildings*. Fred B. Kniffen Cultural Resources Laboratory Monograph Series No. 2. Department of Geography and Anthropology, Louisiana State University, Baton Rouge.

Egloff, Keith T., and Joseph M. McAvoy

- 1990 Chronology of Virginia's Early and Middle Archaic Periods. In *Early and Middle Archaic Research in Virginia*, edited by Theodore R. Reinhart and Mary Ellen N. Hodges, pp. 61–80. Dietz Press, Richmond, Virginia.

Federal Register

- 1983 *Standards and Guidelines for Archaeology and Historic Preservation*. Vol. 48, No. 190.

Gardner, William M.

- 1974 The Flint Run Complex: Pattern and Process during the Paleoindian to Early Archaic. In *The Flint Run Paleoindian Complex: A Preliminary Report 1971-73 Seasons*. Occasional Publication No. 1, pp. 5-47. Archaeology Lab, Department of Anthropology, The Catholic University of America, Washington, D.C.
- 1977 Flint Run Paleo-Indian Complex and its Implications for Eastern North American Prehistory. *Annals of the New York Academy of Sciences* 288:257-263.
- 1982 Early and Middle Woodland in the Middle Atlantic: An Overview. In *Practicing Environmental Archaeology: Methods and Interpretations*, edited by Roger W. Moeller, pp. 53–86. Occasional Paper No. 3. American Indian Archeological Institute, Washington, Connecticut.
- 1987 Comparison of Ridge and Valley, Blue Ridge, Piedmont, and Coastal Plain Archaic Period Site Distribution: An Idealized Transect. *Journal of Middle Atlantic Archeology* 3:49-80.
- 1989 An Examination of Cultural Change in the Late Pleistocene and Early Holocene (circa 9200 to 6800 B.C.). In *Paleoindian Research in Virginia*, edited by J. Mark Wittkofski and Theodore R. Reinhart, pp. 5–52. Dietz Press. Richmond, Virginia.

Gramly, Richard Michael

- 1988 Discoveries at the Lamb Site, Genesee County, New York 1986-7. *Ohio Archaeologist* 38:1, 4-10.

Greer, Georgeanna H.

- 1981 *American Stonewares, the Art and Craft of Utilitarian Potters*. Schiffer, Exton, Pennsylvania.

Hantman, Jeffrey L.

- 1990 Virginia in a North American Perspective. In *Early and Middle Archaic Research in Virginia*, edited by Theodore R. Reinhart and Mary Ellen N. Hodges, pp. 133–154. Dietz Press, Richmond, Virginia.

Hantman, Jeffrey L., and Michael J. Klein

- 1992 Middle and Late Woodland Archaeology in Piedmont Virginia. In *Middle and Late Woodland Research in Virginia: A Synthesis*, edited by T. R. Reinhart and M. E. Hughes, pp. 137-165. Dietz Press, Richmond, Virginia.

Hayden, Brian

- 1980 Confusion in the Bipolar World: Bashed Pebbles and Splintered Pieces. *Lithic Technology* 9:2-7.

Hickin, P.

- 1992 Fairfax County: 1840-1870. In *Fairfax County, Virginia: A History*, edited by N. Netherton, pp. 251-391. Originally published 1978. 250th Anniversary Commemorative Edition. Fairfax County Board of Supervisors, Fairfax, Virginia.

Holmes, William H.

- 1890a Excavations in an Ancient Soapstone Quarry in the District of Columbia. *American Anthropologist* 3:321-331.
- 1890b A Quarry Workshop of the Flaked-Stone Implement Makers in the District of Columbia. *American Anthropologist* 3(1).
- 1897 *Stone Implements of the Potomac-Chesapeake Tidewater Province*. Report No. 15. U.S. Bureau of Ethnology, Washington, D.C.

Hopkins, G. M.

- 1879 *Atlas of Fifteen Miles Around Washington*. G. M. Hopkins, Philadelphia. Published in *The Cartography of Northern Virginia: Facsimile Reproductions of Maps Dating from 1608-1915*. Office of Comprehensive Planning, Fairfax, Virginia, 1981.
- 1894 *Map of the Vicinity of Washington, D.C.* G. M. Hopkins, Philadelphia. Published in *The Cartography of Northern Virginia: Facsimile Reproductions of Maps Dating from 1608-1915*. Office of Comprehensive Planning, Fairfax, Virginia, 1981.

Jeske, Robert and Rochelle Lurie

- 1993 The Archaeological Visibility of Bipolar Technology: An Example from the Koster Site. *MidContinental Journal of Archaeology* 18:131-160.

Johnson, Michael F. and Edward R. Chatelain

- 1979 *Preliminary Reconnaissance and Assessment of the Archeological Resources in the Lockheed Boulevard-Van Dorn Street Connector Road Right-Of-Way, Fairfax County, Virginia*. Fairfax County Archaeological Survey, Fairfax. On file, Virginia Department of Historic Resources Archives & Library, Richmond (Report No. FX-125)

Justice, Noel D.

- 1987 *Stone Age Spear and Arrow Points of the Midcontinental and Eastern United States: A Modern Survey and Reference*. Indiana University Press, Bloomington.

Kavanagh, Maureen

- 1982 *Archeological Resources of the Monocacy River Region, Frederick and Carroll Counties, Maryland*. Submitted to the Maryland Historical Trust, Frederick County Planning Commission, Carroll County Planning and Zoning Commission.
- 1983 Prehistoric Occupation of the Monocacy River Region. In *Piedmont Archeology*, edited by J. M. Wittofski and L. E. Browning, pp. 40-54. Special Publication No. 10. Archeological Society of Virginia.

Klein, Michael J., and Thomas Klatka

- 1991 Late Archaic and Early Woodland Demography and Settlement Patterns. In *Late Archaic and Early Woodland Research in Virginia*, edited by Theodore R. Reinhart and Mary Ellen N. Hodges, pp. 139–184. Dietz Press, Richmond, Virginia.

Kraft, J. C. and J. J. Chacko

- 1978 Paleographic Analysis of Coastal Archeological Settings in Delaware. *Archeology of Eastern North America* 6:41-60.

Lantz, Stanley

- 1985 Western Pennsylvania: Appalachian Plateau and Lake Erie Shore. Paleo-Indian Period. In *A Comprehensive State Plan for the Conservation of Archeological Resources*, vol. II, pp. 164-181. Historic Planning Series 1. Pennsylvania Historical and Museum Commission. Harrisburg, Pennsylvania.

Larson, C. E., D. E. Weston, D. J. Weir, J. A. Newkirk, C. J. Demeter, and J. E. Schaeffer

- 1980 *Archeological Excavation of the Bazuin Site, 44LD3, Lowes Island, Loudon County, Virginia*. On file, Virginia Department of Historic Resources, Richmond.

Lautzenheiser, Loretta, John P. Cooke, Susan Bamann, Bill W. Hall, and N. Carolyn McCollum

- 2001 *Cultural Resources Identification Survey (Phase I) Improvements to U.S. Route 1 from Route 611 (Telegraph Road) to Huntington Avenue, Fairfax County, Virginia, Project C*. Coastal Carolina Research, Inc., Tarboro, North Carolina. On file, Virginia Department of Historic Resources, Richmond (Report No. FX-327).

Lorrain, Dessamae

- 1968 An Archaeologist's Guide to Nineteenth Century American Glass. *Historical Archaeology* 2:35–44.

Mansberger, Floyd

- 1988 *The Archaeology of Historic Galena, Illinois*. Illinois Cultural Resources Study No. 7. Illinois Historic Preservation Agency, Springfield.

Maryland Archaeological Conservation Laboratory

- 2002 Diagnostic Artifacts in Maryland. Electronic document, <http://www.jefpat.org/diagnostic/Index.htm>, accessed 2 June 2006.

McCarron, Kay R.

- 1991 *The Village at Gum Springs Project: A Phase I Archaeological Study in Fairfax County, Virginia*. On file, Fairfax County Park Authority, Falls Church (Report No. 102-1 H3).

McCarron, Kay R. and Elsa W. L. Schemmer

- 1991 *Collard's Mt. Pleasant Farm: A Phase I Archaeological Study of the Tavenner Lane Project in Fairfax County, Virginia*. On file, Fairfax County Park Authority, Falls Church (Report No. 92-4).

McKearin, Helen, and Kenneth M. Wilson

- 1978 *American Bottles and Flasks and Their Ancestry*. Crown, New York.

McLearen, Douglas C.

- 1991 Late Archaic and Early Woodland material culture in Virginia. In *Late Archaic and Early Woodland Research in Virginia: A Synthesis*, edited by T. R. Reinhart and M. E. Hughes, pp. 89-138. Council of Virginia Archaeologists, Richmond.

Mitchell, Beth

- 1987 *Fairfax County, Virginia in 1760: An Interpretive Historical Map*. Office of Comprehensive Planning, Fairfax County.

Mouer, L. Daniel

- 1991 The Formative Transition in Virginia. In *Late Archaic and Early Woodland Research in Virginia: A Synthesis*, edited by T. R. Reinhart and M. E. Hughes, pp. 1-88. Dietz Press, Richmond, Virginia.

Netherton, N.

- 1992 Fairfax County: 1925-1976. In *Fairfax County, Virginia: A History*, edited by N. Netherton, pp. 544-700. Originally published 1978. 250th Anniversary Commemorative Edition. Fairfax County Board of Supervisors, Fairfax, Virginia.

Netherton, R. and N. Netherton

- 1992 *Fairfax County: A Contemporary Portrait*. The Donning Company, Virginia Beach, Virginia.

Noël Hume, Ivor

- 1991 *A Guide to Artifacts of Colonial America*. Reprinted. Vintage Books, New York. Originally published 1970, Knopf, New York.

Perino, Gregory

- 1968 A Guide to the Identification of Certain American Indian Projectile Points. *Oklahoma Anthropological Society Special Bulletin* No. 3. Norman.
1971 A Guide to the Identification of Certain American Indian Projectile Points. *Oklahoma Anthropological Society Special Bulletin* No. 4. Norman.

- Petraglia, M. D., J. S. Daugherty, J. S. Patton, P. Bienenfeld, and M. Pappas
1990 *Archeological Investigations of the Potomac Interceptor Extension, Loudoun County, Virginia*. On file, Virginia Department of Historic Resources, Richmond.
- Petraglia, Michael, Dennis Knepper, John Rutherford, Philip LaPorta, Kathryn Puseman, Joseph Schuldenrein, and Noreen Tuross
1998 *The Prehistory of Lum's Pond: The Formation of an Archaeological Site in Delaware*. Delaware Department of Transportation Archaeology Series No. 155. Parsons Engineering Science Cultural Resources Department, Fairfax, Virginia.
- Potter, Stephen
1993 *Commoners, Tribute, and Chiefs: The Development of Algonquian Culture in the Potomac Valley*. The University Press of Virginia, Charlottesville.
- Price, Cynthia R.
1981 *Nineteenth Century Ceramics in the Eastern Ozark Border Region*. Monograph Series No. 1. Center for Archaeological Research, Southwest Missouri State University, Springfield.
- Reed, P.
1992 Fairfax County: Phoenix or Failure—1870-1900. In *Fairfax County, Virginia: A History*, edited by N. Netherton, pp. 393-467. Originally published 1978. 250th Commemorative Edition. Fairfax County Board of Supervisors, Fairfax, Virginia.
- Reinhart, T. R. and M. E. N. Hodges (editors)
1990 *Early and Middle Archaic Research in Virginia: A Synthesis*. Richmond: Dietz Press.
- Ritchie, W. A.
1971 *A Typology and Nomenclature for New York Projectile Points*. New York State Museum and Science Service Bulletin No. 384.
- Shipman, A. J.
1866 *Map of Fairfax County, Virginia*. Published in *The Cartography of Northern Virginia: Facsimile Reproductions of Maps Dating from 1608-1915*. Office of Comprehensive Planning, Fairfax, Virginia, 1981.
- South, Stanley
1974 *Palmetto Papers*. Anthropological Studies No. 1. Institute of Archeology and Anthropology, University of South Carolina, Columbia.
1977 *Method and Theory in Historical Archeology*. Academic Press, New York.
- Stewart, R. Michael
1986 *Shady Brook Site (28ME20 and 28ME99), Data Recovery*. The Cultural Resource Group, Louis Berger & Associates, Inc., East Orange, New Jersey.

- 1992 Observations on the Middle Woodland Period of Virginia: A Middle Atlantic Region Perspective. In *Middle and Late Woodland Research in Virginia: A Synthesis*, edited by T. R. Reinhart and M. E. Hughes, pp. 1-38. Dietz Press, Richmond, Virginia.
- Sweig, D.
- 1992 Fairfax County: 1649-1800. In *Fairfax County, Virginia: A History*, edited by N. Netherton, pp. 5-151. Originally published 1978. 250th Anniversary Commemorative Edition. Fairfax County Board of Supervisors, Fairfax, Virginia.
- Turner, E. Rudolph III
- 1989 Paleoindian Settlement Patterns and Population Distribution in Virginia. In *Paleoindian Research in Virginia: A Synthesis*, edited by J. M. Wittkofski and T. R. Reinhardt, pp. 71-94. Dietz Press, Richmond, Virginia.
- Virginia Department of Historic Resources (VDHR)
- 1991 *How to Use Historic Contexts in Virginia: A Guide for Survey, Registration, Protection and Treatment Projects*. Virginia Department of Historic Resources, Richmond.
- 2003 *Guidelines for Conducting Cultural Resource Survey in Virginia: Additional Guidance for the Implementation of the Federal Standards Entitled "Archeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines (48 FR 44742, September 29, 1983)"*
- Visser, Thomas D.
- 2006 Nails: Clues to a Building's History. University of Vermont Historic Preservation Program. Electronic document, <http://www.uvm.edu/histpres/203/nails.html>, accessed 26 June 2006.
- Waltemyer, T.
- 1995 A Complete History of the Woodbridge Research Facility. *Journal of Historic Prince William* 3: 40-60.
- Wesler, K., D. Pogue, A. Luckenbach, G. Fine, P. Sternheimer, and E.G. Furgurson
- 1981 *The Maryland Department of Transportation Archaeological Resources Survey, Volume 2: Western Shore*. Manuscript Series No. 6. Maryland Historical Trust, Annapolis.

APPENDIX A
QUALIFICATIONS OF KEY PERSONNEL

Principal Investigator

Paul P. Kreisa, PhD, RPA, earned his Master's degree in Anthropology from Northern Illinois University and his Doctoral degree in Anthropology at the University of Illinois. Dr. Kreisa has more than 26 years of experience in archaeological field work, research, and cultural resource management in the Midwest, Mid-Atlantic, and Southeast regions of the United States.

**Crew Chief &
Background Research**

Nancy L. Powell holds a BA in Anthropology from Millersville University. She has more than 2 years of experience in archaeological field work in the Mid-Atlantic region of the United States.

APPENDIX B
ARTIFACT INVENTORY

APPENDIX C
SITE FORMS

