



**A PHASE I ARCHAEOLOGICAL SURVEY
OF 12 LOTS ON
TAFT AVENUE AND DONELSON STREET AND
ADJACENT STREAM RESTORATION AREA,
CITY OF ALEXANDRIA, VIRGINIA**

Prepared For:

**Calvert Custom Homes
12656-C Lake Ridge Drive
Lake Ridge, Virginia 22192**

Prepared By:

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December 2007

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**PUBLIC SUMMARY: A PHASE I ARCHAEOLOGICAL SURVEY OF 12 LOTS ON
TAFT AVENUE AND DONELSON STREET AND ADJACENT STREAM
RESTORATION AREA, CITY OF ALEXANDRIA, VIRGINIA**



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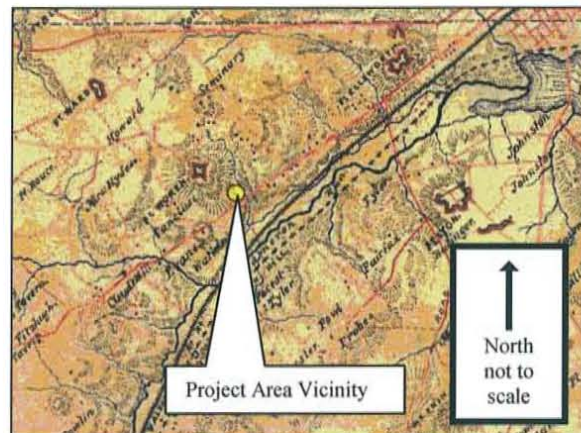
In November 2005 and March of 2007, Cultural Resources, Inc. (CRI) conducted a Phase I archaeological identification survey of 12 lots on Taft Avenue and Donelson Street and an adjacent streambed east of the developed lots in the City of Alexandria, Virginia. Each lot contains a small dwelling constructed in the mid-twentieth century. The project area is bounded on the north, south, and west by private property and on the east by a stream and small park. The project area is north of Duke Street.

Several previously identified archaeological sites identified within a one-mile radius of the project provide an excellent context for Civil War activity in this region of Alexandria. Beginning in 1861, a systematic development of defenses of Washington D.C. took the form of the construction of large forts (Fort Worth, Fort Ellsworth, and later Fort Williams) on the upland areas surrounding the project area.

Sites 44AX191, 44AX195, 44AX199, and 44AX200, all located within a half mile of the project area on the upland areas overlooking and along current Duke Street, represent large Civil War activity sites associated with temporary encampments (such as Winter encampments) or defense network construction activity.

Site 44AX195, located southeast of the project area, recorded intact subsurface features associated with a camp of probably the 38th N.Y. Infantry Regiment, including a

brick "Crimean Oven" feature, despite extensive modern construction activity. This provides a precedent for the recovery of intact Civil War era archaeological resources despite extensive modern construction and demolition.



Detail of Topographical map of the District of Columbia and adjacent areas in Virginia, showing fortifications (Anonymous 1864).

The archaeological investigations within the property employed the systematic excavation of 151 shovel tests at 25-foot intervals, a walkover examination, and a detailed metal detection survey. None of the shovel tests contained artifacts and no cultural features were identified. The metal detection survey resulted in the recovery of 23 artifacts and a number of modern items that were discarded in the field. Recovered artifacts included four Civil War-era Minie balls. The survey revealed severely disturbed soils throughout much of the project area, the likely result of

development of the lots during the mid-twentieth century. Archaeologists focused specific attention on an area at the southern edge of the property, where the Minie balls were recovered. No evidence of historic structural remains was observed on the ground surface. In addition, shovel testing in this area revealed severely disturbed soils, likely the result of landscaping when the existing homes were constructed.

The shovel testing in the house lot area revealed severely disturbed soils and multiple modern fill horizons. This included areas where underground oil and septic tanks existed. Intact soil profiles were found in only a small portion of the study area.

The stream restoration area adjacent to the Taft Avenue lots is an open, partially disturbed area featuring concrete culverts and modern storm water management additions. This intermittent drainage feeds Cameron Run approximately $\frac{3}{4}$ of a mile to the south of the project area.

Shovel tests excavated within the stream restoration area east of the Taft Avenue house lots revealed heavily disturbed contexts. Multiple graded fill layers were encountered, especially on the west bank of the stream. This is likely due to earlier stream restoration efforts.

The south side of the stream restoration area revealed eroded soils with large cobbles present. As the stream bed course has been altered, erosion throughout the project area is likely the result of a shifting stream bed, and previous related stream restoration efforts. The construction of a small playground located just north of the stream restoration area also contributed to the disturbed nature of the project area. Civil War related cultural material recovered within the stream restoration area included one fired lead shot, one Minie ball fragment, and several corroded metal fragments. Modern trash found within the project area

(bottle glass, plastic, and aluminum) was recorded and discarded.

Due to the paucity of cultural materials that would indicate a Civil War era encampment, or other historic or prehistoric use of the property, and the disturbed nature of the project area, ***CRI recommends that no further work is required within the project area on Taft Avenue and Donelson Street, or the adjacent stream restoration area in the City of Alexandria, Virginia.***



Typical House Lot within the Project Area.



North Portion of Stream Restoration Area



South Portion of Stream Restoration Area Showing Modern Disturbance

ABSTRACT

In November 2005, Cultural Resources, Inc. (CRI) conducted a Phase I archaeological survey of 12 lots on Taft Avenue and Donelson Street in the City of Alexandria, Virginia. Subsequently, CRI conducted a Phase I archaeological survey of a stream restoration area east of the Taft Avenue lots in March of 2007. Each lot contains a small frame house constructed in the mid-twentieth century. The stream restoration area adjacent to the Taft Avenue lots is an open, partially disturbed area featuring concrete culverts and modern storm water management additions. This intermittent drainage feeds Cameron Run approximately $\frac{3}{4}$ of a mile to the south of the project area. The project area is bounded on the north, south, and west by private property and on the east by private development and small park. The project area is located north of Duke Street.

Due to the low acreage of the property and the major 20th century construction disturbances therein, the probability of recovery of intact cultural resources was considered low; however, it should be noted that intact Civil War era sites have been recorded in the Alexandria area despite major land modification and modern construction. There is precedent for the recovery of Civil War related resources in disturbed areas, such as the case of many of the previously recorded Civil War resources within a mile radius of the project area (i.e. 44AX191, 193, 199, and 200), which were all recorded in developed areas with some integrity. In lieu of this precedent, extensive testing was conducted in all areas of the project area, despite the existence of modern disturbance.

Archaeologists conducted a surface inspection of the project area and excavated a total of 151 shovel tests at 25-foot intervals. None of the shovel tests contained cultural materials and no cultural features were identified. The survey revealed severely disturbed soils within a majority of the project area, a likely result of the construction and use of the homes on the Taft Avenue lots. Shovel tests located in the stream restoration area revealed heavily eroded contexts, as well as graded and disturbed soils, most likely the result of previous stream restoration efforts. A metal detection survey resulted in the recovery of 23 artifacts. Three of these (Minie balls) dated from the Civil War period and are likely the result of temporary occupation of the property or troop movements in the vicinity. The Phase I survey resulted in the identification of several isolated archaeological finds.

Due to the absence of significant cultural materials and the disturbed nature of the project area, ***CRI recommends that no further work is required within the 12 lots on Taft Avenue and Donelson Street, or in the adjacent stream restoration area, in the City of Alexandria, Virginia.***

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I. INTRODUCTION

In November 2005, Cultural Resources, Inc. (CRI) conducted a Phase I archaeological survey of 12 lots on Taft Avenue and Donelson Street in the City of Alexandria, Virginia. Subsequently, CRI conducted a Phase I archaeological survey of a stream restoration area east of the Taft Avenue lots in March of 2007 (Figure 1). Each lot currently contains a small frame house constructed in the mid-twentieth century. The project area is bounded on the north, south, and west by private property and on the east by a private development and small park. The project area is located north of Duke Street.

The current investigation was conducted for Calvert Homes, Inc., in compliance with the City of Alexandria Protection Code, the National Historic Preservation Act of 1966 (NHPA-PL89-665), as amended, the Archaeological and Historic Preservation Act of 1974, Executive Order 11593, and relevant sections of 36CFR660-666 and 36CFR800. The archaeological investigations were conducted with reference to the *City of Alexandria Archaeological Standards* (Alexandria Archaeology 1996), *Guidelines for Archaeological Investigations in Virginia* (Virginia Department of Historic Resources [VDHR] 1997) and *Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation* (United States Department of the Interior [USDI] 1983) for conducting archaeological investigations. Recommendations concerning the potential eligibility of archaeological resources identified during the survey were made with reference to the Advisory Council on Historic Preservation's (ACHP) *36 CFR Part 800: Protection of Historic Properties, Final Rule* (ACHP 2000); the Department of Interior's *36 CFR 60: National Register of Historic Places*; the Secretary of the Interior's *Standards and Guidelines for Archaeology and Historic Preservation*; and *National Register Bulletin 15, How to Apply the National Register Criteria for Evaluation* (USDI 1981, 1983, 1991). Additionally, the preparation of this report follows guidelines published by the VDHR including: *Guidelines for Preparing Identification and Evaluation Reports for Submission pursuant to Sections 106 and 110, National Historic Preservation Act, Environmental Impact Reports of State Agencies Virginia Appropriation Act, 1992 Session Amendments*; *How to Use Historic Contexts in Virginia: A Guide for Survey, Registration, Protection, and Treatment Projects*; *How to Complete Virginia Department of Historic Resources Archaeological Site Inventory Forms*; and *Guidelines for Archaeological Investigations in Virginia* (VDHR 1992a, 1992b, 1993, 1997), in addition to *City of Alexandria Archaeological Standards* (Alexandria Archaeology 1996).

Senior Principal Investigator Michael Clem oversaw the project, prepared the research strategy, and wrote this report. Field Director Patrick Walters directed the fieldwork in addition to assisting with the final report. Mr. Walters was assisted in the field by Mr. Clem and Richard Shatz. The stream restoration Phase I work was directed by Kevin Goodrich, who was assisted in the field by Justin Bedard. Mr. Michael O'Donnell assisted with the metal detection survey. Copies of all field notes, maps, correspondence, and historical research materials are on file at CRI's office in Frederick, Maryland.

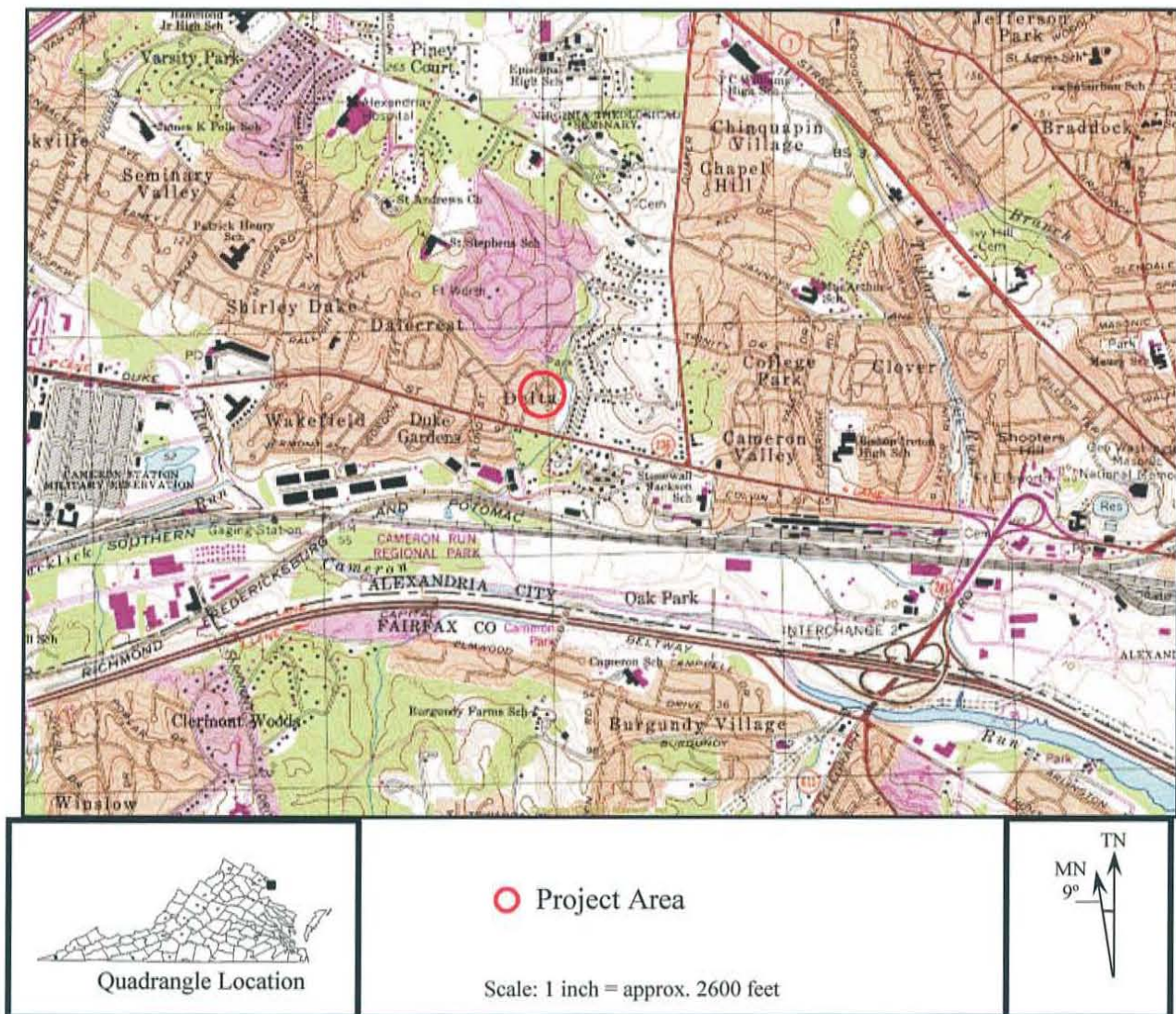


Figure 1. Detail of Mount Vernon, VA USGS Quadrangle depicting the location of the project area (USGS/Maptech 1983).

II. ENVIRONMENTAL CONTEXT

Physical Description and Environmental Setting

The project area is located at the interface of the Coastal Plain uplands and the Piedmont physiographic regions of Virginia. The project area is within the Fall Zone, an area where the sediments from the Piedmont dip below the Quaternary deposits of the Coastal Plain.

In general, broad and narrow ridges and a rolling topography dominate this region. The project area ranges in elevation from 90 feet above mean sea level (AMSL) along the south to 110 feet AMSL at the northern portion of the project area along Donnelson Street.

Hydrology

The project area is drained on the east by a north/south trending intermittent drainage, which ultimately feeds Cameron Run. Cameron Run feeds the Potomac River and greater Chesapeake Bay. Due to extensive modification of the landscape, the natural setting of the intermittent drainage within the area under study has been modified by development of adjacent land, which has interrupted and diverted its natural flow.

Soil Morphology

Surface soils are formed by several factors, including the weathering of parent material, the subsequent processes of plants and animals, and topographic relief over time. The current project area was likely under cultivation during the historic era; however, the modern-era disturbance and extensive landscape modification that likely occurred from development of the project area has transformed the character of the soils and terrain along Taft Avenue. Prior to modern disturbances, the character and type of soil would have had a direct effect on the kind of vegetation and hydrology of an area, and on the potential for human habitation and usage. For instance, there is a strong correlation between settlement density and soil fertility; studies (e.g. Lukezic 1990) of settlement patterns in relation to soil types have indicated that historic settlement is closely correlated with the location of prime farmland. The project area is situated in the coastal plain of Virginia; however, the Soil Conservation Service omitted the project area from detailed analysis primarily due to the extensive modification of landscape and soils at the time of the soil analysis (Woodward 1997).

Natural Resources

The project area currently consists of developed and partially undeveloped wooded property along the east boundary. At present, mixed hardwoods dominate the eastern property border along the stream banks. These hardwoods are co-mingled with Virginia pine, poplars, and magnolias. Elements of the development on the property include landscaped grounds associated with the homes located on each lot. Most of the project area is grassy lawn with decorative shrubs and domestic plants and trees.

III. CULTURAL CONTEXT

The following section provides the results of prehistoric and historic background research with the goal of establishing the appropriate cultural context for the project area as defined by the Secretary of the Interior's *Standards and Guidelines for Archaeology and Historic Preservation* and the Virginia Department of Historic Resources' *How to use Historic Contexts in Virginia: A Guide for Survey, Registration, Protection, and Treatment Projects* (VDHR 1992b).

Virginia's Native American prehistory is divided into three main periods, Paleoindian, Archaic, and Woodland, based on changes in material culture and settlement systems. Descriptions of major characteristics of the time periods and their locally diagnostic artifacts are presented below, along with comments on each period as they relate to the present project area.

Paleoindian Period (Prior to 8000 B.C.)

The Paleoindian occupation of Virginia, representing the initial presence of Native American peoples within the region, began prior to 8,000 B.C. or 10,000 years before present (BP) (Dent 1995; Ward and Davis 1999). The Paleoindian occupation of the greater southeastern United States began during the late glacial era, when sea levels were approximately 230 feet below modern sea levels (Anderson et al. 1996:3). This projected drop in sea level would have exposed the majority of the continental shelf along the eastern coastline of North America. During the Late Pleistocene period (14,000 - 10,000 BP) the Laurentide Ice Sheet still covered large portions of northern North America, and in Virginia the predominant forest type consisted of a mixture of a Jack Pine and Spruce (Delcourt and Delcourt 1981, 1983). These combined lines of evidence indicate that the Paleoindian period predates the formation of the Chesapeake Bay.

The majority of Paleoindian materials recovered in the Eastern United States represent isolated projectile point finds (Dent 1995; Ward and Davis 1999). The majority of Paleoindian remains in Virginia are also isolated projectile point finds. Although some larger, notable base camps are present within the state, these sites are relatively rare and usually associated with sources of preferred high quality lithic materials. Many Paleoindian sites may have been located along the Late Pleistocene coastline of Virginia, which was subsequently flooded during the formation of the Chesapeake Bay (Blanton 1996). As of 1995, there were 25 known Paleoindian sites located within the Chesapeake Region (Dent 1995).

Preservation biases have also had a substantial impact on our understanding of the Paleoindian period. After 10,000 years, few artifacts survive the ravages of time besides stone tools and the debris associated with their manufacture. When compared to the wealth of archaeological materials contained on late prehistoric sites, there are relatively few traces remaining from the Paleoindian occupation of Virginia. There remains a general level of uncertainty for the period based on the extant lines of data (Kane and Keeton 1994).

Paleoindians favored the use of cryptocrystalline material for making projectile points and lithic tools, probably because of its flaking qualities and longer potential use-life (the capability of reworking and reusing the material). The Paleoindian tool kit included well-made bifaces, various scrapers, graters, and adzes. These tools were curated and carried from place to place, possibly due to the extended use-life of the preferred lithic material (Binford 1980; Goodyear 1979). The Native American tool kit associated with the Paleoindian period is still not

well understood. Most of the tools associated with Paleoindian projectile points are also found in association with diagnostic artifacts from the Early Archaic period. A further complication in understanding the tool kit of the Paleoindian is the assertion that the tools created by the Paleoindians may have been used for over 3,000 years, since they were made of cryptocrystalline lithic material (Goodyear et al. 1989:41).

The Paleoindians employed a collector strategy to take advantage of seasonally available flora and fauna throughout the year. This strategy included a seasonal base camp located either in a diverse environmental ecozone or near high-quality lithic quarries, supplemented by smaller procurement camps located some distance from the base camp (Anderson et al. 1996; Daniel 1996; Goodyear 1979). The procurement camps were seasonal and temporary stations where the Paleoindians would gather lithic material and/or flora, or hunt fauna (Anderson et al. 1996; Binford 1980). It is generally accepted that the range of a band of Paleoindians covered a relatively large area (Anderson et al. 1996; Gardner 1989).

Some researchers discuss the Paleoindian period as a single entity (Dent 1995) while others, mostly in the southeast, divide it into three sub-periods based on morphological differences in projectile point manufacture and technology (Anderson 1990; Ward and Davis 1999).

Early Paleoindian (9500 - 9000 B.C.)

The earliest occupation of the southeast and eastern North America occurred sometime before 9000 B.C. The diagnostic artifact associated with this sub-period is the fluted Clovis projectile point, thought to have been hafted on the end of a wooden shaft and utilized as a spear to be thrown or thrust (Chapman 1994; Ward and Davis 1999). Sites associated with Clovis projectile points are scattered in low densities across the eastern seaboard, with notable concentrations around Tennessee, the Cumberland and Ohio River Valley, western South Carolina, southern Virginia, and the northern Piedmont of North Carolina (Anderson 1990:164-71; Daniel 1998; Ward and Davis 1999). Some areas with ephemeral or even no traces of Paleoindian occupation may have only been occupied briefly at this time. Anderson (1990) has hypothesized that these areas of concentrated activity were staging areas or base camps occupied at particular times of the season, with smaller procurement camps located elsewhere throughout the region (Anderson 1990; Ward and Davis 1999).

Middle Paleoindian (9000 - 8500 B.C.)

During the Middle Paleoindian sub-period several other projectile points become characteristic of the changing environment and reuse of earlier projectile point forms. Typical projectile point types include Clovis variants, Cumberland points, Simpson points, and Suwannee points. Some of these projectile points are fluted (Cumberland, Simpson, and Clovis variants) while others are not (Suwannee). Most of the Middle Paleoindian projectile points are slightly "eared" at the base (Anderson et al. 1996; Ward and Davis 1999:31). Anderson (1990) sees the morphological changes in form and increased number of points associated with this sub-period as signifying a change in settlement patterning and subsistence strategies. During the Middle Paleoindian period, Native American peoples began to radiate out from their home ranges and exploit new environmental conditions (Ward and Davis 1999).

Late Paleoindian (8000 - 7900 B.C.)

By the end of the Late Pleistocene, the ice sheet had retreated to the north and the forest cover had changed to a mixture of conifers and northern hardwoods. It is also presumed that numerous Paleoindian sites were submerged with the retreat of the Laurentide Ice Sheet at the end of the last glacial period (approximately 10,000 years ago) (Anderson et al. 1996:3). Dalton projectile points and Hardaway projectile points are typical of the Late Paleoindian sub-period, with some variants (Coe 1964; Daniel 1998; Goodyear 1974, 1982). With the climate and environment changing to one more similar to the present and with the associated rise in sea levels more Late Paleoindian sites are present across the Southeast and Mid-Atlantic regions, suggesting a possible increase in population density.

The strongest case for the pre-Clovis occupation of Virginia comes from the Cactus Hill site (44SX0202). The site, located along the Nottoway River, has provided evidence of potential Native American habitation in Virginia prior to the widely accepted date of 10,000 BP. The site has also produced artifacts that may predate the development Clovis technology: materials supporting the existence of a non-fluted lithic blade technology were recovered below stratigraphic levels associated with fluted Clovis points (McAvoy and McAvoy 1997).

Predictions call for any Paleoindian remains in Alexandria to be found in very low densities, with the most likely locations being situated in close proximity to quality lithic sources (Daniel 1998) or along high ridges overlooking waterways (Anderson 1990; Anderson and Hanson 1988). No Paleoindian sites have been identified within the project area, or within a one-mile radius of the project area. In addition, the project environs do not appear to be of the type that would support Paleoindian sites. With the impact of residential development within and around the project area, the probability of finding Paleoindian sites is low.

Archaic Period (8000 - 1200 B.C.)

The beginning of the Archaic period coincided with the start of the Holocene period around 10,000 BP. The Holocene is a geological period that began with the recession of the ice sheets that covered large portions of North America. The start of the Archaic is marked by a shift from a moist, cool climate to a warmer, dryer climate within the region, more similar to the temperate ecosystem of today. This warming trend was gradual and somewhat continuous throughout the first 5,000 years of the Archaic period. The shift in climate allowed for the development of diverse plant and animal communities, as currently found throughout the Middle Atlantic region. These changes in flora and fauna had a marked impact on the hunter-forager subsistence base of the Archaic period (Dent 1995:147, 164-5). The retreat of the ice sheets also caused the sea levels to rise, leading to the gradual formation of the Chesapeake Bay. Prior to the Archaic period the Chesapeake Bay was merely an extension of the Susquehanna river, emptying into the Atlantic Ocean several miles east of Virginia Beach, Virginia.

As with the Paleo-Indian period, our understanding of the cultural chronology of the Archaic is based primarily upon lithic artifacts: chipped-stone tools and the debris associated with their manufacture. More "biodegradable" forms of material culture have simply not survived in the archaeological record of the region and the items recovered are biased towards lithic materials (Geier 1990:82-83). The basic chronology of Archaic projectile points for the Mid-Atlantic region and the southeastern United States closely follows the sequence outlined by Joffre Coe (1964) for the North Carolina Piedmont, with regional variants. Coe's chronology has been modified and fine-tuned over the past 40 years but the basic typology remains intact (Broyles 1971; Dent 1995; Hranicky 2001; Justice 1995; Ward and Davis 1999).

It is believed that Archaic populations were characterized primarily by band-level social organization with seasonal movements that corresponded to the availability of specific resources. Settlement during the Archaic Period probably involved the occupation of relatively large regions by single, band-sized groups living in base camps during part of the year. These band-sized groups would disperse on an as-needed or seasonal basis, creating smaller microband camps that may have consisted of no more than single families. Two settlement models have projected the seasonal range and focus of Archaic bands. Anderson and Hanson (1988) propose that the distribution of Archaic sites (primarily Early and Middle Archaic) were based along single river drainages. The Band-Macroband Model, as it had become better known as, suggests that a base camp was established in a rich environmental area near the Fall Line, and smaller procurement camps were established seasonally towards the coast and further inland to take advantage of seasonally available resources such as fish, shellfish, nuts and berries. An alternative model takes into account a continued, albeit gradually declining, reliance upon high-quality cryptocrystalline lithic resources during the Early and Middle Archaic periods. Daniel (1996, 1998) proposes that high-quality lithic resources were the central focus around which seasonal movements were geared, and that Early Archaic Native American bands traversed river drainages to gain access to high-quality lithic outcrops and quarries.

The Archaic period can be characterized by the development of more specialized resource procurement activities as well as the development of new technologies to accomplish these activities. These differences in the material culture are believed to reflect larger, more localized populations and changes in methods of food procurement and processing.

Early Archaic (8000 – 6500 B.C.)

Corner and side notching became a common characteristic of projectile points at the beginning of the Early Archaic, indicating potential changes in hafting technology and possibly the invention of the spear-thrower (atlatl). Notched point forms include Palmer and Kirk Corner-Notched and, in localized areas, various side-notched types. The end of the Early Archaic and the start of the Middle Archaic are marked by the appearance of a variety of bifurcate base projectile point forms which, within this area, are primarily represented by Lecroy points (Dent 1995; Justice 1995).

Middle Archaic (6500 - 3000 B.C.)

As a whole, the Middle Archaic is marked by the appearance of stemmed projectile point forms. In this area of Virginia, the most common Middle Archaic projectile point types are (from oldest to most recent) Le Croy, Stanly, Morrow Mountain and Guilford, followed by the side-notched Halifax type as the Middle Archaic transitions into the Late Archaic period between ca. 3500 and 3000 B.C. There is also a notable increase in the number of identified Middle Archaic components over the preceding Early Archaic period, which appears to indicate a rise in Native American population levels during this period (Dent 1995; Justice 1995).

Late Archaic (3000 – 1200 B.C.)

The Late Archaic is dominated by stemmed and notched knife and spear point forms, including various large, broad-bladed stemmed knives and projectile points that generally diminish in size by the start of the Early Woodland (e.g. Savannah River points and variants). Other point forms, while less common, include stemmed and notched-stem types identical to examples

more commonly associated with Pennsylvania and adjoining parts of the northeastern United States (e.g. Susquehanna and Perkiomen points) (Dent 1995; Justice 1995).

Marked increases in population density, and decreased mobility in some areas, appear to characterize the Late Archaic in the Middle Atlantic region and eastern North America as a whole. Locally, there is an increase in the number of late Middle Archaic (Halifax) sites and Late Archaic (Savannah River) sites over those of preceding periods, suggesting a population increase and/or an increasing use of this area of Virginia between about 3500 B.C. and ca. 1200 B.C.

The origins of agriculture within the Middle Atlantic region may have had its start during the Late Archaic period. Yarnell (1976:268), for example, states that sunflower, sump weed, and possibly goosefoot may have been cultivated as early as 2000 B.C. In the lower Little Tennessee River Valley, the remains of squash have been found in Late Archaic Savannah River contexts (ca. 2400 BC), with both squash and gourd recovered from Iddins period contexts of slightly more recent date (Chapman and Shea 1981:70).

Late Archaic sites and site components are the most common archaeological expression of the Archaic period, at both the local and regional levels. Within the Potomac River drainage late Middle Archaic and Late Archaic components are typically present in shallowly buried first terraces and floodplain sediments, as well as on adjoining high terraces/bluffs located above the floodplain.

Based on the work of Barber et al. (1992), as well as on studies conducted within nearby northern Virginia counties, Native American sites dating to the Middle and Late Archaic periods are the most likely type of site to be found within the project area. Early Archaic and Middle Archaic sites are found on both the largest streams and on small headwater tributaries, indicating movement from the major rivers to the interior headwaters and the exploitation of a broad range of both riverine and forest resources; Late Archaic sites are found in a wider range of environments (Barber et al. 1992:46-48). No archaeological sites dating to the Archaic period have been identified within an one-mile radius of the project area. However, five prehistoric sites with an unknown temporal affiliation were located within a one-mile radius of the area under study. These sites consisted primarily of low densities of non-diagnostic lithics with an absence of ceramic artifacts, indicating that they may likely date to the Archaic Period. The probability of finding intact archaeological sites or site components related to the Archaic period would be moderate considering both the topography and location of the project area; however, that probability has been reduced to low due to the disturbance from residential development.

Woodland Period (1200 B.C. – A.D. 1600)

The Woodland Period is characterized by ceramic technology, a gradually developing dependence on horticulture, and increased sedentism (Klein and Klatka 1991; Mouer 1991). Three subperiods (Early, Middle, and Late Woodland) have been designated, based primarily on stylistic and technological changes in ceramic and projectile point types as well as settlement patterns. Floral and faunal remains are not common in Woodland period assemblages; however, it has been suggested that intentional clearing of land increased the availability of edible plants such as goosefoot and sunflower (Stevens 1991). The broad projectile points characteristic of the Archaic period become less common during the Early

Woodland and were replaced with smaller point forms, including notched, stemmed, and lanceolate types.

Early Woodland (1200 - 500 B.C.)

The Early Woodland Period is generally defined by the appearance of ceramics in the archaeological record. The earliest Woodland ceramic wares, Marcey Creek Plain and variants, are rectangular or oval and resemble the preceding Late Archaic soapstone vessels. These ceramics are followed by cord-marked, soapstone-tempered Selden Island ceramics followed, in turn, by sand- and grit-tempered Elk Island (Accokeek) ceramics with both plain and cord-marked surfaces, and in the upper part of the Potomac drainage, cord-marked and plain ceramics tempered with quartz, shale and other crushed rock (Gardner and Nash 1987; McLearen 1991). In the less recent archaeological literature, the latter were referred to as Stony Creek ceramics, a type now known to subsume several Early, Middle, and Late Woodland ceramic series.

Also characteristic of the Early Woodland period across a broad region of the east is the complexity of and emphasis on ceremonialism especially that related to burial of the dead. In Virginia, this emphasis is not seen until about 500 B. C. when stone and earth burial cairns and cairn clusters occur in the Shenandoah Valley. However, this phenomenon did not extend into the Piedmont until much later when a second wave of burial mound ceremonialism occurs around the time of the Middle/Late Woodland transition, and accretional mounds are found in both the Ridge and Valley and Inner Piedmont provinces. However, mounds in the Piedmont appear to have been restricted to the Rivanna and Rapidan drainages.

Middle Woodland (500 B.C. - A.D. 900)

Stephen Potter (1993:62) divides the Middle Woodland period into two sub-periods: the Early Middle Woodland (300 B.C. to A.D. 200) and the Late Middle Woodland (A.D. 200 to A.D. 900). Within the vicinity of the present project area, Pope's Creek ware is the most common ceramic series associated with the first half of the Middle Woodland period (Egloff and Potter 1982:99). The series was first described by Holmes (1903:153-155) and later refined by Stephenson et al. (1963:92-96). Pope's Creek ceramics are tempered with medium to coarse sand, with occasional quartz inclusions (Stephenson et al. 1963:94). Interior scoring has been recorded on a number of specimens (McLearen and Mouer 1989; Stephenson et al. 1963:95). Most Pope's Creek ceramics have net-impressed surfaces, while cord-marked surfaces have been observed as a rare variant (Egloff and Potter 1982:99; McLearen and Mouer 1989:5).

For the latter half of the Middle Woodland period, the dominant ceramic type found within coastal Virginia and Maryland is shell-tempered Mockley ware. Mockley ware first appeared around A.D. 200 and it has a distribution extending from Virginia to southern Delaware (Egloff and Potter 1982:103; Potter 1993:62). Surface treatments for this thick-walled ceramic series include cord-marked, net-impressed, and plain variants (Egloff and Potter 1982:103). Lithic artifacts commonly found in association with Mockley ceramics are Selby Bay, Fox Creek and Nomini projectile points (Potter 1993:66-68).

Late Woodland (A.D. 900 – 1600)

The transition from part-time horticulture to more intensive modes of agricultural production is the hallmark of the Late Woodland period throughout the greater region. Potter (1993:77-87)

divides the Late Woodland into two distinct sub-periods, based upon the introduction of Potomac Creek ceramics within the Inner Coastal Plain of the Potomac River around A.D. 1300. The Late Woodland I period runs from A.D. 900 through A.D. 1300, which marks the start of the Late Woodland II period. Projectile points associated with the Late Woodland period are smaller triangular points, often referred to as Madison or Clarksville, and slightly larger Levanna triangles.

Shell-tempered Townsend ware is the dominant ceramic series associated with this period, with four distinct types of surface treatment: Rappahannock Fabric-Imprinted, Rappahannock Incised, Townsend Corded, Townsend Herringbone (from southern Delaware) (Egloff and Potter 1982:107-109). It is commonly found in Virginia east of the fall line, except for in Dinwiddie and Greensville counties (Egloff and Potter 1982:109). While Rappahannock Fabric-imprinted is common for the entire Late Woodland period, the presence of Rappahannock Incised and Curriomen Fabric-Imprinted are associated for the Late Woodland I period (see Potter 1993:77-79).

The appearance of Potomac Creek ceramics within the inner Coastal Plain between Virginia and Maryland marks the start of the Late Woodland II period. Made with sand and quartz temper, these ceramics effectively replace the shell-tempered Townsend series within the region, and Potter (1993:137) believes that they are related to the earlier Montgomery focus in the Maryland piedmont. For the rest of Virginia and coastal Maryland, Townsend ceramics remain the dominant series for the Coastal Plain region. It should be noted that a distinction between ceramic "cultures" is clearly noted for the Fall Line by the start of the Late Woodland period, and, that in the Late Woodland II period, the appearance of ossuary burials (large multiple secondary interments) becomes a common archaeological feature across the regional landscape.

Drawings and journals of early European explorers describing Indian villages indicate that houses were constructed of oval, rectanguloid or circular frameworks of flexible green sapling poles set in the ground, lashed together, and covered with thatch or bark mats. Burial sites of the period were situated in individual pits or in ossuaries. Such historical accounts are consistent with data obtained from archaeological excavations of Late Woodland village sites (Hodges and Hodges 1994).

With the development of a more sedentary settlement-subsistence system culminating in the Late Woodland Period, permanent habitation sites gradually replaced base camps, which were characteristic of earlier foragers and hunter-gatherers. Various supporting camps and activity areas were established in the daily procurement of food and other resources (i.e., short-term hunting and foraging camps, quarries, butchering locations, and re-tooling locations). Locations used partially or largely for ceremonial purposes were also present, usually in association with habitation sites.

John Smith mapped many "king's" and "ordinary" village sites within Virginia on his map, *Virginia: Discovered and Discribed* [sic] (Smith 1610). This map depicts villages of "ordinary houses" labeled "Assaomeck" and "Namoraughquend" in the project area vicinity (Figure 2). The scale and accuracy of Smith's map is poor by modern standards and it is impossible to pinpoint the exact location of the two villages; however, it is possible that cultural activities associated with this Native American village could have occurred within the bounds of the project area.

The large base camps, hamlets, and villages are typically located on bluffs, terraces or high floodplains adjacent to rivers or major tributaries. Small seasonal camps and non-seasonally based satellite camps supporting nearby sedentary villages and hamlets are located along smaller streams in the interior. Limited concentrations and sparse scatters of lithics and ceramics typically characterized these campsites. The majority of the Late Woodland sites that had been recorded at the time of the Barber et al. (1992) study were located along the major high order streams and rivers. It would therefore seem that the project area would not have been conducive to settlement by Woodland peoples, being located along a low-order stream amongst a rolling topography. As such, the most likely manifestation of Late Woodland sites would be hunting camps and hunting locales that would consist primarily of small scatters of lithics and some ceramics, indicative of temporary campsites, these being more numerous than nucleated villages.

The probability of finding intact Woodland period sites within the project area would appear to be moderate, but due to disturbances within the project area and vicinity, the probability is low.



Figure 2. Detail of *Virginia Discovered and Discribed* [sic], depicting the project area vicinity (Smith 1610).

Settlement to Society (1607-1750)

At the time of European contact in the New World, present day Fairfax County and the City of Alexandria was occupied by several Native American tribes. One of the dominant tribes were the Dogue (or "Doeg") Indians, whose primary village, Tauxenent, was located on the Occoquan River. The Dogue were part of the Algonquian Federation (Brown 1994). John Smith encountered the Dogue and feasted with them on Dogue Island, at the convergence of the Potomac and Occoquan Rivers. Smith estimated the size of the tribe at about 135 to 170 people. The Dogue proved to be valuable friends; Smith was able to trade for corn to feed the colonists. The Dogue even showed the colonists how to hunt and fish, as well as their farming methods (Brown 1994; Waltmyer 1995).

With expansion of the colony and more settlers, settlement moved up the Potomac River, on the Maryland side first. Then with the defeat of the Dogue Indians in 1644, the area of Fairfax County and the City of Alexandria was opened up to European settlement. Some of the earliest land patents along the Occoquan River were issued in the 1650s. As the settlers began moving into the areas of present-day Fairfax and Prince William counties, tensions grew again between the Native Dogue and the new European settlers. In 1676, two more conflicts, the Susquehannock War and Bacon's Rebellion, caused settlers to retreat south towards Aquia Creek in present-day Stafford County. Soon after, the English established forts along the upper Potomac River and settlers continued to move northward and westward (Sprouse 1975). By 1700, diseases had further decimated the Dogue as they began to move westward and leave their villages behind (Brown 1994; Waltmyer 1995). A map from this period shows the European settlement of this region beginning along the Potomac River (Figure 3).

The Native American trail, known as the Potomac Path, paralleled the Potomac River, and provided the settlers with a convenient trail that soon developed into a road. Present-day U.S. Route 1, more or less follows the Potomac Path up to State Route 611 (Telegraph Road). The Potomac Path would become the primary road between Alexandria and Fredericksburg (Sprouse 1975; Sweig 1992; Waltmyer 1995).

The project area was encompassed within the Northern Neck proprietary that was created by Charles II in 1649. The local colonial government began to grant lands within the proprietary in the 1650s (Netherton 1992). Original grantees held much of the large grants of land in this region well into the nineteenth century. These lands were held primarily for speculative purposes, and were leased to investors or tenants.

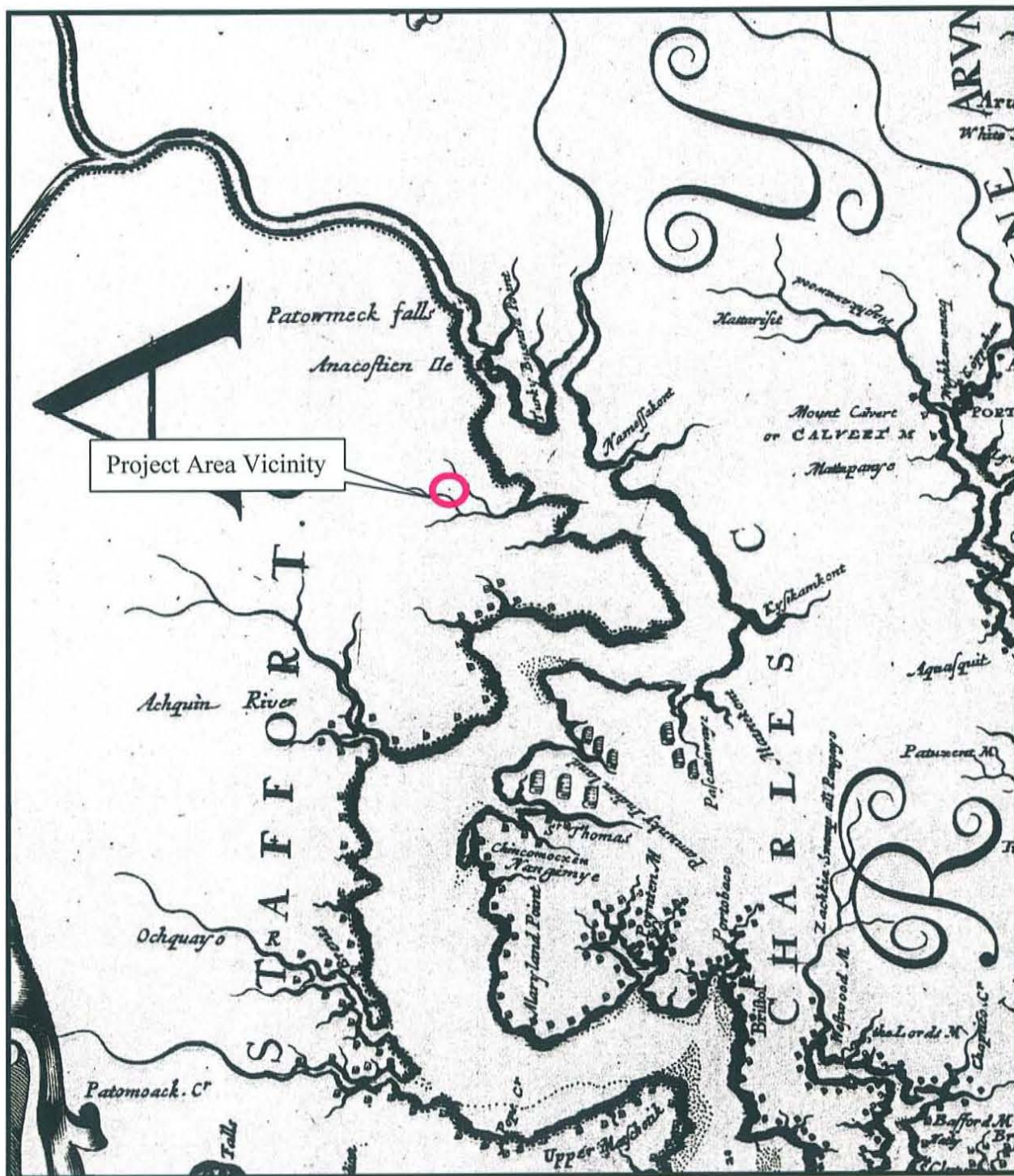


Figure 3. Detail of Virginia and Maryland depicting the project area vicinity (Herrman 1673).

The founding of Alexandria dates to 1732, when a tobacco warehouse was relocated "upon Simon Pearson's land upon the upper side of Great Hunting Creek" (Harrison 1924:405; LBA 1991). In 1749, John West, Jr. and his assistant George Washington surveyed the site for the new town. The boundaries originally extended from Great Hunting Creek north to Ralphs Gut, a creek near the location of Oronocco and Pendleton streets (Artemel et al. 1987:11-12; LBA 1991).

One archaeological site from this time period was located within a one-mile radius of the project area. However, increased historic European habitation of this area along the Potomac began in the middle of the eighteenth century. Therefore, there would have been a low to moderate probability that cultural resources from this period will be located within the project area; however, the disturbances within the project area decrease that probability to low.

Colony to Nation (1750-1789)

The Potomac Path continued to play a significant role in the development of Alexandria, Fairfax, and surrounding counties, as well as the nation as a whole. The importance of the Potomac Path is illustrated by the fact that it was named an official mail route by 1773. About the same time, the name of the road was changed to the King's Highway (Waltmyer 1995).

During the Revolutionary War, Generals Washington and Rochambeau used the King's Highway in the journey from Mount Vernon to Williamsburg and eventually to Yorktown. Rochambeau's French soldiers traveled south to Yorktown on this road, and then returned on it after the British surrender (Waltmyer 1995).

By the end of the eighteenth century, the City of Alexandria had grown from a sparsely settled rural area to an affluent colonial society. Alexandria served critical economic and commercial functions within the colony and the nation. In this capacity, it attracted other skilled labor and became a social and religious center (Cressey et al. 1982; LBA 1991). During the Revolutionary War, residents experienced a decline in available goods and other commodities, but the effect of the war was minimal (Sweig 1992). The activities of surrounding counties centered on the town of Alexandria by the end of the Revolutionary War. All major roads passed through the town, and commercial opportunities were abundant (Sweig 1992). By 1790, Alexandria was one of the busiest ports in the newly formed country (Cressey et al. 1982:148).

Although the City of Alexandria was experiencing a considerable economic and social boom, the related expanses in population centered along the port town and not in the region surrounding the project area. One standing structure dating to this period is located within a one-mile radius of the project area. The probability of locating sites associated with this period within the project area is low.

Early National Period (1789-1830)

During the late eighteenth and early nineteenth centuries, the counties surrounding the City of Alexandria underwent a radical transition from tobacco to a new diversified grain-based economy that would characterize the region throughout the nineteenth century and well into the twentieth. By the time of the American Revolution all arable land in the Tidewater and Piedmont regions of Virginia had been planted in tobacco at least once, and most areas were experiencing the effects of severe soil depletion. Between 1790 and 1820 as many as 250,000

Virginians moved from the older settled parts of the state to the recently opened southwest frontier, taking approximately 150,000 black slaves with them. The virtual collapse of the tobacco economy and the concomitant out-migration of significant numbers of people had a revolutionary effect on the social and economic character of the Piedmont and Tidewater. Large plantations that had relied on slave labor were increasingly subdivided into smaller-scale farmsteads that grew corn and wheat rather than tobacco (Evans 1988; Kulikoff 1986:422, 429).

Despite the obvious benefits of the transition from tobacco to grain crops, the farming methods of the late eighteenth and early nineteenth centuries continued to have a deleterious effect on exhausted soils. Under the traditional three-crop rotation system, a field would first be planted in corn, the following year planted in wheat, and then left unplowed the third year to provide grazing for cattle and hogs. Recognizing the need for improved agricultural practices, Loudoun County farmer John A. Binns spearheaded the agricultural reform movement in Virginia. His 1803 *Treatise on Practical Farming*, which won the admiration of President Thomas Jefferson, outlined a formula for improving crop yields that would come to be known as the "Loudoun System." In his widely read book, Binns recommended deep plowing, the use of gypsum to restore soil productivity, and revising the old crop rotation pattern to include a third year of clover (Poland 1976:84-88).

But ample harvests were of little use to the farmers of the northern Virginia counties if agricultural produce could not be moved cheaply and efficiently to the region's major transportation centers, principally the port of Alexandria. As a result, Northern Virginia experienced a boom in turnpike construction in the early years of the nineteenth century, with the goal of linking Virginia's Piedmont "breadbasket" with hungry eastern and international urban markets.

Six historic structures dating to this era are located within a one-mile radius of the project area, including a mill, a school, a seminary, and three dwellings.

Antebellum Period (1830-1861)

By the mid-nineteenth century railroad developers were building rail lines throughout much of northern Virginia. By the 1850s, the Manassas Gap Railroad joined the Orange and Alexandria line at what was now commonly called Manassas Junction. As with turnpikes earlier in the nineteenth century, the construction of rail lines had a tremendous economic and social effect on the area, facilitating the export of farm produce (Hennessy 1989).

By the 1840s and 1850s, the departure of numerous Fairfax farming families for the West had opened a considerable amount of land to outside purchase at low cost. With the advantage of new transportation routes and proximity to the growing markets of Alexandria, Georgetown, and Washington, this region proved attractive to northern farmers and recent immigrants. By the early 1850s, about 200 Northern families had moved to neighboring Fairfax and invested more than \$200,000 in land, which they set about improving with vigor and ingenuity that impressed their new Virginia neighbors. In 1850, roughly one in three adult white males in Fairfax hailed from the northern states or European countries. Most were farmers who took up moderately sized parcels, typically between 150 and 200 acres. These Yankee newcomers, including many Pennsylvania and New Jersey Quakers, were inherently anti-slavery but not aggressively so. By improving their farms with free white labor, they hoped to show Southerners that black slavery was not simply immoral, but also economically unsound (Netherton 1992:251-59). This

influx of newcomers provided an impetus for growth and the region began to thrive. Commerce and urban growth in Alexandria increased with the shift away from tobacco and the expanded emphasis on grains, vegetables, and cattle (LBA 1991).

Five cultural resources from the Antebellum Period were previously identified within a one-mile radius of the project area. These resources include a railroad bed, a post office, and three dwellings.

Civil War (1861-1865)

By the 1860s, the issues of slavery and states' rights finally provoked an armed conflict. Alexandria fell to the Union army on May 24, 1861. Alexandria became a Union stronghold focused on the Confederate forces around Manassas. The lands between Alexandria and Manassas, "had been destroyed as effectively as possible and a long deep cut filled in with trees and earth" (U.S. Dept. of War 1881:720). The Union worked quickly to make Alexandria an effective port and depot for the Army of the Potomac, and protected it with defensive fortifications laid out in a ring around the city (Figures 4, 5, and 6). These defenses served the greater purpose of an extra line of defense on the Union capital of Washington, D.C. (LBA 1991)

Numerous troops and fortifications occupied Alexandria and the surrounding lands. From atop Ft. Ellsworth in November 1861, J. Howard Kitching wrote, "[looking] out over the surrounding country, every hill crowned with a breastwork or fortifications, and every valley holding a camp, or camps, with martial music sounding on every side, you would find it hard to believe that were not in some fairyland" (Miller 1983:89).

Numerous maps of the region were drafted at this time to assist in the strategies of war. These maps show the project area vicinity in varying detail (Figures 4 and 5); however they do not show any structures within the project area. Previously identified cultural resources within a one-mile radius of the project area that date to the Civil War-era include earthworks, four campsites, and a fort.

Several previously identified archaeological sites identified within a one-mile radius of the project provide an excellent context for Civil War activity in this region of Alexandria. Beginning in 1861, a systematic development of defenses of Washington D.C. took the form of the construction of large forts (Fort Worth, Fort Ellsworth, and later Fort Williams) on the upland areas surrounding the project area (Embry 2005).

The Union army began the construction of defensive positions in 1861 overlooking the Potomac floodplain on the Alexandria uplands above Duke Street with the construction of Fort Worth, located directly upslope to the north of the project area, and Fort Ellsworth, located approximately ½ mile east of the project area. Fort Williams was added as an additional defensive emplacement in 1863 to fill the gap between Forts Worth and Ellsworth. In addition to the semi-permanent defensive positions, the Union army occupied most of the areas between the three Forts in temporary camps throughout the course of the Civil War (Balicki 2006).

Sites 44AX191, 44AX195, 44AX199, and 44AX200, all located within a half mile of the project area on the upland areas overlooking and along current Duke Street, represent large Civil War

activity sites associated with temporary encampments (such as Winter encampments) or defense network construction activity.

Site 44AX195, located just southeast of the project area, recorded intact subsurface features associated with a camp of probably the 38th N.Y. Regiment, including a brick "Crimean Oven" feature, despite extensive modern construction activity. This provides a precedent for the recovery of intact Civil War era archaeological resources despite extensive modern construction and demolition (Balicki 2006).

Taking into account these factors, there would be a moderate probability of finding intact Civil War-era sites within the project area; however, because of disturbance within the area under study, the probability is low.

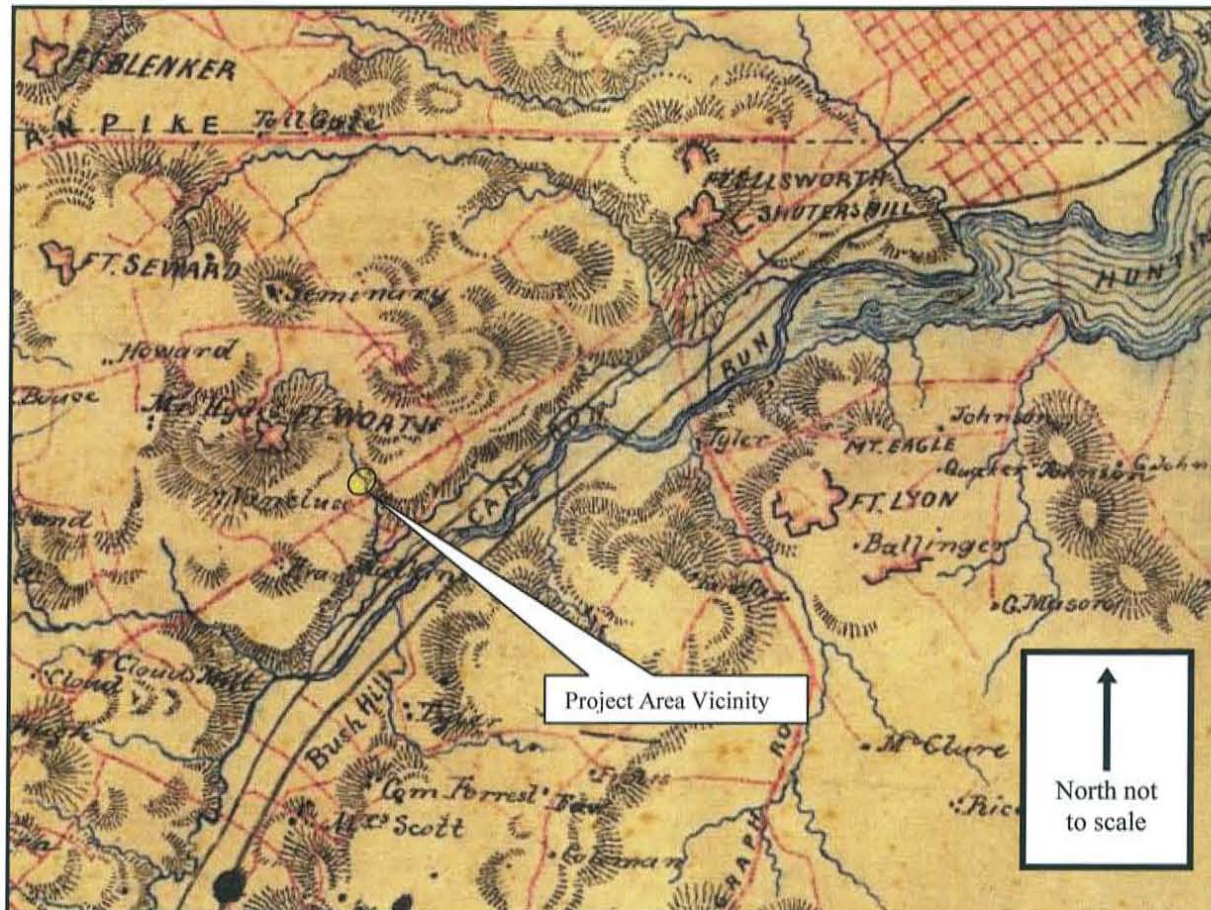


Figure 4. Detail of Surveys of the military defences, vicinity of Washington, D.C. / compiled at Division Hd. Qrs. of Gen. Irvin M'Dowell, U.S.A., Arlington, depicting the project area (1862).

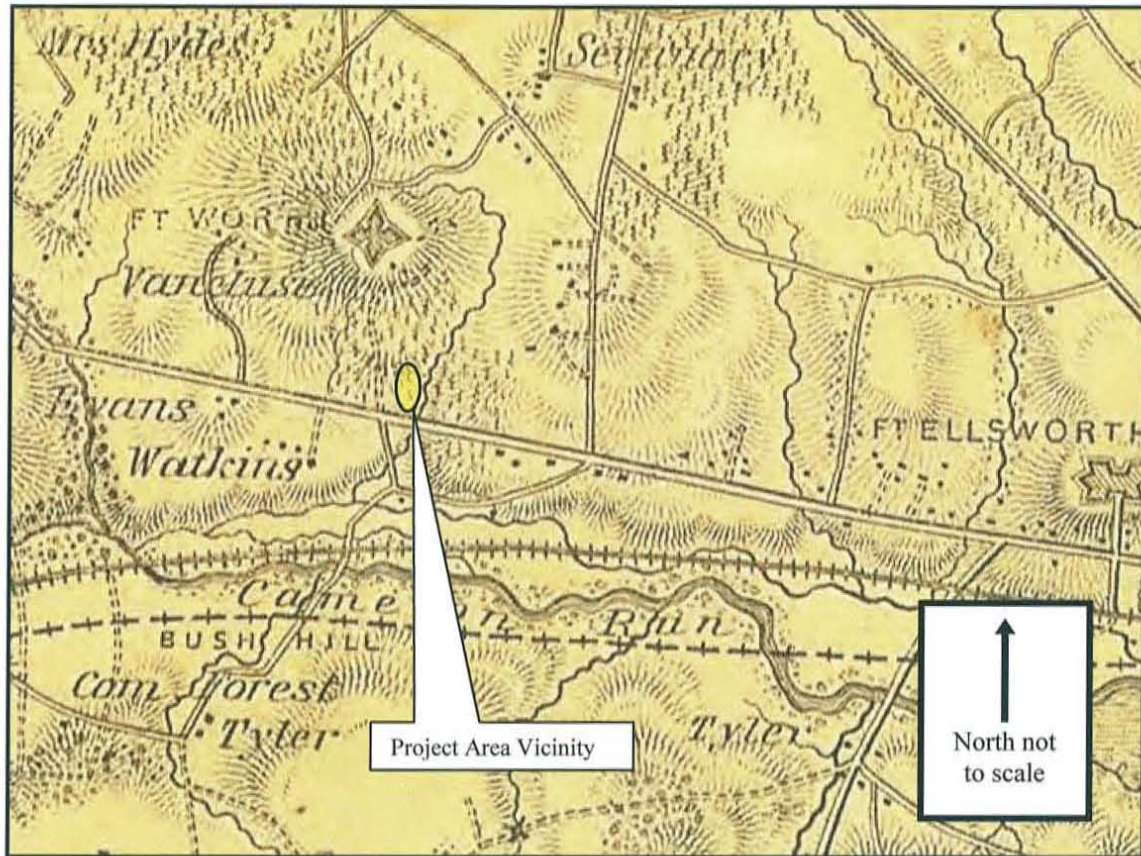


Figure 5. Detail of Map of n. eastern Virginia and vicinity of Washington / compiled in Topographical Engineers Office at Division Head Quarters of General Irvin Mc Dowell, Arlington, from published and manuscript maps corrected by recent surveys and reconnaissances depicting the project area in relationship to Forts Worth and Ellsworth (Schedler 1862).

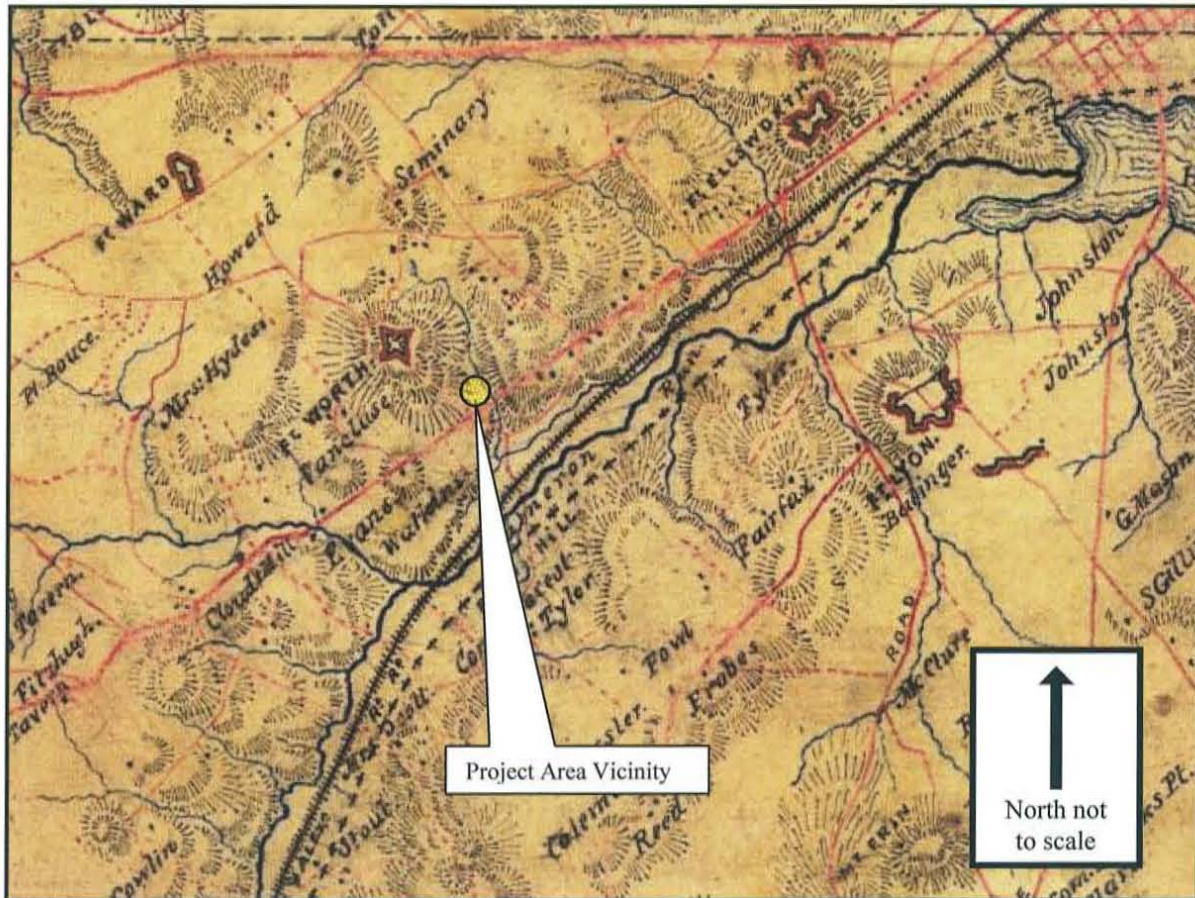


Figure 6. Detail of *Topographical map of the District of Columbia and adjacent areas in Virginia*, showing fortifications (Anonymous 1864).

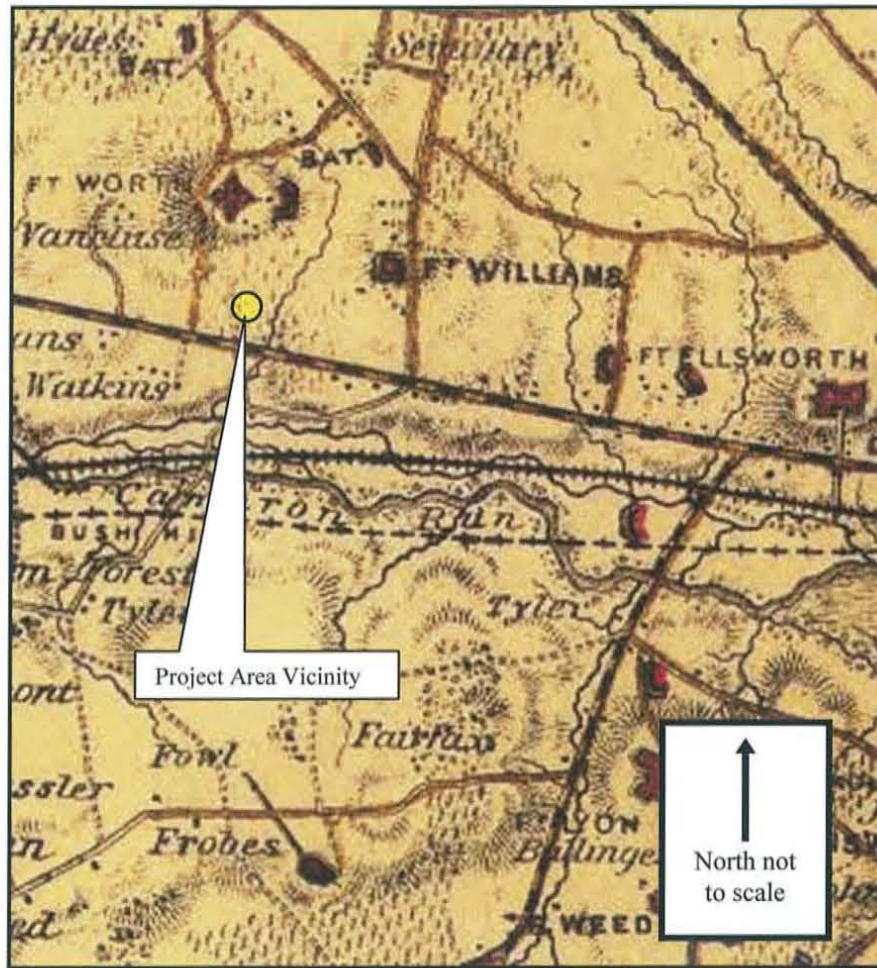


Figure 7. Detail of Map of N.E. Virginia showing forts and roads created by Engineer Bureau, War Department, showing project area vicinity in relationship to Fort Worth, Fort Williams, and Fort Ellsworth (1865).



Figure 8. *Birds Eye View of Alexandria, Va.* (Magnus 1863).

Reconstruction and Growth (1865-1917)

Four years of war had a devastating effect throughout Virginia, and Alexandria, and Fairfax County had seen heavy occupation between 1861 and 1863. As a major staging area for military activity, much of its critical infrastructure had been destroyed. The combined loss of manpower and draft animals, the neglect of agricultural lands, and the emancipation of the slave population had a detrimental effect on the county's economic and social landscape in the postwar era. Property values plummeted: land that had sold for \$10 per acre before the war was valued at only \$1.00 to \$3.00 following the hostilities. In fact, the real estate market was so depressed that, during the 1869-70 session, the General Assembly enacted a law prohibiting the sale of land for less than 75 percent of its assessed value (Kaplan 1993: 153-56).

In a pattern reminiscent of the early nineteenth century, postwar agricultural difficulties prompted local and regional farmers to seek alternative sources of income. The solution for many was to sell timber for cash. Others simply left the county for jobs in Washington or elsewhere. Those who continued to farm joined the "Grange," or "Patrons of Husbandry," a fraternal order established in 1867 and dedicated to helping farmers learn new agricultural methods. Though Virginians were initially slow to join, by 1876 the organization claimed 18,000 members in Virginia in 685 local chapters. Although the Grange had lost most of its power by the 1890s, it was replaced by similar organizations, including the Farmers' Assembly and Farmers' Alliance, and the annual Farmers' Institutes.

The first two decades of the twentieth century saw Fairfax County and Alexandria's economy grow. The emergence of Fairfax County as a leading dairy producer spurred on the construction of better roads and rail services, enhancing the business connection with Alexandria and Washington D.C. With better transportation came more residents and businesses to the region (Netherton 1992).

Ten previously identified cultural resources associated with this period are located within a one-mile radius of the project area. They include three archaeological sites (a school, a domestic site, and a site of unknown function), and seven historic structures (six dwellings and a commercial building). There is a low potential for sites from this historic period to be located within the project area. Although the economy of the region was on the rise during the latter half of this period, the low acreage of the project area and the disturbances therein indicate a low probability for containing intact cultural resources associated with this period.

World War I to World War II (1917-1945)

With the outbreak of World War I, Fairfax County and Alexandria residents supported the War effort in any way possible. Twenty-two county branches of the American Red Cross lent much time and support to the War effort, as well as the local farmers. In turn, the government helped farmers with the use of experimental techniques to increase agricultural yields. The government also established Camp A. A. Humphreys (later named Fort Belvoir) in Fairfax, creating more jobs and boosting the economy (Reed 1992).

The faltering postwar economy caused prices to fall, and farmers could no longer afford to produce their crops. To make matters worse, the government shifted their focus from the agricultural economy to the growth of urban centers. While farmers were still suffering hardships related to the Great Depression, the region was experiencing an overwhelming influx of new residents. By 1940, rising land values, a result of urban and suburban growth, forced many farmers to sell their land and move elsewhere (LBA 1991). Furthermore, with the onset of World War II and the expansion of the federal bureaucracy, the county's population continued to grow, and prices continued to rise on property.

The decades between the wars marked the beginning of the suburbanization of the land surrounding Alexandria. Two historic structures, both single dwellings, dating to this period were noted within a one-mile radius of the project area. Although the probability of finding sites associated with this time period is moderate, the likelihood of their being eligible for listing on the NRHP is low.

The New Dominion (1945-Present)

By the end of World War II, Fairfax County and the City of Alexandria had become one of the major suburbs of Washington D.C. With disappearing farmsteads being replaced by new subdivisions, commercial farming and urban lifestyles were becoming more popular. During the 1940s and 1950s, the population of Fairfax County increased from 40,900 to 98,500, and in the 1960s the population grew to almost 500,000 residents (Netherton and Netherton 1992).

To accommodate the increasing population of the region, I-95 was commissioned in 1956 under subsidies provided by the Federal Highway Act and completed in 1965. In 1973, Fairfax County and the City of Alexandria established that I-95 would be the boundary between the two jurisdictions.

Two standing structures dating to this period are located within a one-mile radius of the project area. The probability of finding sites associated with this time period within the project area is high, due to the presence of dwellings from this era on each of the twelve lots; however, the likelihood of such sites being eligible for listing on the NRHP is low.

IV. RESEARCH DESIGN

Objectives

The Phase I archaeological survey was designed to locate and identify all archaeological resources within the project area, and to obtain sufficient information to make preliminary recommendations about the significance of each identified resource, based on its potential eligibility for listing on the National Register of Historic Places (NRHP). A cultural resource is gauged to be significant if it meets at least one of four National Register criteria:

- A. Associated with significant events in the broad patterns of national history.
- B. Associated with the lives of persons significant in our past.
- C. Representative of a type, period, or method of construction, or the work of a master.
- D. Capable of yielding important information about the past.

Archaeological sites are typically evaluated in relation to Criterion D. In order to be capable of yielding important information about the past, generally a site must possess artifacts, soil strata, structural remains, or other cultural features that make it possible to test historical hypotheses, corroborate and amplify currently available information, or reconstruct the sequence of the local archaeological record.

In addition to the National Register Criteria typically applied to the evaluation of a potential archaeological resource, additional standards were also applied during the course of this survey as outlined by Alexandria Archaeology Code, especially in lieu of the high potential for recovery of Civil War related resources within the project area. As applied to all research during the course of this survey, these additional criteria include:

- 1) Research value. The extent to which the archaeological data that might be contained on the property would contribute to the expansion of knowledge.
- 2) Rarity. The degree of uniqueness the property's resources possess and their potential for providing archaeological information about a person, structure, event or historical process, for which there are very few examples in Alexandria.
- 3) Public Value. The level of importance the property has to the community as a location associated with a significant person, structure, event or historical process.
- 4) Site integrity. The extent to which soil stratigraphy and original placement and condition of archaeological resources on the property have not been disturbed or altered in a manner which appreciably reduces their research or public value.
- 5) Presence of materials. The extent to which archaeological resources or evidence of historic structures are present on the property.

- 6) Impact on resources. The extent to which any proposed ground disturbing activities will alter or destroy resources which the director has determined to have substantial archaeological significance under sections 11-411(E)(1) through (5) above.

The background research for the Phase I archaeological survey included a review of the VDHR archives, Alexandria Archaeology archives, and data collected from the VDHR Data Sharing System (DSS), and the results of this research follow.

Previously Identified Resources

Archaeological Sites

No previously identified archaeological sites were recorded within the project area, but 17 sites were recorded within a one-mile radius of the project area (Figure 7, Table 1). These include 10 historic sites, three prehistoric sites, two multi-component sites with both historic and prehistoric occupations, and two sites of unknown temporal/cultural affiliation. None of the prehistoric sites have a distinct temporal affiliation.

Several previously identified archaeological sites identified within a one-mile radius of the project provide an excellent context for Civil War activity in this region of Alexandria. Beginning in 1861, a systematic development of defenses of Washington D.C. took the form of the construction of several forts (Fort Worth, Fort Ellsworth, and later Fort Williams) on the upland areas surrounding the project area. Sites 44AX191, 44AX195, 44AX199, and 44AX200, all located within a half mile of the project area on the upland areas overlooking and along current Duke Street, represent large Civil War activity sites associated with temporary encampments (such as Winter encampments) or defense network construction activity.

Site 44AX195, located just southeast of the project area, recorded intact subsurface features associated with a camp of probably the 38th N.Y. Regiment, including a brick "Crimean Oven" feature, despite extensive modern construction activity. This provides a precedent for the recovery of intact Civil War era archaeological resources despite extensive modern construction and demolition.

As a whole, the historic sites date from the late seventeenth century through the twentieth century, and include dwellings, military or defensive sites, and a school. None of the 17 previously identified archaeological sites located within a one-mile radius of the project area have been evaluated for listing on the NRHP.

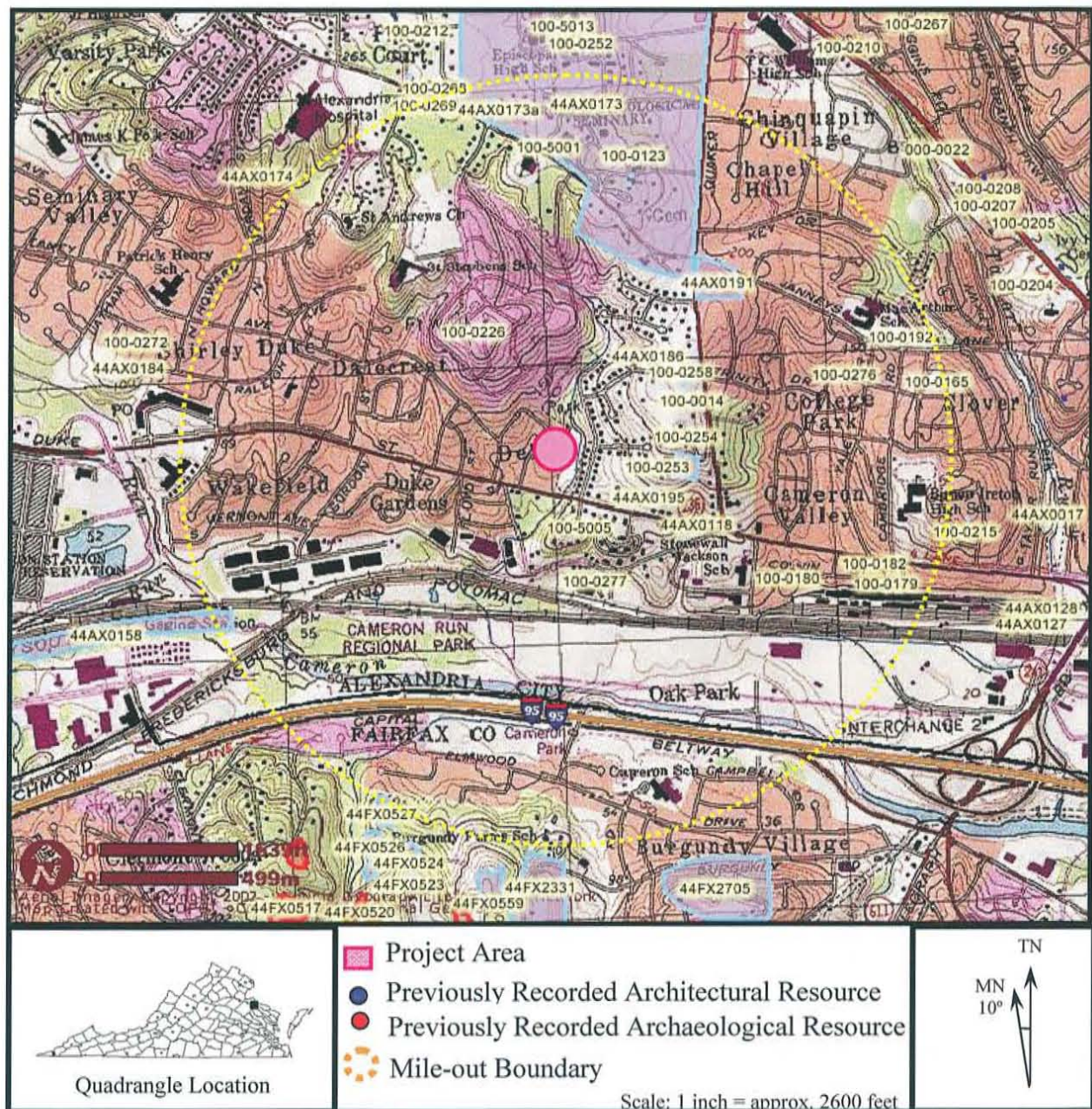


Figure 9. Detail of Annandale, VA and Alexandria, VA USGS Quadrangles depicting the location of the project area and previously identified archaeological resources within a one-mile radius. (USGS/Maptech 1998).

Table 1. Previously Identified Archaeological Sites Within a One-Mile Radius of the Project Area

Site Number	Type	Association	Reference
44AX0118	Single dwelling	Historic/Unknown	Alexandria Archaeology
44AX0158	Railroad bed	19 th Century	Louis Berger Associates, Phase I
44AX0173	Farmstead, hospital, military camp, school	19 th and 20 th Century	John Milner Associates (JMA), Phase I
44AX0174	Indeterminate	2 nd half 19 th Century – 20 th century; Prehistoric/Unknown	Archaeological Society of Virginia
44AX0184	Other (Time Capsule Vault)	20 th Century	
44AX0186	Earthworks	2 nd half 19 th Century	JMA, Phase I
44AX0191	Single dwelling, military camp	2 nd , 3 rd quarter 19 th Century	Thunderbird Archaeological Associates (TAA), Phase I
44AX0193	Military camp	19 th Century	TAA, Phase I-III
44AX0195	Camp	3 rd quarter 19 th Century	JMA, Phase I
44FX0523	Other	3 rd quarter 19 th Century, 4 th quarter 20 th Century, Prehistoric/Unknown	Fairfax County
44FX0524	Indeterminate	Prehistoric/Unknown	Fairfax County
44FX0525	Indeterminate	Prehistoric/Unknown	Fairfax County
44FX0526	Indeterminate	Unknown	Fairfax County
44FX0527	Indeterminate	Prehistoric/Unknown	Fairfax County
44FX0559	Other	Unknown	Fairfax County
44FX2331	Single dwelling	4 th quarter 17 th Century	Fairfax County Civil War Sites Inventory, Balicki 2002
44FX2705	Camp, single dwelling, trash scatter	3 rd quarter 19 th Century, 20 th Century	TAA, Phase I

Architectural Resources

While no previously recorded architectural resources were identified within the project area, 26 architectural resources were located within a one-mile radius of the project area (Figure 7, Table 2). Two resources dated to the eighteenth century, 13 to the nineteenth century, and 10 to the twentieth century (one with no date given). They included 19 dwellings, two educational institutions, a library, a fort, a commercial building, a mill, and a post office. Half of the architectural resources were dwellings dating from the mid-nineteenth century to the twentieth century.

Table 2. Previously Identified Architectural Resources Within a One-Mile Radius of the Project Area

Resource No.	Name	Date	Type/Style	NRHP Recommendation
100-014	Fort William	1862	Fort	
100-0123	Protestant Episcopal Theological Seminary	1800-1879	Seminary/various	VLR/NRHP
100-0165	Pres. Gerald Ford House	1955	Single dwelling	VLR/NRHP/NHL
100-0179	Colvin St., 310	1900	Commercial	
100-0180	Colvin St., 3220	1910	Single dwelling/bungalow	
100-0182	Duke St., 3020	1930	Single dwelling/mid 19 th century	
100-0192	Janney's Lane, 1001	1840	Single dwelling/Late Victorian	
100-0215	Longview Dr., 126	1774	Single dwelling/Federal	
100-0216	Longview Dr., 200	1824	Single dwelling/Federal	
100-0226	Muckcross, 4007 Moss Pl.	1830	Single dwelling/Late 19 th and 20 th century Revivals	
100-0252	Hoxton Hall/Episcopal High School	1805	Education/Classic Revival Federal	NRHP
100-0253	Quaker Lane, 108 N	1924	Single dwelling/ mid-19 th Century	
100-0254	Quaker Lane, 208 N	1909	Single dwelling/Dutch Colonial	
100-0255	Quaker Lane, 318 N	1814	Single dwelling/ Colonial Revival	
100-0256	Quaker Lane, 399 N	1898	Single dwelling/Queen Anne	
100-0257	Quaker Lane, 502 N	1793	Single dwelling/ Italianate	
100-0258	Quaker Lane, 504 N	1900	Single dwelling/Late Victorian	
100-0268	Seminary Rd., 4103	1850	Single dwelling/Queen Anne	
100-0269	Seminary Rd., 4112	1885	Single dwelling/Queen Anne	
100-0270	Seminary Rd., 4135	1910	Single dwelling/Late 19 th -early 20 th Century	
100-0272	Strath'slane Pl.,	1860	Single dwelling/Federal	

Table 2. Previously Identified Architectural Resources Within a One-Mile Radius of the Project Area

	4630			
100-0276	Vassar Lane, 1105	1930	Single dwelling/Colonial Revival	
100-0277	Wheeler Ave., 3610	1800	Mill	
100-5001	Seminary Post Office	1850	Government	
100-5005	Cockrell Ave., 43	1967	Single dwelling	
100-5013	Bryan Library		Education	

Expected Results

The project area includes an intermittent drainage that feeds into Cameron Run. This location may have been an attractive location for prehistoric sites dating to the Middle and Late Archaic Periods. At least five prehistoric camps were located within a one-mile radius of the project area (see Table 1).

Historic maps also indicate that the general vicinity of the project area was utilized for domestic occupation and agricultural exploitation beginning in the middle of the 18th century and continuing to the present. The project area is outside of the Alexandria Historic District, in a region that was not developed as part of the city until the mid-twentieth century (see Figures 4 & 5).

Taking these facts into consideration and calculating the number of archaeological and architectural sites located within the vicinity of the project area, the potential for identifying previously unknown resources from both the historic and prehistoric eras within the study area would have been moderate. Due to the low acreage of the property and the major 20th century construction disturbances therein, the probability of recovery of intact cultural resources should be considered low; however, it should be noted with attention many sites have been recovered in the Alexandria area despite major land modification and modern construction. There is precedent for the recovery of Civil War related resources in disturbed areas, such as the case of many of the previously recorded Civil War resources within a mile radius of the project area (i.e. 44AX191, 193, 199, and 200), which were all recorded in developed areas with some integrity. In lieu of this precedent, extensive testing was conducted in all areas of the project area, despite the existence of modern disturbance.

Methods

Archival Research

Documentary and cartographic research on the history of the project area was conducted using the resources of the VDHR, the Library of Virginia, the Virginia Historical Society, the Central

Rappahannock Regional Library, the Simpson Library of Mary Washington College, as well as the Office of Historic Alexandria and the Alexandria Archaeology Museum.

Field Methods

The archaeological survey strategy consisted of systematic shovel testing across the entire project area. Areas of surface exposure were inspected and augmented with shovel testing at 25-foot intervals. All shovel tests were at least 1.0 foot in diameter and were excavated to sterile subsoil. Soil from each shovel test was screened through ¼-inch hardware cloth, and representative soil profiles were recorded on standardized forms using Munsell color designators and U. S. Department of Agriculture soil texture terminology (*Munsell Soil Color Charts* 1994). Archaeologists recorded a stratigraphic profile of a representative shovel test hole on a standardized shovel test form. The location of each shovel test hole was recorded on a survey map of the project area.

A metal detecting survey was conducted across the project area. The survey was conducted by walking transects with a sweep of approximately five feet centered on transects five feet apart. The CRI archaeologists were assisted Mr. Michael O'Donnell in this effort. Field personnel excavated all positive metal targets and created a base map indicating all locations with artifacts. An inventory of all artifacts recovered was prepared, and the base map was keyed to allow for a differentiation between significant and insignificant finds. The modern metal artifacts were discarded after being inventoried.

Definitions

This archaeological survey utilized two designations for identified resources: the *archaeological site* and the *archaeological location*. An *archaeological site* is regarded as any apparent location of human activity not limited to simple loss, casual or single-episode discard, and having sufficient archaeological evidence to indicate that further testing would produce interpretable archaeological data.

In contrast, an *archaeological location* is defined as an area marked by surface indications and little else, and/or limited to simple loss, casual or single-episode discard which has low potential of possessing interpretable archaeological resources. Some areas with archaeological resources determined to be less than 50 years old may be recorded as locations. Examples of locations would be isolated projectile point finds, or scatters of less than three historic artifacts. Locations may also be defined as isolated finds of questionable lithic material, such as possible fire-cracked rock or debitage.

In application, both of these definitions require a certain degree of judgment in the field and consideration of a number of variables. Contextual factors such as prior disturbance and secondary deposition must be taken into account. The representativeness of the sample, as measured by such factors as the degree of surface exposure and shovel test interval, must also be considered when determining the nature of an archaeological resource. Both *sites* and *locations* should ultimately be accorded serious consideration as potentially important traces of past human activity.

Laboratory Methods

Any archaeological data and specimens collected during Phase I survey projects are transported to CRI's laboratory in Fredericksburg, Virginia, for processing and analysis. Prior to washing, artifacts from a given provenience are first emptied into a screened basket and sorted. Next, the provenience information from the field bags is confirmed with the bag catalog and transferred onto bag tags. Stable objects are washed with tap water using a soft brush, with careful attention paid to the edges of ceramics and glass to aid in the identification of body type and to assist in mending. Washed items are then placed by provenience on a drying rack.

Once dry, the artifacts are bagged by provenience and material type. Artifacts of a given provenience are placed in clean 2 ml thick re-sealable polyethylene bags that have been perforated to allow air exchange. Each grouped material type is placed in a separate plastic bag (i.e., all glass in one bag, all brick fragments in one bag, etc.) and each of these individual type bags are then placed in a larger bag with the bag tag noting the provenience.

After processing and bagging, the entire artifact assemblage is then cataloged for analysis. Stylistic attributes are described using current terminology and are recorded by count into a database for analysis. Once all the artifacts are cataloged, ceramics are then pulled from their bags and marked with correct provenience information. Diagnostic ceramics are sorted out and grouped together based on type or ware and/or vessel or function and checked for crossmends.

The analysis of prehistoric lithic artifacts is aided by reference works such as *Projectile Point Typology for the Commonwealth of Virginia* (Hranicky 2001), *The Formative Cultures of the Carolina Piedmont* (Coe 1964), *Stone Age Spear and Arrow Points of the Midcontinental and Eastern United States* (Justice 1995), and *Second Preliminary Report: The St. Albans Site, Kanawha County, West Virginia, 1964-1968* (Broyles 1971).

Analysis of historic artifacts is aided by reference works such as *The Parks Canada Glass Glossary* (Jones and Sullivan 1989), the *Guide to Artifacts of Colonial America* (Noel Hume 1969), and the *Colonial Williamsburg Foundation Laboratory Manual* (Pittman et al. 1987).

All materials generated by this project will be curated according to the standards outlined in 36 CFR Part 79 ("Curation of Federally-Owned and Administered Archaeological Collections"). All processed artifact bags are deposited in acid-free Hollinger boxes for permanent storage and will be retained in the CRI Richmond, Virginia laboratory facility, which meets or exceeds all CFR Part 79 federal standards.



V. SURVEY RESULTS

CRI conducted a Phase I archaeological investigation of 12 lots at Taft Avenue and Donelson Street, as well as an adjacent stream restoration area located directly east of the house lots, in the City of Alexandria, Virginia, in November, 2005. The Phase I survey employed the systematic excavation of shovel tests at 25-foot intervals and a metal detector sweep of the project area. A total of 151 shovel tests were excavated across the project area; 60 shovel tests were excavated within the 12 house lots, and 91 shovel tests were excavated within the boundaries of the stream restoration area. None of the shovel tests contained cultural materials and no cultural features were identified. The metal detector sweep recovered 23 artifacts and a number of modern items that were discarded in the field. Recovered artifacts included three Civil War-era Minie balls and several metal objects. Some of the metal items may also be related to a Civil War camp, such as a tin folding plate, fragments of metal containers, and a small brass buckle.

Shovel tests excavated within the stream restoration area east of the Taft Avenue house lots revealed heavily disturbed contexts. Multiple graded fill layers were encountered, especially on the west bank of the stream. This is likely due to earlier stream restoration efforts. The south side of the stream restoration area revealed eroded soils with large cobbles present. As the stream bed course has been altered, erosion throughout the project area is likely the result of a shifting stream bed, and previous related stream restoration efforts. The construction of a small playground located just north of the stream restoration area also contributed to the disturbed nature of the project area. Civil War related cultural material recovered within the stream restoration area included one fired lead shot, one Minie ball fragment, and several corroded metal fragments. Modern trash found within the project area (bottle glass, plastic, and aluminum) was recorded and discarded.

The metal detector sweep recovered 13 artifacts and a number of modern items that were discarded in the field. Recovered artifacts included three Civil War-era Minie balls and several unidentified metal objects. No archaeological sites or architectural resources were identified during the course of the survey. The shovel test profiles revealed severely disturbed soils within a majority of the project area, a likely result of construction of the houses within the surveyed lots in the mid-twentieth century.

The shovel testing revealed severely disturbed soils across much of the house lot project area. The typical disturbed shovel test contained 0.2 feet of dark yellowish brown topsoil (10YR4/4) over a disturbed layer of brownish yellow (10YR6/6) gravelly clay fill, which extended to at least 1.6 feet below grade. Evidence of disturbance within the lots was also demonstrated by artificial terracing that coordinated with the lot boundaries. Each lot has been leveled off and a 1 - 2 foot rise was observed for each house lot moving north along Taft Avenue. There was also evidence of underground heating fuel tanks on lots 3708 and 3712, and possibly a septic tank on lot 3700.

Shovel tests conducted within the stream restoration area revealed eroded and disturbed soils. The typical eroded shovel test contained 0.3 feet of dark grayish brown clayey loam topsoil (10YR 3/2) over a hydrated yellowish brown sandy clay (10YR 6/8). The typical disturbed shovel test, located primarily on the west bank and north side of the project area, contained 0.4 feet of dark grayish brown clayey loam (10YR 3/1) over 0.3 feet of grayish brown mottled with dark yellowish brown (10YR 4/2 mottled with 10YR 4/6) clay over, terminating at 1.2 feet below

ground surface in a dark yellowish brown (10YR 4/6) clay. Many of the shovel tests in this area also revealed a mixed soil context, with fill layers interlaced overlaying a cobble layer which represents the original stream bed location.

Only a small segment of the house lot project area contained stratigraphy that appeared to remain intact. This was to the east of 3700 Taft Avenue, in a small section of the side yard. A typical shovel test profile here consisted of two strata sealing subsoil. The area measured only some 12 by 20 feet and was interrupted by a sidewalk to the west and what was likely a septic tank, or other subsurface concrete feature to the south. Taft Avenue was to the north and the property boundary was to the east. Stratum I (Ao) was a brown (10YR4/3) sandy loam that extended to 0.3 feet below the surface. Stratum II was a yellowish brown (10YR5/4) sandy loam Ap horizon that extended to 0.8 feet below the surface and sealed the yellow (10YR7/6) sandy clay subsoil.

VI. CONCLUSIONS AND RECOMMENDATIONS

In November 2005, Cultural Resources, Inc. (CRI) conducted a Phase I archaeological survey of 12 lots on Taft Avenue and Donelson Street in the City of Alexandria, Virginia. Subsequently, CRI conducted a Phase I archaeological survey of a stream restoration area east of the Taft Avenue lots in March of 2007. Each lot contains a small frame house constructed in the mid-twentieth century. The stream restoration area adjacent to the Taft Avenue lots is an open, partially disturbed area featuring concrete culverts and modern storm water management additions. The goal of the survey was to identify all archaeological sites within the project area and to obtain sufficient information to make recommendations about the further research potential of each resource based on potential eligibility for listing on the NRHP.

Due to the low acreage of the property and the major 20th century construction disturbances therein, the probability of recovery of intact cultural resources was considered low; however, it should be noted that intact Civil War era sites have been recorded in the Alexandria area despite major land modification and modern construction. There is precedent for the recovery of Civil War related resources in disturbed areas, such as the case of many of the previously recorded Civil War resources within a mile radius of the project area (i.e. 44AX191, 193, 195, 199, and 200), which were all recorded in developed areas with some integrity. In lieu of this precedent, extensive testing was conducted in all areas of the project area, despite the existence of modern disturbance.

Archaeologists conducted a surface inspection of the project area and excavated a total of 151 shovel tests at 25-foot intervals. None of the shovel tests contained cultural materials and no cultural features were identified. The survey revealed severely disturbed soils within a majority of the project area, a likely result of the construction and use of the homes on the Taft Avenue lots. Shovel tests located in the stream restoration area revealed heavily eroded contexts, as well as graded and disturbed soils, most likely the result of previous stream restoration efforts. A detailed metal detector survey yielded multiple modern metal items and 23 historic artifacts, including three Minie balls. The Minie balls are likely the result of temporary use of the property or troop movements in the vicinity. Much of the project area contained disturbed soils, likely a result of landscaping and construction activities related to the mid-twentieth century houses that are present on each of the twelve lots.

Due to the paucity of artifacts recovered within the stream restoration area, the recovered artifacts in the area were interpreted as isolated finds, most likely associated with very limited activity between Civil War encampments.

Due to the paucity of cultural materials and the disturbed nature of the property, ***CRI recommends that no further work is required within the project area at Taft Avenue and Donelson Street, or the adjacent stream restoration area in the City of Alexandria, Virginia.***



Plate 1. View of 3700 Taft Avenue (front) , facing southwest.



Plate 2. View of 3709 Taft Avenue (front), facing southeast.



Plate 3. View of 3704 Taft Avenue showing landscaping and landform interruption, facing west.



Plate 4. 3721 Taft Avenue, front yard--major ground disturbance (STP J-1).



Plate 5. Overview drainage area from 15' east of STP M-6.



Plate 6. 3713, 3709, 3705 Taft Avenue-view of backyards, facing south.



Plate 7. 3704 Taft Avenue- backyard distrubance (STP B-7).



Plate 8. 3712 Taft Avenue-backyard ground disturbance.

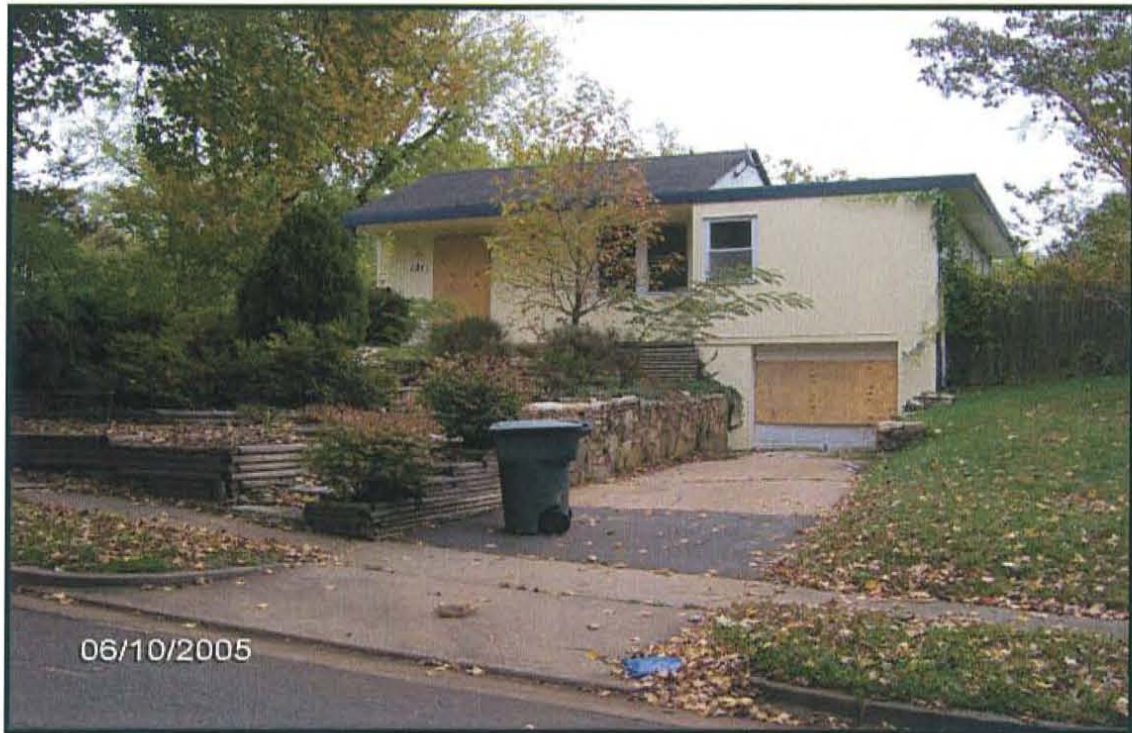


Plate 9. View of 131 North Donelson (front), facing east.



Plate 10. View of 123 North Donelson (front), facing east.



Plate 11. View of slope/disturbance along proposed water line, facing northwest (STP M5).

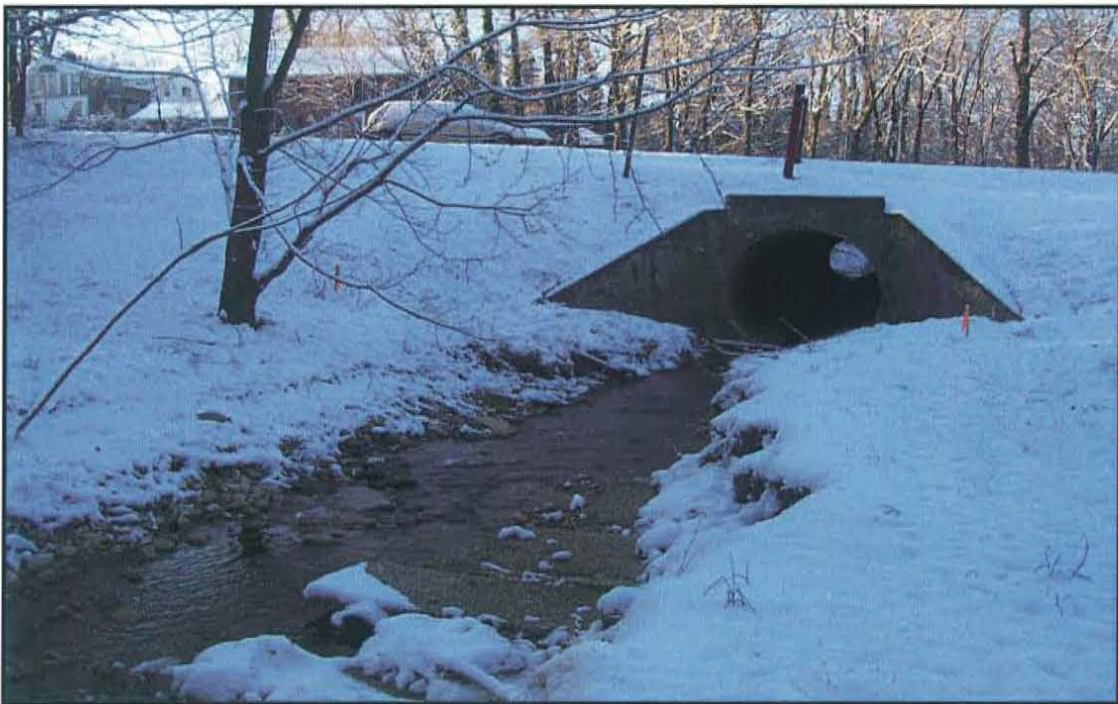


Plate 12. Overview of south end of stream restoration area showing modern storm water management disturbance, facing southwest.



Plate 13. Profile of west stream bank cut, facing west.



Plate 14. General overview of the stream restoration area from west bank, facing north.



Plate 15. North end of the stream restoration area showing small bridge crossing, facing northeast.



Plate 16. Large drainage pipe extending from the west bank of the stream cut, facing southwest.



Plate 17. Several historic artifacts recovered during the Phase I Archaeological survey associated with the Isolated Archaeological Finds within the project area.



Plate 18. Metal artifacts recovered during the Phase I Metal Detection Survey of the project area.

REFERENCES

Alexandria Archaeology

- 1996 City of Alexandria Archaeological Standards. On file at the Alexandria Archaeology Office of Historic Alexandria. Alexandria, Virginia.

Anderson, David G.

- 1990 The Paleoindian Colonization of Eastern North America: A View from the Southeastern United States. In *Early Paleoindian Economics of Eastern North America*, edited by K. B. Tankersley and B. L. Isaac, pp. 163-216. Research in Economic Anthropology, supplement 5. JAI Press, Greenwich, Connecticut.

Anderson, David G., Lisa D. O'Steen, and Kenneth Sassaman

- 1996 Environmental and Chronological Considerations. In *The Paleoindian and Early Archaic Southeast*, edited by David G. Anderson and Kenneth E. Sassaman, pp. 3-15. The University of Alabama Press, Tuscaloosa, Alabama.

Anonymous

- 1864 *Topographical map of the District of Columbia and adjacent areas in Virginia, showing fortifications*, LC Civil War maps (2nd ed.)

Anonymous

- 1862 *Surveys of the military defences, vicinity of Washington, D.C. / compiled at Divison Hd. Qrs. of Gen. Irvin M'Dowell, U.S.A., Arlington*, LC Civil War maps (2nd ed.)

Artemel, Janice G., Elizabeth A. Crowell, and Jeff Parker

- 1987 *The Alexandria Slave Pen, The Archaeology of Urban Captivity*. Engineering-Science, Inc., Washington, D.C.

Advisory Council for Historic Preservation (ACHP)

- 2000 36 CFR 800: Part 800- Protection of Historic and Cultural Properties. Federal Register, September 2, Washington, D.C.

Anderson, D.G. and G.T. Hanson

- 1988 *Early Archaic Settlement in the Southeastern United States: A Case Study from the Savannah River*. *American Antiquity* 53:262-286.

Barber, Michael B., J. Mark Wittkofski, and Michael F. Barber

- 1992 *An Archaeological Overview of Stafford County, Virginia*. Preservation Technologies, Roanoke, Virginia.

Balicki, Joseph, Bryan Corle, Kerri Holland, et al

- 2006 *ARCHAEOLOGICAL TESTING (44AX199) 108 N. QUAKER LANE, SMUCKER PROPERTY ALEXANDRIA, VIRGINIA*, prepared by John Milner Associates, Inc. for Alexandria Archaeology, Office of Alexandria, Alexandria, Virginia.

Binford, Lewis R.

- 1980 Willow Smoke and Dogs' Tails: Hunter-Gatherer Settlement Systems and Archaeological Site Formation. *American Antiquity* 45:4-20.

Blanton, Dennis B.

- 1996 Accounting for Submerged Mid-Holocene Archaeological Sites in the Southeast: A Case from the Chesapeake Bay Estuary, Virginia. In *Archaeology of the Mid-Holocene Southeast*, edited by Kenneth E. Sassaman and David G. Anderson, pp. 200-217. University Press of Florida, Gainesville.

Broyles, Bettye J. (editor)

- 1971 *Second Preliminary Report: The St. Albans Site, Kanawha County, West Virginia*. Report of Archeological Investigations No. 3. West Virginia Geological and Economic Survey, Morgantown.

Brown, G. B.

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

Chapman, Jefferson

- 1994 *Tellico Archaeology: 12,000 Years of Native American History*. Revised edition. Publications in Anthropology No. 41. The University of Tennessee Press, Knoxville.

Chapman, Jefferson, and Andrea Brewer Shea

- 1981 "The Archaeobotanical Record: Early Archaic Period to Contact in the Lower Little Tennessee River Valley." *Tennessee Anthropologist* VI(1):61-84.

Coe, Joffre L.

- 1964 *The Formative Cultures of the North Carolina Piedmont*. Transactions of the American Philosophical Society 54, no. 5. Philadelphia.

Cressey, Pamela J.

- 1982 A Preliminary Historical Report; the Baptist Cemetery Association of Alexandria Virginia, located near Holland Lane. Alexandria Archaeology, Office of Historic Alexandria, City of Alexandria.

Daniel, I. Randolph, Jr.

- 1996 Raw Material Availability and Early Archaic Settlement in the Southeast. In *The Paleoindian and Early Archaic Southeast*, edited by David G. Anderson and Kenneth E. Sassaman, pp. 84-91. The University of Alabama Press, Tuscaloosa.

- 1998 *Hardaway Revisited: Early Archaic Settlement in the Southeast*. The University of Alabama Press, Tuscaloosa.

Delcourt, Paul A., and Hazel R. Delcourt

- 1981 Vegetation Maps for Eastern North America: 40,000 Years B. P. to Present. In *Geobotany: An Integrating Experience*, edited by R. Romans, pp. 123-66. Plenum Press, New York.

- 1983 Late-Quaternary Vegetational Dynamics and Community Stability Reconsidered. *Quaternary Research* 19:265-71.

Dent, Richard J., Jr.

- 1995 *Chesapeake Prehistory: Old Traditions, New Directions*. Plenum Press, New York.

Egloff, Keith T., and Stephen R. Potter

- 1982 Indian Ceramics from Coastal Plain Virginia. *Archaeology of Eastern North America* 10:95-117.

Embry, James M., Lynn D. Jones, Joseph Balicki

- 2005 *DOCUMENTARY STUDY, ARCHAEOLOGICAL EVALUATION AND RESOURCE MANAGEMENT PLAN FOR VIRGINIA THEOLOGICAL SEMINARY FACULTY HOUSING, ALEXANDRIA, VIRGINIA*, Alexandria Archaeology, Alexandria, Virginia

Evans, D'anne

- 1988 *Prince William County: A Pictorial History*. Donning Company, Norfolk, Virginia.

Gardner, William M.

- 1989 "An Examination of Cultural Change in the Late Pleistocene and Early Holocene (circa 9200 to 6800 B.C.)." In *Paleoindian Research in Virginia: A Synthesis*, edited by J. Mark Wittkofski and Theodore R. Reinhart, pp. 5-52. *Special Publication No. 19* of the Archeological Society of Virginia.

Gardner, William, and Carole Nash

- 1987 "Early and Middle Woodland Ceramics in the Shenandoah Valley, Potomac Piedmont and Inner Potomac Coastal Plain." Paper presented to the Archaeological Society of Virginia Ceramics Symposium, Charlottesville, Virginia.

Geier, Clarence R.

- 1990 The Early and Middle Archaic Periods: Material Culture and Technology. In *Early and Middle Archaic Research in Virginia: A Synthesis*, edited by Theodore R. Reinhart and Mary Ellen N. Hodges, pp. 81-98. Archeological Society of Virginia Special Publication No. 22. The Dietz Press, Richmond.

Goodyear, Albert C., III

- 1974 *The Brand Site: A Techno-functional Study of a Dalton Site in Northeast Arkansas*. Research Series No. 7. Arkansas Archaeological Survey, Fayetteville, Arkansas.

- 1979 *A Hypothesis for the Use of Cryptocrystalline Raw Materials Among Paleoindian Groups of North America*. Research Manuscript Series No. 156. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

- 1982 The Chronological Position of the Dalton Horizon in the Southeastern United States. *American Antiquity* 47:382-95.

Goodyear, Albert C., III, James L. Michie, and Tommy Charles

- 1989 The Earliest South Carolinians. In *Studies in South Carolina Archaeology: Essays in Honor of Robert L. Stephenson*, edited by A. C. Goodyear, III and Glen T. Hanson, pp. 19-52. Anthropological Studies No. 9. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

Harrison, Fairfax

1924 Landmarks of Old Prince William; A Study in Origins in Northern Virginia. Privately Printed. On file at Lloyd House, Alexandria Public Library, Alexandria.

Hennessy, John

1989 *The First Battle of Manassas: An End to Innocence, July 18-21, 1861*. H. E. Howard, Inc. Lynchburg, Virginia.

Herrman, Augustine

1673 *Virginia and Maryland*. On file at VDHR, #6.01

Hodges, Mary Ellen N., and Charles T. Hodges, editors

1994 *Paspahegh Archaeology: Data Recovery Investigations of Site 44JC308 at The Governor's Land at Two Rivers, James City County, Virginia*. Prepared by James River Institute for Archaeology, Inc.

Holmes, William H.

1903 *Aboriginal Pottery of the Eastern United States*. Twentieth Annual Report of the Bureau of American Ethnology, Washington, D.C.: GPO.

Hranicky, William Jack

2001 *Projectile Point Typology for the Commonwealth of Virginia*. Virginia Academic Press, Alexandria, Virginia.

Jones, Oliver, and Catherine Sullivan

1989 *The Parks Canada Glass Glossary*. National Historic Parks and Sites, Canadian Parks Service, Environment Canada, Ottawa.

Justice, Noel D.

1995 *Stone Age Spear and Arrow Points of the Midcontinental and Eastern United States*. Indiana University Press, Bloomington.

Kaplan, Barbara Beigun

1993 *Land and Heritage in the Virginia Tidewater: A History of King and Queen County*. Cadmus Fine Books, Richmond, Virginia.

Kane, Sharyn and Richard Keeton

1994 *Beneath the Waters: Archaeological and Historical Studies of 11,500 Years Along the Savannah River*. Interagency Archaeological Services Division, National Park Service-Southeast Region, Atlanta.

Klein, Michael J. and Thomas Klatka

1991 Late Archaic and Early Woodland Demography and Settlement. In *Late Archaic and Early Woodland Research in Virginia: A Synopsis*, edited by Theodore R. Reinhart and Mary Ellen N. Hodges, pp. 139-184. Council of Virginia Archaeologists and the Archaeological Society of Virginia. The Dietz Press, Richmond.

Kulikoff, Allan

1986 *Tobacco and Slaves: The Development of Southern Cultures in the Chesapeake, 1680-1800*. University of North Carolina Press, Chapel Hill.

Louis Berger & Associates, Inc. (LBA)

1991 Phase IB Cultural Resource Survey of the Clermont Avenue Interchange, City of Alexandria and Fairfax County, Virginia.

Lukezic, Craig

1990 "Soils and Settlement Location in 18th Century Colonial Tidewater Virginia." *Historical Archaeology* 24(1): 1-17.

Magnus, Charles

1863 *Birds eye view of Alexandria, Va.* New York, Washington D.C.

Maptech, Inc.

1998 *Terrain Navigator*. Software Program. Greenland, NH.

McAvoy, Joseph M., and Lynn D. McAvoy

1997 "Archaeological Investigations of Site 44SX202, Cactus Hill, Sussex County, Virginia." *Research Report Series No. 8*, Virginia Department of Historic Resources.

McLearen, Douglas C.

1991 Phase III Archaeological Investigations of the 522 Bridge Site (44WR329), Warren County, Virginia. Virginia Commonwealth University Archaeological Research Center, Richmond. Report on File, Virginia Department of Historic Resources, Richmond.

McLearen, Douglas C., and L. Daniel Mouer

1989 "Middle Woodland II Typology and Chronology in the Lower James River Valley of Virginia." Paper presented at the Middle Atlantic Archaeological Conference, Rehoboth Beach, Delaware.

Miller, T. Michael

1983 The Saga of Shuter's Hill. *The Historical Society of Fairfax, Virginia*. 19:75-108.

Mouer, L. Daniel

1991 The Formative Transition in Virginia. In *Late Archaic and Early Woodland Research in Virginia: A Synthesis*, edited by Theodore R. Reinhart and Mary Ellen N. Hodges. Special Publication No. 23. The Dietz Press, Richmond.

Munsell Color

1994 *Munsell Soil Color Charts*. Macbeth Division of Kollmorgen Instruments Corporation, New Windsor, NY.

Netherton, Nan, editor

1992 *Fairfax County a Virginia: A History*. Originally published 1978. 250th Anniversary Commemorative Edition. Fairfax County Board of Supervisors, Fairfax, Virginia.

Netherton, Ross and Nan Netherton

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

Noel-Hume, Ivor

1969 *A Guide to Artifacts of Colonial America*. Alfred A. Knopf, New York.

Pittman, William, et al.

1987 *Laboratory Manual, Department of Archaeological Research*, Colonial Williamsburg Foundation. Williamsburg, Virginia.

Poland, Charles Preston, Jr.

1976 *From Frontier to Suburbia*. Walsworth Publishing Co., Marceline, Missouri.

Potter, Stephen R.

1993 *Commoners, Tribute, and Chiefs: The Development of Algonquian Culture in the Potomac Valley*. University of Virginia Press, Charlottesville.

Reed, Patrick

1992 Fairfax County: The Electric Connection, 1900-1925. In *Fairfax County a Virginia: A History*, edited by N. Netherton, pp. 251-391. Originally published 1978. 250th Anniversary Commemorative Edition. Fairfax County Board of Supervisors, Fairfax, Virginia.

Smith, John

1610 *Virginia Discovered and Discribed [sic]*. Virginia Department of Historic Resources, Richmond, VA.

Schedler, J.

1862 *Map of n. eastern Virginia and vicinity of Washington / compiled in Topographical Engineers Office at Division Head Quarters of General Irvin Mc Dowell, Arlington, from published and manuscript maps corrected by recent surveys and reconnaissances*, United States Corps of Topographical Engineers.

Sprouse, E. M.

1975 *Colchester: Colonial Port on the Potomac*. Fairfax County Office of Comprehensive Planning, Fairfax, Virginia.

Stephenson, Robert L., A.L.L. Ferguson, and H.G. Ferguson

1963 *The Accokeek Creek Site: A Middle Atlantic Seaboard Culture Sequence*. Anthropological Papers no. 20. Ann Arbor: Museum of Anthropology, University of Michigan

Stevens, J. Sanderson

1991 *A Story of Plants, Fire, and People: The Paleoecology and Subsistence of the Late Archaic and Early Woodland in Virginia*. In *Late Archaic and Early Woodland Research in Virginia: A Synopsis*, edited by Theodore R. Reinhart and Mary Ellen N. Hodges, pp. 185-220. Council of Virginia Archaeologists and the Archaeological Society of Virginia. The Dietz Press, Richmond.

Sweig, Donald

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.

United States Department of the Interior (USDI)

- 1981 *Department of the Interior's Regulations, 36 CFR Part 60: National Register of Historic Places.* U.S. Department of the Interior, Washington, D.C.
- 1983 *Department of the Interior, Archaeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines.* U.S. Department of the Interior, Washington, D.C.
- 1991 *How to Apply the National Register Criteria for Evaluation. National Register Bulletin 15.* U.S. Department of the Interior, Interagency Resources Division, Washington D.C.

United States Department of War

- 1881 *The War of the Rebellion.* Series I, Vol. II. Government Printing Office, Washington, D.C.

United States Geologic Survey (USGS)/Maptech

- 1998 *Mt. Vernon, VA, 7.5 Minute Series Quadrangle.* Reston, Virginia.
- 1998 *Alexandria, VA, 7.5 Minute Series Quadrangle.* Reston Virginia.

Virginia Department of Historic Resources (VDHR)

- 1992a *Guidelines for Preparing Identification and Evaluation Reports for Submission Pursuant to Sections 106 and 110, National Historic Preservation Act Environmental Impact Reports of State Agencies Virginia Appropriation Act, 1992 Session Amendments.*
- 1992b *How to Use Historic Contexts in Virginia: A Guide for Survey, Registration, Protection, and Treatment Projects.* VDHR, Richmond.
- 1993 *State Curation Standards.* VDHR, Richmond.
- 1997 *Historic Context Guidelines for Preparing Cultural Resource Survey Reports.* Letter from John Kern to DHR Survey Team dated July 16. VDHR, Richmond.
- 2000 *Guidelines for Archaeological Investigations in Virginia, Additional Guidance for the Implementation of the Federal Standards Entitled Archaeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines (48 FR 44716-44742, September 29, 1983).* VDHR, Richmond.

Waltmyer, T.

- 1995 *A Complete History of the Woodbridge Research Facility. Journal of Historic Prince William* 3:40-60.

Ward, H. Trawick and R.P. Stephen Davis Jr.

- 1999 *Time Before History: The Archaeology of North Carolina.* University of North Carolina Press, Chapel Hill.

Woodward, Susan L.

- 1997 "Physiographic Provinces of Virginia." <http://www.runet.edu/~swoodwar/CLASSES/GEOG 202/physprov/physprov.html> accessed 15 August 2003.

Yarnell, Richard A.

1976 "Early Plant Husbandry in Eastern North America." In *Cultural Change and Continuity: Essays in Honor of James Bennett Griffin*, edited by Charles E. Cleland, Academic Press, New York.

APPENDIX A: ARTIFACT CATALOG

Item	Type	Artifact	TPQ	Recovered From	Recovery Method
FS #1	Historic	Metal vessel base rim fragment		25' east of front center, 3716 structure	MD
FS #2	Historic	Gold Ring, interior leaf cut design		25' east of northeast corner, 3716 structure	MD
FS #3	Historic	Metal container, neck and body fragment		12' north of northeast corner, 3704 structure	MD
FS #4	Historic	.54 Caliber Common Rifle Bullet w/ Burnside – Poultney Pattern USA; Burnside carbine dished base	1861	25' south of southeast corner, 3704 structure	MD
FS #5	Historic	Fired Rifle Bullet		20' south of SW corner, 3704 structure	MD
FS #6	Historic	Small metal container; flat, hinged		18' southwest of southwest corner, 3704 structure	MD
FS #7	Historic	.577 Caliber Sharps or Enfield Carbine Rifle Bullet USA; Swagged 5-Point Swage Marks	1861	10' North of center front, 3700 structure	MD
FS #8	Historic	Folded plate tin fragment		20' north of front center, 3700 structure	MD
FS #9	Historic	.52 Caliber Unknown Carbine Rifle Bullet USA; Flat solid base, pointed nose	1842	30' northeast of northeast corner, 3700 structure	MD
FS #10	Historic	Brass bracket fragment		20' east of northeast corner, 3700 structure	MD
FS #11	Historic	Lead slag fragment		40' east of east center, 3700 structure	MD
FS #12	Historic	2 – Lead slag fragments		42' east of east center, 3700 structure	MD
FS #13	Historic	Small brass buckle		8' west of center front, 3713 structure	MD

FS #14	Historic	Shot, round fragment, lead cast, fired condition			MD
FS #15	Historic	Coin, Cast copper alloy, Japanese coin (10 yen), milled edge	1951	MD Hit #21, East bank, Stream Restoration Area, STP	MD
FS #16	Historic	2-Brick fragments; Cartridge case fragment (copper alloy), corroded, unknown; Fired Minie ball fragment, three ring, lead, cast	1848	MD Hit #22, East bank, Stream Restoration Area, STP	MD
FS #17	Historic	Unidentified Iron Object, "L" shaped iron rod, threaded end; Iron "Split" Horseshoe fragment, cast; Iron washer fragment, rolled/sheet metal; Iron rolled/sheet metal Cap/Lid, complete, circular cap; Iron pipe, plumbing/drainage fragment, corroded, threaded end	1837	MD Hit #3, East bank, Stream Restoration Area, STP	MD