

# MOUNT VERNON WOODS PARK

Master Plan Revision

December 16, 2015



## **ACKNOWLEDGEMENTS**

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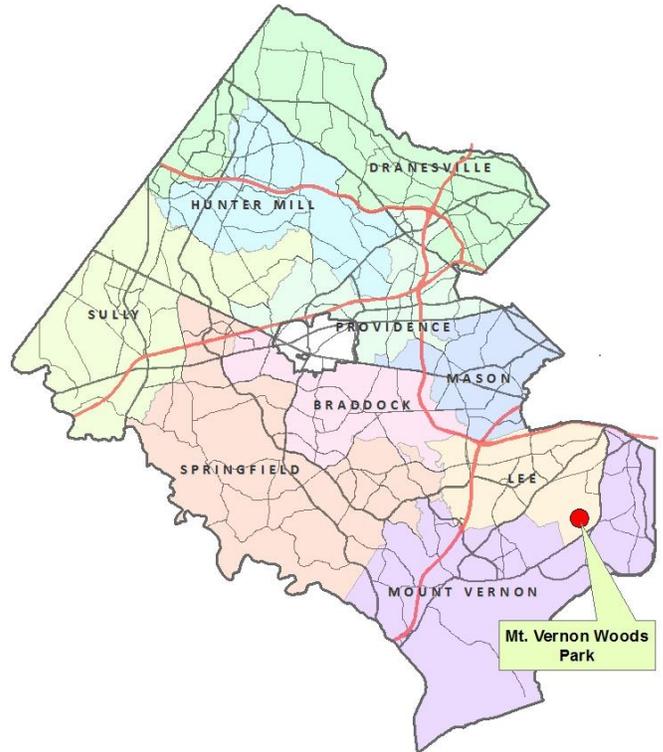
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## INTRODUCTION

### I. PURPOSE AND PLAN DESCRIPTION

The purpose of a Master Plan is to create a long-range vision for the identified park by determining the appropriate uses and resource management for a specific site. During the planning process, the site is considered in the context of the surrounding community and as one park of many within the Fairfax County Park Authority (Park Authority) system. The approved master plan serves as a long-term decision making tool to be referred to before any planning, design/construction projects, resource management activities, or programming is initiated. Master Plans are general in nature and can adapt over time to accommodate changing park users' needs, and management practices. They should be updated as necessary to reflect changes that have occurred both in and around the park.

Figure 1: Location of Mount Vernon Woods Park



### II. PARK MASTER PLANS

Fairfax County is a thriving community that is home to more than one million residents and the base for over two hundred million square feet of commercial, industrial and retail space. The County's residents, work force, and visitors all greatly benefit from the more than 23,000 acres of parkland and a myriad of recreational opportunities provided throughout the county. In 1950, the Fairfax County Park Authority was established with the charge of maintaining the viability and sustainability of this expansive system of parks and facilities. In providing quality facilities and services while protecting the county's cultural and natural resources, the Park Authority seeks to improve the county's quality of life today and well into the future.

In order to achieve its long-range goals and objectives, the Park Authority has established a consistent and equitable approach in the planning of park property and facilities. A key part of this process includes development of Park Master Plans, specific to each park and intended to establish a long-range vision guiding future site development. During the planning process, the site is evaluated to assess its context within the surrounding neighborhoods as well as within the framework of the entire Fairfax County park system. Potential and desired land uses are considered with regard to the ability to establish them sensitively and sustainably with public input as a key component in the decision-making process. When completed, the individual Park Master Plan will serve as a long-term, decision-making tool to guide all aspects of development related to planning, design, construction, resource management, and programming within that given park. To maintain the viability of the Park Master Plan as an effective tool, periodic updates may occur so that the plan accurately reflects the park and

its surroundings, addressing changes that occur over time. The approved Park Master Plan is presented at a conceptual level of detail and future site design and engineering may result in a shift of use location within the park.

### III. PLANNING PROCESS & PUBLIC INVOLVEMENT

The public planning process to revise the Mount Vernon Woods Park Master Plan began in early 2015. The Park Authority held a public information meeting on February 3, 2015, that was attended by about a dozen community members. The majority of the comments centered on the need for new, active facilities to be located in the park closer to Fielding Street to help create a more active and family-friendly park. There was interest in adding a skate park, improved playground, and upgraded picnic facilities. There was also concern for better park maintenance and protection of the wooded area of the park. Prior to the public information meeting, students at Mount Vernon Woods Elementary School were invited to participate in a park planning exercise. Some of the student's ideas and drawings were displayed at the meeting. The students expressed enthusiasm for improving the park with skating facilities, a new playground, sport courts, picnic facilities and a soccer field.

Following the public information meeting, the Park Authority conducted further site analysis, collected additional public comments, reviewed the public comments, and developed a draft revised Master Plan. A community event, "Picnic, Play & Plan" was held at Mount Vernon Woods Park and Elementary School on the evening of June 22, 2015. Beginning at 5:30 p.m., the community was invited to enjoy grilled hot dogs, play games and learn more about the draft master plan revision for Mount Vernon Woods Park. Attendees had the opportunity to view conceptual design maps and talk to park planners, fill out comment cards, post ideas on sticky notes to a poster board, and draw their own park designs.

At 7:00 p.m. a Public Comment Meeting was held in the Mount Vernon Woods Elementary School cafeteria to present the draft master plan revision for Mount Vernon Woods Park to the community. The public was then invited to speak and share their comments on the proposed park plan. Very little critical comment on the draft plan was heard. Most members of the community expressed concern for the need to have a safe and fun outdoor space for children in the neighborhood to play and for the community to gather and socialize. There was good support for a new playground and skatepark within the park. In addition to the oral testimony, over 50 written comments were submitted. Some of the comments received included the request for bathrooms, water fountains, lighting, seating, bike racks, and additional trash cans in the park. Some citizens requested paved trails in the park for jogging, biking, and connecting to Huntley Meadows.

Subsequent to publication of a revised master plan document in August 2015, public concerns were raised pertaining to the need to conduct further natural and cultural resource assessments in the wooded area of the park adjacent to the southern boundary of Huntley Meadows. From September-October 2015 Park Authority staff undertook natural and cultural resource investigations that indicate ground disturbing activities in the northern wooded area of Mount Vernon Woods Park should be avoided. Further information on natural and cultural resources can be found in the Existing Conditions section of this report.

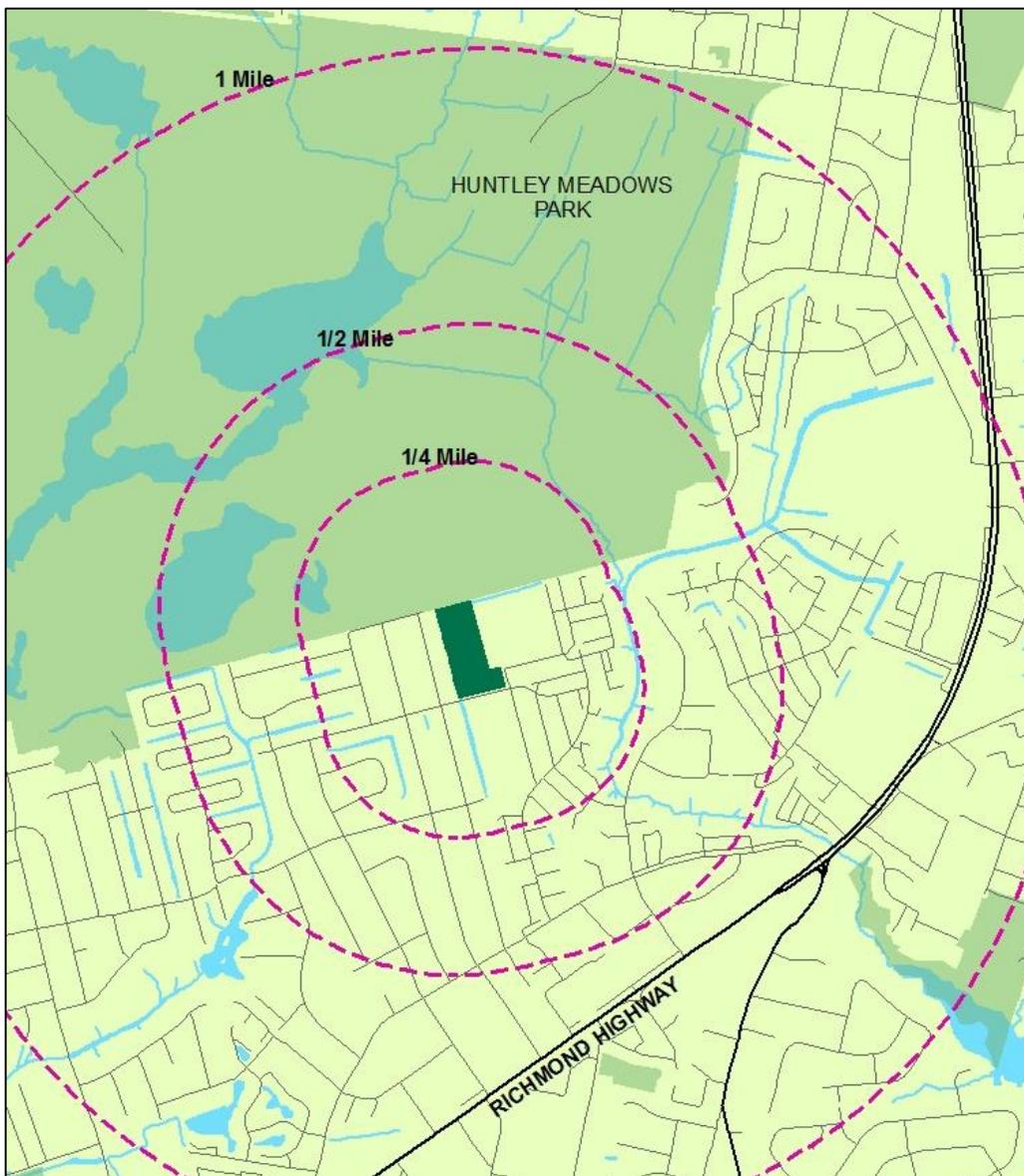
## PART 1: BACKGROUND & EXISTING CONDITIONS

### I. PARK DESCRIPTION & SIGNIFICANCE

#### A. GENERAL DESCRIPTION

Mount Vernon Woods Park is a seven-acre, Local-classified park in the Lee Supervisory District, located at 4014 Fielding Street in the Hybla Valley Section of Alexandria (Figure 2). Currently, about half the park is wooded and the other half consists of an open, grassy area. Built facilities in the park include a picnic pavilion, children’s play area, trails, and benches. Park visitors arrive on foot or park their cars along Fielding Street and the adjacent school property.

Figure 2: Mount Vernon Woods Park Vicinity



*B. AREA CONTEXT*

Mount Vernon Woods Park is bordered to the east by the WPIK radio transmission tower and the Sequoyah Condominium community, Mount Vernon Woods Elementary School to the south, single-family residential neighborhoods to the west, and Huntley Meadows Park to the north. Huntley Meadows is a significant natural and cultural resource preserve of over 1,500 acres with forests, meadows and vast wetlands. Huntley Meadows has a popular nature center and ½ mile boardwalk and is well known as a prime bird watching spot, with over 200 species identified in the park.

*Figure 3: Surrounding Land Uses of Mount Vernon Woods Park*

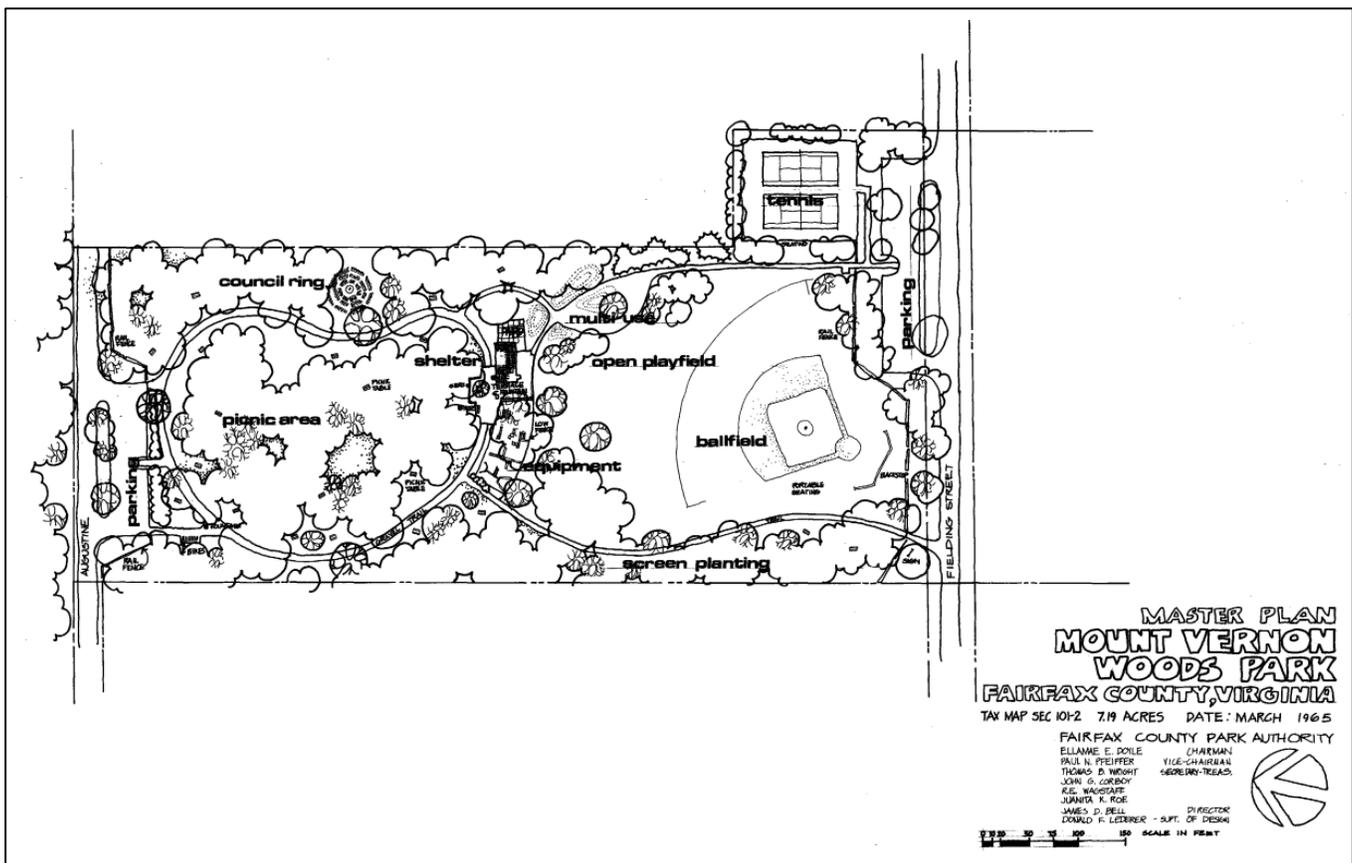


Using the planning geography designated in the Fairfax County Comprehensive Plan, Mount Vernon Woods Park is located in Area IV, Mount Vernon Planning District, Woodlawn Community Planning Sector. The Mount Vernon Planning District is generally bounded by the Potomac River to the south and east, the Capital Beltway and the City of Alexandria to the north, and Huntley Meadows and Fort Belvoir to the west.

*C. ADMINISTRATIVE AND MASTER PLAN HISTORY*

The Park Authority acquired the approximately seven acre parcel that is now Mount Vernon Woods Park through fee simple purchase in 1961. A Park Master Plan (Figure 4) was approved in 1965 and the park was subsequently developed with recreational facilities including a playground, picnic pavilion, baseball diamond, tennis courts, and trails. The baseball diamond and tennis courts have since been removed.

Figure 4: Mount Vernon Woods Park Master Plan approved in 1965



In 1965, the Park Authority obtained an easement on a portion of the adjacent radio tower property “to use and maintain as a park.” The easement was renewed in 1980 when the radio tower property changed ownership. The easement grants the Park Authority “...the right to construct and use facilities

or structures not to exceed fifteen feet in height.” The easement also states that “No plant material shall be placed in said area without the written consent” of the property owner. The area seems to have been used in the past as an auxiliary open play field and the Park Authority continues to mow the area periodically. Figure 5 shows the easement area.

Figure 5: Mount Vernon Woods Park Easement Areas



#### *D. PARK CLASSIFICATION SYSTEM*

The Park Classification System is a general framework intended to guide open space and public facilities planning, and also to assist in the development of public and private land management plans, by grouping parks according to certain common typical characteristics. The Park Classification System specifically supports Countywide Policy Plan Objective 1, Policy a. by outlining the primary purpose, location and access, character and extent of development for the following park classifications. The four park classifications include: Local, District, Countywide, and Resource-Based.

Mount Vernon Woods Park is designated as a Local Park. Local Parks primarily provide facilities for active or passive recreation, or both; areas for scheduled and unscheduled recreation activities and social gathering places; and serve residential, employment and mixed-use centers. In suburban settings, park size will typically be at least 2.5 acres and less than 50 acres, but some local parks may range up to 75 acres. In urban areas, park size is typically less than 5 acres and often less than ½ acre. Visits to local parks will typically be less than two hours.

The character of Local Parks may vary depending on their location within the county. In residential settings, these parks will generally be larger than in urban parts of the county. Local Parks offer open space to those with little or no yards as well as places to informally gather and socialize. Various facility types are appropriate and may include, but are not limited to, open play areas, playgrounds, dog parks, skating features, courts, athletic fields, game areas, trails, trail connections, natural areas, and picnic facilities. Facilities may be lit or unlit. In a suburban setting and depending on the park size, accessibility, and facilities, the service area may be up to 3 miles. In an urban setting, the service area is generally ¼ to ½ mile, or generally within a 5-10 minute walking distance from nearby offices, retail and residences.

The user experience at Local Parks may be casual and informal geared toward social interaction, play and outdoor enjoyment, or may be more structured to support organized sports and park programs. Collocation of a mix of park uses and facilities that support both informal and structured activities is increasingly necessary to meet the county's diverse and varied recreation and leisure needs in an environment where available land is diminishing. To the extent possible, facilities will be planned so that areas that address different needs are compatible.

#### *E. PARK AND RECREATION NEEDS*

The need for park and recreation facilities in Fairfax County is determined through long-range planning efforts. Planning district-level park plans are provided in the Park Authority's *Great Parks, Great Communities Comprehensive Park System Plan*. Mount Vernon Woods Park is located in the Mount Vernon Planning District. Recreation needs are generally met through the provision of park facilities. The Parks and Recreation Needs Assessment provides guidance for parkland and facility needs, and includes a process that considers industry trends, surveys County citizen recreation demand, and compares itself with peer jurisdictions to determine park facility needs. In addition, the Park Authority Board adopts countywide population-based service level standards for parkland and park facilities. Table 1 reflects projected park facility needs in the Mount Vernon Planning District.

Table 1: Mount Vernon Planning District 2020 Facility Needs Analysis

| <b>95,120</b>            | 2010 population               |                                 |                               |  |                                     |
|--------------------------|-------------------------------|---------------------------------|-------------------------------|--|-------------------------------------|
| <b>101,298</b>           | 2020 projected population     |                                 |                               |  |                                     |
| <b>Facility</b>          | <b>Service Level Standard</b> | <b>2010 Existing Facilities</b> | <b>2020 Needed Facilities</b> | <b>2020 Projected (Deficit)/ Surplus</b> | <b>2020 Projected Service Level</b> |
| Rectangle Fields         | 1 / 2,700 people              | 26.0                            | 37.5                          | <b>(11.5)</b>                            | 69%                                 |
| Adult Baseball Fields    | 1 / 24,000 people             | 5.0                             | 4.2                           | <b>0.8</b>                               | 118%                                |
| Adult Softball Fields+   | 1 / 22,000 people             | 0.0                             | 4.6                           | <b>(4.6)</b>                             | 0%                                  |
| Youth Baseball Fields+   | 1 / 7,200 people              | 15.5                            | 14.1                          | <b>1.4</b>                               | 110%                                |
| Youth Softball Fields+   | 1 / 8,800 people              | 12.0                            | 11.5                          | <b>0.5</b>                               | 104%                                |
| Multi-use Sport Courts   | 1 / 2,100 people              | 15.0                            | 48.2                          | <b>(33.2)</b>                            | 31%                                 |
| Playgrounds              | 1 / 2,800 people              | 28.5                            | 36.2                          | <b>(7.7)</b>                             | 79%                                 |
| Neighborhood Dog Parks   | 1 / 86,000 people             | 1.0                             | 1.2                           | <b>(0.2)</b>                             | 85%                                 |
| Neighborhood Skate Parks | 1 / 106,000 people            | 0.0                             | 1.0                           | <b>(1.0)</b>                             | 0%                                  |

+ 60 ft. and 65 ft. diamond fields are assigned to the sport where primarily allocated.

As reflected in the *Great Parks, Great Communities Comprehensive Park System Plan*, the Park Authority also conducted a more localized examination of needs within the Mount Vernon Planning District. Based on the above adopted service level standards and projected population growth, the Mount Vernon Planning District will be deficient in the provision of rectangle fields, adult softball fields, multi-use sport courts, playgrounds, neighborhood dog parks, and neighborhood skate parks in the year 2020. Needs are reassessed every decade and may shift over time.

*Great Parks, Great Communities* also serves as a long-range plan for the place-based, physical aspects of the park system, its land, its natural and cultural resources, and its facilities. In this respect, the plan offers recommendations and strategies to improve or enhance the overall park system and specifically Mount Vernon Woods Park. Some of the major recommendations and strategies applicable to the Mount Vernon Woods Park master plan revision include:

- Improve trail access from adjacent residential communities into Huntley Meadows Park.
- Consider additional appropriate locations for dog parks within the district.
- Add recreational facilities and amenities, where appropriate, to parks in the district that are collocated with other civic uses.
- Explore the possibility of adding a neighborhood skate park facility to one of the parks in the district.
- Co-locate play equipment for the full age-range of children wherever possible to increase use of playgrounds by the community.
- Develop all local parks in a way that encourages non-motorized access to the surrounding residential areas.

- Promote shared access and parking agreements when parks are adjacent to other civic uses, such as libraries or schools.
- Designate permanent resource protection zones in park master plans that define appropriate uses and development.
- Direct development of park infrastructure to areas that, when inventoried, reflect few or poor quality natural resources, unless otherwise incompatible.
- Identify, preserve, protect and enhance wetlands within Dogue Creek, Little Hunting Creek and Cameron Run stream corridors.
- Incorporate natural landscaping techniques on parkland, avoid tree loss from development and where possible increase tree canopy.



*View of Mount Vernon Woods Park from Fielding Street*



*Picnic and Play Area*

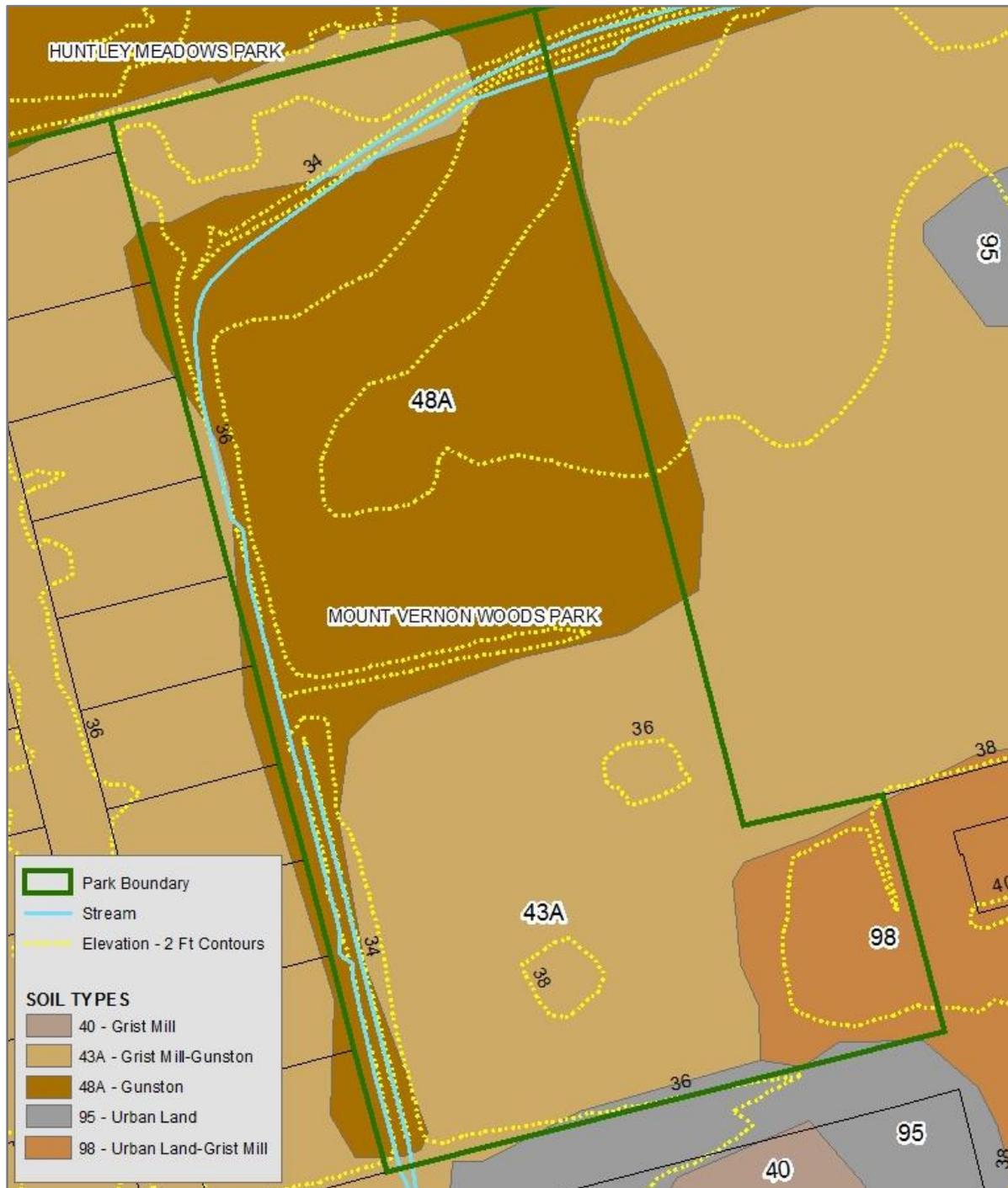
## II. EXISTING CONDITIONS

### A. NATURAL RESOURCES

#### 1. Topography and Soils

The topography of Mount Vernon Woods Park (Figure 6) is relatively flat throughout.

Figure 6: Topography and Soils of Mount Vernon Woods Park



There are three soil types found in Mount Vernon Woods Park. The northern half of the park remains wooded and contains Gunston Soils (48). The developed portions of the park closer to the school contain soils of the Grist Mill-Gunston Complex (43) and the Urban Land-Grist Mill Complex (98), which have experienced disturbance.

(48) Gunston – This silty and clayey soil occurs on flat portions of the Coastal Plain in Mason Neck. The topsoil is typically grey silt loam while the subsoil consists of deep moderately plastic clays. Bedrock is greater than 20 feet below the surface. The seasonal high water table ranges from 10 inches to 2½ feet below the surface. Foundation support is poor because of the high water table, soft soil and plastic clays. Extensive foundation drains (both exterior and interior), waterproofing and surface grading are necessary to prevent wet basements. Suitability for septic tanks and infiltration trenches is poor because of the high water table and slow permeability. Surface grading and subsurface drainage are needed to prevent wet yards.

(43) Grist Mill-Gunston Complex – This complex is a mixture of the development disturbed Grist Mill soil and the natural Gunston soil. The complex occurs in areas of Mason Neck that have been developed but retain a good portion of undisturbed soil. Grist Mill soil will be clustered around foundations, streets, sidewalks, playing fields and other graded areas. Gunston soil will be found under older vegetation in ungraded back and front yards and common areas. For a description of the two soils that make up this map unit, please see (40) Grist Mill and (48) Gunston.

(98) Urban Land-Grist Mill Complex – This complex is a mixture of impervious manmade materials that comprise Urban Land and the development-disturbed Grist Mill soil. It occurs in very densely developed, low elevation areas of the Coastal Plain. Most of the surface area is covered by impervious paving and rooftop, but significant areas of graded and compacted soils exist. The permeability of this complex is highly reduced by the impervious surfaces and the densely compacted Grist Mill soil. Most of the precipitation that falls on this complex will be converted to runoff. For a description of the soils that make up this map unit, please see (40) Grist Mill and (95) Urban Land.

(40) Grist Mill – This soil consists of sandy, silty and clayey sediments of the Coastal Plain that have been mixed, graded and compacted during development and construction. Characteristics of the soil can be quite variable depending on what materials were mixed in during construction. The subsoil is generally a clay loam, but can range from sandy loam to clay. The soil has been compacted, resulting in high strength and slow permeability. The soil is well drained and depth to bedrock is greater than 20 feet below the surface. In most cases, foundation support is suitable assuming that the soil is well compacted and contains few clays. Because of the slow permeability, suitability for septic drainfields is poor and for infiltration trenches is marginal. Grading and subsurface drains may be

needed to eliminate wet yards caused by the slow permeability. This soil is found in low elevation developed areas of the Coastal Plain.

(95) Urban Land – This unit consists entirely of man-made surfaces such as pavement, concrete or rooftop. Urban land is impervious and will not infiltrate stormwater. All precipitation landing on Urban Land will be converted to runoff. Urban Land units lie atop development disturbed soils.

## *2. Land Cover and Forest Stand*

The distribution of land cover is a meaningful indicator of past and current uses within a park. The Park Authority classifies land cover for each park using five categories: Developed, Forested, Managed, Open Field, and Tree Cover.

- “Developed” indicates an area contains constructed features that typically involve significant grading and require frequent maintenance such as playing fields, courts, parking, drives, buildings, dry storm water management ponds, and water features.
- “Forested” indicates a treed area greater than 10 acres in size or smaller if directly contiguous to a functional forested block.
- “Managed” indicates an area has little or no built features, but requires routine maintenance such as lawns, gardens, agricultural fields, and orchards.
- “Open Field” indicates a non-treed area in a mostly natural state including meadows, old growth fields, and certain utility corridors.
- “Treed” indicates a treed area less than 10 acres in size and/or having a significantly impaired vegetative integrity due to human activity, invasive plant species and/or damage due to deer browsing; scattered trees in open areas, buffers along edges of parks or use zones adjacent to development.

About half the land area at Mount Vernon Woods Park is a wooded area classified as Forested due to adjacency to Huntley Meadows Park. The remaining acreage at Mount Vernon Woods is a Managed open lawn area. Only a small portion of the park is Developed, with a picnic pavilion and children’s playground. (Figure 7)

The Forested area, totaling about 3.5 acres, borders two other natural areas: Huntley Meadows Park to the north and the American Towers, Inc. parcel to the east. The bordering sections of these parcels contain utility easements maintained as open space, with numerous wet depressions and predominantly native vegetation. Widespread sensitive species and natural communities have been documented in the southern area of Huntley Meadows Park. These communities include rare forested wetlands that exist in a large, undisturbed block and also state-listed rare plants. The association with Huntley Meadows and the American Towers, Inc. parcel provides an opportunity for greater habitat and wildlife connectivity at Mt. Vernon Woods Park than would normally be afforded to a small park within a neighborhood.

Figure 7: Park Land Cover at Mount Vernon Woods Park



The woods at Mt. Vernon Woods Park are heavily impacted, but show signs of maturity and quality with little soil disturbance. Notably, there are many large and majestic trees present in a fairly open setting. The dominant canopy tree species are willow oak, white oak, red oak, sweetgum, southern red oak, and red maple. Many of the trees exhibit buttressing, which is a broadening and reinforcing of each trunk at the base.



*Buttressed roots of a willow oak*

There are a handful of blueberry shrubs as well as small cedar seedlings, holly, pine and magnolia. These are species not typically consumed by deer. There is, however, a diverse ground layer that is nearly free from non-native invasive species. Plants growing here include wood reed grass, slender wood oats, greenbrier, wintergreen, velvet panic grass, broomsedge, wood aster and goldenrod. There are also areas of haircap moss with standing water.

The only non-native species present in abundance is bamboo at the northwest corner of the park, spreading into the park from a neighbor's backyard. Bamboo is notoriously difficult to control and would require the cooperation of both landowners with funds and dedication to eradicate it from this area permanently. The lack of common non-native invasive species (such as *Microstegium*) across the park indicates that the soils have remained undisturbed and intact for a long period of time.

Typical healthy forests are structured, with groundcover, understory, and canopy layers. In the forested area of Mount Vernon Woods Park, there is a notable lack of forest structure, with few to no small trees or shrubs present under the mature canopy. This is likely due to two factors: human disturbance and deer overabundance.



*Mature forest canopy in park*

### *3. Hydrology and Watershed*

Buttressing of trees in the park is a flood-resistant adaptation, indicating that portions of these woods are, or were, wet at various times during the year. The tree species found in the park tolerate seasonally-saturated soils. The American Towers parcel to the east sits only slightly lower than Mount Vernon Woods Park and contains emergent wetlands with standing water. Species present there include sugarcane plume grass, wool grass, rushes, small oaks, and other native plants also occurring in the wet meadows of Huntley Meadows Park nearby.

Mount Vernon Woods Park is situated in the Dogue Creek watershed and the Barnyard Run and North Fork sub watersheds. The park is located right near the boundary between the Dogue Creek Watershed and the Little Hunting Creek Watershed. The Fairfax County Department of Public Works and Environmental Services prepared a Watershed Management Plan for Dogue Creek in 2011. The Dogue Creek watershed is part of the Potomac River Basin and contains about 32 miles of stream divided among five Watershed Management Areas (WMAs): Barnyard Run, Mainstem, North Fork, Piney Run and Potomac. Approximately 70 percent of the watershed is developed, primarily in the headwaters of Dogue Creek, Barnyard Run and Piney Run, as well as most of the North Fork sub watershed. The large areas of undeveloped land on Fort Belvoir Military Reservation and Huntley Meadows Park help to protect the overall quality of the mainstem of Dogue Creek. This is in contrast to neighboring watersheds with much higher levels of impervious cover.

In 2002, habitat was assessed on approximately 17 of the 32 miles of stream within the Dogue Creek watershed. Of the assessed reaches, three miles (nine percent) of stream were rated as good, nine miles (28 percent) as fair and five miles (16 percent) as poor for habitat conditions. There were no reaches rated as excellent. In comparison with the rest of the County, the Dogue Creek watershed is in the lower range of quality.

The Dogue Creek Watershed Management Plan lists only one stormwater project in the vicinity of Mount Vernon Woods Park. The project is a planned reconstruction of the culvert at Ashboro and Fielding Street, to the west of the park, to allow 100-year event flows along this unnamed tributary of Dogue Creek.

### *4. Wildlife*

The Park Authority has not conducted a formal wildlife survey for Mount Vernon Woods Park, but staff observations revealed a variety of commonplace, non-rare species, such as deer, squirrels, and birds. This park could potentially support breeding amphibians if pools of water formed and persisted over the winter and spring. There are also several dead trees, or snags, in the park that provide habitat for insects, woodpeckers and other birds.

## *B. CULTURAL RESOURCES*

### *1. History*

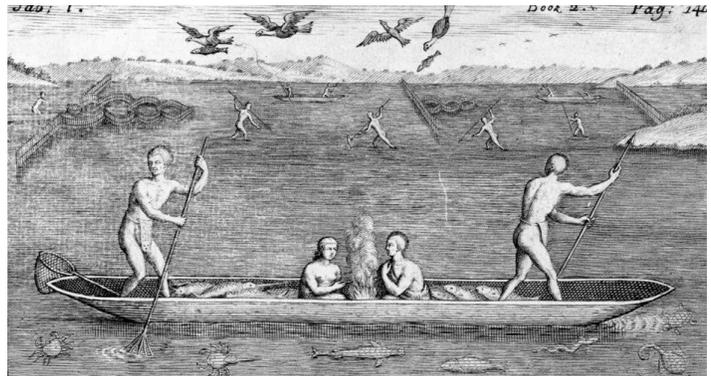
Although early exploration of modern-day Fairfax County began with Captain John Smith's trip up the Potomac River in 1607-1609, the roots of the county's history lie in the land transactions that occurred

throughout the seventeenth and eighteenth centuries. These transactions form modern day boundaries and define the land development that extends from the earliest expansion period to contemporary times.

As in other areas of Fairfax County, Paleo-Indians arrived between 20,000 and 10,000 years ago. They hunted for deer, elk and other small animals, foraged for food and fished and collected shellfish from the Potomac River. When Europeans arrived in this section of Fairfax County it was inhabited by the Dogue Indians, agriculturists who competed and traded with other Native American groups. However, tribal warfare along with European pressure and disease reduced the Native American population; by 1675 the Dogue were no longer a presence in the Fairfax County.



*Tauxenent Village*

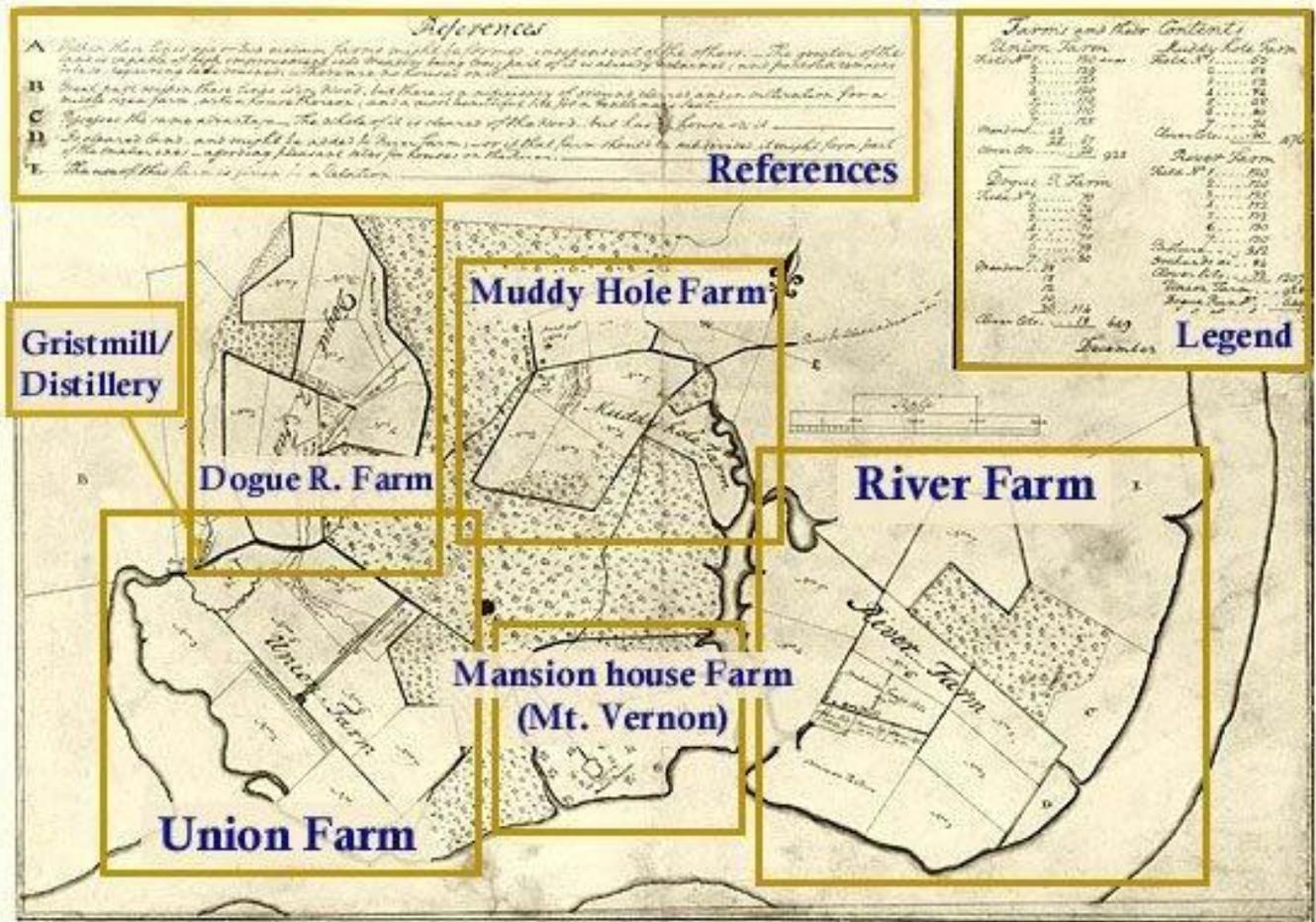


*Dogue Indians*

Mt. Vernon Woods Park is part of the original Culpeper land grant given to Nicolas Spencer and John Washington, the great-great grandfather of George Washington and land purchased by George Washington from Sampson Darrell, the first Fairfax County sheriff. The land was one of five farms surrounding Mt. Vernon and was named Muddy Hole Farm. At Washington's death in 1799, Muddy Hole Farm was worked by 42 enslaved people with a black overseer. The land was meticulously cared for with the then, best known agricultural practices. Washington's diary noted that he and his neighbors fox hunted through the open fields.

At George Washington's death, Muddy Hole was inherited by Bushrod Washington, a Supreme Court Justice who mainly spent his time in Philadelphia. His ownership saw the deterioration of the fields and forests, although he did emancipate most of the enslaved. His son, Bushrod, Jr., showed no interest in the farm and Muddy Hole was sold in 1840 to repay his extensive debts. The new owner was a successful farmer, but died with no heirs. The land was divided into farmettes and sold.

During the Civil War, this area was a "no man's land" between the Union and Confederate armies, with each army ransacking farms for provisions. Following the Civil War, the land that had been Muddy Hole Farm had a series of absentee owners. The remains of Muddy Hole were bought by a local Circuit Court judge. On his death in 1938, his widow sold property to a developer.



Land Surveyed by George Washington in 1799



### *George Washington at Muddy Hole Farm*

Agricultural use, once prevalent in the area and characteristic of most farmlands, has disappeared today. During the Washingtons' ownership the property was kept largely in cultivation and pasture. Farm managers, tenants, laborers and the enslaved resided on the property. Fields were still described as fenced in the 1860s; they were defined by fencing and hedgerows in 1937.

#### *2. Cultural Landscape*

Early 20<sup>th</sup> century aerial photography identifies a purposely planted row of trees along a fence line. At the time, this was probably a windbreak between the two fields. The fence and trees bisect the park in a roughly east to west direction and run on the edge of the present wooded area north of the open field.

#### *3. Archaeology*

Historic documentation of George Washington's Muddy Hole Farm indicates that unlike the other four outlying farms, Muddy Hole's dwellings and supporting structures were located throughout the property, not centralized in one location. In 2015, development of the Draft Master Plan for Mount Vernon Woods Park as well as the replacement of structures within a Dominion Power transmission corridor along the southern boundary of Huntley Meadows raised concerns regarding impacts to a series of shallow ditches in the area. George Washington's will described his northern property boundary as delineated by a set of parallel ditches separated by 30 feet (9.14 m) with a wooden fence between the ditches. Presently, shallow ditches are visible at various locations on the landscape. In September and October 2015, archaeologists from the Fairfax County Park Authority, Cultural Resource Management and Protection Branch conducted limited investigation at selected sites across these ditches with the goal of recovering information regarding the period and method of their construction.

The results of the archaeological investigation offer no definitive evidence regarding the original construction of a ditch along the northern boundary of Mount Vernon Woods Park or the parallel ditches along the southwestern boundary of Huntley Meadows Park. However, the historic record suggests that they likely reflect eighteenth century landscape elements associated with George Washington's Mount Vernon estate. Based on established Fairfax County criteria, the ditches under investigation can be considered publically significant and can serve as publically interpreted educational tools. The full report of the archaeological investigation can be found in Appendix 1.

### *C. EXISTING FACILITIES AND INFRASTRUCTURE*

When the park was first developed in the late 1960s, most of the planned facilities were built, including a baseball diamond, two tennis courts, playground, and picnic pavilion. The two planned off-street parking lots were never built. Since that time, the baseball field and tennis courts were removed due to misuse and vandalism. The areas where the tennis courts and baseball field were located are now open grassy play areas.

#### *1. Playground*

The existing playground, set back from Fielding Street by several hundred feet, consists of a platform climbing structure with slides and a set of four swings, two of which are equipped with infant/toddler seats. The existing equipment was installed in 2002 and shows some wear and tear, including graffiti. The playground is scheduled for replacement in 2017 as part of the Park Authority's maintenance and lifecycle replacement plan.



#### *2. Picnic Pavilion*

Located near the playground and at the edge of the wooded area, the picnic pavilion is a 25' x 45' rectangle and has a concrete pad. It was built in 1980. There are currently no picnic tables in the pavilion, but there are several low benches around the perimeter. When members of the community use the pavilion for picnics and family celebrations, they bring their own tables and chairs. The stone fireplace is boarded up and there are no grills for barbequing. The metal posts are showing signs of corrosion.

#### *3. Open Play Areas*

About half the park (approximately 3.5 acres) consists of open, grassy play areas. In the past, these areas were developed with a youth baseball diamond and tennis courts.

*4. Pedestrian Access and Parking*

There is a 4-foot wide concrete sidewalk along the park's Fielding Street frontage and a similar sidewalk that extends from the street to the playground area. There is no off-street parking for vehicles at the park, but there is on-street parallel parking along Fielding Street. Park users arriving by vehicle park on the street and in the school parking lot across the street.



## **PART 2: PARK ASPIRATIONS & MANAGEMENT**

### **I. PARK PURPOSE**

Park Purpose statements provide high-level guidance for planning and development. The purpose of Mount Vernon Woods Park is to:

- Meet community and neighborhood-serving recreation and leisure needs;
- Create a safe and fun community gathering place for the local area; and
- Preserve the wooded area adjacent to Huntley Meadows Park.

### **II. DESIRED VISITOR EXPERIENCE**

Mount Vernon Woods Park has functioned as a local-serving park since it was first developed with facilities in the 1960s. Mount Vernon Woods Park offers active and passive recreation experiences that typically involve an individual or group for a time period of up to two hours. The visitor experience should accommodate the broad needs of a wide range of ages of users and be enhanced by the addition or upgrading of amenities, along with off-street parking to support active uses of the park.

### **III. MANAGEMENT OBJECTIVES**

In order to achieve the park's purpose, the following objectives have been developed to guide specific actions and strategies for dealing with management issues. Mount Vernon Woods Park should:

- Provide local-serving recreation elements to address the leisure needs of the surrounding community;
- Co-locate complementary uses and amenities;
- Provide facilities that that promote community building and that support programs and activities of the adjacent Mount Vernon Woods Elementary School;
- Incorporate the principles of Crime Prevention Through Environmental Design (CPTED);
- Provide adequate accessibility and off-street parking to support use of the park;
- Seek sustainable site design and optimize facility capacity to the extent feasible; and
- Establish a natural resource protection zone to protect and manage the wooded habitat adjacent to Huntley Meadows Park.

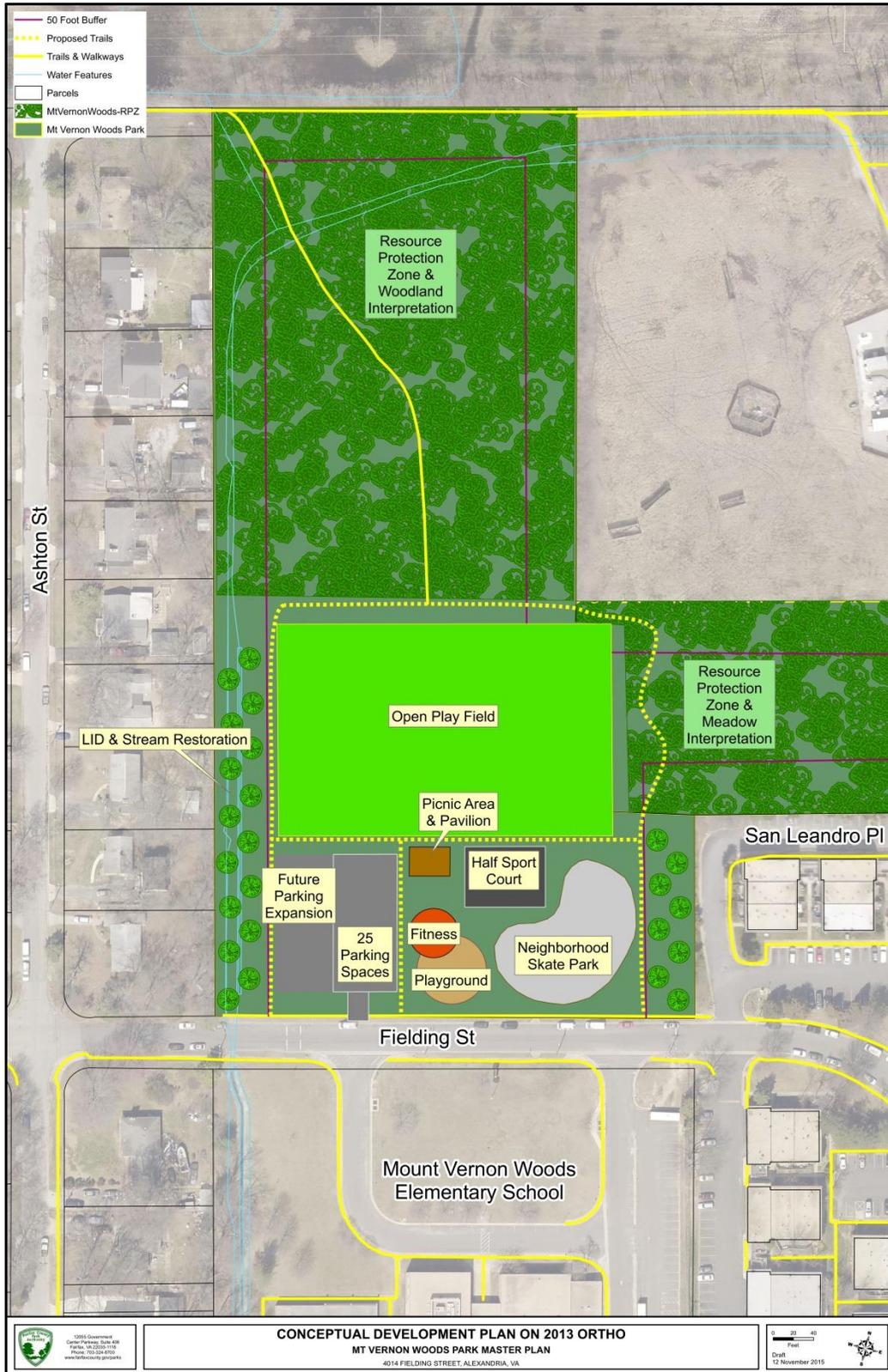
## **PART 3: CONCEPTUAL DEVELOPMENT PLAN**

### **I. INTRODUCTION**

The Conceptual Development Plan (CDP) provides recommendations for future park uses and facilities. The CDP contains descriptions of the proposed plan elements and design concerns and is accompanied by a graphic that shows the general location of the recommended park elements. The CDP is shown as Figure 8.

Development of the CDP is based on an assessment of area-wide needs and stakeholder preferences in balance with the existing site conditions as described in the EXISTING CONDITIONS section of this master plan. The scope of the master plan process does not include detailed site engineering; therefore, it should be understood that the CDP is conceptual in nature. Although planning site analysis forms the basis of the design, final facility locations for the planned elements will be determined through more detailed site analysis and engineering design that will be conducted when funding becomes available for park development. Final design will be influenced by site conditions such as topography, natural resources, tree preservation efforts, and stormwater and drainage concerns as well as the requirement to adhere to all pertinent state and county codes and permitting requirements.

Figure 8: Conceptual Development Plan for Mount Vernon Woods Park



**II. CHANGES TO PREVIOUSLY APPROVED PLAN ELEMENTS**

*A. UNBUILT FACILITIES*

Some of the facilities included on the 1965 Master Plan have never been built. A parking lot, adjacent to Fielding Street, was planned but never built. This lot is relocated on the new Conceptual Development Plan. Another parking lot was planned for the back of the property, with access to Augustine Street. The location of this parking lot is in the wooded area, along with a loop trail, council ring, and picnic area with tables. The parking lot and council ring are removed from the Conceptual Development Plan as the wooded area is now designated a Resource Protection Zone. The picnic area is relocated closer to Fielding Street and other active uses in the park. The opportunity remains to provide a trail through the woods in Mount Vernon Woods Park.

*B. REMOVED FACILITIES*

When the park was first built in the 1960s, it included a youth baseball diamond and a pair of tennis courts. While these facilities may have been heavily used in the early years, their use declined over time. Eventually, due to misuse and vandalism the baseball diamond and tennis courts were removed. Current recreation trends and community interests indicate these two facility types should not be rebuilt in Mount Vernon Woods Park.

*C. RELOCATED FACILITIES*

*1. Playground*

The existing playground, built in 2002, is due for replacement in 2017. It should be relocated to be closer to, and clearly visible from, Fielding Street and be co-located with other complementary park facilities, such as a new picnic area and pavilion, sport court, and neighborhood skate park. In addition, the playground should be expanded to meet the needs of a wide range of ages and abilities and should provide activities and elements that complement and supplement the playground at the nearby school.

*2. Picnic Area and Pavilion*

The existing pavilion, built in the early 1980s, is in poor condition and should be removed. A new picnic area with grills and tables should be located near other active uses in the park to enhance the user experience of a local-serving park. A new pavilion could also be located in the picnic area and should be

**MOUNT VERNON WOODS PARK  
PLAN ELEMENTS**

Removed

- Rear Parking Lot
- Council Ring
- Baseball Diamond
- Tennis Courts

Relocated

- Playground
- Picnic Area & Pavilion
- Front Parking Lot
- Trails

New Plan Elements

- Skate Park
- Sport Court
- Fitness Cluster
- Open Play Field
- Interpretive Signs
- Supplemental Plantings
- Resource Protection Zones

sized to accommodate small- to medium-sized groups. The pavilion should be available for rental by permit to support sports events, family gatherings, and other activities in the park.

### 3. *Parking*

While the planned parking lots were never built, there is a need for off-street parking to serve the park, especially as additional recreational facilities are added to the park. The Conceptual Development Plan shows a parking lot with up to 50 spaces at the southeast corner of the park, opposite the school entrance drive. Construction of the parking lot could be phased, with 25 spaces initially and then an additional 25 spaces to be built later, as needed, as new recreational facilities are built. In the interim, picnic tables could be located in the expansion area.

### 4. *Trails*

The existing paved trails in the park are 4' wide concrete. These may need to be relocated to accommodate new facilities that are planned for the area of the park near Fielding Street. Trail access from the parking lot to the recreation area should be provided and new paved trails should be 8' wide asphalt for wheelchair accessibility. Additionally, a new trail loop should be provided that connects the recreation area of the park with the open meadow and wooded area to allow park patrons to enjoy these natural settings.

## II. NEW PLAN ELEMENTS

### A. *NEIGHBORHOOD SKATE PARK*

A new neighborhood-scale skate park, with features for both experienced and less-experienced users should be provided at the southeast corner of the park, where the tennis courts were once located. This location close to Fielding Street will allow for easy access and visibility. Skate park ramps and other features could be modular or of the concrete type. Prior to construction, the Park Authority will work closely with the community to determine the types of features desired in the skate park.



*Skate Park Examples*

### B. *SPORT COURT*

A half size sport court could be co-located with other complementary park facilities, such as the playground and skate park to increase the diversity of recreational opportunities in the park. The half

court could be used for basketball practice, one-on-one games, four square, hopscotch, or as an area for young children to practice riding a scooter or bike, for example.

### *C. FITNESS CLUSTER*

A cluster of outdoor fitness stations, located in proximity to other active uses in the park would provide teens and adults an opportunity to get exercise in the fresh air and sunshine. A fitness cluster including strength, balance, core, and cardio elements would round out the complement of facilities so that all members of the family could enjoy and benefit from their time in the park.



*Outdoor Fitness Examples*

### *D. OPEN PLAY FIELD*

A rectangular open grass play field, approximately 180' x 300' in size is planned to allow for youth and adult sports practices and games, as well as more casual use such as throwing a disc or flying a kite. The existing open area in the park should be re-graded and seeded to improve the usability of the field. A portion of the field may overlap the park boundary onto the radio tower property, where the Park Authority has an easement for recreational use. The east-west orientation of the field is not ideal, especially for games played in the evening, due to the position of the sun in the sky. This orientation, however, allows more room and flexibility for other desired recreational facilities to be included in the park.

### *E. INTERPRETIVE SIGNAGE*

Interpretive signage may be appropriate within the park along the trails and near the open meadow and wooded area. Interpretive signs should be designed within the framework of the Park Authority's guidelines for interpretive signs. Sign content might focus on the local history or thematically link Mount Vernon Woods Park to other area parks. Additionally, signs could provide educational information about the natural resources in the park and Huntley Meadows Park to the north.

### *F. SUPPLEMENTAL PLANTINGS*

Mount Vernon Woods Park provides an opportunity for the addition of rain gardens and other Low Impact Development (LID) techniques to reduce stormwater runoff into Huntley Meadows. There is also an opportunity to plant new trees to increase tree canopy and buffer neighboring residences from active park uses. Tree planting could be done by a community adopt-a-park group in cooperation with Fairfax ReLeaf, Mount Vernon Woods Elementary School and other civic organizations as an educational community service project.

### *G. RESOURCE PROTECTION ZONES*

The Park Authority designates Resource Protection Zones (RPZ) to identify park areas that contain natural resources and provide ecosystem functions by type for protection and management. RPZs may contain resources that are sensitive, rare or unique, but may also contain resources that while not necessarily being of the highest quality may cover large areas, protect water resources, provide important habitat and corridors, and provide educational and recreational opportunities. RPZs are intended to be managed primarily to protect and enhance natural resources, but may also provide for appropriate levels of human access and activities compatible with the resources present at the park level. Two areas at Mount Vernon Woods Park are designated as a Resource Protection Zone.

#### *1. Open Meadow*

The easement area on the radio tower property consists of tall grasses and some woody plant species. The area is mowed with a "bush hog" by Park Authority maintenance staff on an annual basis. Portions of the area are consistently wet and, therefore, the easement area is not suitable for active recreation uses. It would be appropriate to encourage a meadow to develop by reducing the frequency of mowing to once every few years. The mowing would allow grasses to grow while preventing woody species from taking over. In addition, depending upon the availability of resources and volunteer interest, it may be possible to add supplemental plantings of meadow species (with permission of the property owner). A restored meadow could provide stormwater management benefits, support pollinators, increase local biodiversity, and provide opportunities for natural resource interpretation and education.

#### *2. Forested Area*

Existing facilities (pavilion, playground) should be removed from the forested area of the park and no new facilities should be constructed there, other than trails and interpretive signs and features. This area provides a natural buffer to Huntley Meadows to the north but also provides opportunities for natural resource interpretation and education.

### III. DESIGN CONCERNS

#### *A. ACCESSIBILITY*

Accessible park elements and facilities should be provided wherever possible and feasible. This includes accessible facilities and accessible trail connections between different areas of the park.

#### *B. TRAILS*

The trails shown on the Conceptual Development Plan are for illustrative purposes only and actual trail location and alignment will be determined at the time of development to avoid any sensitive environmental or cultural resources.

#### *C. PARKING*

The relocated planned parking is intended to minimize impacts to the natural areas of the park. The intent is to add 25 spaces, with the possibility of expanding the parking area up to a total of 50 spaces if needed to serve planned park uses in accordance with Park Authority standards. Non-park related parking may need monitoring as there is a parking shortage in the area.

#### *D. FENCING*

Due to the close proximity of the playground to Fielding Street, the area will require fencing to ensure the safety of children who play there. The skate park should also be fenced to keep it separate from the playground.

#### *E. OPEN PLAY FIELD MAINTENANCE*

If the open play field gets heavy sports use, it may require annual re-seeding and other regular maintenance. Adoption or sponsorship of the field by a community group would help to ensure regular maintenance.

#### *F. STORMWATER MANAGEMENT*

Construction of stormwater management facilities may be necessary to address water runoff from the addition of the parking lot and other facilities. Low Impact Development (LID) principles should be used to the extent possible for this purpose, such as pervious pavers, rain gardens, and/or bio-retention areas. A concrete-lined channel runs along a portion of the western boundary of the park. This channel does not provide for filtering of nutrients as stormwater flows from the channel into Little Hunting Creek. Restoration of the concrete channel to a natural condition with the addition of riparian landscape plantings would allow for improved stormwater runoff quality and quantity. Finally, reduced mowing of the meadow area on the radio tower property, along with supplemental plantings could help to address stormwater management. Any or all of these stormwater management projects could be done in partnership with the Fairfax County Department of Public Works and Environmental Services.

### *G. ARCHAEOLOGY*

At a minimum, an archaeological survey is required within any area proposed for ground disturbance with a buffer to extend not less than 50 feet beyond the projected limits of the disturbance. Furthermore, the archaeological survey must take into account the difficulties in identification and use metal detection in addition to subsurface testing. All work should follow the Guidelines for Conducting Historic Resources Survey in Virginia (VDHR 2011).

Should cultural resources be present, they should be evaluated as to their National Register eligibility. Should any intact, National Register eligible resources be discovered, every effort should be made to avoid these resources and preserve them in place.

### *H. SITE AMENITIES & VISITOR SERVICES*

This is an unstaffed local park where typical visits are self-directed and expected to last up to two hours. As such, the park will be unstaffed and will not include any major service facilities. An orientation area with a small kiosk could be sited near the park entrance to provide general information about park and recreational opportunities at the site as well as other park sites nearby (such as Muddy Hole and Huntley Meadows Parks). Other visitor amenities may include benches, trash cans, and bike racks. If the park gets regular heavy use with the addition of new facilities, it may be necessary to provide portable toilets onsite.

### *I. LIGHTING*

Members of the community have expressed an interest in adding security lighting to the park at night to address safety concerns. Mount Vernon Woods Park is intended to be open for use only from dawn until dusk. This may be re-evaluated after new facilities have been built and in use for a while in the park.

## APPENDIX 1

**MANAGEMENT SUMMARY**  
**Archaeological Testing – Ditches**  
**Huntley Meadows and Mount Vernon Woods Parks,**  
**Alexandria, Virginia**

Christopher Sperling, FCPA (Principal Investigator)  
28 October 2015

### Introduction

Development of the Draft Master Plan for Mount Vernon Woods Park as well as the replacement of structures within a Dominion Power transmission corridor raised concerns regarding impacts to a series of shallow ditches. George Washington's will described his northern property boundary (Figure 1) as delineated by a set of parallel ditches separated by 30 feet (9.14 *m*) with a wooden fence between the ditches. Presently, shallow ditches are visible at various locations on the landscape. Archaeologists from the Fairfax County Park Authority, Cultural Resource Management and Protection Branch conducted limited investigation at selected sites across these ditches with the goal of recovering information regarding the period and method of their construction.

### Location

Two locations were subjected to archaeological investigation. The first is located along the northern boundary of Mount Vernon Woods Park, south of Augustine Street. The second area is located in the south western portion of Huntley Meadows Park, immediately beyond the western terminus of Welford Street (Figure 2). Although both areas are undeveloped, the Mount Vernon Woods Park location appears to have been cleared of understory. Trees are widely spaced, mature hardwoods. The vegetation at the Huntley Meadows location consists of a mature hardwood forest with moderate understory. Dominion Power maintains a power transmission corridor immediately north of the Huntley Meadows location and approximately 30 *m* north of the Mount Vernon Woods Park location.

### Methods

Test trenches were excavated across the ditches at both the Mount Vernon Woods Park and Huntley Meadows Park locations (Figures not included). Additionally, a test trench was excavated in the space between the two parallel ditches at the Huntley Meadows Park location. The test trenches at Huntley Meadows Park measured 2 *m* x 1 *m*. One test trench was excavated perpendicular to each of the parallel ditches. A third test trench was excavated between the ditches in a parallel alignment. The single trench at Mount Vernon Woods Park was bisected in two locations with test trenches. Owing to the greater width of this trench, it was necessary to enlarge the excavations to 3 *m* x 1 *m* in order to get a full trench cross-section. Test trenches were backfilled after excavation in a manner attempting to replicate ditch shape.

All test trenches were oriented along arbitrary grids established at each of the two locations in order to bisect the ditches. Horizontal location within the grids was maintained by use of a total station. The

geographic location of total station datum points was recorded through use of a Trimble handheld GPS device to facilitate integration of project data into a GIS project.

Excavation was conducted according to internal stratigraphy with data for each layer recorded on standardized "Unit Level" forms. The forms contained all relevant horizontal and vertical provenience information as well as artifact, soil, and photographic data. Vertical measurements were maintained with a line level and string. Soil colors were recorded according to the Munsell soil color chart. Space was provided for a sketch drawing, if warranted. The opening of each stratum was recorded photographically as was the base of excavation.

All soils were passed through 0.635 cm (0.25 in) hardware mesh for uniform recovery. Any artifacts were bagged according to the horizontal and vertical context of their recovery for transport to the CRMPB lab facility at the James Lee Center in Falls Church. In the lab, artifacts were washed with water and a soft bristled toothbrush unless the material was too delicate. Clean artifacts were cataloged into a Microsoft Access database then stored in archival bags according to provenience.

## **Results**

The results of excavations varied slightly between Mount Vernon Woods and Huntley Meadows Parks. Accordingly, they will be discussed individually.

### ***Mount Vernon Woods Park***

A total of two test excavation trenches were excavated across the single ditch visible at Mount Vernon Woods Park. The excavations each measured 3 m x 1 m. Excavations revealed between 17 cm and 19 cm of accumulated modern soils overlying a concrete ditch lining. Soils on the exterior of the concrete were tested to determine for evidence of earlier ditch construction. Soils along the exterior of the concrete yielded no such evidence (Figure 5). Likewise, augering an additional 25 cm revealed gleyed, wetlands soils. Material contained from the overburden consisted of modern debris such as beer bottles and cellophane wrappers. These were noted and not recovered from the field.

Excavations at Mount Vernon Woods Park yielded no evidence of the original ditch construction. Although the ditch contained a concrete lining, it cannot be determined whether this indicates twentieth century origin or if the concrete represents an improvement to a historic ditch.

### ***Huntley Meadows Park***

A set of two, parallel ditches was discernable at the testing location in the southwestern portion of Huntley Meadows Park. The ditches were considerably shallower than the single ditch observed at Mount Vernon Woods Park. Approximately nine meters separated the ditches, consistent with the 30-foot separation indicated in the Washington will. A total of three, 2 m by 1 m test trenches was excavated at this testing area. One test trench bisected each of the ditches in order to provide a profile view. The final test trench was excavated parallel to the ditches along the centerline between them. The goal of the third test trench was to search for evidence of the historic fence described in the Washington will.

The profiles of the two ditches differed significantly (see Figure 5). The southernmost of these exhibited a wide and shallow morphology with a topsoil layer underlain by highly mottled, predominantly organic silt clay. The final, subsoil layer consisted of mottled subsoil. With the exception of one quartz flake from disturbed context, all artifacts recovered were modern; accordingly they were not recovered after notation. In contrast, the test excavated northernmost ditch revealed a deeper, more steeply walled ditch cross-section. Soils under the organic topsoil consisted of lighter colored loamy and silty clays, likely comprised of redeposited subsoil. The base of the ditch contained gleyed, wetland soils. Materials recovered from this trench consisted of barbed wire and machine made bottle glass.

The trench tested along the centerline of the space between the two ditches contained a shallow topsoil layer, underlain by a plowzone, underlain by subsoil. A distinctive plow scar cut into subsoil. The only artifact from this unit, a jasper flake, was recovered in the plowzone stratum. No post or similar fence features were identified.

Collectively, the excavations in the southwestern portion of Huntley Meadows Park also proved inconclusive. No eighteenth century artifacts were recovered.

### **Conclusions**

Based on the results of this investigation the temporal origin of the ditches located along the northern boundary of Mount Vernon Wood Park and in the southwestern portion of Huntley Meadows Park is archaeologically inconclusive. None of the artifacts recovered dates to the eighteenth century; concrete lines the base of the ditch at Mount Vernon Woods Park. Excavations revealed no information regarding original construction techniques.

However, the amount of modern fill observed within the ditches at both locations is evidence that any historic ditch feature would require regular maintenance. The conduct of this maintenance would likely erase any evidence of original construction. Documentary evidence proves more compelling. George Washington's will indicates the presence of double parallel ditches along his northern boundary, consistent with the location and orientation of the ditches visible, particularly those at Huntley Meadows Park. Furthermore, the measurement between the extant ditches is consistent with the 30 foot separation indicated in the historic record.

Based on the documentary evidence, it is considered likely that the double ditch feature most visible on the modern landscape in the southwestern portion Huntley Meadow Park mimics that described in the Washington will. Accordingly these ditches likely represent features evocative of the eighteenth century landscape design. Furthermore, this design has profound impacts through the present day. The modern grid system in the immediate vicinity of Mount Vernon Woods and the southern portion of Huntley Meadows Parks is oriented to this historic boundary. This association is reinforced through street names in this area such as "Augustine," "Lawrence," and "Martha Washington."

### **Recommendations**

The results of the archaeological investigation offer no definitive evidence regarding the original construction of ditch along the northern boundary of Mount Vernon Woods Park or the parallel ditches along the southwestern boundary of Huntley Meadows Park. However, the historic record suggests that they likely reflect eighteenth century landscape elements associated with George Washington's Mount Vernon estate.

Fairfax County established criteria under which historic and archaeological resources achieve significance worthy of preservation. "A heritage resource can be considered significant to the public if it meets one or more of the following criteria:

1. It possesses information on or represents any aspect of heritage considered important by a discrete population, ethnic group, or community; or
2. It has the potential to serve, or already serves, as a focus of community identity and pride; or
3. It retains characteristics that are potentially useful in educating the public about the past and how it is studied; or
4. It enables the exhibit and display of objects, ruins, or stabilized restored structures for public education and enjoyment" (Fairfax County 2013).

Based on these criteria, the ditches under investigation can be considered publicly significant. They do reflect information regarding the historic landscape. The local community is indelibly linked to these landscape features though the modern developed landscape and place names. The ditches can serve as publically interpreted educational tools.

Based on the local significance of these landscape features, a degree of preservation is warranted. First, detailed mapping of the features and recording them with both CRMPB and the Virginia Department of Historic Resources (DHR) will provide the information necessary to avoid future impacts. High definition LiDAR imagery provided by the GIS and Research departments of George Washington's Mount Vernon offer the best means of recording these resources (Figure 6). Second, any potentially ground disturbing activities should avoid impacts to these landscape features. Third, to enhance public awareness of the resources and increase the sense of community identity, the ditches should be interpreted. Finally, based on the results of the archaeological investigation, additional excavations are considered unlikely to yield valuable information regarding the ditch construction and none are recommended.

### **Works Cited and Consulted**

Fairfax County

2013 Policy Plan: The Countywide Policy Element of the Comprehensive Plan for Fairfax County, Virginia [Heritage Resources]. Prepared by the Fairfax County Department of Planning and Zoning.

Fairfax County Park Authority

2013 Policy Manual, Fairfax County Park Authority. Prepared by the Fairfax County Park Authority.

Virginia Department of Historic Resources (DHR)

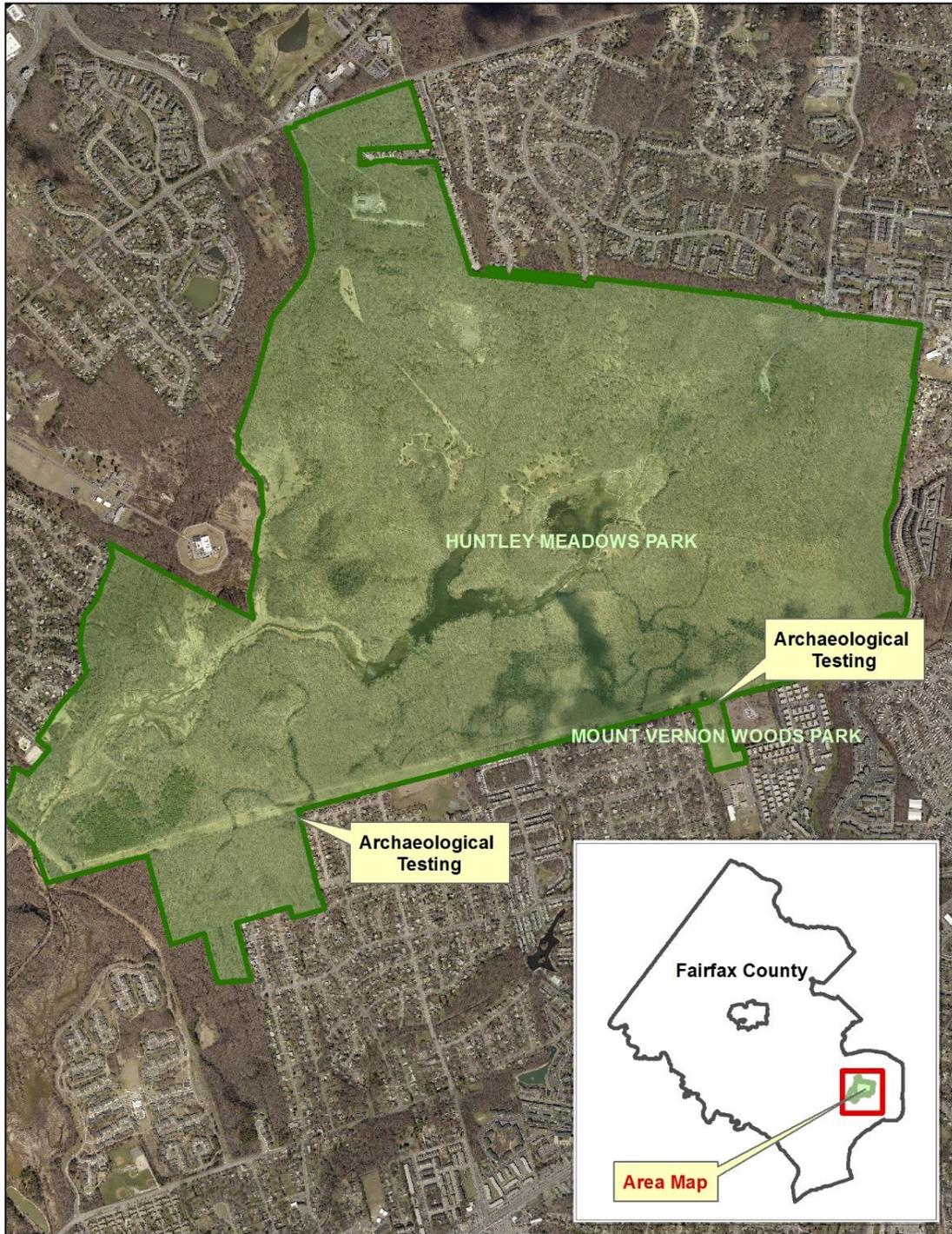
2011 *Guidelines for the Conduct of Historic Resources Survey in Virginia*. Prepared by the Department of Historic Resources. Richmond, Virginia.

Figure 1: George Washington's Mount Vernon



Source: George Washington's Mount Vernon

Figure 2: Project Locations



Mount Vernon Woods  
Huntley Meadows  
Ditches Investigation  
24 October 2015

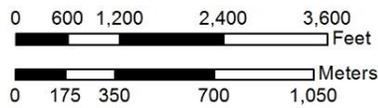
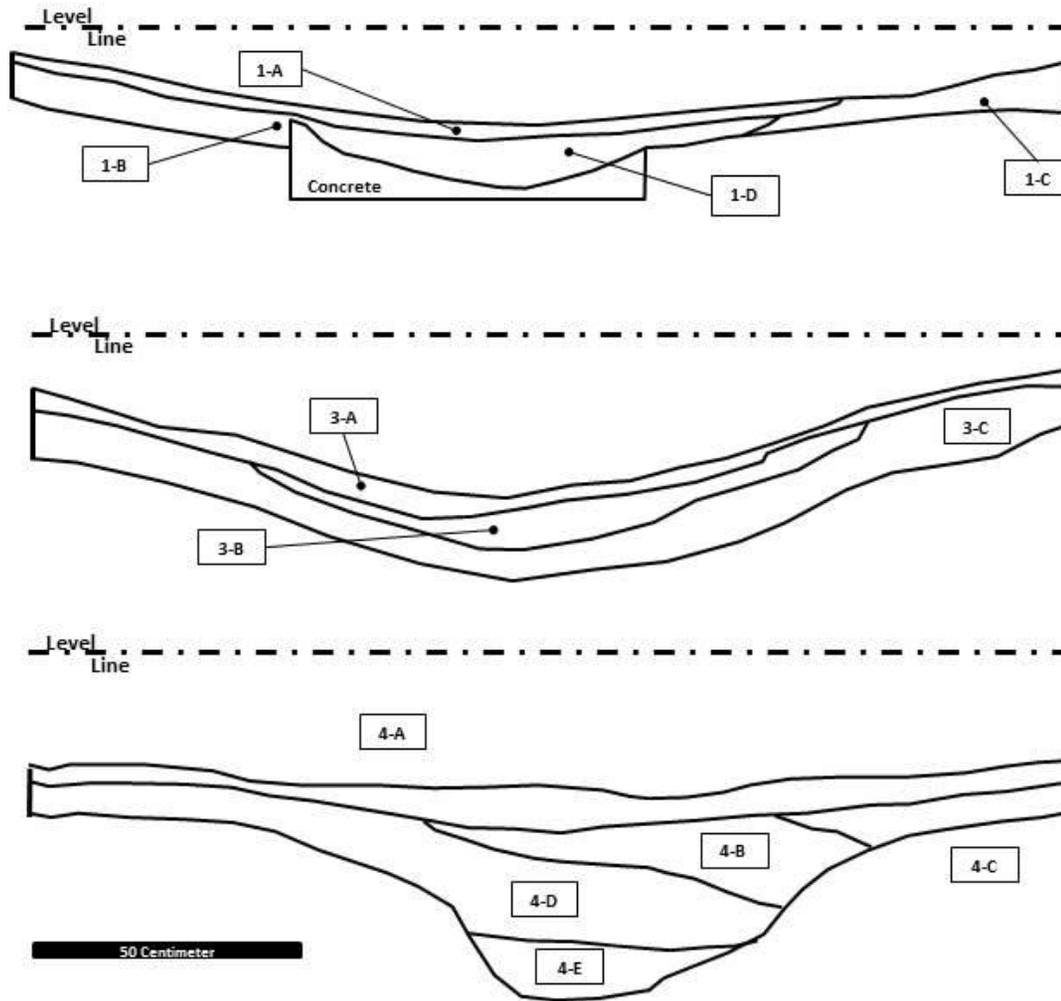


Figure 5: Ditch Profiles.



**Test Unit 1**

- 1-A: Brown (10YR4/3) Loam
- 1-B: Mottled Brown (10YR4/3) Brown Loam /Light Brownish Gray (10YR6/2) Loam/ Dark Grayish Brown (10YR4/2) Loam/Light Yellowish Brown (2.5Y 6/4) Clay/Yellowish Brown (10YR5/6) Clay
- 1-C: Light Yellowish Brown (2.5YR6/4) Clay
- 1-D: Dark Grayish Brown (10YR4/2) Dark Grayish Brown Loam

**Test Unit 3**

- 3-A: Dark Brown (10YR3/3) Loam
- 3-B: Mottled Very Dark Gray Brown (10YR3/2)/ Very Dark Brown (10YR2/2) Loam/ Grayish Brown (10YR5/2) Loam/Light Gray Brown (10YR7/4) Silt Clay/Brownish Yellow (10YR6/6) Silt Clay
- 3-C: Mottled Brown (10YR5/3) Clay/Brownish Yellow (10YR5/8) Silt Clay

**Test Unit 4**

- 4-A: Dark Brown (10YR3/3) Loamy Silt
- 4-B: Mottled Light Brownish Gray (10YR6/2)/ Yellowish Brown (10YR5/6) Silt Clay
- 4-C: Mottled Light Gray (10YR7/2)/ Brownish Yellow (10YR6/8) Silt Clay
- 4-D: Gray (10YR5/1) Silt Clay
- 4-E: Mottled Light Gray (10YR7/2)/ Brownish Yellow (10YR6/8) Gley

**Figure 6: LiDAR Imagery of Ditches.**

*LiDAR Imagery Courtesy of Mount Vernon GIS and Research Departments*

