Westgrove Park Master Plan

Approved: September 25, 2013

ACKNOWLEDGEMENTS

FAIRFAX COUNTY PARK AUTHORITY BOARD

William G. Bouie, Chairman, Hunter Mill District
Kala Leggett Quintana, Secretary, At-Large Member
Ken Quincy, Treasurer, Providence District
Edward R. Batten, Sr., Lee District
Mary Cortina, At-Large
Linwood Gorham, Mount Vernon District
Faisal Khan, At-Large
Harold L. Strickland, Sully District
Richard Sullivan, Dranesville District
Mike Thompson, Springfield District
Frank S. Vajda, Mason District
Anthony Vellucci, Braddock District

SENIOR STAFF

Cindy Messinger, Acting Director
Sara Baldwin, Deputy Director/COO
David Bowden, Director, Planning & Development Division
Barbara Nugent, Director, Park Services Division
Cindy Walsh, Director, Resource Management Division
Todd Johnson, Director, Park Operations Division
Judith Pedersen, Public Information Officer

PROJECT TEAM

Sandy Stallman, Manager, Park Planning Branch, PDD
Jay Rauschenbach, Project Manager, Park Planning Branch, PDD
Charles Smith, Manager, Natural Resource Management and Protection Branch, RMD
Joe Nilson, Area 3 Manager, POD
Dan Sutherland, Manager, Grounds Management Branch, POD

TABLE OF CONTENTS

FIGURES AND TABLES

APPENDICES

APPENDIX A: Pamphlet – Outdoor Learning Stations, Belle View Elementary School

APPENDIX B: Memorandum of Understanding – Fairfax County Park Authority and Pumphouse Association for Canine Kindness, Westgrove Park Off-Leash Dog Area

APPENDIX C: Memorandum – Safe Routes to School National Partnership, Greater Washington Region Safe Routes to School Network, Westgrove Park

I. INTRODUCTION

A. PURPOSE & PLAN DESCRIPTION

The purpose of a Master Plan is to create a long-range vision for the 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 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 site.

B. PLANNING PROCESS & PUBLIC INVOLVEMENT

A master plan process for Westgrove Park was initiated in 2004 and generated significant community discussion around optional park uses that included active recreation and/or leisurely pursuits in the disturbed areas of the site with natural resource areas around the perimeter. The master plan process was indefinitely deferred in 2005.

In 2010, the Pumphouse Association for Canine Kindness (PACK), a group of dog owners in the Fort Hunt area, made a request to the Park Authority to establish an off-leash dog area (OLDA) use within the park. On July 11 2012, the Park Authority Board approved an interim OLDA use at Westgrove Park for two years. The interim use was reviewed by the Fairfax County Planning Commission for a public use determination pursuant to Section 15.2-2232 of the Code of Virginia. The Planning Commission determined on July 19, 2012, that the interim OLDA use was in substantial conformance with the County Comprehensive Plan in terms of location, character and extent.

The Park Authority kicked off the public Westgrove Park Master Plan process on July 30, 2012, with a public information meeting attended by over 100 community members. Comments centered on the interim OLDA use and the potential to become a permanent feature, other desirable park facilities, managing and protecting natural resources, safety and traffic concerns, and the lack of pedestrian access. Community members were encouraged to send in additional comments after the public information meeting to help guide park planning staff in the development of the master plan.

Following the public information meeting, the Park Authority conducted further site analysis, reviewed the received public comments, and developed a draft Master Plan. A public comment meeting was held on April 30, 2013, to present the draft plan and gather community input, which attracted over 90 attendees and 29 speakers. In addition, a 30-day comment period enabled further community input on the draft plan. Comments on the draft plan were again centered on the interim OLDA that was recommended to become a permanent feature. The majority of the other comments focused on enhancing pedestrian access with the park and surrounding area, as well as managing and protecting natural resources in proximity of Dyke Marsh.

C. 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 and work force all uniquely 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 serve the County's residents today and well into the future.

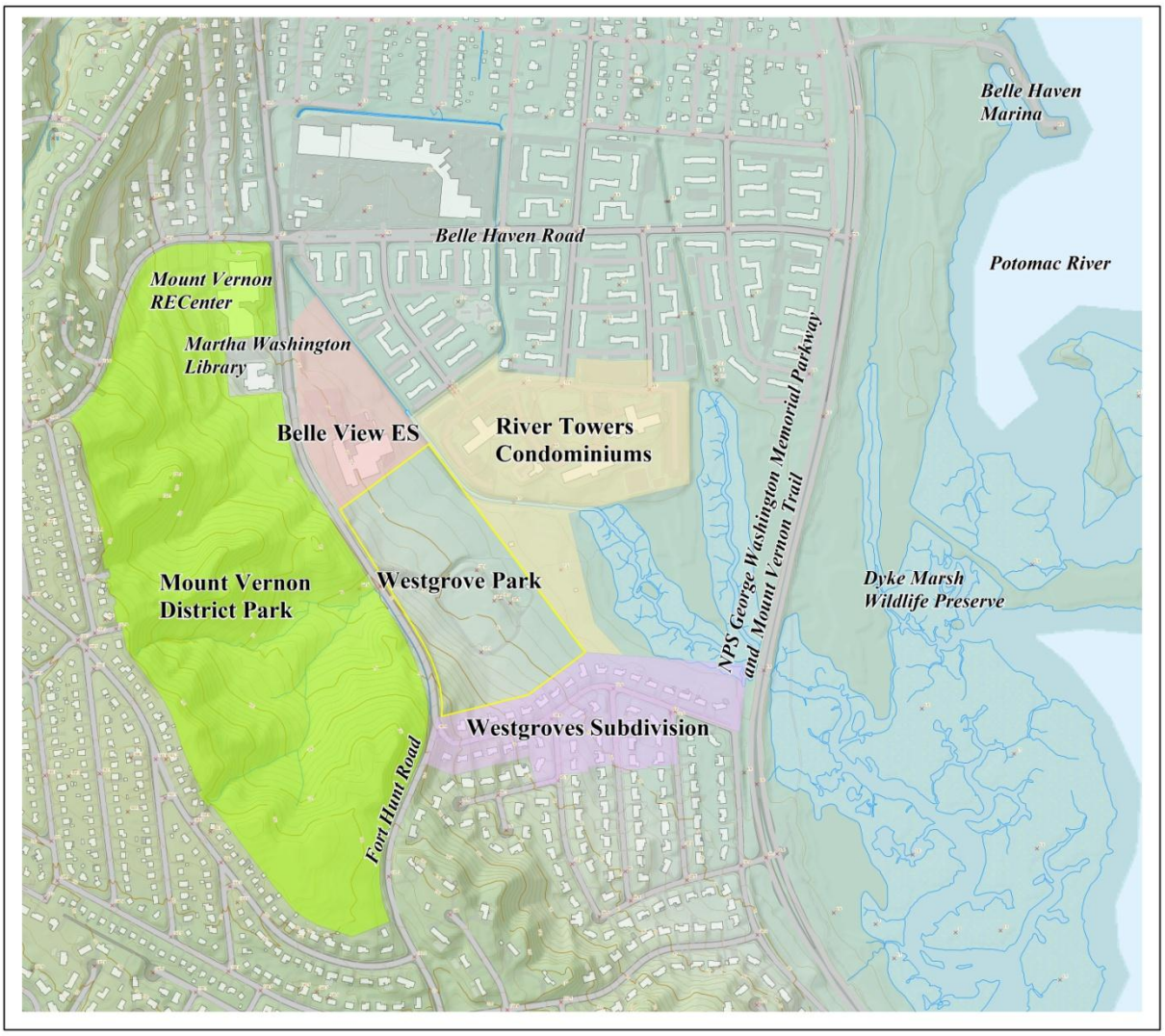
In order to achieve its long-range goals and objectives, the Park Authority has established a consistent and equitable approach in the planning of park property and facilities. A key part of this process includes development of Park Master Plans, specific to each park and intended to establish a long-range vision towards future site development. During the planning process, the site is evaluated to assess its context within the surrounding neighborhood as well as within the framework of the entire Fairfax County Park Authority park system. Potential and desired uses are considered with regard to the ability to establish them sensitively and sustainably on the subject property 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 the 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.

II. PARK BACKGROUND

A. GENERAL DESCRIPTION

Westgrove Park is a 21.3-acre park in the Mount Vernon Supervisory District, located at 6801 Fort Hunt Road in Alexandria and classified as a Local Park (Figure 1). It is adjacent to Belle View Elementary School to the north, River Towers Condominiums to the east, the Westgroves subdivision to the south, and Mount Vernon District Park to the west across Fort Hunt Road. The site was first developed in the mid-20th century as a wastewater treatment plant, which was decommissioned and ultimately demolished in 1986. A wastewater pump station was installed in 1961 to serve the surrounding residential neighborhoods and remains in-operation today. The surplus property was reserved for future park uses with the exception of the former plant site in the center of the park. The majority of the park is forested with areas of open lawn and a perennial stream.

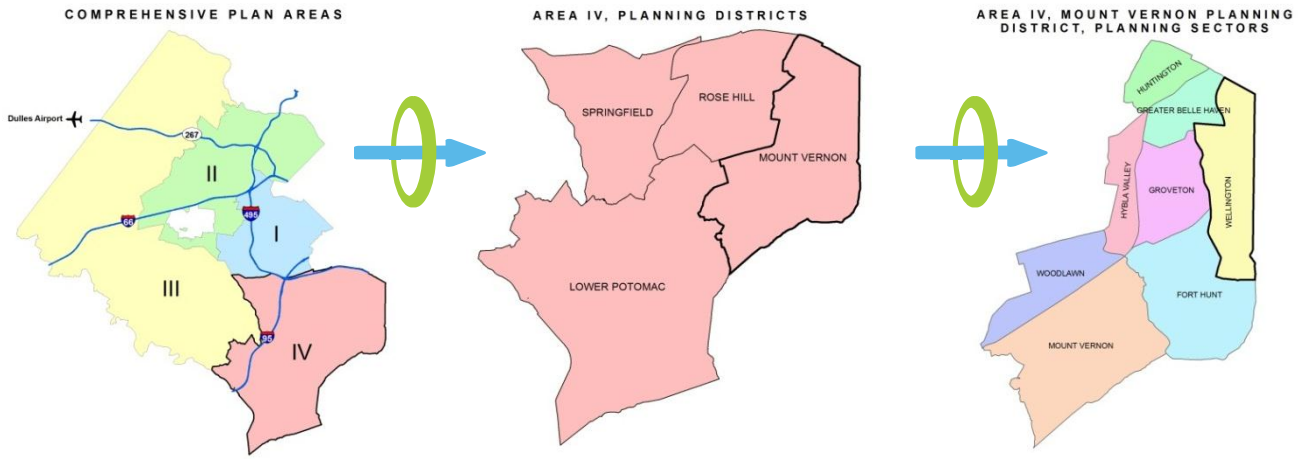
Figure 1: Location of Westgrove Park



B. AREA CONTEXT

Using the districts designated in the County Comprehensive Plan, Westgrove Park is located in Area IV, Mount Vernon Planning District, Wellington Planning Sector (Figure 2). The Mount Vernon Planning District is generally bounded by the Capital Beltway and City of Alexandria to the north, the Potomac River to the east, Fort Belvoir to the south and Huntley Meadows Park to the west. The Wellington Planning Sector is generally bounded to the east by the Potomac River, Collingwood Road to the south, Fort Hunt Road to the west, and the Capital Beltway to the north. The northern portion of the planning sector contains a mix of commercial and apartment uses, whereas the southern portion predominantly contains single-family neighborhoods built during the early- and mid-part of the 20th century. Fort Hunt Road and the National Park Service (NPS) George Washington Memorial Parkway serve as the major transportation routes in the planning sector. The Mount Vernon Trail aligned adjacent to the parkway also provides a significant pedestrian and bicycle connection in the area; NPS estimates that the trail receives up to 80,000 visitors per month.

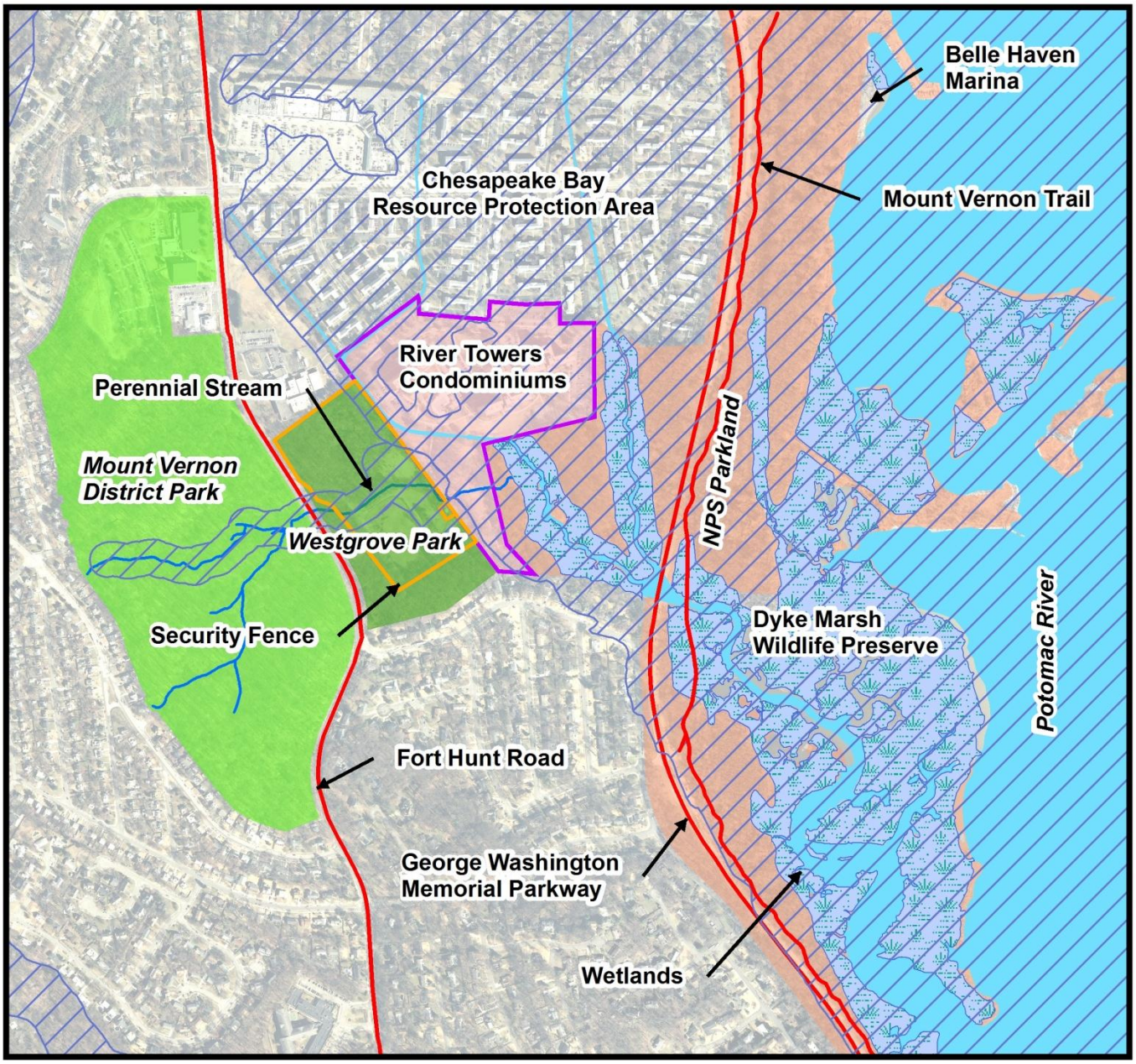
Figure 2: Comprehensive Plan Context



C. NATURAL RESOURCE CONTEXT

Westgrove Park is one link in the area's natural resource connectivity, although impaired by multiple barriers (Figure 3). To the west of Westgrove Park is Mount Vernon District Park, which is primarily characterized by upland forest and is planned for resource protection. These two parks are separated by the two-lane Fort Hunt Road. To the east, is NPS owned and operated parkland along the Potomac River that is associated with the George Washington Memorial Parkway, which contains several hundred acres of swampland, including the 485-acre Dyke Marsh Wildlife Preserve. Dyke Marsh consists of tidal marsh, floodplain, and swamp forest, and is one of the largest tidal wetlands in the Washington, D.C., area. Situated in between Westgrove Park and the NPS parkland is the River Towers residential development. The River Towers community consists of 26 acres that is mostly developed within resource protection area (RPA) as identified and delineated in accordance with the Chesapeake Bay Protection Act. Remnants of the former plant security fence also present another barrier to the natural resource connectivity of the region.

Figure 3: Natural Resource Context



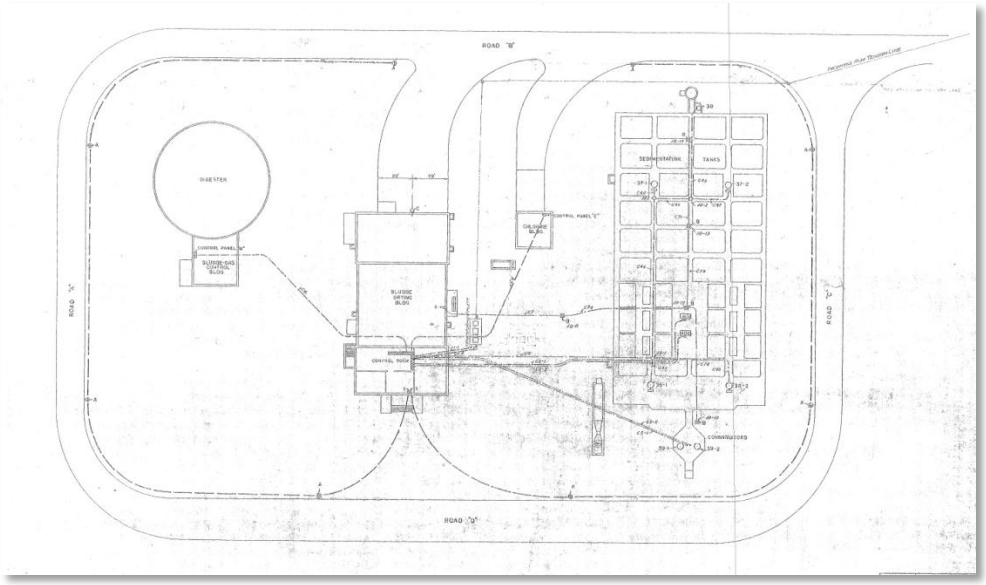
D. WATERSHED MANAGEMENT CONTEXT

Westgrove Park is situated in the 2.7-square mile Belle Haven Watershed, which is part of the Potomac River Basin. According to the Belle Haven Watershed Management Plan approved by the Board of Supervisors on January 11, 2011, approximately 69% of the watershed has been developed affording 32% overall imperviousness. Due to the high level of imperviousness and limited stormwater controls, the watershed is rated fair to very poor for stream habitat and 4.37 out of 10 in pollutant load modeling (10 being the best possible). However, the plan indicates that the water quality in the watershed is within acceptable limits and no stream segments are listed by the Virginia Department of Environmental Quality as impaired, which indicates a TDML (total daily load maximum) program is not warranted under the Clean Water Act. While the Belle Haven Watershed is considered to be in an overall poor condition, the watershed management plan does not identify any restoration strategies within the bounds of Westgrove Park.

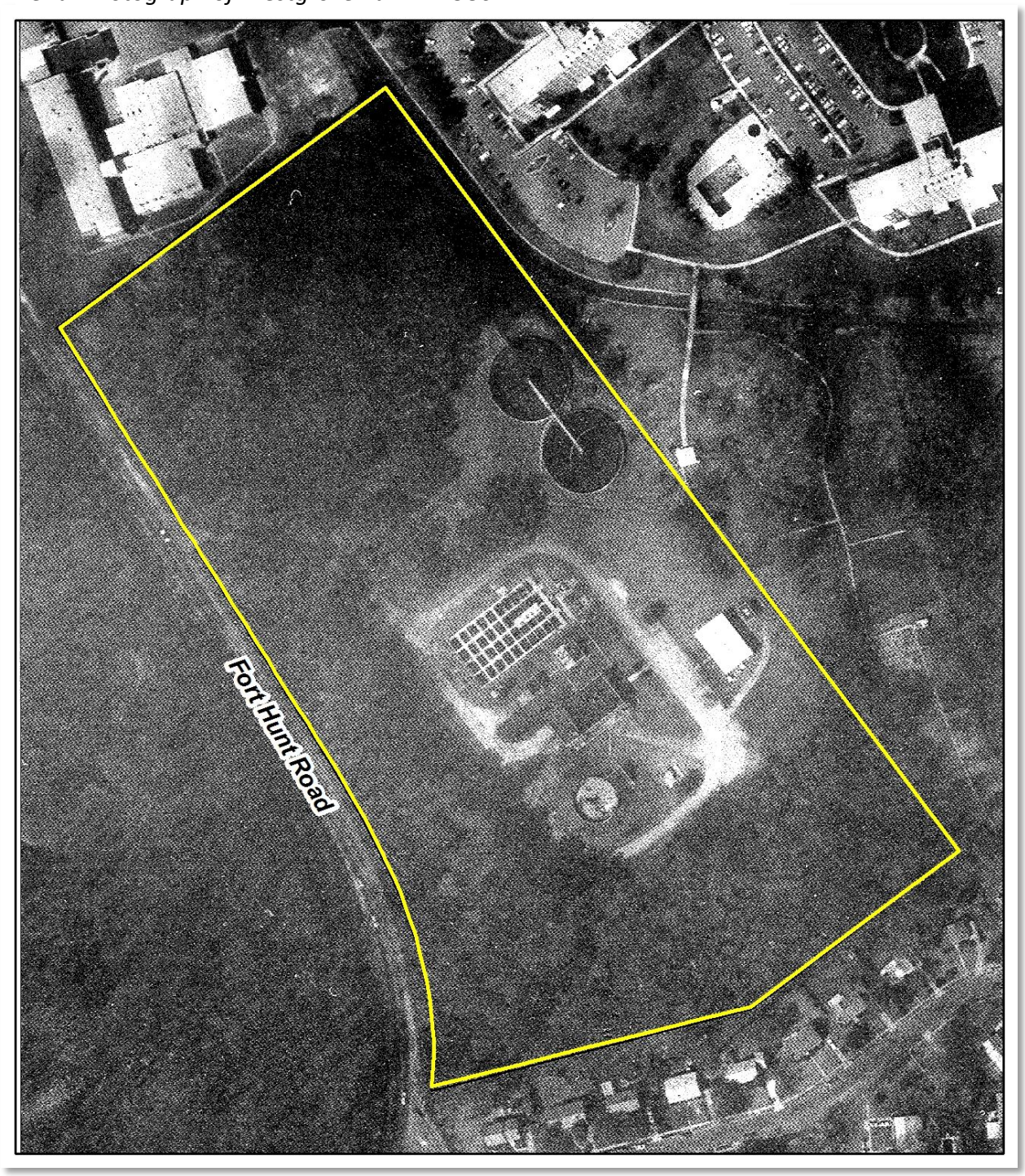
E. ADMINISTRATIVE HISTORY

The single parcel comprising Westgrove Park (Tax Map: 093-2 ((1)) 0006) was transferred from the Board of Supervisors to the Park Authority on October 29, 2001. The former wastewater treatment plant was located within the existing circular drive and meadow in the northern forested area, and was in operation between the mid-20th century and 1980s (Figure 4). After the plant was decommissioned, the facility and related materials were either removed and/or buried onsite during its demolition in 1986. Between the time of demolition in 1986 and the land ownership transfer in 2001, the park was leased to the Park Authority from the Board of Supervisors for park purposes.

Figure 4: Site Plan of Former Wastewater Treatment Plant



Aerial Photograph of Westgrove Park in 1986



F. PARK CLASSIFICATION

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.

Westgrove Park is designated as a Local Park. Local parks primarily provide facilities for active and/or passive recreation, which may include areas for scheduled or unscheduled recreation activities or social gatherings, to serve local residential and employment centers. Areas designated for natural and/or cultural resource protection are also common features of local parks. In suburban settings, such as the neighborhoods around Westgrove, local park size will typically be between 2.5 and 50 acres. Typical local park facilities may include picnic areas, open play areas, playgrounds, trails, athletic fields, off-leash dog areas and multi-use courts. In a suburban setting, the local park service area may be up to three miles. The typical duration of visits to local parks will be two hours or less.

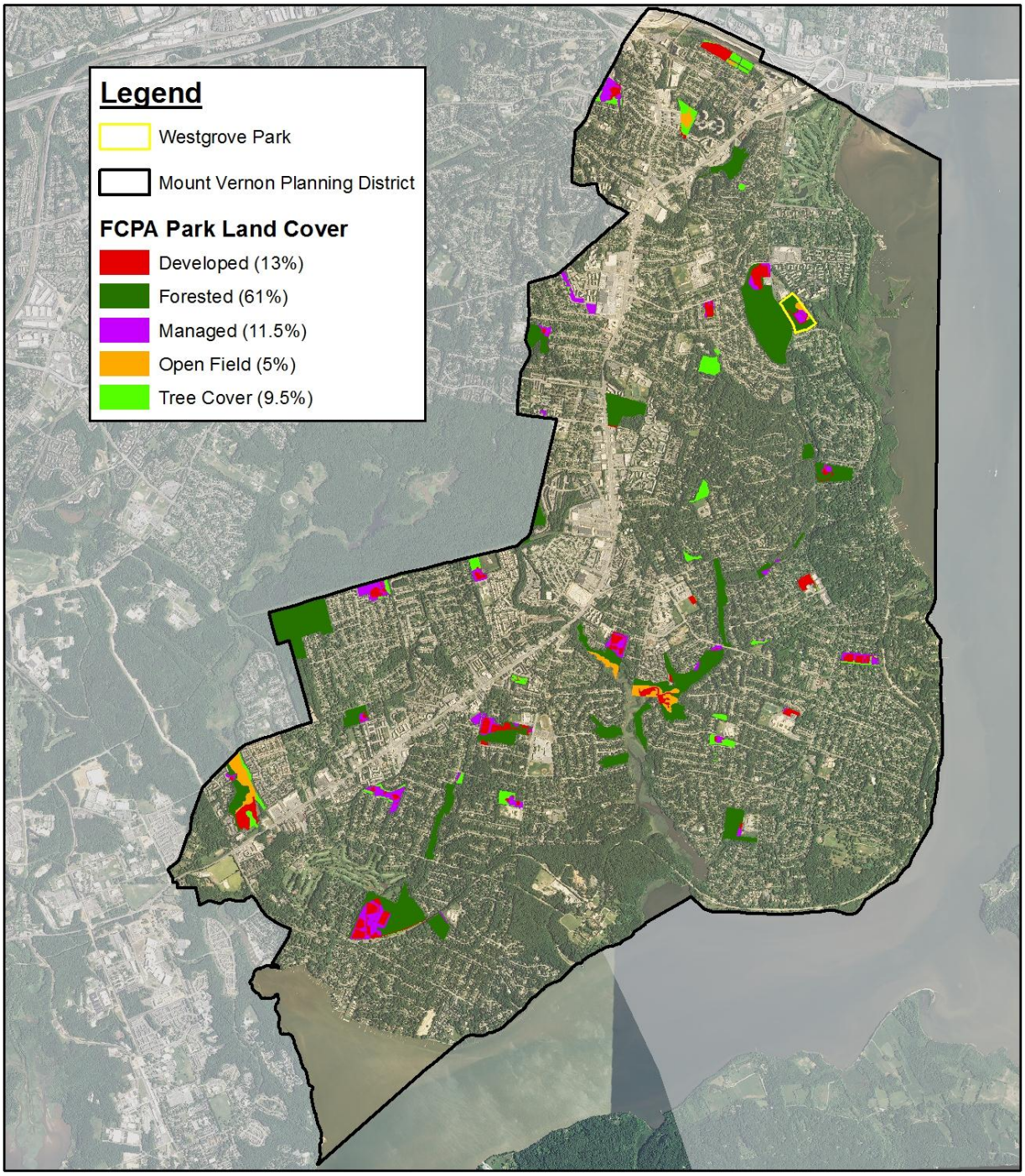
G. PARK LAND COVER

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 containing 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 edge of parks or use zones adjacent to development.

There is approximately 778 acres of Park Authority parkland in the Mount Vernon Planning District, which has the following land cover distribution: 13% developed, 61% forest, 11.5% managed, 5% open field, and 9.5% tree cover (Figure 5). The area's natural resource connectivity and proximity to the Chesapeake Bay is a large influence in the Park Authority's management of parkland in the Mount Vernon Planning District, as evidenced by the fact that only 25% of parkland has been developed or is actively being managed.

Figure 5: Park Land Cover in Mount Vernon Planning District



H. PARK AND RECREATION NEEDS

The area within two miles of Westgrove Park is served moderately well with park and recreational opportunities by 14 local parks, seven resource-based parks, nine public schools, and the parkland associated with the George Washington Memorial Parkway (Figure 6 and Figure 7). These opportunities provide a variety of local-serving amenities and recreational facilities, such as rectangle and diamond fields, playgrounds, multi-use courts, picnic areas, and trails. Several opportunities also provide wider-serving facilities and features unique to the area, such as the Mount Vernon District Park RECenter, the Nature Center at Huntley Meadows, and the Mount Vernon Trail.

The need for park and recreation facilities is determined through long range planning efforts. Recreation needs are generally met through the provision of park facilities. The 2003-2013 Needs Assessment provides guidance for parkland and facility needs. As part of the Needs Assessment process, the Park Authority tracks inventory of facilities, looks at industry trends, surveys County citizen recreation demand, and compares itself with peer jurisdictions to determine park facility needs. In addition, the Park Authority Board adopted countywide population-based service level standards for parkland and park facilities. Table 1 reflects projected local serving park facility needs in the Mount Vernon Planning District in which Westgrove Park is located.

Figure 6: Nearby Parkland and Recreation, Within One Mile of Westgrove Park

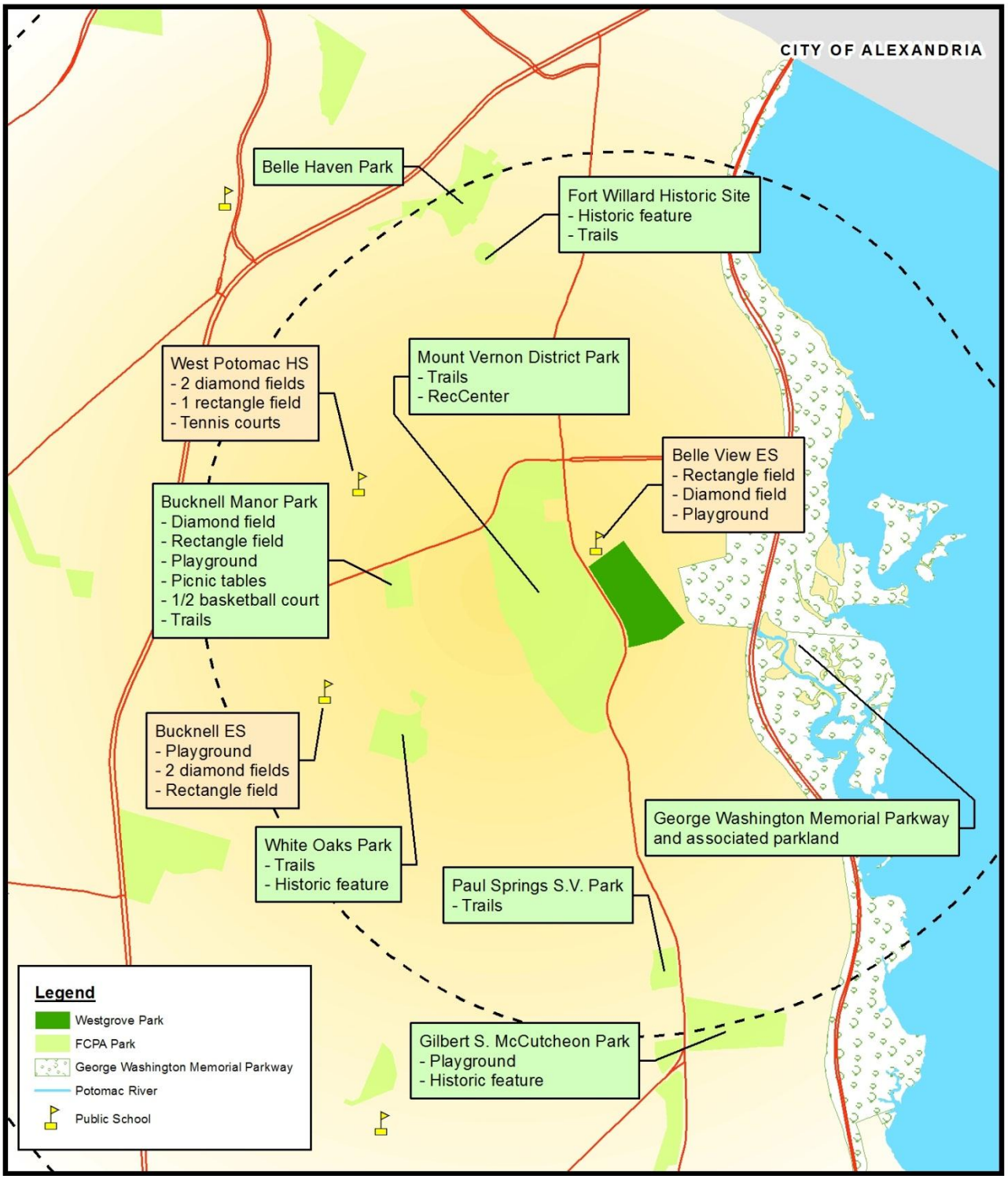


Figure 7: Nearby Parkland and Recreation, Between One and Two Miles from Westgrove Park

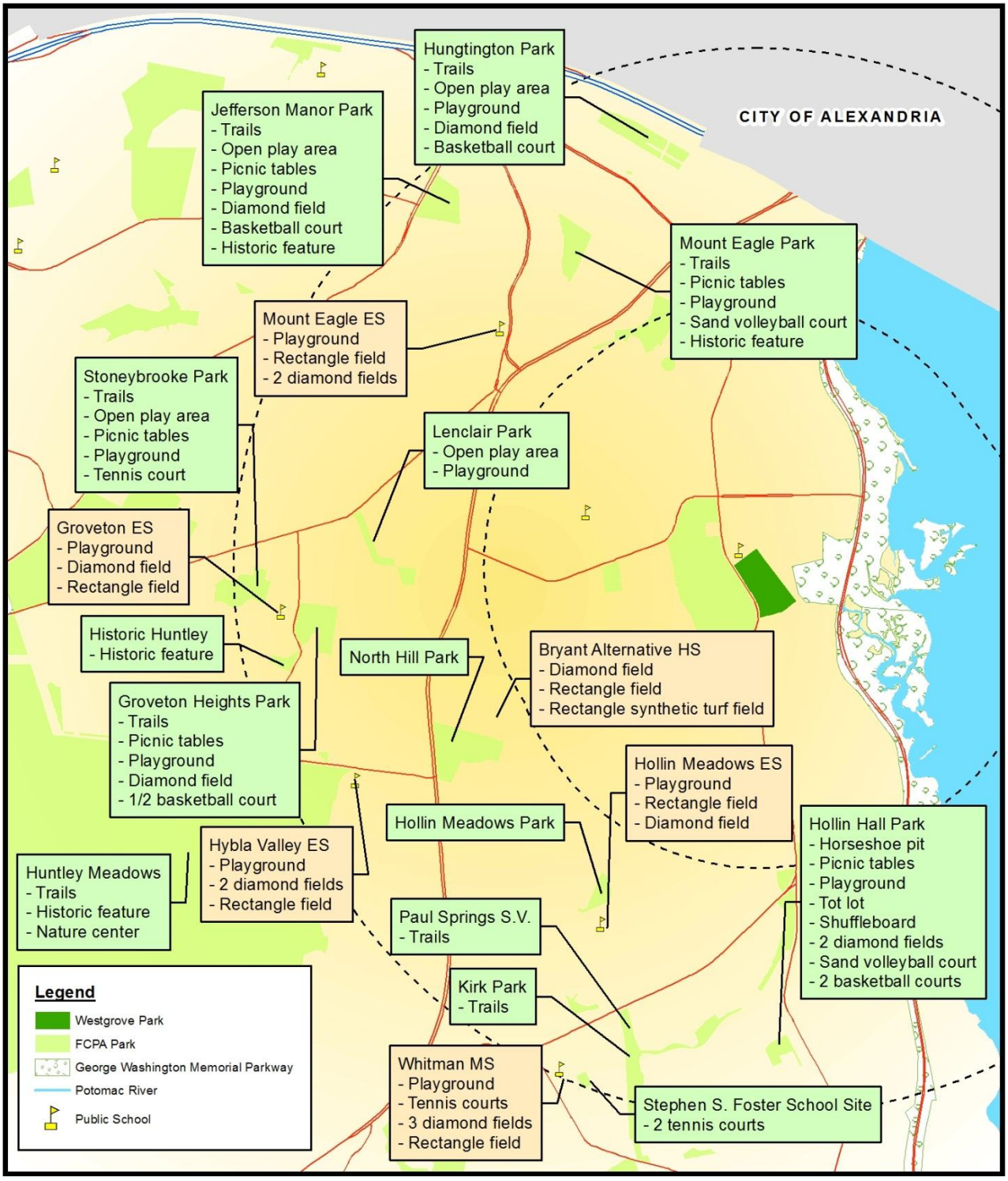


Table 1: Mount Vernon District 2020 Facility Needs Analysis

95,120	2010 population				
101,298	2020 projected population				
Facility	**Service Level Standard**	**2010 Existing Facilities**	**2010 (Deficit)/ Surplus**	**2020 Needed Facilities**	**2020 Projected (Deficit)/ Surplus**
Rectangle Fields	1 field / 2,700 people	26.0	**(9.2)**	37.5	**(11.5)**
Adult Baseball Fields	1 field / 24,000 people	5.0	**1.0**	4.2	**0.8**
Adult Softball Fields	1 field / 22,000 people	0.0	**(4.3)**	4.6	**(4.6)**
Youth Baseball Fields	1 field / 7,200 people	15.5	**2.3**	14.1	**1.4**
Youth Softball Fields	1 field / 8,800 people	12.0	**1.2**	11.5	**0.5**
Basketball Courts	1 court / 2,100 people	15.0	**(30.3)**	48.2	**(33.2)**
Playgrounds	1 playground / 2,800 people	28.5	**(5.5)**	36.2	**(7.7)**
Neighborhood Dog Parks	1 dog park / 86,000 people	1.0	**0.1**	1.2	**(0.2)**
Neighborhood Skate Parks	1 skate park / 106,000 people	0.0	**(0.9)**	1.0	**(1.0)**

As reflected in the Park Comprehensive Plan entitled *Great Parks, Great Communities*, the Park Authority conducted a more localized examination of needs around Westgrove Park within the Mount Vernon Planning District using the planning district demographics and geography as established through the County Comprehensive Plan. Based on the above adopted service level standards, the Mount Vernon Planning District is currently deficient in the provision of rectangle fields, adult softball fields, basketball courts, playgrounds, and neighborhood skate parks. Projected population growth indicates that by 2020 the demand will be greatest within the Mount Vernon Planning District for basketball courts as well as rectangle fields and playgrounds. Needs are reassessed every decade and may shift over time.

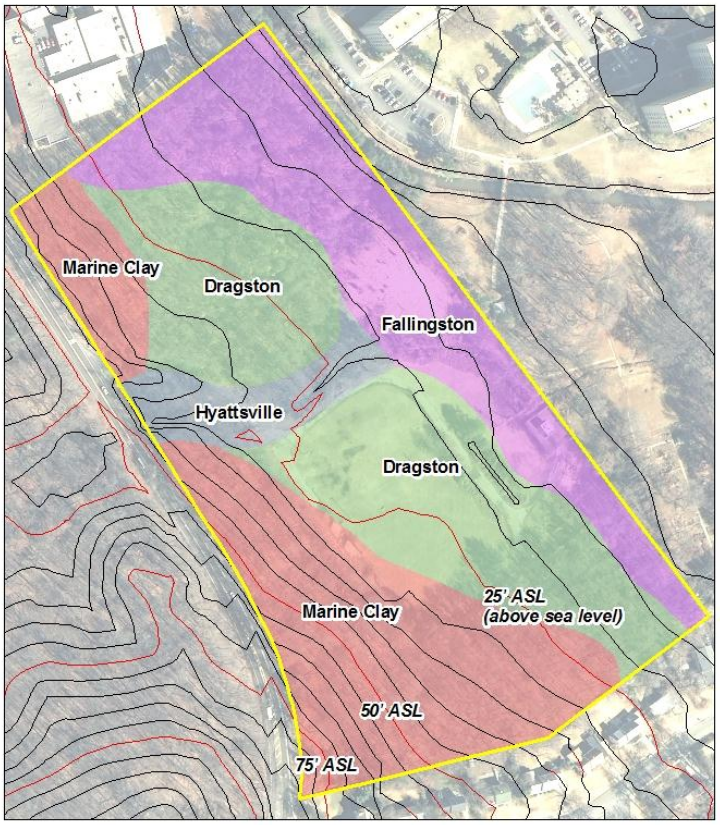
III. EXISTING CONDITIONS

A. NATURAL RESOURCES

1. Soils

The soils found in Westgrove Park consist of Dragston, Fallingston, Hyattsville, and Marine Clay (Figure 8). Dragston is made up of sandy loams and sandy clay loams that have moderate permeability and slight erosive potential. Fallingston is made up of sandy to sandy clay that have moderate to moderately rapid permeability and slight erosive potential. Hyattsville is predominantly made up of sedimentary material eroded from higher areas and may contain varying amounts of clays, silts, sands, and gravel; Hyattsville is often found in drainage ways and have moderate permeability. Marine Clay has limited permeability.

Figure 8: Existing Soils and Topography



2. Topography

The topography of Westgrove Park is gently sloping to flat in a generally east to northeast direction (Figure 8). There are no steep slopes greater than 25% in the park. The area with the greatest slope is the southwest corner which drops roughly 40 feet over a distance of 240 feet, resulting in a slope of approximately 15%.

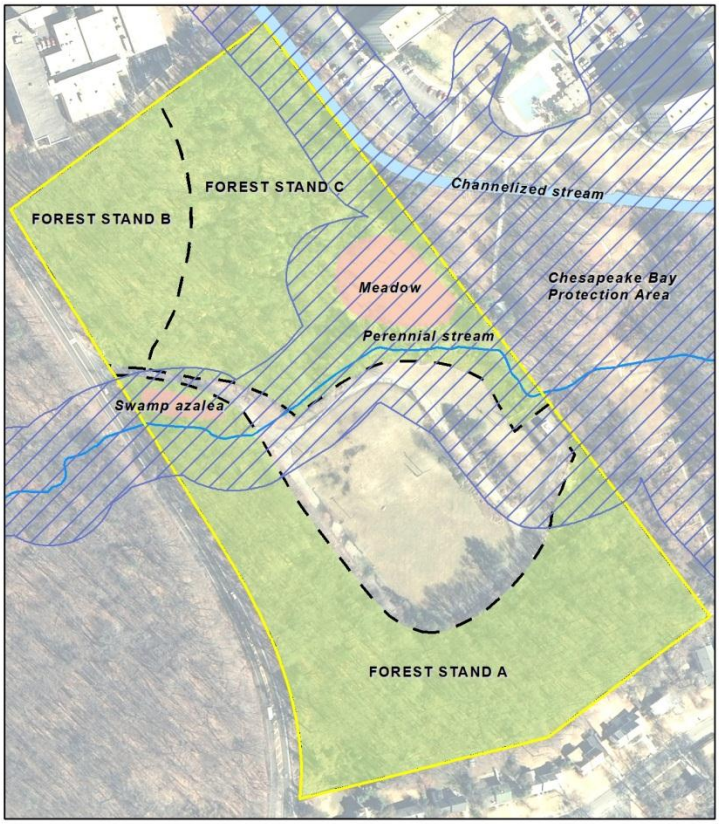
3. Vegetation Cover

Westgrove Park contains approximately 13.5 acres of forest within three ecologically-unique stands (Figure 9). Forest stand A (+/- 7.09 acres) extends along the western and southern boundaries of the park, and primarily consists of willow oak and sweetgum that range from 22" to 28" diameter by breast height (dbh), although some exceed up to 30" dbh. The associated species that are codominant, and found in the understory as well, include red maple, tulip poplar, white oak, southern red oak, black gum and American beech. The understory contains a variety of species, including azalea, arrowwood viburnum, blackhaw viburnum, greenbrier, spicebush, trumpet creeper, blueberries, Japanese stilt grass, and Christmas ferns.

The portion of forest stand A between Fort Hunt Road and the former plant security fence is considered the best remaining forest remnant in the park. This area was forested in 1937 and appears not to have been disturbed since that time. The remainder of forest stand A between the homes on Wake Forest Drive and the open area of the park was disturbed in the mid-20th century,

has younger trees and more disturbed soils as evidenced from the prevalence of non-native invasive plant species. Deer herbivory in forest stand A ranges from moderate to severe. The old, good quality portion of forest stand A should be protected and no trails placed within it.

Figure 9: Existing Forest Stands and Hydrology



Forest stand B (+/- 2.18 acres) is located along the northwest corner of the park and contains a mix of hardwoods, including sweetgum, yellow poplar, white oak, willow oak, scarlet oak, red maple, black cherry, and black gum. These hardwoods typically range in size from 20" to 25" dbh. Red maples, oaks, American holly, viburnums, greenbier, New York fern, and Christmas ferns are commonly found in the understory.

Forest stand B was open field in 1937, and based on the high degree of non-native invasive plant coverage in the understory was likely disturbed in the mid-20th century. Overall diversity of species appears low, and deer herbivory levels are severe and the quality of the forest stand is poor, but the diversity of the overstory trees makes this forest stand a good candidate for forest restoration. Restoration efforts would require control of white-tailed deer herbivory in order to be successful.

Forest stand C (+/- 4.25 acres) is located in the northeastern portion of the park and is primarily comprised of mature, dead, and partially fallen Virginia pine. The associated species that are codominant, and found in the understory as well, include willow oak, red maple, sweetgum, white oak, and southern red oak.

Forest stand C is relatively very young (estimated 40 years or less), was open field in 1937, is very poor in quality and exhibits a high degree of disturbance likely in the mid- to late-20th century. Improving this forest stand would be difficult due to the downed pine trees, disturbed soils, and overall severe levels of deer browse and prevalence of non-native invasive plant species. An approximate one-half-acre meadow is located in the middle of forest stand C that is the former location of a facility associated with the wastewater treatment plant; along the same demolition history as the main plant facility, facilities were removed and/or buried on-site. The meadow is not high quality in its current condition but is well situated in the landscape to provide valuable wildlife habitat as part of a landscape mosaic.

The remaining 7.8 acres of Westgrove Park have been disturbed from activities related to the former wastewater treatment plant and/or pump station, and are subsequently managed by the Park Authority. This includes the existing entrance and circular drive, the open lawn where the wastewater treatment plant was formerly located, and all adjacent open space areas.

4. Hydrology

Westgrove Park contains two hydrological features, a patch of swamp azalea and an unnamed perennial stream that bisects the park from west to east (Figure 9). The patch of swamp azalea (Rhododendron viscosum) is uncommon in Fairfax County due primarily to human habitat destruction. The swamp azalea likely is a remnant from seep and bog communities that abounded in the coastal plain of Northern Virginia prior to large scale land disturbance particularly in areas at the toe of large gravel terraces where marine clay layers forced ground water to the surface forming numerous seeps. Remnants of seeps and bogs still persist on public and private lands in Arlington, Alexandria, Springfield, Lorton and Prince William County.

The unnamed perennial stream originates from a stormwater outfall pipe off Quander Road in the upland portion of Mount Vernon District Park. The stream runs downslope through Mount Vernon District Park and under Fort Hunt Road before reaching Westgrove Park. Once in the park, it flows for 850 feet in an easterly direction to the eastern park boundary where it submerges underground and is subsequently diverted into wetlands on NPS parkland and the Potomac River. Approximately 6.5 acres of RPA surround the perennial stream within the park, see *Design and Community Concerns* of CDP.

5. Wildlife

The Park Authority has not conducted a formal wildlife survey for Westgrove Park, but staff observations and those of professional and volunteer observers revealed a variety of wildlife, including deer, squirrels, foxes, birds, and butterflies. Although habitat within the park is degraded, the location of the park between Dyke Marsh and Mount Vernon District Park and along the Potomac River Corridor places it in a location to provide cover, forage and corridor opportunities for resident and migratory wildlife. Natural areas within the park will remain intact, so disruption of wildlife usage is not anticipated.

6. Rare Species

A list of natural heritage resources found near Westgrove Park was provided by the Department of Conservation and Recreation, Division of Natural Heritage. They include: Virginia Mallow, Epiphytic Sedge, Northern Virginia Well Amphipod, A Tiger Beetle, Blue-hearts, Hairy Beardtongue, Red Milkweed, Large-leaf Pondweed, Midland Clubtail, Flatleaf Pondweed, and Heart-leaved Plantain. None of these species have been documented within the park. Habitat suitable for some of these resources may be present in the park. Staff will look for these species during future growing season surveys.

B. INFRASTRUCTURE

The existing infrastructure in Westgrove Park as described below is shown in Figure 10.

1. Pump Station

A wastewater pump station was installed in Westgrove Park in 1961 to serve the surrounding residential neighborhoods and remains in-operation today. Fairfax County employees routinely access the fenced, gated and locked pump station for operational and maintenance purposes.

Pump station

2. Utilities

Westgrove Park is serviced with underground water and sewer and above-ground electric. All utilities currently terminate at the existing pump station. Underground utilities are located along the park boundary whereas the above-ground electric originates from the park entrance on Fort Hunt Road and bisects the open lawn.

3. Vehicular Access and Parking

There is a single vehicular entrance to Westgrove Park off Fort Hunt Road. The entrance was formerly gated and locked for Fairfax County employee-access only; however, it was opened to the public after the interim off-leash dog area (OLDA) use was installed and opened in fall 2012. During installation of the interim OLDA use, the one-way, counter-clockwise circular drive was sealed and striped to improve driving conditions and to accommodate 22 parking spaces and one Americans with Disabilities Act (ADA) parking space for the park. The parking spaces were intentionally designed outside the RPA.

4. Pedestrian Access

Pedestrian access to Westgrove Park is provided by a gap in the former wastewater treatment plant security fence adjacent to the vehicular entrance off Fort Hunt Road. There are no sidewalks or other pedestrian paths that serve the park; however, there is a multi-use trail on the opposite side of Fort Hunt Road, although it does not have direct access to the park.

5. Security Fence

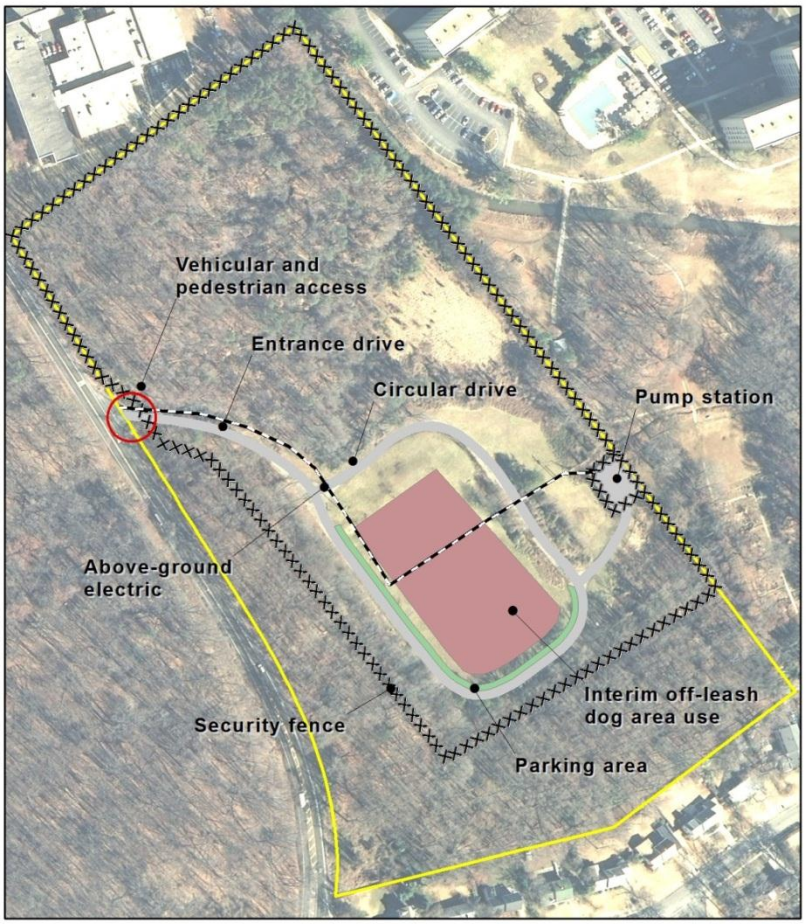
A security fence for the former wastewater treatment plant was installed generally on the Westgrove Park property perimeter during the plant's operational time period. Most of the security fence remains intact except for a portion along the northeastern border near the channelized stream on the River Towers property.

C. USES

Existing uses in Westgrove Park are limited to the pump station operations, the interim off-leash dog area (Figure 10), and casual community activities within the open lawn areas, such as wildlife

viewing, picnicking, walking, and general exercising. Thickets, dense brush, and the former wastewater treatment plant security fence pose access barriers to some areas of the park.

Figure 10: Existing Infrastructure



Looking south at interim OLDA

Remnant of security fence

IV. PARK ASPIRATIONS

A. PARK PURPOSE

Park Purpose statements provide high-level guidance for planning and development. The purpose of Westgrove Park as with other local-serving parks is to balance:

- Meeting community recreation and leisure needs;
- Preserving and interpreting the natural character of the park.

B. DESIRED VISITOR EXPERIENCE

Westgrove Park is envisioned as a local park that will serve a variety of users from nearby neighborhoods and the larger community within its service area. The planned uses will better utilize the former wastewater treatment plant area, open lawn areas to provide community recreation and leisure facilities; protect and preserve natural resources, provide educational and interpretation opportunities; enhance accessibility and create a trail network. This plan aspires to provide a park experience that will appeal and be enjoyed by a variety of users, such as family and group gatherings, dog owners, nature enthusiasts, students and community members seeking social activities.

Typical user visits will last from thirty minutes 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 parking area to provide general information about the park and support a self-guided experience.

C. 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. Westgrove Park should:

- Provide recreation and leisure elements to address overall needs within the Mount Vernon Planning District;
- Provide natural resource protection, preservation, connectivity and interpretation elements;
- Provide adequate pedestrian access and trails throughout the park;
- Be designated and managed as an Invasive Management Area within appropriate forest stands.

V. CONCEPTUAL DEVELOPMENT PLAN

A. 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 project elements. The CDP is shown as Figure 11 on page 21.

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 Section III 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 the development of this park. 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.

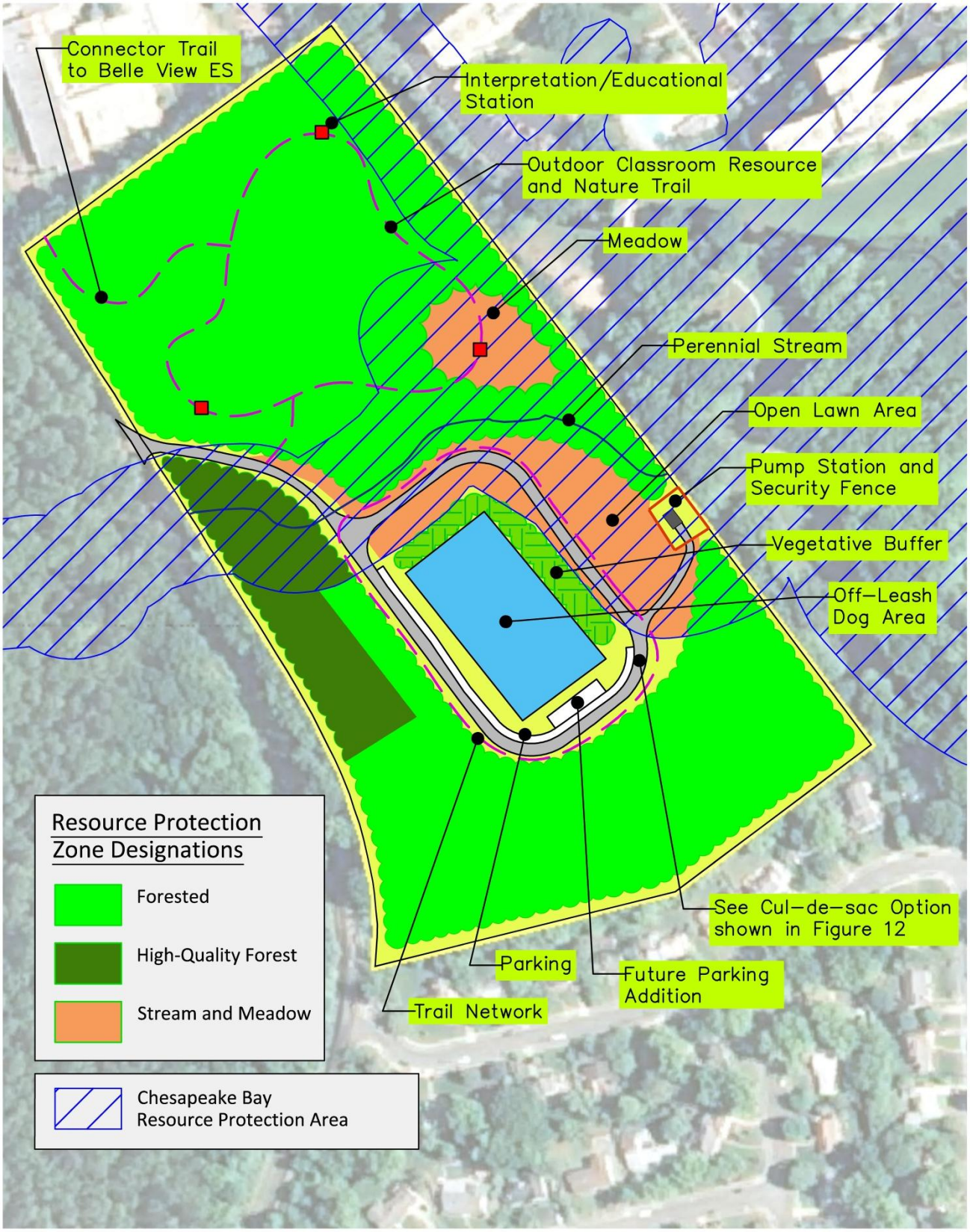
B. PLAN ELEMENTS

1. Off-Leash Dog Area

The interim off-leash dog area (OLDA) has become a well-used amenity in Westgrove Park since it was opened on November 6, 2012, and should be retained as a permanent use. The determination to retain the OLDA use was based on a host of factors, including evaluating alternative sites, monitoring potential impacts on the perennial stream, researching the demolition of the former wastewater treatment plant, parking requirements and future needs, and receiving public support for the use. For further details regarding the OLDA evaluation, see Table 2: Evaluation of Park Uses on page 26.

The sponsor group should adhere to the memorandum of understanding (Appendix B) and coordinate with the Park Authority to make the temporary fencing permanent and facilitate other improvements to ensure the OLDA is consistent with Park Authority OLDA standards. In addition, vegetative buffers should be installed along the northeast and northwest sides of the OLDA to provide an extra degree of separation between the OLDA and open lawn areas. The design of the vegetative buffer should seek to incorporate Low Impact Development (LID) principles and elements to benefit the area's natural resources. If the utility poles and electric lines that bisect the OLDA are removed or relocated, the OLDA size and configuration may be altered with Park Authority coordination.

Figure 11: Conceptual Development Plan



2. Outdoor Classroom Resource and Nature Trail

An outdoor classroom resource affiliated with Belle View ES is envisioned in the northern forested area of the park. The school utilizes the schoolyard property for a series of 22 outdoor learning stations (Appendix A) that enhances student learning and supports the Virginia's Standards of Learning (SOL). These stations allow students to gain first-hand experience in a variety of earth resources and living systems, such as decomposition, small mammal habitats, wildlife observation, wetland restoration and other water systems, and agriculture. One SOL component that the school is unable to provide is forest habitat education, simply because the schoolyard property does not contain any forest.

The best identified mechanism to provide this outdoor classroom resource is through a nature trail that contains a series of interpretative features similar to those found on the schoolyard property. Seating along the nature trail is also envisioned, such as benches or picnic tables for group activities. The placement, content, and funding of the interpretation signs, stations, and seating will be coordinated between the Park Authority and Belle View ES. Access to the outdoor resource classroom and nature will be provided from the shared border with the school and open lawn areas in the center of the park, see plan element *Pedestrian Access and Trail Network*.

3. Open Lawn Areas

The open lawn areas adjacent to the circular drive are to be retained for casual community use, such as picnicking, nature enjoyment, and general exercising. Small-scale uses could occur or be programmed in these areas, such as social gatherings, picnicking, or small classes. The areas are currently and should continue to be managed by the Park Authority and mowed on a routine schedule. The mow schedule may vary throughout the park depending on the management objective and time of year, such as maintaining a meadow-like area near the forest edges with less frequent mows and mowing the areas with high activity more often.

4. Pedestrian Access and Trail Network

A trail network is envisioned to support recreational use and nature observation in the park as shown on the CDP. This trail network is shown as a general concept and will be field located at the time of implementation. Features of the trail network include, but are not limited to, the outdoor classroom resource and nature trail, a circular walking trail generally parallel to the loop road, and a connector trail to the adjacent Belle View ES. The trail network should provide adequate seating and separation from other park uses to minimize user conflicts.

Pedestrian access was evaluated for all sides of Westgrove Park. However, the only feasible option is the shared border with Belle View ES and is designed as a connector trail to the park trail network.

Trail connections could physically be made to surrounding residential communities to the northeast and south (i.e. River Towers and Westgroves subdivision); however, concerns about trespassing on private property at the connections make these connections undesirable. Additionally, a trail created along the park frontage along Ft. Hunt Road connecting to Westgroves Subdivision was examined but is infeasible due to unsafe conditions related to topography and utilities. However, in

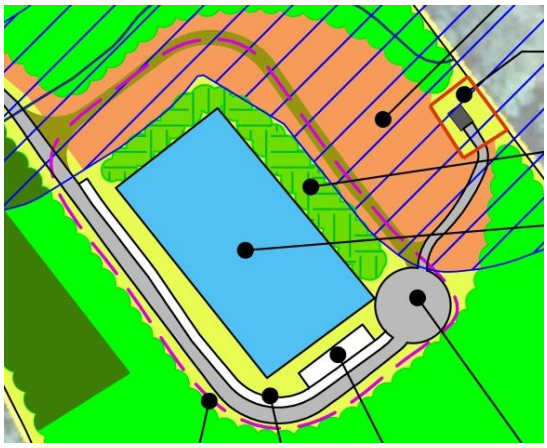
the event future Fort Hunt Road improvements alleviate these constraints, the Park Authority will work with transportation officials to seek opportunities for better pedestrian access to the park.

5. Vehicular Access and Parking

The sole vehicular entrance to Westgrove Park off Fort Hunt Road is to be retained. No additional vehicular access points are envisioned to serve the park.

Vehicular circulation within the park will be by means of the existing roadway shown in the CDP in Figure 11. An alternative vehicular circulation route is shown in Figure 12 that effectively adds a cul-de-sac and removes a portion of the existing roadway or converts a portion of the existing roadway into a sustainable trail segment within the park's trail network. The alternative vehicular circulation route may be implemented in the future after taking into account park usage patterns. To facilitate this improvement and serve vehicle circulation, the drive should be designed to terminate at a cul-de-sac near the pump station that retains access to the pump station. Consequently, the traffic pattern will be converted from a one-way loop into a widened two-way driveway.

Figure 12: CDP, Cul-de-sac Alternative



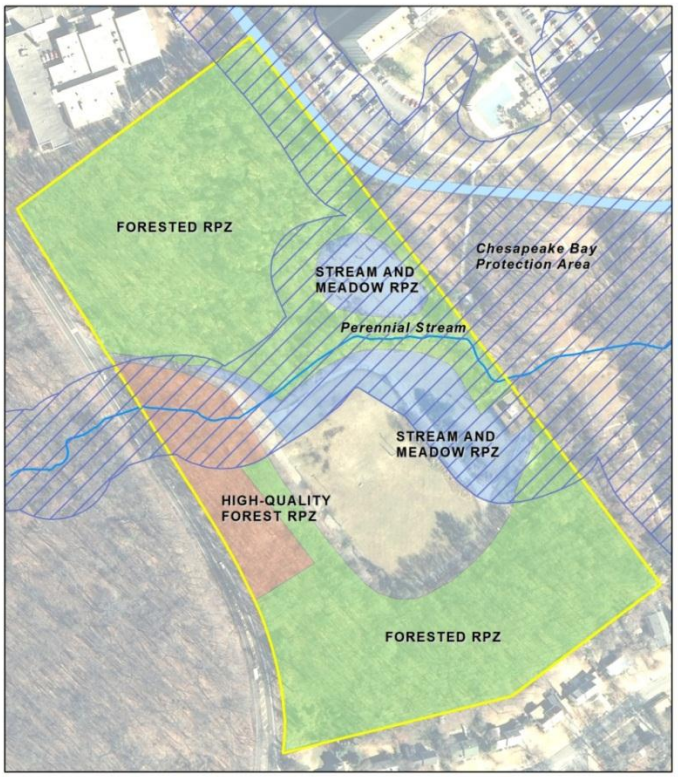
Parking spaces should be retained along the entrance road, but could be reconfigured as slanted or pull-in to increase the amount of available parking, if needed. Alternatively, additional parking spaces may be added along the roadway as shown on the CDP. The additional parking should be designed to respect the surrounding RPA and RPZs and be designed to avoid impacts to natural resources.

6. 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

Figure 13: Resource Protection Zones



and activities compatible with the resources present at the park level. Three RPZs are established for Westgrove Park (Figure 13).

Forested Resource Protection Zone – Two areas of forested RPZs are centered on forested areas in the park and contain natural resources that are not considered to be significant but provide valuable habitat and ecosystem services. As such, they will be protected for the benefit of the natural resources. Trails, interpretive features and an outdoor classroom are appropriate uses in these zones.

High-Quality Forest Resource Protection Zone – This RPZ contains areas of a higher quality and more sensitive natural resources. One area contains a patch of swamp azalea that is unusual for the region; and another area contains a higher quality forest stand than those found over the remainder of the site. To protect these resources, no trails, facilities or unsupervised public access should occur in this RPZ.

Stream and Meadow Resource Protection Zone – These non-forested, non-developed RPA areas include wetlands, a stream and stream buffer areas and a meadow. These areas are not pristine but provide important water quality and habitat benefits. They will be protected and managed for the benefit of the natural resources. Trails and interpretive features are appropriate uses in these RPZs.

7. Resource Protection Area

Chesapeake Bay Resource Protection Areas (RPA) are the corridors of environmentally sensitive land that lie alongside or near the shorelines of streams, rivers and other waterways which drain into the Potomac River and eventually into the Chesapeake Bay. In their natural condition, RPAs protect water quality, filter pollutants out of stormwater runoff, reduce the volume of stormwater runoff, prevent erosion, and perform other important biological and ecological functions. RPAs include any land characterized by one or more of the following features: a tidal wetland; a tidal shore; a water body with perennial flow; a non-tidal wetland connected by surface flow and contiguous to a tidal wetland or water body with perennial flow; and the area extending 100 feet from both banks of all perennial streams or 100 year floodplain, whichever is greater.

No new development is allowed to occur in an RPA without a waiver from DPWES or exception from the Board of Supervisors. However, development can occur within the bounds of existing development, such the existing roadway located within the RPA. While most of the park is designated as a resource protection zone, the RPA presents another mechanism to protect the park's resources. In particular, the RPA further limits the amount of developable land for park facilities. Removal of portions of the existing circular drive in favor of planned sustainable trails and community use-open lawn areas would further improve and protect the RPA.

8. Meadow

The meadow located in the northern forested area is a former facility site associated with the wastewater treatment plant. The facility and related materials were either removed and/or buried onsite during its demolition. In its current state, the meadow offers a unique habitat and ecosystem

within the park's forest. The meadow should remain and be managed for meadow species and educational and interpretation uses related to the outdoor classroom resource and nature trail.

Meadow

9. Pump Station

The pump station is planned to remain in-operation for the next foreseeable future. In the event the pump station is decommissioned and removed, the Park Authority will coordinate the best possible strategies to reclaim and reuse the area.

C. DESIGN AND COMMUNITY CONCERNS

1. Security Fence

The former wastewater treatment plant security fence that remains mostly intact throughout the park has been a prominent feature in Westgrove Park for over 40 years and has affected the community and region in a variety of ways, particularly the park's adjacent neighbors – Belle View ES, River Towers Condominiums, and the Westgroves subdivision.

The former wastewater treatment plant security fence exists along a large portion of the park with varying conditions; fencing surrounding the pump station will remain. The Park Authority typically does not fence parks and over time may remove fencing for safety or other reasons, such as enhancing the region's natural resource connectivity balanced with community concerns.

During the master plan process, the Park Authority engaged with Belle View ES and the River Towers community and received comments from adjacent homeowners on Wake Forest Drive about the security fence placed on their respective shared borders with the park. Belle View ES expressed interest in leaving the security fence intact along its shared border for security purposes as the areas adjacent to the fence are used daily by students. Prior to removing the security fence, the Park Authority will consult with Belle View ES on the need for security fencing along its shared border. In addition, the Park Authority will coordinate with Belle View ES to manage pedestrian access between the school and park.

The River Towers community and adjacent homeowners on Wake Forest Drive expressed the desire for some border fencing to remain in place to preclude public access onto their property and to ensure reasonable privacy from park users. Prior to removing the security fence, the Park Authority will consult with these parties on the need for security fencing along its shared border.

2. Pedestrian Access

Improving pedestrian access to Westgrove Park was a key issue identified by the Park Authority and community throughout the master plan process. In addition to field surveys and consultation with trail designers, the Park Authority engaged the Safe Routes to School National Partnership to

evaluate a possible pedestrian connection to Belle View Elementary School through the park. The wooded nature of the park and the lack of safe access from a public street precluded a safe route to the school (Appendix C).

3. Stormwater

Construction of stormwater management facilities may be necessary to address water runoff for the addition of park facilities. Low Impact Development (LID) principles should be used to the extent possible for this purpose.

4. Vegetative Berms

To the extent of Park Authority knowledge, the existing vegetative berms that flank a portion of the existing circular drive were installed during the wastewater plant's operational time period. The berms provide some benefit to the park, such as a mechanism for vegetative screening and wildlife habitat. However, the berms may contain hazardous remnants from the plant's demolition that are not ideal in a park setting. Therefore, the berms should be retained unless otherwise determined to be removed in the future by the Park Authority.

5. Evaluation of Park Uses, Site of Former Wastewater Treatment Plant

Throughout the master plan process, the Park Authority received numerous public comment and recommendations for appropriate uses of the park, particularly alternative uses for the interim OLDA. The Park Authority evaluated all uses in the spirit of resource protection and interpretation, low-impact development, and addressing community needs. Table 2 provides a list of considered uses and Park Authority evaluation regarding inclusion in the master plan.

Table 2: Evaluation of Park Uses

Use Proposed or Considered	Included in MP	Park Authority Evaluation
Community garden plots	No	The high probability of buried demolished wastewater treatment plant facility materials on the former plant site makes the soil less than desirable for gardening.
Disc golf course	No	The forested areas are designated as resource protection zones; consequently, the disc golf course would be beyond the recommended amount of allowable use in these protection zones.
Outdoor classroom resource	Yes	Resource interpretation is a high priority for Westgrove Park as it serves a role in the regions environmental connectivity. Partnering with Belle View ES will provide a forest habitat educational component in the school's outdoor education program that supports the Virginia's Standards of Learning. Forest habitat is not available on school property and is the one component missing from the school's comprehensive 22-station program. Moreover, it is a great opportunity for collaboration between the Park Authority and the school community.

Natural habitat protection	Yes	Three resource protection zones (RPZ) have been established for the park – Forested Resource Protection Zone, High-Quality Forest Resource Protection Zone, and Stream and Meadow Resource Protection Zone. RPZs identify park areas by type that contain natural resources for protection and provide ecosystem functions.
Off-leash dog area at Westgrove Park	Yes	With strong community support, the interim OLDA has become a popular facility in the park since its opening as a two-year interim use on November 6, 2012. In addition, the sponsor group, PACK, has been a successful sponsor and supports a broad community need. The OLDA is an appropriate use in this flat, disturbed area that has a high probability of buried building materials. The former wastewater treatment plant was demolished in 1986 and some materials may have been buried onsite including the large storage tanks are thought to have been leveled, filled and buried.
Off-leash dog area at Mount Vernon District Park	No	The most suggested alternative site for an OLDA use was the meadow area atop the Mount Vernon RECenter third tier parking lot. The slope of the meadow area was calculated to vary between 12% and 20%. The high probability of stormwater runoff immediately dismisses the site for an OLDA use as only a 4% slope is typically permissible. In addition, the Park Authority and the Department of Public Works & Environmental Services (DPWES) have an agreement to use the meadow area for re-vegetation and stormwater purposes.
Picnic tables	Yes	Providing a place to sit and picnic is a valuable park amenity and is recommended as a compatible use in the open lawn areas.
Playground	No	Playground equipment is available to the surrounding community at Belle View ES.
Rugby field	No	The rugby community made a strong argument to use the former facility site open lawn as a practice and game field. However, the interim OLDA has shown to be a popular sponsored use and supports a broad community need. Both uses could not be accommodated and other options for rugby use should be explored.
Sand volleyball courts	No	Sand volleyball courts were simply not requested or needed by the majority of the community, and the Park Authority wanted to limit the amount of overall development in the park.
Stormwater lake	No	Not feasible or warranted. Accessible waterfront areas along the Potomac River are abundant nearby and provide a similar experience.

Trails	Yes	A conceptual trail network for the park is proposed. It includes, but is not limited to, an outdoor classroom resource and nature trail in the forested areas, a circular walking trail generally around the center of the site for a more open experience, and a connector trail to the adjacent Belle View ES.
Trail connection to Belle View ES	Yes	A connector trail is planned to provide pedestrian access between Belle View ES and the park's trail network.
Trail connection to River Towers	No	Option is not feasible due to the respecting the interests of private land owners.
Trail connection to Westgroves subdivision	No	Option is not feasible due to the combination of the respecting the interests of private land owners and topographical and utility constraints
Walking track	Yes	A trail network is planned throughout the park, including a circular loop generally around the OLDA that will provide a varied walking experience.

6. Fiscal Sustainability

Economic realities require that public park funding be supplemented by revenue generated by park offerings, sponsorships, donations, and volunteerism. Fiscal sustainability as outlined in the agency Financial Sustainability Plan is essential to be incorporated into the master plan implementation. Successful implementation of the fiscal sustainability plan and master plan will allow the agency to address community needs, as well as critical maintenance, operational and stewardship programs by providing latitude in funding options and decisions. Together these plans will serve the public, park partners and the Park Authority by providing a greater opportunity for fiscal sustainability while managing the inevitable needs for capitalized repairs and replacements.

16. **Butterfly garden:** Many native and perennial plants attract butterflies, bees and hummingbirds. If one type of plant is observed carefully you may see eggs, larva and adult stages of butterflies that may depend on only that plant for survival. Hummingbirds are attracted to red or purple tube shaped flowers that allow them to use their long beaks and tongues to extract nectar.

17. **No Mow (insect meadow):** An un-mown plot provides an amazing variety of study topics and discovery opportunities. As grasses and wildflowers mature they provide increased diversity in the plant community which provides increased diversity in the kinds of wild animals that might utilize the site (rabbits, insects, birds, voles, and butterflies).

18. **Purple martin houses:** Purple martins are members of the swift family of birds. They are colony nesters and prefer to nest in open fields near water where they can find their favorite food – Mosquitoes and other insects! The houses can be lowered to observing the different stages of nesting and raising their young.

19. **Amphitheater:** This area is used for instruction, presentations, small plays and performances.

20. **Climbing Log:** While not a garden this tree trunk provides a place for climbing and exercise as well as textural exploration. It demonstrates one creative use of a natural resource.

21. **Window Bird Feeders:** Many classrooms have installed bird feeding stations on their windows. This allows for close observation and study of the many perching birds that call Northern Virginia home. It also encourages students to take responsibility in caring for wildlife and appreciating nature.

22. **Running Path:** Exercise is vital to the health and wellbeing of our children. The running path provides an opportunity for our students, staff and community to safely get the exercise needed for health and learning.

BELLE VIEW 'S OUTDOOR LEARNING STATIONS

Belle View Elementary School's unique schoolyard property has allowed us to develop outdoor learning stations to enhance student learning and support the Virginia's Standards of Learning.

Please begin your tour at the Wetland Restoration Garden (SW corner of the building). Look for the stone number markers as you progress counter clockwise around the building. Thank you for your interest and support.

1. **Wetland Restoration:** As a natural wetland/storm water area this garden provides opportunities for students to explore wetland, meadow and forest habitats and make comparisons to the nearby Dyke Marsh and Potomac River watershed.

2. **Bulb/Tuber Garden:** Growing bulbs and tubers allows students to explore the area of plant storage and provides a surprise as they burst out in the spring.

3. **Brush Pile habitat:** Small mammals and birds use the brush pile for shelter. Mammal tracks can be found entering the layers. Birds will use the brush pile as they wait in line to come to nearby feeders.

4. **Deadwood/Leaf litter (decomposers):** Dead, dying and hollow trees with crevices provide food and shelter for all kinds of wildlife. A rotting log can be the center of all kinds of activity. Wildlife will be attracted by the trees and logs and may stay to nest in cavities.

5. **Bird feeding Stations:** By providing an appropriate arrangement of feeder styles and different kinds of food, and by including plant cover and water, the variety and number of birds and small mammals that visit these areas can be increased.

6. **Perch and Plant (seed distribution):** As birds begin perching on the rope, their droppings will be planting many different types of seeds. Seeds allowed to germinate and mature provide information on seed dispersal and what food birds eat. It also shows how a fence row develops and provides a perching area where visiting birds can be observed and studied.

7. **Vernal Pool Garden:** As a part of our watershed management this garden provides habitat for frogs and salamanders during rainy seasons. It contains mostly ferns and native plants that can adapt to both wet and dry conditions.

8. **Sensory/Quiet Garden:** This garden was developed with all the senses in mind. All of our student can come to this quiet place and find things to touch, taste, hear, see and smell.

9. **Pine/Deciduous Forest:** Most forests can be divided into several layers. The first layer is the forest floor made up of leaf litter, decaying logs and fallen branches. Next is the herbaceous layer including ferns and woodland wildflowers. The third layer is the shrub layer consisting of shrubs and young trees. The understory layer consists of small trees and tall shrubs. Finally is the top layer called the canopy. Each of these layers provides habitat for wildlife.

10. **Rain Garden (watershed area):** Native grasses and other plants slow rainwater and remove pollutants before runoff water enters streams and rivers. Plants also provide protection for children playing near drains.

11. **Bat houses (mosquitoes no more):** The most likely occupants of bat houses in Virginia are the big brown bat and the little brown bat. A single big brown bat can eat 3,000 to 7,000 mosquitoes each night.

12. **Vegetable Beds:** This area provides opportunities for classroom planting to be done outdoors. They can also be used to produce food for the students to harvest and enjoy.

13. **Rose/Herb Garden:** These plantings provide a beautiful place for us to enjoy. Observation in this area demonstrates the cycle of pollination and seed production.

14. **Shade Garden:** Many plants prefer shade. The benches in this garden provide a cool area for quiet activities.

15. **Kinder Garden:** (near kitchen entrance) Apple trees, pumpkins and flowers are excellent food for wildlife and support the kindergarten science curriculum.

FAIRFAX COUNTY PARK AUTHORITY

12055 Government Center Parkway, Suite 927 • Fairfax, VA 22035-5500
703-324-8700 • Fax: 703-324-3974 • www.fairfaxcounty.gov/parks

October 31, 2011

Steven Nixon
Pumphouse Association for Canine Kindness (PACK)
7734 Midday Lane
Alexandria, VA 22036

Dear Mr. Nixon,

Thank you for your interest in partnering with the Fairfax County Park Authority to establish an Off Leash Dog Area (OLDA) at Westgrove Park. We appreciate PACK's willingness to sponsor this park amenity for the citizens of Fairfax County.

As you are familiar, Westgrove Park does not have a park master plan. An approved master plan showing an OLDA use is generally a requirement for establishing such a park use. However, the Park Authority has agreed to consider an interim OLDA use at Westgrove Park and apply for a public use determination as required by the Code of Virginia, Section 15.2-2232. When this determination is made by the Fairfax County Planning Commission, the Park Authority will require that PACK enter into a standard OLDA agreement for an interim period of two (2) years. The permanent park uses will be determined by the master plan process that is scheduled to start in 2012. If the master plan process is not complete at the end of the two (2) year interim period, the interim use period can be extended for up to one (1) additional year as agreed to by both parties.

The installation of the interim OLDA is contingent upon the following requirements by each of the parties:

Park Authority Responsibilities:

1. Park Authority will seek a public use permit for the interim OLDA through the 2232 determination process.
2. Park Authority will be responsible for ensuring that the park is accessible and parking is made available for OLDA participants as well as other park patrons.
3. Park Authority will manage the installation of the fence by a contractor.
4. Park Authority agrees to give full consideration to a Mastenbrook grant request for making the OLDA permanent, if the facility is an approved part of the master plan.

PACK Responsibilities:

1. PACK will be responsible for providing $3000 in funding towards the installation of the fence.
2. PACK will be required to sign the standard OLDA agreement upon completion of the 2232 process and will be responsible for the responsibilities included therein.
3. PACK will be responsible to pay any additional costs associated with making the OLDA fence permanent if the facility is an approved part of the master plan.
4. If the OLDA is an approved facility of an approved Westgrove Park master plan, PACK will be responsible for paying for improvements to the OLDA to make the facility permanent and consistent in its development with the other Park Authority OLDA facilities.
5. PACK will not be responsible for the removal or demolition of the fencing, if it is determined during the master plan process that the OLDA will be removed.

Thanks again for partnering with the Park Authority to establish the OLDA at Westgrove Park.

Sincerely,

Todd Johnson
Division Director, Park Operations

PACK's financial contribution, including the $3000 set forth in paragraph 1 above, will be no more than amounts typically paid by other Fairfax County OLDA sponsors.

We agree to the stipulations outlined in this letter between the Fairfax County Park Authority and the Pumphouse Association for Canine Kindness (PACK), dated October 31, 2011.

Steven Nixon, President
Pumphouse Association for Canine Kindness

12-2-2011
Date

Copy: Gerry Hyland, Board of Supervisors, Mt. Vernon District
Linwood Gorham, Park Authority Board, Mt. Vernon District
John W. Dargle, Jr., Director
Cindy Messinger, Deputy Director/CFO
Sara Baldwin, Deputy Director/COO
Dave Bowden, Director, Planning and Development Division
Sandy Stallman, Manager, Planning and Development Division
Dan Sutherland, Manager, Park Management Branch

To: Jay Rauschenbach, Park Planner
Fairfax County Park Authority
From: Christine Green, Regional Policy Manager
Greater Washington region Safe Routes to School network
Subject: Multi-use path connecting school and neighborhood
Date: August 21, 2012

Thank you for the opportunity to provide comments on the proposed multi-use path in Westgrove Park that would provide a connection to Belle View Elementary School. The Safe Routes to School National Partnership and specifically, the Greater Washington region Safe Routes to School network are happy to offer recommendations. However, this memo should be taken as recommendations only. Our expertise is not in design and construction of multi-use paths but in the holistic approach to Safe Routes to School.

Parents cite traffic as their top concern for allowing their children to walk or bicycle to school. The path through the park connecting a neighborhood and school is a path separated from traffic and therefore removes that specific safety concern. Below is information about the connection of the path to the school and implementing a comprehensive Safe Routes to School program.

Engineering

The National Center for Safe Routes to School has information on building a multi-use path in their SRTS Guide which can be found at the website below. The website offers recommendations but defers to FHWA and AASHTO guidelines. In this specific situation, there should be a balance of preserving trees and ensuring that the path is visible from multiple locations and site lines down the pathway are open and not obstructed by sharp curves or overhanging trees. If possible, the area adjacent to the path should have less dense vegetation to also improve site lines. Visibility of the path makes it safer and easier to see other users.

http://guide.saferoutesinfo.org/engineering/paths.cfm

Pedestrian and bicycle friendly site features

School property is the connection between the neighborhood, street and in this case, a multi-use path and school front door. Students should be able to access school doors directly, via a clear path and with minimum conflict with cars. Since the park connects to the school on the opposite side as the parking lot, this makes the transition much easier. Below are a few other items to consider for this specific school property. Some of these items, such as adding sidewalks on school property, may not be immediately feasible but should be considered in future school site planning.

1. The connection between the path and the entrance door should be obvious. School sidewalks and multi-use paths should connect into the multi-use path.
2. All doors adjacent to the multi-use paths are available for pedestrian and bicyclist entry.

Greater Washington Region Safe Routes to School Network
Christine Godward Green, Regional Policy Manager
Christine@saferoutespartnership.org |202.596.1328|P.O. Box 15737 Washington D.C. 20003
www.saferoutesgreaterwashington.wordpress.com

3. Bike racks should be separate from the drop-off/pick-up zone and parking lots and easily accessible from the multi-use path.
4. Bike racks are near a door that is frequently used, preferable within view of the main office or another window for natural surveillance. Inverted U-shaped bike racks are preferred. Covered bike parking is preferred.
5. The path of pedestrians and bicyclists should be marked with crosswalks and should not cross the parking lot and drop-off/pick-up zone.

Keep kids safe when walking and bicycling to school

Safe Routes to School programs emphasize the "Five E's" to keep kids safe when walking and bicycling to school –Education, Encouragement, Engineering, Enforcement and Evaluation.

Safety is always a parental concern. While traffic will not be a problem on this trail, it is still in a wooded area. The same best practices for walking or bicycling to school on the sidewalk would apply to the trail. Best practices include encouraging parents to walk with their children and having children walk in groups. Encourage neighbors who walk their dogs, walk and run for exercise or neighborhood walking groups to use the trail to increase traffic. There is less chance for crime on well used trails. Since the parents are requesting this path, hopefully they are engaged and will be active participants in their children's walk or ride to school.

Providing bicycling and pedestrian education to students should be a critical element of a successful Safe Routes to School program. Trail etiquette is different than walking and bicycling on streets. The local police department or volunteer trail group would be good partners to consider for the education element.

Resources

"Active School Neighborhood Checklist," Arizona Department of Health Services and Arizona Department of Transportation, accessed May 15, 2012, http://www.azdhs.gov/phs/bnp/nupao/documents/ASNC_Guide-Book.pdf.

"Design Guidelines for Pedestrian-Friendly Neighborhood Schools," City of Raleigh, accessed May 15, 2012, http://peoriachronicle.com/wp-content/uploads/Docs/District-150/References/school_design_guidelines.pdf.

"Safe Routes to School Putting Traffic Safety First: How Safe Routes to School Initiatives Protect Children Walking and Bicycing," Safe Routes to School National Partnership, accessed August 15, 2012, http://www.saferoutespartnership.org/sites/default/files/pdf/Safety_report_final.pdf.

"Why Johnny Can't Walk to School," National Trust for Historic Preservation, accessed May 15, 2012, http://www.preservationnation.org/information-center/saving-a-place/historic-schools/additional-resources/schools_why_johnny_1.pdf.

Greater Washington Region Safe Routes to School Network
Christine Godward Green, Regional Policy Manager
Christine@saferoutespartnership.org |202.596.1328|P.O. Box 15737 Washington D.C. 20003
www.saferoutesgreaterwashington.wordpress.com