RUCKSTUHL PARK
MASTER PLAN

Fairfax County Park Authority

DRAFT
May 27, 2015

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I. INTRODUCTION

A. PURPOSE & PLAN DESCRIPTION

The purpose of a Park Master Plan is to create a long-range vision for the park by determining the best uses, facilities, and resource management for a specific site. During the planning process, the park is evaluated in the context of the surrounding community and as one park of many within the Fairfax County park system. The approved master plan then serves as a long-term decision making guide to be consulted before the initiation of any detailed planning, design/construction projects, resource management activities, or programming. By design, master plans are general in nature, which allows flexibility to accommodate changing park users' needs, as well as management practices. Park master plans are updated as necessary to reflect community and park changes over time.

Operational plans and growth projections are carefully considered in the master plan. However, the park master plan is not a guide to routine park operations. The park master plan is conceptual with facilities shown in general locations within the park. Many of these features will require additional, separate fiscal analysis, funding, space program analysis, design, and engineering.

B. PLANNING PROCESS & PUBLIC INVOLVEMENT

The Park Authority kicked off the public Ruckstuhl Park Master Plan process on July 30, 2014, with a public information meeting attended by over 40 community members. Public comments centered on potential park uses desired by the community, including an off leash dog area, playground, picnic area, gardens, managing and retaining the natural features, trails, and site access. The public also voiced concerns about safety particularly due to the lack of sidewalk and crosswalks on Idylwood Road. The public input was considered along with existing site conditions, natural and cultural resources, site management, and design issues in developing the draft master plan. This draft was published for public review and presented at a public comment meeting on TBD, 2015. The plan was revised based upon the public input and was approved by the Park Authority Board on TBD, 2015.

II. PARK BACKGROUND

A. LOCATION & GENERAL DESCRIPTION

Located between Idylwood Road and I-66, Ruckstuhl Park, a former residential property, consists of 7.2 acres of lawn, meadow, and forest. Ruckstuhl Park is located in the Jefferson Planning District, and is classified as a local park, expected to serve the surrounding residential neighborhoods (Figures 1 and 2).

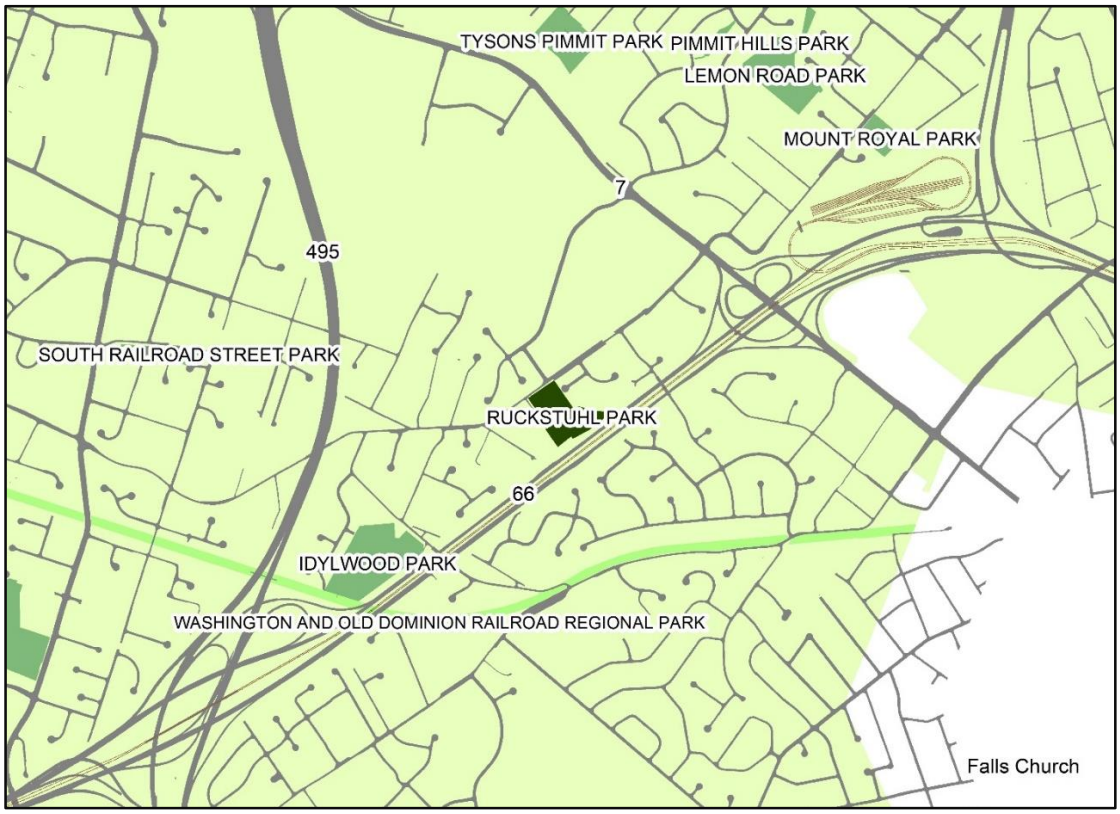

Figure 1: General Vicinity Map

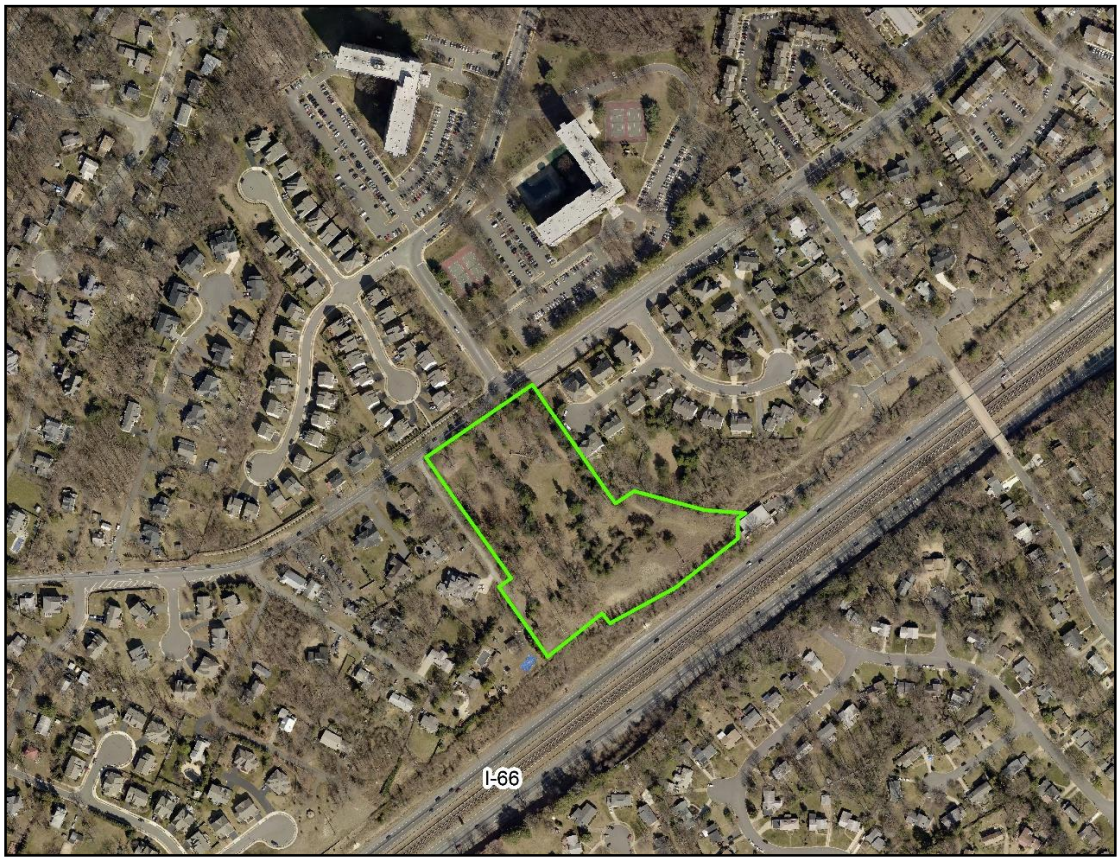

Figure 2: Aerial Photo of Park and Surrounding Area

B. CONTEXT

Ruckstuhl Park is located north of Route 66, surrounded by single family residences, including the Brittany Parc, and Mount at Tysons communities, as well as the Idylwood Towers Condominium. These suburban neighborhoods consist of primarily single-family homes and multifamily high-rise apartments, mostly built between the early 1930s and 2000s, some of which border the park along its east and west sides. Idylwood Road and Route 66 form the park's northern and southern borders respectively (Figure 3).

Ruckstuhl Park is located in the Jefferson North Community Planning Sector (J10) of the Jefferson Planning District as described in the Fairfax County Comprehensive Plan.

Surrounding areas are planned, zoned, and developed with residential uses with densities ranging from 3 to 20 dwelling units per acre. Ruckstuhl Park is in the R-3 residential zoning district that allows residential use at 1 to 3 dwelling units per acre and public facilities, such as parks.

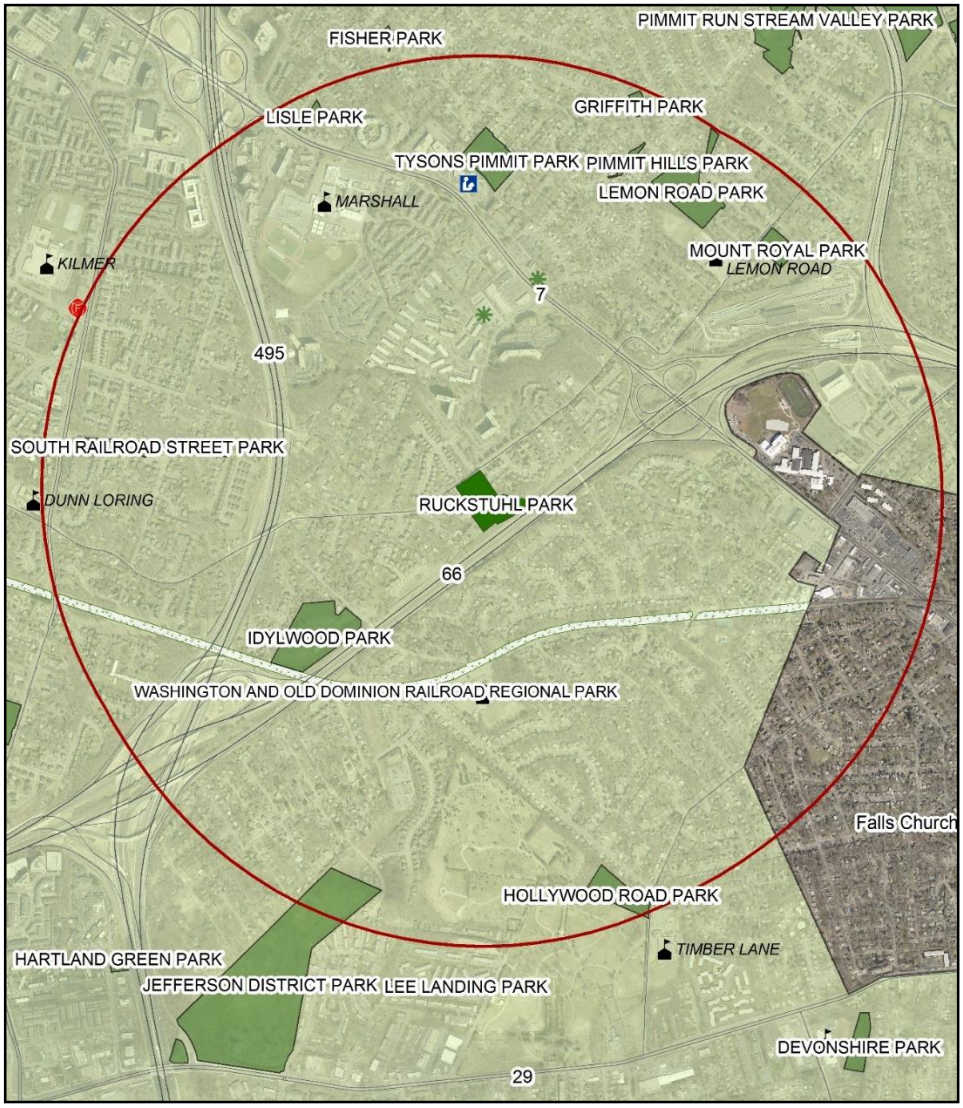

Figure 3: Ruckstuhl Park One Mile Service Area Map

Additionally, the Countywide Trails Plan Map shows planned sidewalks along both sides of Idylwood Road, to be completed connecting to other trails in the area. While not yet completed on either side of the road, these sidewalks provide some connections to the community.

C. ADMINISTRATIVE HISTORY

Figure 4: Dr. Ruckstuhl in her Garden

The acquisition of Parcels 40-3((1)) 59, 61A, 64, and 65 which became Ruckstuhl Park was made possible through the generosity of Dr. Lily Ruckstuhl and the Northern Virginia Conservation Trust (NVCT), to whom she donated her property upon her passing in September 2008. Dr. Ruckstuhl expressed her desire that her property be forever preserved, preferably as a public park that area residents could enjoy as she had for many years (Figure 4). Therefore, NVCT transferred the property to the Park Authority in 2011 for $250,000 with a conservation easement on the property that prescribes certain conditions on the property and prohibits uses such as athletic fields (Figure 5).

D. PARK CLASSIFICATION

Park classifications provide broad guidance on each park's general purpose, character, location, and service areas. Ruckstuhl Park is designated as a Local Park in the Park Authority's classification system. 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 Idylwood neighborhoods, 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, and 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.

Figure 5: Parcel Map

E. PARK & RECREATION NEEDS

Overall, the park system around Ruckstuhl Park provides a diverse range of offerings. Within one mile are 11 other parks, comprising 192 acres, eight of which provide recreational facilities, such as playgrounds, picnic areas, athletic fields, and courts (Table 1). Some offer distinctive facilities such as Jefferson District Park's golf course. Idylwood Park provides a

playground and athletic facilities less than a ¼ mile to the west. In addition, there are three public schools within a one-mile service area, which typically have athletic fields and playgrounds that are available to the public during non-school hours. Figure 3 shows the parks and facilities that are located within one mile from Ruckstuhl Park.

PARK NAME	PRACTICE PUTTING GREEN	MINI GOLF	EXECUTIVE 9 HOLE COURSE	TRAILS	AMPHITHEATRE	HORSESHOE PIT	OPEN PLAY AREA	PICNIC AREA	SCHOOL AGE PLAYGROUND	TOT LOT	RECTANGLE FIELDS	60FT DIAMOND FIELD	TENNIS COURTS	TENNIS PRACTICE WALL	FULL BASKETBALL COURTS
GRIFFITH PARK				Y		Y	Y		Y	Y					
HOLLYWOOD ROAD PARK															
IDYLWOOD PARK				Y			Y	Y	Y		1	2	2	2	1
JEFFERSON DISTRICT PARK	Y	Y	Y	Y				Y	Y				8	4	2
LEMON ROAD PARK				Y	Y										
LISLE PARK				Y			Y		Y						1
MOUNT ROYAL PARK									Y						
PIMMIT HILLS PARK				Y			Y		Y						1
PIMMIT RUN STREAM VALLEY PARK				Y											
RUCKSTUHL PARK															
SOUTH RAILROAD STREET PARK				Y				Y	Y						
TYSONS PIMMIT PARK				Y			Y	Y	Y						2

Table 1: Parks within Ruckstuhl Park Service Area

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 2 reflects projected local serving park facility needs in the Jefferson Planning District in which Ruckstuhl Park is located.

Park facility service levels are examined using planning district geography that is established in the County Comprehensive Plan. As shown in Table 2, Jefferson Planning District has a deficit of public playgrounds, basketball courts, and athletic fields. A playground is located at Idylwood Park nearby and at a nearby church.

Athletic fields are not allowed at Ruckstuhl Park under the conservation easement. It is increasingly rare for the Park Authority to find property that is ideal for a local public park in this developed part of Fairfax County. Few undeveloped public park opportunities are available where these needs could be addressed. Private facilities in homeowner common areas supplement the public inventory for trails, playgrounds, and courts.

53,818	2010 population – Jefferson Planning District			
60,249	2020 population projection			
Facility	Service Level Standard	2010 Existing Facilities	2020 Needed Facilities	2020 Projected (Deficit)/ Surplus
Rectangle Fields	1 per 2,700 people	14.2	22.3	(8.1)
Adult Baseball Fields	1 per 24,000 people	2.0	2.5	(0.5)
Adult Softball Fields	1 per 22,000 people	1.5	2.7	(1.2)
Youth Baseball Fields	1 per 7,200 people	7.5	8.4	(0.9)
Youth Softball Fields	1 per 8,800 people	6.0	6.8	(0.8)
Basketball Courts	1 per 2,100 people	13.5	28.7	(15.2)
Playgrounds	1 per 2,800 people	18.5	21.5	(3.0)
Neighborhood Dog Parks	1 per 86,000 people	0.0	0.7	(0.7)
Neighborhood Skate Parks	1 per 106,000 people	0.0	0.6	(0.6)

Table 2: Jefferson Planning District 2020 Facility Needs Analysis

III. EXISTING CONDITIONS

The existing site conditions are evaluated to determine the opportunities and constraints located on the site. Typical site conditions examined include soils, topography, hydrology, habitats, vegetation, history and prehistoric features and any infrastructure elements. Using the existing conditions data allows for more focused planning and development.

A. NATURAL RESOURCES

1. Soils

Soil characteristics can have major implications on site suitability for certain uses. As classified by the Natural Resources Conservation Service (NRCS) of the United States Department of Agriculture (USDA), Ruckstuhl Park is comprised of the Fairfax loam, Kingstowne-Danripple complex, and Wheaton-Fairfax complex soil types (Figure 6). This site contains problem soils for which additional soil investigation will be needed to determine suitability for the proposed features.

a. Danripple

Soils of the Danripple series forms on flat stream terraces near the border of the Piedmont and Coastal Plain. The topsoil is often gravelly with clay subsoil. Seasonal

high water table can be as high as 40 inches below the surface, with depth to bedrock greater than 5 feet. Considerations for park development include marginal structural support due to the high water table combined with moderately plastic clays. Suitability for drain fields and for infiltration trenches is poor because of the seasonal high water table. Surface grading and subsurface drainage may be necessary to prevent wet areas. Danripple is a Class II problem soil, for which ground water problems and over lot drainage must be addressed.

b. Fairfax

This Piedmont upland soil consists of silty topsoil over silty and sandy soil materials. The silty capping ranges from ½ to 3 feet thick and contains rounded water worn pebbles. The subsoil can be quite clayey, but the clays are only slightly plastic. This soil is well drained with depth to water table greater than six feet and hard bedrock over 10 feet below the surface. Benefits for park development are good structural support, and infiltration trenches are well suited for this soil. Considerations for park development include low baring capacity for structures and low suitability for drain fields because the high clay content of the subsoil can cause slow permeability. Because of a high mica content, the soil tends to "fluff" up when disturbed and is difficult to compact requiring engineering designs for use as structural fill. Fairfax is a Class I problem soil, for which further investigation is suggested.

c. Kingstowne

Soils of the Kingstowne series are dense, very deep, and well drained. They are found on hills, shoulders, and backslopes. Benefits for park development include a moderate bearing strength, high water table depth of over 40 inches, and low to moderate shrink-swell potential. They are suitable for natural surface trails, roads, or staging areas. Concerns for park development include very high to moderate surface runoff, with moderate to very slow hydraulic permeability, affected by frost action, with moderately unstable excavation walls. Due to these attributes, Kingstowne soils have very limited suitability, for local roads, or streets, landscaping and fairways (due to density). They have somewhat limited suitability for building structures, shallow excavations, campsites, picnic areas, playgrounds, or excavated ponds. Kingstowne is a disturbed Class IVB problem soil for which a geotechnical investigation is required, particularly for soil strength, footing concerns, and drainage.

d. Wheaton

The Wheaton series consists of very deep well drained soils with moderate permeability, and medium to rapid runoff. Benefits for park development, at less than seven percent slope; they are well suited for structures such as dwellings and small commercial buildings, minor excavations, or trails. Concerns for park development include low bearing strength, slow peculation rate, shallow depth to water, frost action, severe rutting hazard, and moderate to severe erosion. Excavations are unstable, with tendencies to cave. Due to these characteristics, they have limited suitability for moderate excavations, campsites, picnic areas, and playgrounds. Usability is very limited for local roads, streets, landscaping, excavated ponds, and absorption fields. Over seven percent slope uses are very limited. Wheaton is a

disturbed Class IVB problem soil for which a geotechnical investigation is required, particularly for soil strength, footing concerns, and drainage.

e. Uncontrolled Fill

The areas of the site where building basements and the in ground pool were dug out, were replaced by "uncontrolled fill" according to the project engineer who oversaw the demolition. Concerns for park development include low bearing strength, tendency to settle, severe rutting hazard, and moderate to severe erosion. Excavations are unstable, with tendencies to cave. Due to these characteristics, they have very limited suitability for driveways, trails, moderate excavations, campsites, picnic areas, playgrounds, or structures of any type. Since this is a disturbed Class IVA problem soil, Virginia Uniform Statewide Building Code (USBC) and Public Facility Manual (PFM) states that a detailed geotechnical investigation and report are mandatory for all construction and grading (including trails) within these problem soil areas.

2. Topography & Hydrology

For centuries, the site was tilled as farmland until domestic home sites were added in the early 20th century that altered grading around these structures. The topography of Ruckstuhl is characterized by a low ridge that runs north south across the middle of the park. This ridge forms a divide between the Pimmit Run watershed to the west, which drains toward Idylwood Road and the Cameron Run watershed to the east, draining toward I-66. The Idylwood side of the ridge is gently sloping while the other side of the ridge has somewhat steeper slopes draining down into an oval bowl-shaped area adjacent to I-66. Both watersheds are highly developed and heavily impacted by urbanization (Figure 7).

Due to the park's location at the outer limits on the divide between both of these watersheds and its relative isolation from any significant water resources, no specific watershed management projects are identified in either the Pimmit Run or Cameron Run Watershed Management Plans that are targeted for Ruckstuhl Park. Therefore, there are no water bodies or associated Chesapeake Bay Ordinance designated Resource Protection Areas (RPA) within the park. It is the intent of this planning process, however, to establish stormwater management practices that are supportive of the efforts of the Department of Public Works and Environmental Services in protecting Fairfax County's water resources.

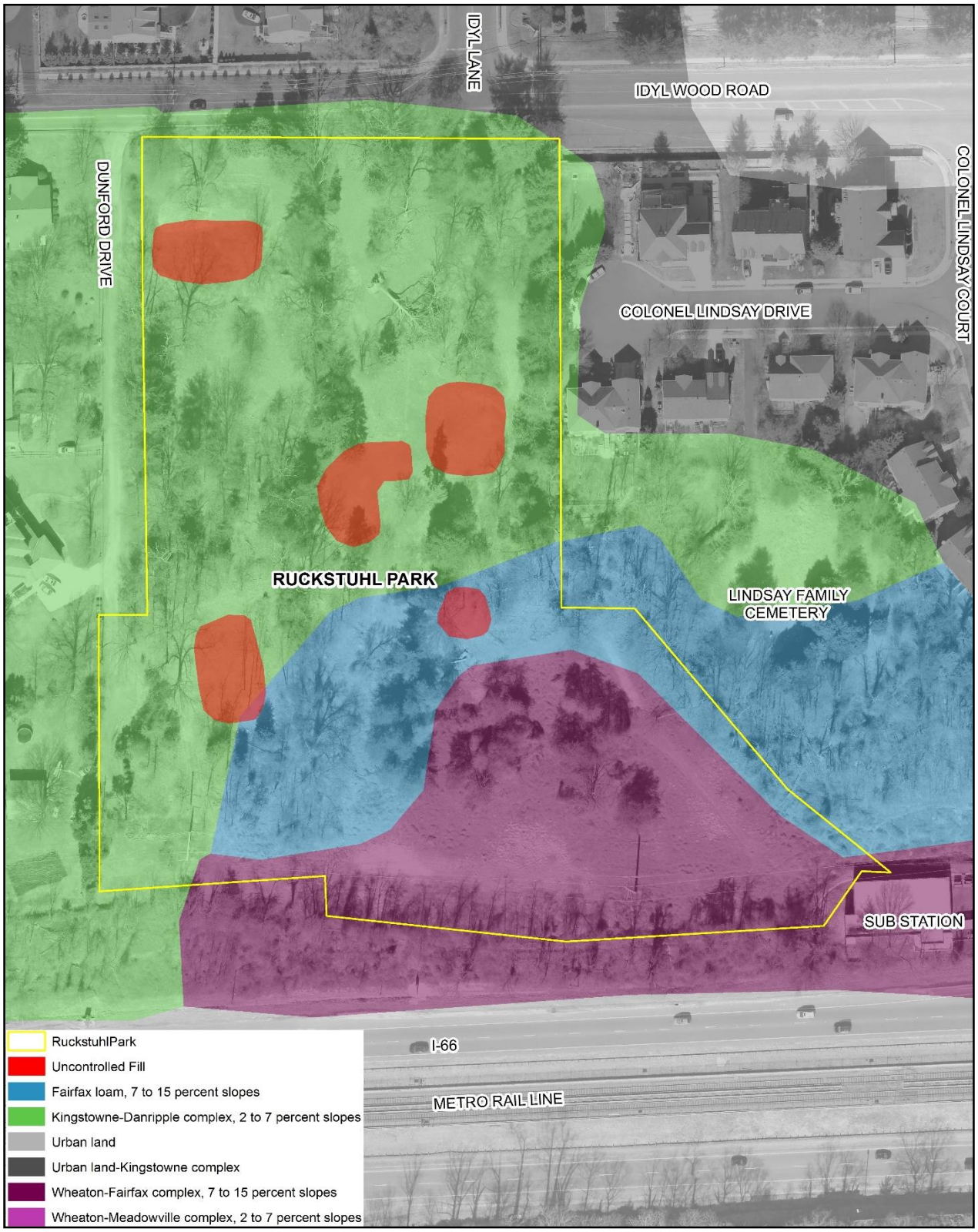

Figure 6: Soils Map

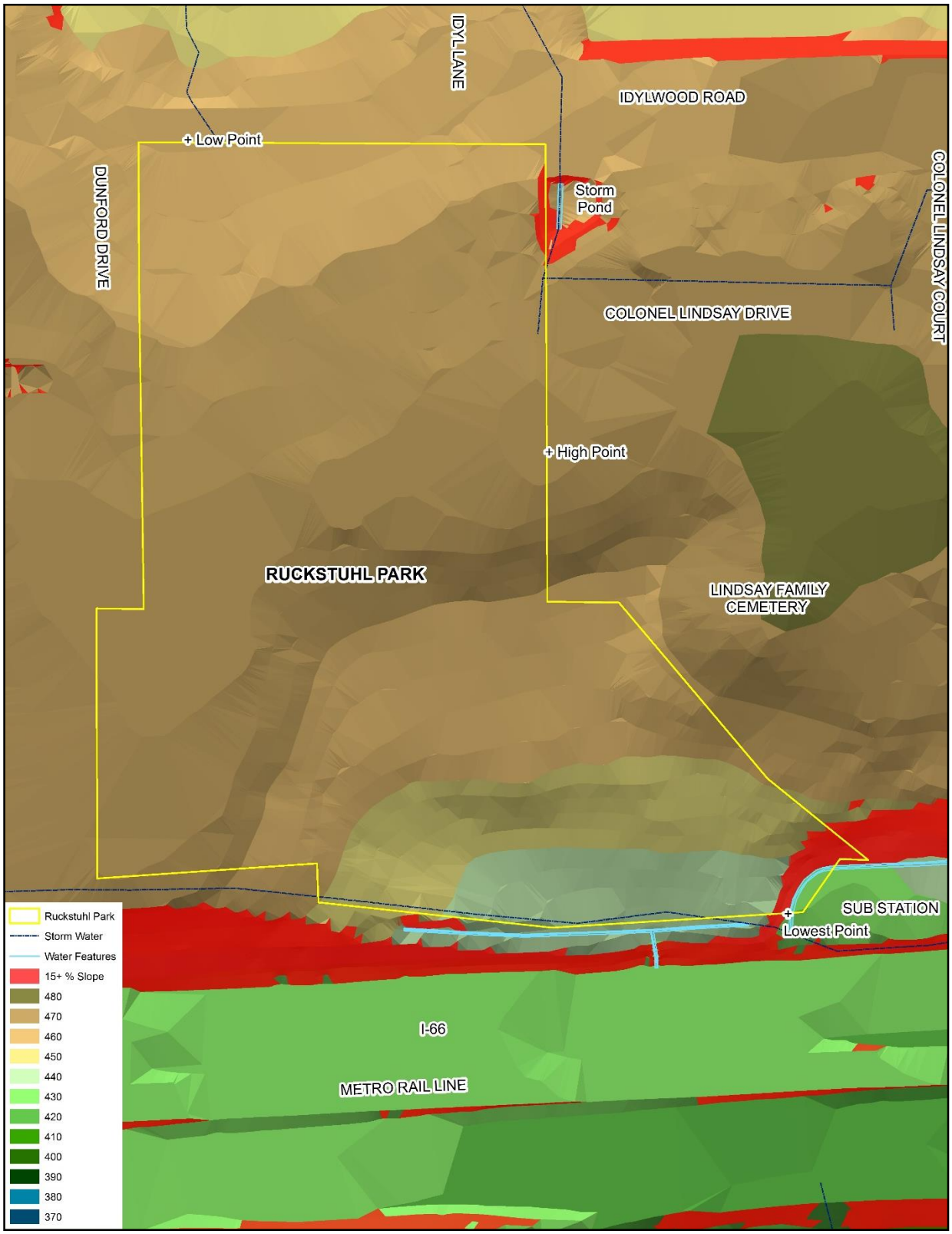

Figure 7: Topography & Hydrology Map

3. Vegetation

Ruckstuhl Park has several large mature, native trees that are found in the grassy mowed area in the central area and north end of the park. The larger trees and dense understory in the park create walls around several open grassy areas define the park's character, naturally forming several "outdoor rooms" (Figure 8 & 10).

Figure 8: Outdoor Room

The area of the park nearest to I-66 has significant invasive plant cover that threatens the trees and other vegetation in this area. Some of the non-native species present are relics from the residential landscaping located on or near the property. The vegetation along the power lines is nearly 100% invasive species. At one time, there were native trees present in this area of the park, but these have been completely covered in invasive vines and are most likely dead. The most noticeable invasive species present include porcelain berry, English ivy and multiflora rose (Figure 9 & 10). While providing some shade and cover for wildlife, overall, the vegetation is of relatively low habitat and environmental quality, mostly due to the human disturbance, small area, lack of native plants, invasive species and deer browse.

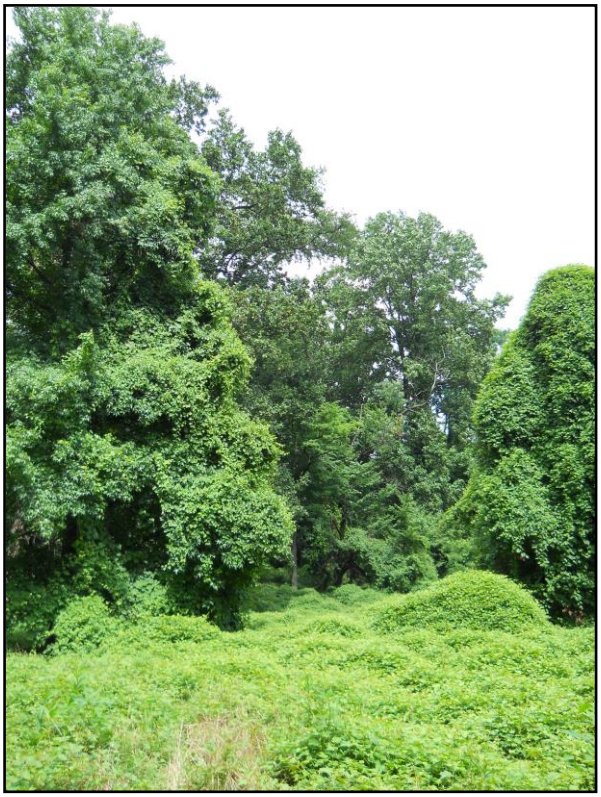

Figure 9: Non-native Invasive Plants

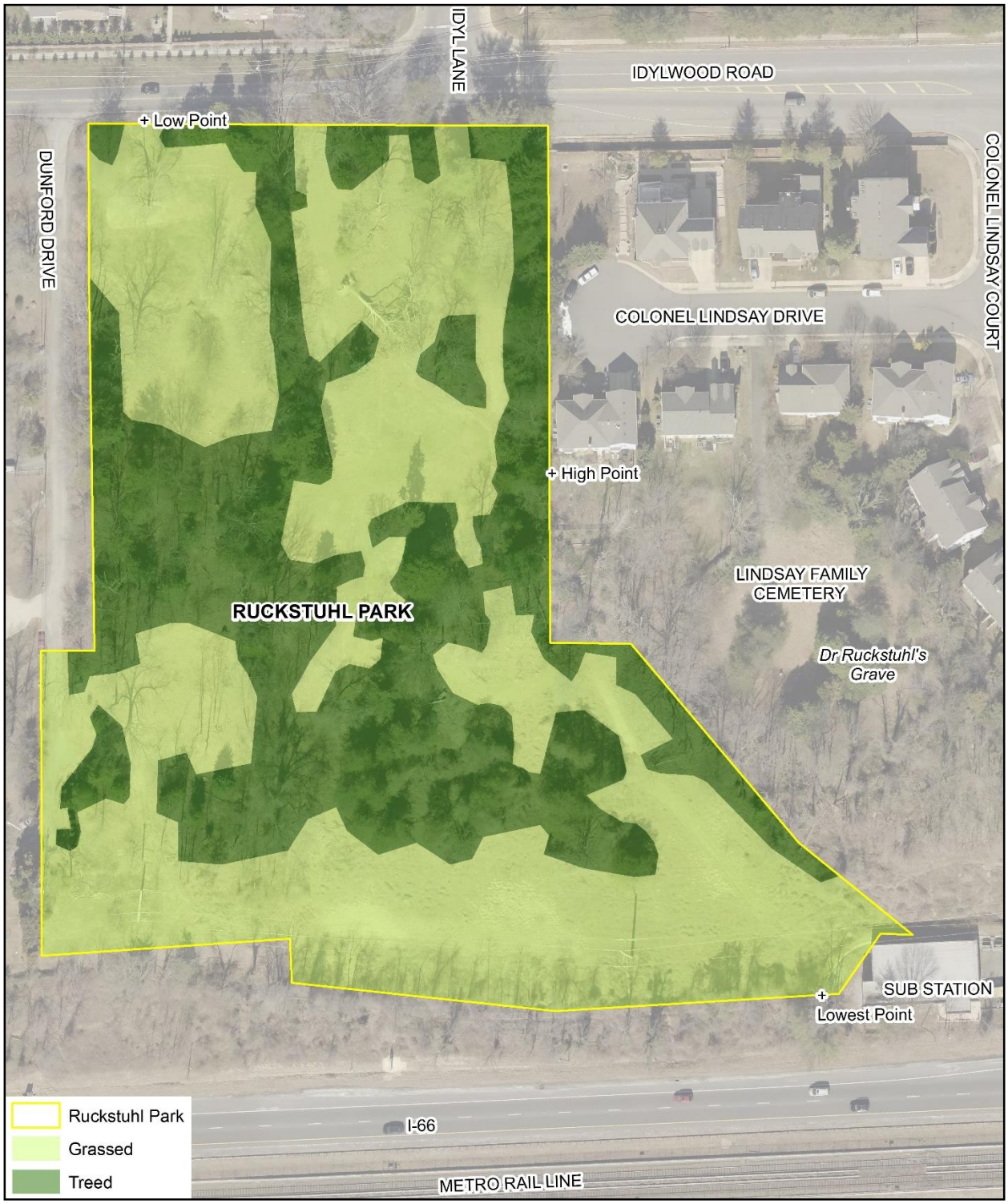

Figure 10: Vegetation within the Park

4. Wildlife

A wildlife survey has not been conducted for this park, but Park Authority staff have witnessed rabbit, squirrels, raccoons, fox, white-tailed deer, and various bird species, including bluebirds (Figure 11). These species are all typically supported by the regions parks and would be expected to tolerate park use by visitors. Deer are voracious herbivores, eating much of the plant understory in wooded areas and the results of deer herbivory is a familiar sight in Fairfax County. Too much deer browsing can have a detrimental impact on native plant communities, particularly the understory.

5. Rare Species

Though a survey has not been undertaken, archival research and observations indicate that there are no known endangered, threatened, or rare species occurring at Ruckstuhl Park.

Figure 11: Bluebird

B. CULTURAL RESOURCES

Ruckstuhl Park has a long history of human use. In the 1960s, archaeologists discovered one of the first formally recorded archaeological sites in the county within what is now Ruckstuhl Park. Designated as site 44FX0007 by the Virginia Department of Historic Resources (VDHR), though not the oldest, the site dates to the Archaic Period, approximately 8000-1200 years before current epoch (BCE). Unfortunately, little can be gleaned from the records about how the site was used, due to the reporting standards at the time. However, we do know that people in the area during that time were hunter-gatherers, adapting to a changing climate. Populations during generally increased and are believed to have migrated on seasonal cycles. Changes in the stone tool shape, material, and size mark various temporal and, possibly, cultural changes across the Archaic Period.

Dating to the mid-1700's the Lindsay family's "The Mount" plantation, encompassed what is now Ruckstuhl Park. The period from 1750-1789 witnessed increased social, political, and economic strife between the Virginia Colony and England, culminating in

the American Revolution, resulting in the establishment of the United States. A member of a prominent Fairfax County family, Robert Lindsay reached the rank of Colonel before returning home to The Mount at the end of the Revolution.

Following the Revolution, the nation divided along internal social, economic, and political divisions. Geographically, Fairfax County was caught between northern states with increased industrial interests based on wage labor and the southern states economically invested in cash crop agriculture with slave labor. These sectional differences culminated in the *Civil War* (1861-1865). Fairfax County's location, within a rebellious state, separated from the federal capital by only the Potomac River, placed it in tenuous spot. Union forces established forts and lines while Confederate irregular forces roamed across Fairfax County, disrupting lines of communication and gathering intelligence. The Union victory resulted in great social upheaval and economic depression across the south that lasted into the 1900's.

While Fairfax County rebounded relatively quickly compared to most of Virginia, having been a large plantation that had employed multiple slaves, this period was difficult for the owners of "The Mount" with it changing hands multiple times. This led to the section that became Ruckstuhl Park being sold off for smaller farms and house lots beginning around 1900. An air survey photo taken in 1937 show the site of Ruckstuhl Park used as farmland with an abandoned field growing in with trees (Figure 12). By the end of the Second World War and the beginning of the Cold War, the United States government greatly expanded. Between the 1950's and 2000's, mostly rural farmland had given way to suburban development throughout the Idylwood area with services and residences for the growing federal work force.

Dr. Lily Ruckstuhl, namesake for the park, resided on the property from the 1950's until she passed away in 2008. An air survey photo taken in 1997 shows the site during Dr. Ruckstuhl's inhabitation with three house, multiple out buildings, and the pasture for her farm animals (Figures 13). Dr. Ruckstuhl, who residents remember as an animal lover and supporter of land conservation, conveyed the property to the Northern Virginia Conservation Trust (NVCT). In order to keep with Dr. Ruckstuhl's wishes that the property be forever preserved as a public park that area residents could enjoy as she had, the NVCT transferred the land to the Park Authority in 2011.

The main part of The Mount plantation, which is now recognized as archaeological site 44FX1203 exists east of the park. While the original manor house no longer exists and had been situated outside current park boundaries, another family home from the estate dating to the mid 1800s is located in the adjacent neighborhood, east of the Lindsay Family Cemetery, which is located adjacent to the northeast park boundaries. Being associated with "The Mount" plantation, the cemetery dates to the mid-eighteenth century. Manors of this period required secondary support structures such as smokehouses, icehouses, dairies, servant or slave quarters, and slave cemeteries, among others. Accordingly, it is possible that deposits associated with "The Mount" occur archaeologically within Ruckstuhl Park, which was plowed as part of the plantation's farm fields.

Figure 12: 1937 Aerial Photo

Figure 13: 1997 Orthographic Photo

C. EXISTING INFRASTRUCTURE

1. Utilities

As a former residence, the park has access to public utilities including water and electric service that are located along Idylwood Road and Colonel Lindsay Drive. A fire hydrant is present along Idylwood Road opposite Idyl Lane. The residences on the site all were all on septic systems. According to Fairfax County Waste Water, sewer service is only accessible from Colonel Lindsay Drive as well as a manhole in the eastern tip of the park near the substation along I66. Electrical service is available from Idylwood and Dunford Drive. A small stormwater pond exists adjacent to the northern corner of the park between Idylwood Road and Colonel Lindsay Drive. Two grated yard inlets in the park near the cul-de-sac of Colonel Lindsay Drive drain to this pond.

Figure 14: Power line Easement

An inlet to the stormdrain system exists along the frontage with Idylwood Road near the west corner of the park, which collects runoff from both the park and road. High tension electric transmission lines run in an easement parallel to I-66. These lines belong to Dominion Virginia Power, who also has a substation building located adjacent to the east corner of the park that serves the Metro rail line in the center of I-66 (Figures 14 - 16).

2. Vehicular Access

Transportation officials generally prefer public entrances be aligned with other cross streets and be a certain distance from other entrances. Idyl Lane aligns perpendicularly across Idylwood Road from the former entrance to Dr. Ruckstuhl's residents and is the only public street suitable for alignment to the park. This access could be signalized with crosswalks (Figure 15 & 16). Two other previous entrances to the site were from Dunford Drive, which intersects Idylwood Road at the west corner of the park, serves several private residents and would require upgrades for use as a public entrance (Figure 16 & 17). A bus stop is

Figure 15: Entrance from Idylwood Road

present along Idylwood Road, between the park and Colonel Lindsay Court to the east.

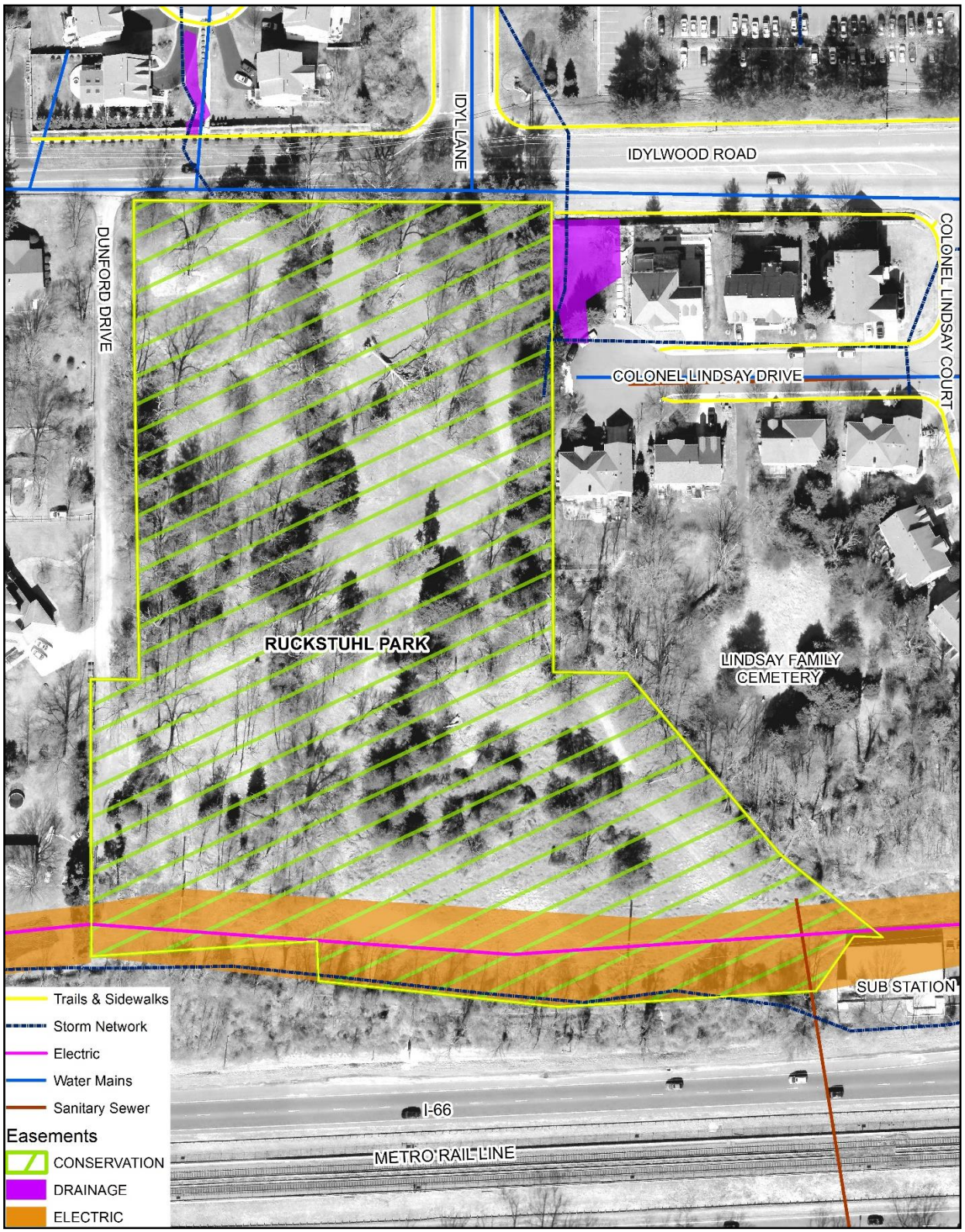

Figure 16: Trails, Utilities, & Easements

3. Pedestrian Access and Trails

No official trails or sidewalks currently exist within Ruckstuhl Park, however, some informal access points and footpaths are present. In particular, along the Idylwood Road pedestrians walk on the park's frontage between the existing sidewalks on each side as well as to the bus stop located to the east on Idylwood Road. Pedestrians also enter the park from several places along Dunford Drive.

Figure 17: Dunford Drive with Ruckstuhl Park on left.

IV. PARK ASPIRATIONS

A. PARK PURPOSE

Park purpose statements provide a broad overview for planning and decision-making. The purpose of Ruckstuhl Park as with other local serving parks is:

- To share and interpret the site's natural character and cultural history.
- To meet community recreation and leisure needs.

B. DESIRED VISITOR EXPERIENCE

Ruckstuhl Park is envisioned as a local park that will serve users from the adjacent neighborhoods and the larger community within the service area (roughly defined as a one-mile radius). The intention is to preserve a sense of the open landscape, inspire community sponsored and supported uses that bring the community together while also providing low impact community recreation opportunities that appeal to a variety of users including small groups, families, and individuals who want to enjoy a mix of recreation facilities, or open green space (Figure 18).

Figure 18: Large Tree Emblematic of Park Experience

Typical user visits would 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 at one of the park entrances to provide general information about the park and support a self-guided experience. Other visitor amenities may include benches, trashcans, picnic tables, and interpretive and way finding signage.

This visitor experience can be supported in a number of ways. Therefore, this Master Plan provides an overall vision of the park's ultimate development. These facilities may not be constructed at the same time, but might be combined in various ways as funding becomes available from public sources and/or sustainable community sponsorships that will facilitate the implementation of the master plan. To facilitate any of the conceived uses, adequate park infrastructure, parking, stormwater management, and ADA access, will be required preceding the implementation of any greater public use.

C. MANAGEMENT OBJECTIVES

In order to achieve the park's purpose, the following objectives guide actions and strategies for dealing with management issues:

- Ruckstuhl Park should be a focal point of the neighboring communities and a space for community-building activities.
- Ruckstuhl Park should support local wildlife habitat and provide local historic interpretation.
- Ruckstuhl Park will continue to be managed to provide public low impact leisure opportunities in the Providence District.
- Park users should have universal access to any future park facilities when access is possible and feasible. This includes accessibility facilities and accessible connections between different areas of the park.

The Park Authority's area maintenance crew will provide periodic maintenance and repairs to park facilities. This includes mowing the grass, removing leaves from managed areas, emptying trash, and other similar tasks. Other maintenance tasks include inspection of facilities and equipment; cleanup; repairing pavement; pruning, dead wooding and removal of hazardous trees as needed. The maintenance crew also responds to any park issues brought to their attention by citizens or staff.

V. CONCEPTUAL DEVELOPMENT PLAN

A Conceptual Development Plan (CDP) uses the management objectives established in this master plan and consists of two parts. The first portion is the text, which describes recommendations for future park uses and facilities. This section also discusses design concerns that need to be considered when the CDP is implemented. The second part of the CDP is a graphic depiction of the recommended uses and their general locations (Figure 19). CDPs are based on existing site conditions as described in the first section of this master plan. No site engineering has been conducted at this phase and therefore the CDP is general in its composition. Actual facility locations may shift based on future site engineering.

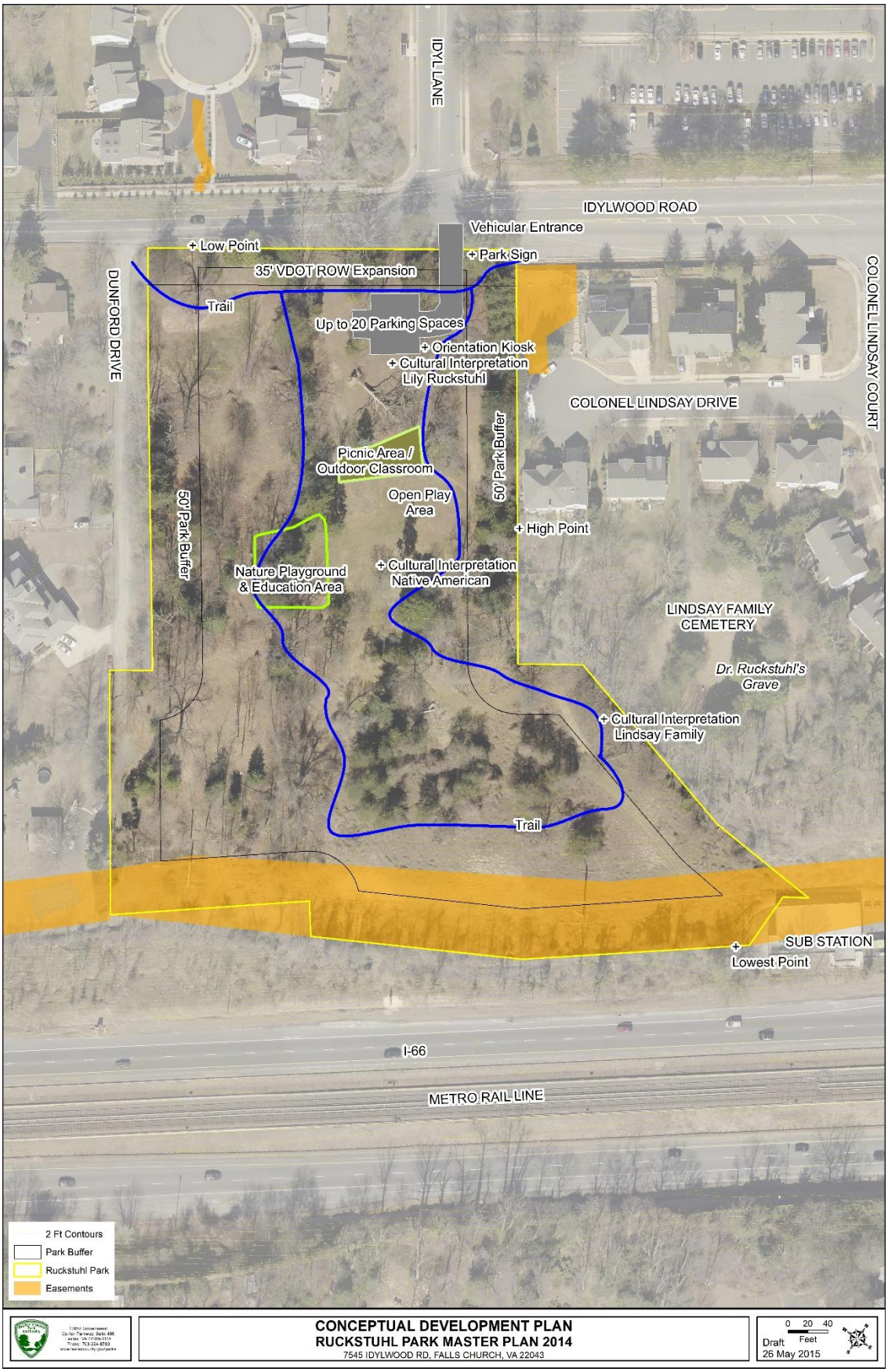

Figure 19: Conceptual Development Plan Map

The following facilities are planned for the park:

A. VEHICULAR ENTRANCE & PARKING

Access to the parking lot will be from Idylwood Road at the old driveway location across from Idyl Lane (Figure 20). The parking lot will have up to 20 parking spaces to support user access to the park. To the extent feasible, low impact development features and landscaping treatments will enhance integration of the entrance and parking into the landscape of the park.

Figure 20: Vehicular Entrance

B. TRAILS & PEDESTRIAN ACCESS

The planned trail network throughout Ruckstuhl Park is shown on the CDP. Trails will allow access from the entrances throughout the site as well as form a loop through the park to facilitate exercise. The trail along the park frontage parallel to Idylwood Road will provide connections to existing and future sidewalks as shown on the Countywide Trails Plan. It should also be noted that the Fairfax County Bicycle Master Plan, dated October 2014, shows a future planned bicycle lane along Idylwood Road. The trails support a variety of park uses including walking, dog walking, biking, running, socializing, and nature observation. Trail access is provided at the vehicular entrances and the pedestrian entrances as shown on the CDP. The general trail location allows for future widening of Idylwood Road. Visitor orientation is important to provide at these points, including informational kiosks, benches, trashcans, park identification, regulation, and way finding signage. All services and routes in Ruckstuhl Park should be fully accessible, as feasible.

The large trees and specimen plantings are an important part of the park's character and are well loved by the community. Care will need to be taken to field locate all trails and facilities as not to disturb these trees on the property during construction. Root disturbance and soil compaction could impact health of the trees.

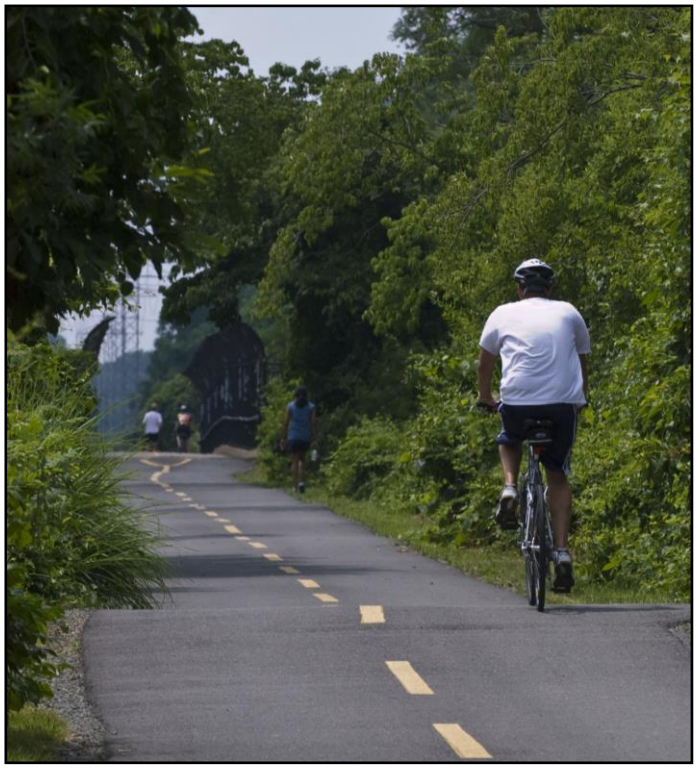

Figure 21: W & OD Trail

Idylwood Park and the regional Washington & Old Dominion Trail (W & OD) operated by NoVA Parks exists near Ruckstuhl Park but is not connected by formal trails or sidewalks. An opportunity exists to connect Ruckstuhl Park with these nearby facilities, by completing a fragmented network of existing sidewalks and social trails that are currently not maintained. The pedestrian connections should be enhanced through coordinated efforts from Ruckstuhl Park west along Idylwood Road, Hurst Street, and Virginia Lane, to Idylwood Park and the W&OD (Figure 21 & 22).

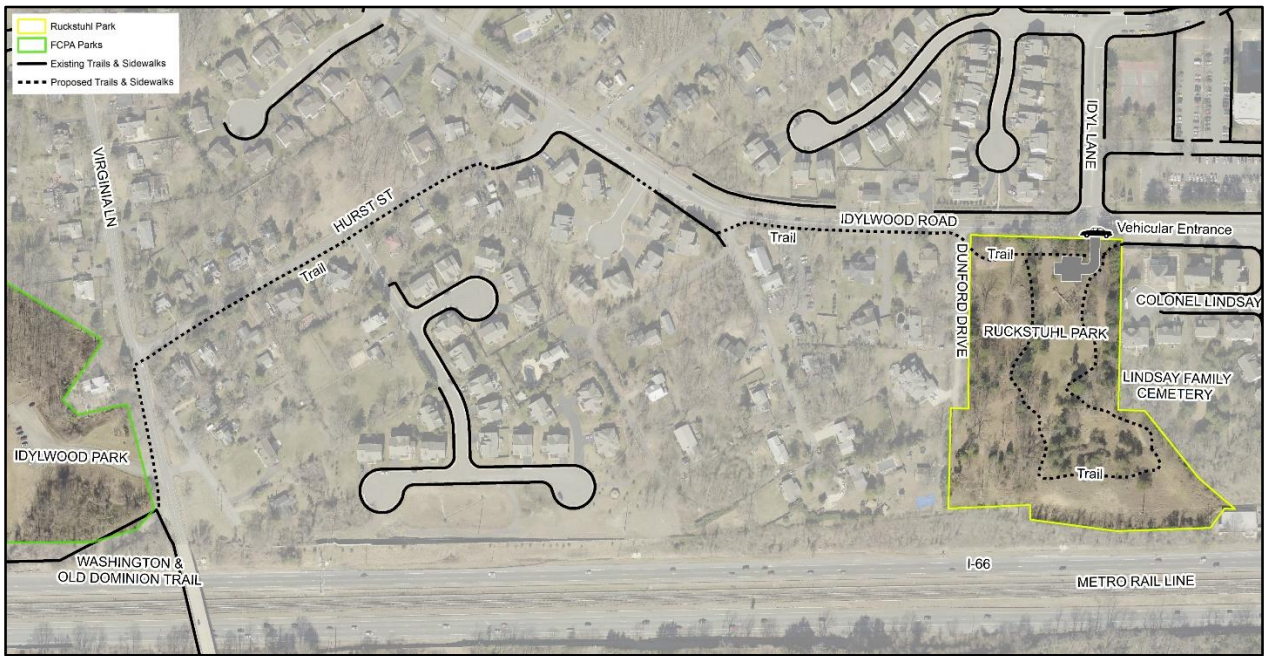

Figure 22: Potential Trail Connections to Idylwood Park and W & O D Trail

C. OPEN PLAY AREA

A small open grass field will be retained as a central feature of the site to provide an open play area for unstructured play, informal uses, and outdoor enjoyment (Figure 23). Usage of this area would promote casual forms of recreation such as frisbee throwing, tossing a ball, or a game of tag. The open play area can also be used as a small community gathering space or group activity area.

Figure 23: Open Play Area

D. NATURE PLAYGROUND

Figure 24: Nature Playground

The natural setting at Ruckstuhl Park offers an opportunity for childhood development with nature themed play features. Green natural settings, with habitat value have healthy benefits that are critical to children's development intellectually, emotionally, socially, spiritually, and physically. Nature playgrounds provide features to encourage high quality play in multiple play types such as functional play, constructive play, imaginary play, manipulative play (such as building elements such as a sand castle), open ended play, with elements that provide differential feedback, help children learn risk management, and provide environmental education in a safe environment. It is important to provide areas where children can play with unique equipment in an enclosed space with a natural aesthetic. This is achieved through the incorporation of natural organic materials, such as trees, hollow logs, tree stumps, wood, tall grasses, living plants, as well as sand, gravel, stones, and water. These

elements are arranged into open spaces, rooms, stages, overlooks, created by landform, plant arbors, stones, and wood fences.

A nature playground is planned on the ridge encompassing areas in both the open woods and small field. This location provides easy access from the trails and open play area. It is also a complementary use to the open play area and Picnic/Seating Education Area. Particular attention should be made to ensure the inclusion of nature education and skill development facilities. Additional detailed design and programming will be necessary to ensure a safe and self directed experience (Figure 24).

E. PICNIC / OUTDOOR CLASSROOM

A picnic area / outdoor classroom should be centrally located as shown on the CDP to support small family or neighborhood gatherings, and resource education classes.

F. SITE FURNISHINGS

Picnic tables, benches, and trashcans should be provided in appropriate locations throughout the park to support the other uses (Figure 25). An outdoor fitness equipment cluster may be located adjacent to the picnic area, nature playground, and open play area, so that parents can use the equipment while watching their children playing in the other features.

Figure 25: Bench

G. INTERPRETIVE FEATURES

Interpretative features may be placed at appropriate locations within the park describing important park features. Interpretation may include the Lindsay Family and cemetery, Dr. Ruckstuhl, The Mount Plantation, as well as the park's natural resources, wildlife, and vegetation. Directional, including distance, regulation, and park identification signs should also be placed as

Figure 26: Interpretive Sign

needed in the park. Minimize the number and collocate signs to preserve the natural setting as well as prevent impacts to important resources (Figure 26).

H. VEGETATIVE BUFFER

Ruckstuhl Park is vegetated around its perimeter but has some areas that are open to the neighbors. Planned park uses are generally internal to the site and low impact in nature. The existing stand of trees along the park borders are intended to remain to provide screening between neighboring homes and the park. Native vegetation should be allowed to grow up over time within the buffer area with a mix of trees, understory, and shrub layers, to naturally provide sustainable buffering and screening.

VI. DESIGN & COMMUNITY CONCERNS

Park master plans are conceptual documents that show general size and locations of facilities for planning and funding purposes. After funding is appropriated, engineering documents will be prepared and submitted for review and approval prior to development as deemed necessary by applicable governing agencies. These plans will need to meet all applicable county, state, and federal codes and requirements, in effect at that time. They will also need to address all potential impacts, as well as providing public review, when applicable, the same as any other public or private development. These reviews ensure that the proposed facilities meet all applicable standards for traffic, parking, size, safety, stormwater management, environmental protection, and zoning with review by the respective agencies. To ensure that these plans meet the latest development standards, and to responsibly manage the costs associated with creating engineered designs, plans are created during the design phase that precedes construction, after funding has been appropriated, which could be several years in the future. When site design, plan submittal, and construction are funded and scheduled, the following concerns should be considered:

A. ACCESSIBILITY

Provide accessible park elements and facilities wherever possible and feasible. This includes accessibility facilities and accessible connections between different areas of the park.

B. PEDESTRIAN IMPROVEMENTS

Pedestrian and bike facilities are planned along Idylwood Road and are typically implemented through transportation improvements or private development. The Park Authority will coordinate with transportation and County officials to support connectivity and safe access to Ruckstuhl Park as park development occurs. The Park Authority will coordinate with other state and county agencies to meet all applicable county, state, and federal requirements, in effect at the time of development.

C. LAND & WATER CONSERVATION FUND REQUIRMENTS

Due to the presence of known Archaic Period archaeologial deposits, the potential for archaeological deposits associated with “The Mount” plantation, the proximity to a

recorded cemetery, and the wishes of Dr. Ruckstuhl, the entire park property is held in concervation easement with NVCT. The park was aquired in part through federal assistance, with deed restrictions developed by the Virginia Department of Historic Resources (VDHR) in order to preserve any known or as yet unidentified cutlural resources within park bounds. This conservation easement prescribes certain conditions on the property and prohibits uses such as athletic fields. Use of federal assistance for acquisition renders any development work performed within the park subject to Section 106 of the National Historic Preservation Act. To satisfy these requirments, deed restrictions, as well as park development and cultural resources policy, all ground distrubing work in Ruckstuhl Park, will require a systematic archaeological survey within the proposed distrubance areas as well as additional archaeological investigations on any identified sites, as warranted. All work must be reviewed by VDHR, NVCT, and the Park Authority's Cultural Resourse Management & Protection branch.

D. SOILS

This site contains four known, but unlocated septic system cesspools located near the former house sites. Some broken asphalt, concrete, drain tile, gravel, stonework, and clay, are clearly visible in some areas. Additionally the site is made up of three disturbed soil classifications, as well as three problem soils. Weak soil, expansive clays, and subsurface inclusions (rock, concrete, or asphalt) can be detrimental to locating playgrounds (due to the depth of footings needed to meet modern safety requirements), and stormwater facilities. In the area where the old house basements and a large swimming pool were demolished and dug out, uncontrolled fill was added to a depth of 8 feet or more, before the sites were regraded.

These are a disturbed Class IVA problem soil, while both Kingstowne and Wheaton soils, also on site, are Class IVB problem soil. Both Class IVA & IVB problem soils fall under federal jurisdiction, which, as per United States Department of Agriculture - Natural Resources Conservation Service (NRCS), a detailed geotechnical investigation and report is mandatory for all construction (this includes trails) and grading within these problem soil areas. It must be prepared according to the Virginia Uniform Statewide Building Code (USBC) and the geotechnical guidelines of Public Facility Manual (PFM) Chapter 4. As per NRCS requirements, geotechnical problems must be addressed with adequate engineering evaluations and designs prior to development. The engineering evaluation report shall be submitted for approval and the recommendations incorporated into the grading plans as requirements prior to plan approval. Construction inspections and certifications are required from the engineer of record.

E. OFFSET ENVIRONMENTAL IMPACTS

Part of the site will serve low intensity recreation and educational uses as a local park, but the majority of the site will remain in a natural (minimally developed) state. Environmental impacts caused by site development should be offset by environmental improvements such as stormwater management, including Low Impact Development (LID) methods, such as porous pavers and bioswales. Due to the current condition of the drainage onsite, stormwater management facilities will reduce runoff from the site to

below the current onsite conditions and mimic natural processes to the greatest extent possible.
Large trees and specimen plantings are an important part of the parks character and their wellbeing is of considerable concern to the community. Root disturbance and soil compaction could cause the trees to die. Therefore, care will need to be taken to field locate all facilities, including trail as not to disturb these trees on the property during construction, particularly, for the parking, trails, nature playground, and picnic / seating area / outdoor classroom area.

The existing landscape and vegetation have been impacted by human activity, especially 20th century land disturbance. This includes the disposal of yard waste (leaves, branches), competition from non-native invasive plant species, and deer browse, which is preventing regeneration of native forest species. Considerable clearing of invasives and brush will need to be performed here, with invasives removal undertaken during construction. A revegetation plan should be prepared to help stop erosion and reduce runoff from the park emphasizing the use of native species.

Natural resource management practices will have to be adaptive and realistic while focusing on restoring the disturbed landscape. Necessary Countywide practices include non-native invasive plant control; deer herd culling (to bring herd numbers within the ecological carrying capacity); and restoration planting once deer herd numbers and non-native invasive plant species are in check. Disposal of yard waste and other debris should be eliminated on site. The potential exists for a vigorous community effort with several volunteers trained by Park Operations and Resource Management in Invasive Plant Management could achieve the community's vision for their local park. An Invasives Management Area (IMA) may be established in Ruckstuhl Park to enlist volunteers to assist in managing invasive plants within the park, especially in the vegetated buffer. Part of this program should include the planting of native plants to help control erosion and runoff along the borders of the park.

F. SIDEWALKS & CROSSWALKS

The community members are very concerned about the lack of sidewalks and especially crosswalks to provide access across the street to the park as well as other nearby destinations. This is of particular concern due to the large number of children and elderly living nearby who rely on walking to get to their destinations. Sidewalks should be provided by the appropriate transportation agency in the right of way adjacent to Idylwood Road to facilitate pedestrian connectivity between the neighborhood, Ruckstuhl Park, and the bus stop located east of the park. Crosswalks should also be provided at the intersection of Idylwood Road and Idyl Lane by Fairfax County and/or Virginia Department of Transportation. This initiative would require coordination between the community, state and county transportation officials, and the Providence District Supervisors Office. Care should be taken to field locate all trails as not to disturb these trees on the property which are important to the parks character and the community during construction. Root disturbance and soil compaction could cause the trees to die.

G. VEHICULAR ACCESS, TRAFFIC, & PARKING

The community is concerned about vehicular access to the parking lot. Facilities planned for this park typically do not generate a significant amount of traffic. The Park Authority has consulted Fairfax County Department of Transportation (FCDOT) and the Virginia Department of Transportation (VDOT) during the creation of this master plan to identify and address access issues. Neither agency had issues with site access at this time, since typically, parks without ball fields do not generate the level of intensity that creates a significant amount of traffic. At the time of development, the Park Authority will need to meet all applicable county, state, and federal codes and requirements, in effect at that time. These reviews ensure that the proposed facilities address potential impacts and meet all applicable standards for traffic, parking, size, safety, stormwater management, environmental protection, as well as zoning with review by the respective agencies.

The Master Plan ultimately provides for up to 20 parking spaces to serve Ruckstuhl Park. This number of spaces is based on Park Authority parking standards for the combined primary and ancillary facilities planned as follows:

- Picnic shelter / outdoor classroom = 5 to 20 Parking Spaces (depending on size and including 2 ADA spaces)
- Nature Playground = 5 Parking Spaces
  Other planned facilities in the park are generally ancillary to the primary uses or envisioned to be accessed by foot or bike
- Open Play Area = 0 Parking Spaces (pedestrian/ancillary access)
- Trails = 5 Parking Spaces (typically pedestrian access, but trail users may also drive to the park)

The total number of spaces to meet Park Authority operational standards for the facilities as provided in this master plan is 10 with an ultimate of up to 20 spaces planned. The Park Authority is sensitive to ensuring that there is adequate parking onsite so that adjacent neighborhoods are not impacted. Should this become an issue, the parking lot may be expanded beyond 20 spaces if necessary to meet the demands of the park users.

H. IDYLWOOD ROAD WIDENING

A 20’ wide easement exists along Idylwood Road for the eventual widening of that road by the Virginia Department of Transportation (VDOT). The Fairfax County Bicycle Master Plan, dated October 2014, shows a bicycle lane planned for Idylwood Road, when it is widened. This easement extends 20’ behind the existing Right of Way (ROW) for Idylwood Road along the frontage of the park. Care should be taken not to plan or build any park features (except entrances and sidewalk) or plantings within this additional right of way.

I. I-66 WIDENING

The Virginia Department of Transportation (VDOT) is studying the options for expanding I-66 through Fairfax County. As currently being studied, this expansion may include several lanes in both directions, as well as utilities, and sound walls. This would affect Ruckstuhl Park by the expansion of the VDOT Right of Way and I-66 by as much as 50

feet into the park. This could in turn push the Dominion Power Lines 50 feet further into the park. Care should be taken not to construct any permanent features within 50 feet of the existing power easement, nor within the easement.