

APPENDIX A

Lexington Manor Passive Park Master Plan Drawing

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Legend

- 2-ft contours
- Tree canopy
- Specimen tree (30'-inch + diameter)
- Interpretive Center (existing)
- Parking
- Restroom
- Interpretive Center
- Disc golf (existing)
- 14' x 16' picnic feature (sculpture of former "FlatTop" building)
- Benches
- Flattops' road - 24 ft
- Flattops' road - 12 ft
- Flattops' road - 6 ft
- Foot path - 6 ft
- Picnic table area
- Flowering tree
- Shade tree
- Rain garden
- Pavilion
- Removable boardwalk

Note: See Vehicular Access Circulation Diagram for vehicular and removable boardwalk locations.

Lexington Manor Passive Park Master Plan

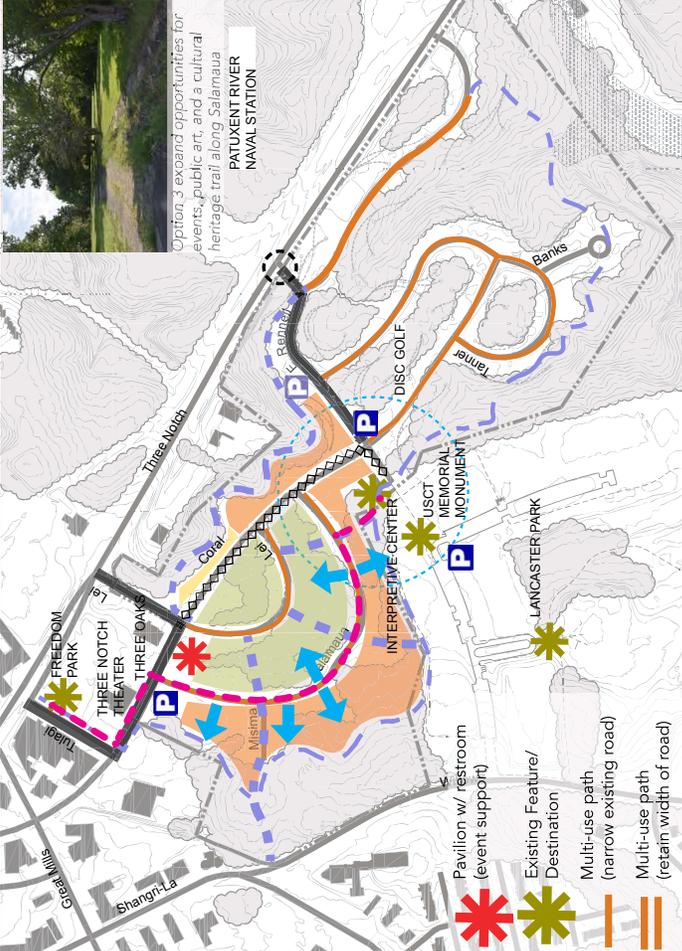
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APPENDIX B

Concept Alternatives Questionnaire

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OPTION 3: CREATE EVENTS AND HERITAGE TRAIL SPINE ALONG SALAMAUA



Legend	
	Events/Program Spine expanded arts and heritage event programming along Salamaua using the "Arboretum" concept
	Heritage Trail: interpreted trail connects Freedom Park to USCT Memorial Monument and Interpretive Center focused along Salamaua
	Community Garden Lei and Coral (NE corner)
	Visual Corridors: enhance natural openings (limbing up trees; thinning understory; preserve healthy trees/remove damaged/dying trees)
	Vehicular Access: limited at Coral/Lei and Coral/E, Rennell intersection
	Event Access: Coral Drive between Lei and E, Rennell open
	Casual Use: open grass areas with tree groupings
	Parking: new lots accessed along Coral at Lei and Salamaua
	Trail Connections: <ul style="list-style-type: none"> Willows Road to Lei (via Misima) to new pavilion (multi-use trail) Lancaster Park to Lei (new footpath through woods to new pavilion) Interpretive Center to Lei
	Public Art: incorporated into Events/Program spaces along Salamaua



Lexington Manor Park Master Plan

Allowable Uses and Site Layout Options

Based upon the input provided at the initial stakeholder and Recreation and Parks Citizen Advisory Board meetings on February 21, 2019, three options, arrayed on the following pages, are under consideration for accommodating potential uses, circulation and parking. The following describes the potential and allowable uses:

- Events and Programming Spine** - areas enhanced to better accommodate future art and heritage events and other programmed temporary activities. Three options are proposed:
- Option 1: Narrow spine along Coral between Freedom Park and the Interpretive Center
 - Option 2: Expanded spine along Coral between Freedom Park and the Interpretive Center and extending along the loop on Lei
 - Option 3: Expanded spine along Salamaua using the "Arboretum" concept

Heritage Trail - an interpreted walkway or path telling the story of Flattops and the surrounding neighborhoods. Three options are shown:

- Option 1: Part of narrow event spine along Coral
- Option 2: Separated from event spine along a new footpath around the perimeter of the former Flattops
- Option 3: Part of expanded event spine along Salamaua

Community Garden - space dedicated to garden plots and/or tree nut and fruit crops (several options located closer to Coral/Lei intersection)

Casual Use: open grass areas with tree groupings for passive activities

Visual Corridors: enhance natural openings to increase safety and visibility between park areas (limbing up trees; thinning understory; preserve healthy trees/remove damaged/dying trees)

Vehicular and Event Access - changes to the circulation and parking included with each of three options:

- Option 1: Current access and circulation remain the same
- Option 2: Closed at Coral/Lei intersection, event access at E, Rennell (gate opened at Three Notch for events)
- Option 3: Closed at Coral/Lei intersection; E, Rennell open from Three Notch to Coral; event access between Coral/Lei to E, Rennell

Trail Connections - add new multi-use trail from Willows to Lei via Misima (all options) and conversion of all roads to trails by removing 1/2 of roadway width, except the following for each of the three options:

- Option 1: Lei (event use) and Coral (vehicular access)
- Option 2: Lei and Coral (event use) and E, Rennell temporary access
- Option 3: Coral from Lei to E, Rennell (events)

Public Art: can be incorporated directly into the features of the park, such as the pavilion, benches or lighting; or as a sculpture park integrated with the event spine.

Pavilion: new picnic pavilion with restrooms to support events.



Option 1 retains and enhances the existing event infrastructure and an interpreted cultural heritage trail along Coral Drive



Options 2 and 3 expand opportunities for events, public art, and a cultural heritage trail along Coral and Lei Drives (Option 2) or along Salamaua (Option 3), respectively



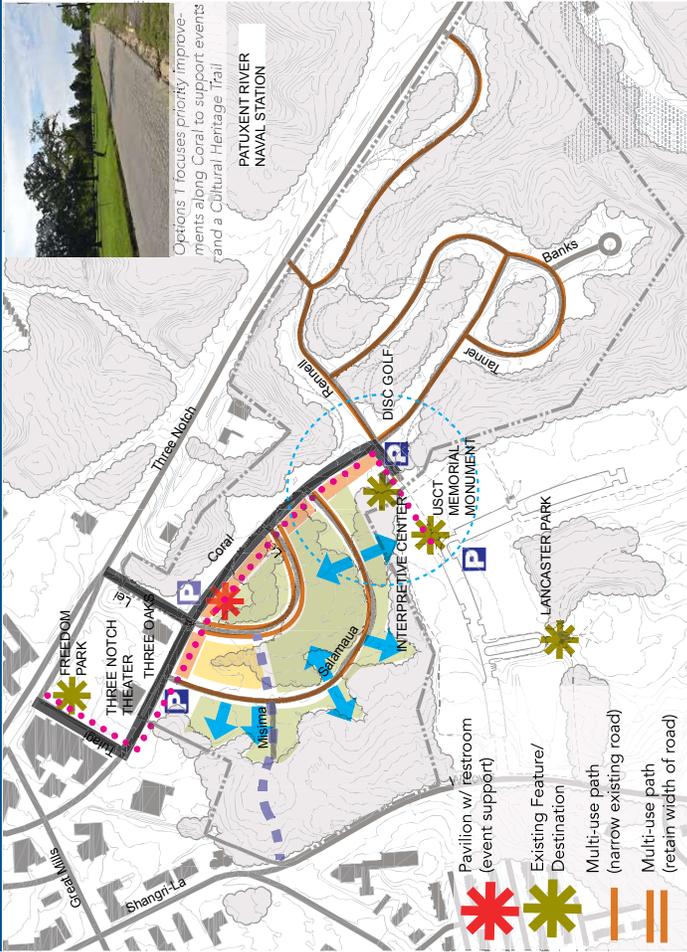
Public art can be curated and located throughout the park (such as at the Anne Marie Sculpture Garden, top) or integrated into specific design elements (Simpson Park, Alexandria, VA)

St. Mary's CDC.

City of Hagerstown

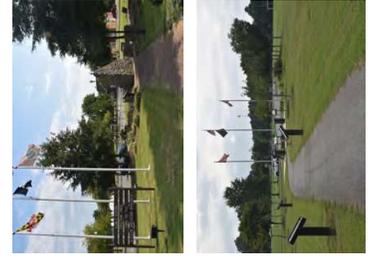
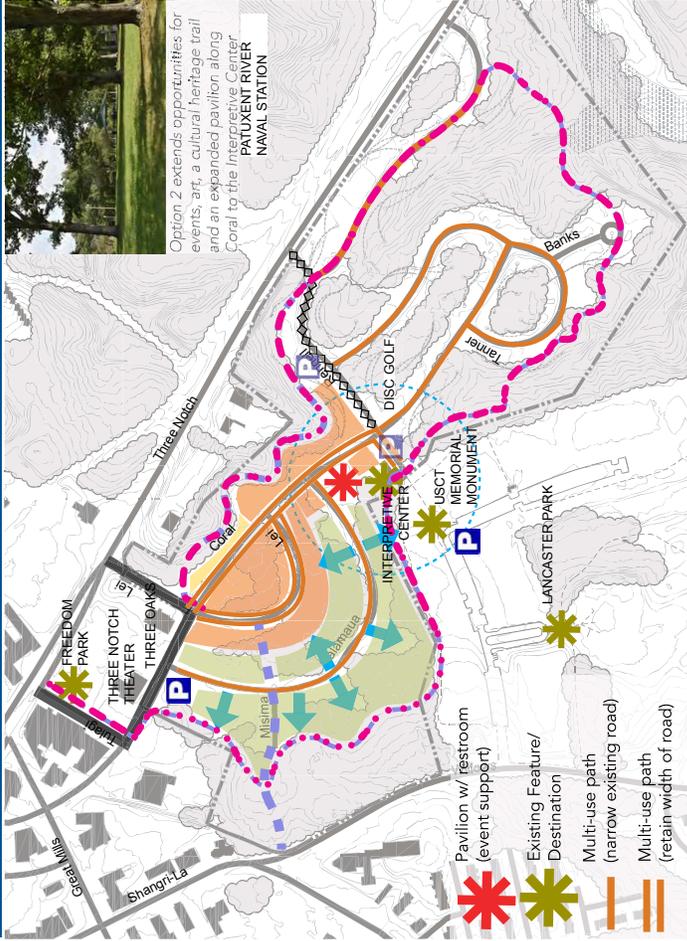
Annapune Sculpture Garden

OPTION 1: RETAIN EXISTING FEATURES WITH LIMITED INTERVENTION



Providing visual connections by enhancing existing openings such as towards Lancaster Park is common to all three options.

OPTION 2: EXPAND EVENTS/PROGRAMMING SPACES ALONG CORAL



Connecting Freedom Park with the US Colored Troops Memorial along a new Cultural Heritage Trail can be developed jointly with an Events Spine along Coral in Option 2 or Salamaua in Option 3

APPENDIX C

Specimen Tree Inventory and Report

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3/27/19

Mr. Jim Klein
Lardner/Klein Landscape Architects
815 North Royal, Suite 200
Alexandria, VA 22314

Re: *Lexington Manor Park Specimen Tree Survey and Forest Characterization*
Lexington Park, St. Mary's County, MD
ESA Contract 2018-79

Jim:

Environmental Systems Analysis, Inc. (ESA) has been retained by Lardner/Klein Landscape Architects (LKA) to assist with field studies pertaining to the development of the Lexington Manor Passive Park Concept Plan (RFP 2019-053). This report includes ESA's findings for a specimen tree survey, forest characterization, wetlands and waters classification and other documentation of on-site existing conditions.

Introduction

The study site is known as Lexington Manor Park, an 85-acre parcel that was formerly a military housing complex built in the 1940's, and known as the Flattops. In 2004 and 2005, the 171 housing units were razed, leaving behind the roadway infrastructure of the former residential community.

This site is more or less bounded by Three Notch Road (Route 235) and Patuxent Naval Air Station to the north and east, Great Mills Road and the Lexington Park Post Office to the north and west, and then Willows Road and Lancaster Park to the south and west. The Park has two sections, a 35-acre upper section and a 50-acre lower section with disc golf course. The sections are divided by a War Memorial, interpretive center and picnic pavilions. Access is currently available from Lancaster Park, off of Willows Road and from South Coral Drive, an internal park roadway, which ends at the interpretive center.

Specimen Tree Survey

ESA performed field work on March 20, 2019, prior to, but at the onset of bud-break and leaf-out. ESA field-located and surveyed all trees 30-inches diameter at breast height (dbh) and greater, leading to 82 trees being tagged and surveyed. The Maryland Department of Natural Resources, *State Forest Conservation Technical Manual* and St. Mary's County, Department of Land Use & Growth Management, *FSD Checklist and FCP Checklist* defines a specimen tree as having a diameter at breast height of 30-inches or more, or trees having 75% or more of the diameter of the current State champion of that species. Healthy specimen trees are to be protected in the landscape, as and where possible. If for some reason

a healthy specimen tree is to be partially impacted or removed, then best arboricultural management practices are to be implemented or compensated through the forest conservation plan process.

Attached with this report is a map of the specimen tree locations and a table consisting of the tree identification tag, species, diameter, tree height, canopy crown width and arboricultural comments. Seventy four percent or 61 of 82 trees were white oak, then followed by southern red oak at 12%. Other overstory trees observed included northern red oak, blackjack oak, red maple, sweetgum, loblolly pine, chestnut oak, post oak and black oak. Ninety percent of the tagged trees were considered to be in good condition, where only some minor sanitation pruning may be required, or the removal of vines growing on the trees.

The largest healthy, specimen white oak in St. Mary's County is 63-inches diameter, located at a private residence in Leonardtown, and was nominated in 2014 (*The Maryland Big Tree Program Website*). Lexington Manor Park had one white oak within 75% (47-inch diameter or greater) of the size of the County champion, which was tree tag #74, a 55-inch diameter tree with two primary leaders, both 30-inches each, breaking at face height, and generating a 55-inch diameter trunk bole.

The majority of the specimen trees of 30-inches and larger occurred within the open ground surrounding the roadway network. This area also had a goodly number of mature, overstory, open grown, broad crowned oak in the 20 to 29-inch diameter range. It appears that when the Flattops residential community was designed and built by the federal government starting in 1943, the architects made a point to protect select oak hardwoods for retention in the community proper (lawn and common areas). The federal government sold all of the residences to Club Properties in 1962. The new owner planted the Japanese cherry trees found along the primary roads. Large, open grown oak are quite evident within the landscape, then with maintained lawn and a network of internal roads. Along the roads, the former residential sites are now maintained as grassy areas with the remnants of the hardwood overstory, and no associate forest structure of understory trees, shrubs or herb layer. This former residential zone then meets natural area forest zones at several locations toward the perimeter of the property, where the land slopes downward into valley and side slope topography, away from where the homes were once located on level grounds.

The overstory oak zone where the homes were once located, is dominated by stately oak, typically with broad crowned and open-grown canopies, and with most being quite healthy, as oaks can handle ground compaction and are long-lived trees, capable of living beyond a 300-year time period.

Ornamental Cherry Trees

The planted ornamental cherry along the roadways are all in relatively poor condition. The Japanese ornamental cherry is a short-lived tree by nature and pre-disposed to blight and other insect and disease vectors. At present, the cherry have been pruned to eliminate dead and dying wood, and now appear as remnants of their once preeminence within the landscape. The remaining cherry trees no longer retain their original shape, are stunted and are nearing the end of their life expectancies. If the result of the master plan is a decision to try and retain or replant the Japanese cherries, then they will require an on-going investment in both time and money to restore and sustain a healthy and attractive planting. Further evaluation of what is required to continue to retain the Japanese cherries will be addressed in the master plan report. No 30-inch diameter or larger Japanese cherry were documented during the specimen tree survey.

Natural Area Woodlots

Three areas of larger, natural area woodlots occur at the project site, and are associated with steeper slopes and drainage corridors, away from what was the flat grounds where the former residential homes were cited. They are labeled as forest stands #FS-1, #FS-2 and #FS-3 from north to south. Woodlot #1 occurs in the north 35-acre area, and woodlots #2 and #3 occur in the southern 50-acre zone, with the woods continuing off-site as a part of larger, contiguous forest-interior woodlands, and which includes Penbrook Run.

The three woodlots were all similar and considered homogeneous, with an estimated 348 trees per acre and a fully-stocked basal area of 103. The dominant species was white oak, at approximately 34 per acre, and with a mean diameter of 12-inches. White oak with a mean diameter of 12-inches are typically 60-years old, suggesting that the natural area woodlands date to the late 1950's. Species observed within the woodlands included white oak, northern red oak, Virginia pine, southern red oak, loblolly pine, black gum, American holly, black cherry, eastern red cedar, southern magnolia (likely introduced, as escaped from residential), multiflora rose, privet, winged euonymus, poison ivy, Japanese honeysuckle and common greenbriar.

Wetlands/Waters Classification

All surface waters flow from the 85-acre property and eventually to the St. Mary's River. This watershed is classified as Use Class 1, Tier II waters. The Tier II designation requires that the State (MDE) will ask for extra-ordinary SWM practices to ensure water quality from any proposed land development, and typically in excess of MD SWM Design Guidelines. The study parcel does not include floodplain, per FEMA mapping.

While performing tree survey and forest characterization, ESA performed a preliminary wetland delineation to classify any nontidal wetlands or waterways observed. In the north portion of the tract, at the dead-end of Misima Road, a 40-foot by 20-foot percolation bulb was observed that contained a few shoots of cattail and soft rush, but which was dominated by tall fescue. This depression appears to collect water and a flow path exits from the depression, and into depressional topography. We did not observe hydric wetland soil, nor any seasonal base flow, and we therefore classified the system as being ephemeral, only flowing in response to direct precipitation, and not considered jurisdictional by either the Maryland Department of the Environment (MDE) or the U.S. Army Corps of Engineers (ACOE).

Two draws occur in the lower, south portion of the project site. The more north and easterly draw is considered forested upland drainage, a dry swale that may carry direct precipitation during rain events. We did not observe flow rack through the drainage corridor. The second draw occurs in the lower south and west and is classified as an ephemeral channel. The channel did have a few pockets of standing water, but no seasonal base flow. No regulatory wetlands or riverine intermittent or perennial stream channels were documented on-site. Reference the enclosed mapping for details.

Environmental Review

ESA submitted paperwork to the Maryland Department of Natural Resources (DNR), Natural Heritage Program, asking for a review of their internal files to ascertain if any known rare, threatened and/or endangered plant or animal species are known to occur on-site or nearby of similar habitat. This level of

review generally takes 30 to 60-days for DNR to respond. We can not therefore include DNR findings with this letter report. The St. Mary's River watershed is known to have several significant wetland related plant species, several areas of wetlands of state importance and the highly state rare, eastern narrow-mouth toad within the watershed. Therefore, natural areas that include wetlands and streams are targeted areas for survey. As noted previously, wetlands/waters were not documented as occurring on the Lexington Manor parklands.

ESA performed a natural heritage review through the federal U.S. Fish and Wildlife IPaC system. The federally threatened northern long-eared bat has been documented at the Patuxent Naval Air Station, which abuts the Lexington Manor Park parklands along its north and east, Route 235 boundary. This means that no trees can be felled from the project site between June 1 and July 31, when these bats may be roosting/nesting. The only exception is for a direct threat to human life or property.

Recommendations

It is our understanding that the 85-acre parkland tract is to remain as parklands. We noted non-native invasive English ivy with regularity and growing on many of the trees that occur both in the woods and within the more open habitat where housing once occurred. A program should be implemented to manage for the elimination of English ivy, especially when growing on mature trees. The non-native shrub privet was observed with regularity, especially along the edges of the forest and should also be suppressed, as it is a dominant feature in the landscape, and reduces the potential for native shrub cover.

The areas of the park that includes the road network and where the housing once occurred appears as a savannah, where overstory trees occur, but then is devoid of understory, shrub and herb matrices. It appears that these lawn areas with an oak dominated overstory are intentionally maintained as lawn. Once the master plan is completed and overall design objectives confirmed, the County should consider preparing a natural resources management plan to direct future management operations within particular parkland zones. At present several once-open areas are beginning to become covered with a dense cover of loblolly saplings, and it is not known if this is desirable.

Consideration should be given to converting some of the extensive lawn areas into pollinator meadows to enhance wildlife and insect habitat and reduce the maintenance burden of turf. Lawn areas should be occasionally aerated and improved via over-seeding and fertilization. The open canopy overstory trees should be pruned and soils aerated as necessary.

Options to consider for the planted Japanese cherry trees include:

- Retain the character defining features of the ornamental planting by an overall replanting program, similar to, but on a smaller scale as is done for the cherries along the tidal basin in Washington, DC.
- Replant new flowering trees to replace the cherries with a stronger diversity of species, while retaining the overall desire to achieve a spring display.

Through the master planning process, some roads will be narrowed and pavement removed. Because the roads will include various activities, a lawn perimeter is appropriate, then with occasional drifts/sweeps of meadows.

The lower, south portion of the park includes a disc golf course, and has restricted access by vehicles other than for maintenance operations, and existing pavement is likely to be converted to narrower paved trails. Because mating bluebirds were observed at the time of the forest characterization and tree survey, Parks may want to consider installing blue bird boxes to enhance the local population.

Please let me know if I can be of any further assistance or if you have questions regarding this letter report. I can be reached at 301-775-4388 (cell phone), 410-267-0495 x-203 (office phone) or e-mail at mburchick@esatoday.com.

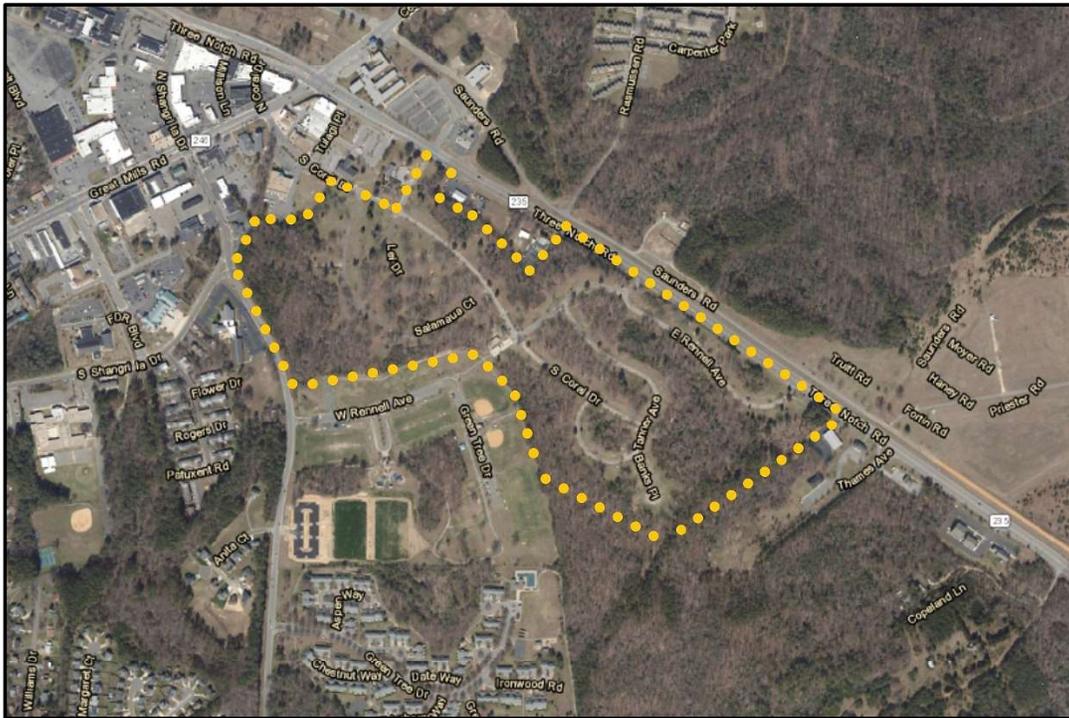
Sincerely,

Mark Burchick

Mark Burchick
Principal, Senior Environmental Scientist

Attachments:

- Select Photographs
- Specimen Tree Survey Map
- Specimen Tree Survey Table
- Wetlands/Waters Classification and Soils Map



Above: Vicinity aerial map from MD Merlin Interactive (2017 photo).
Below: Typical open grown, broad-crowned, overstory oak.





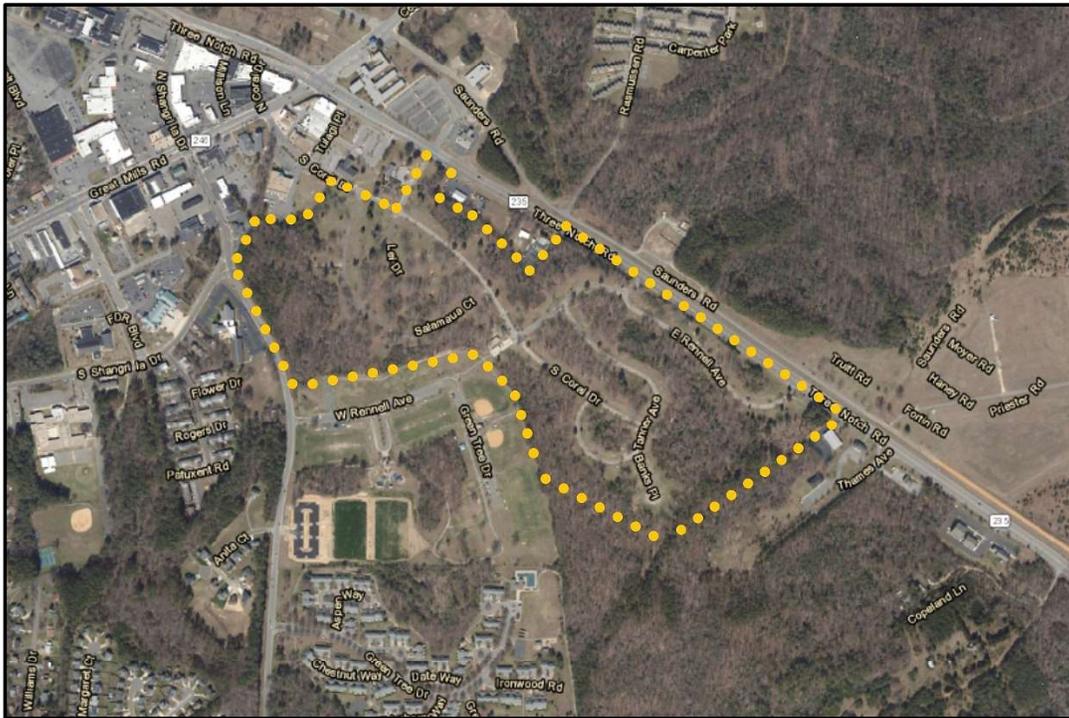
Above: Tree #19, a 44-inch diameter, specimen white oak.
Below: Aluminum tags and nails were used to document the 82 specimen trees.





Above: A typical photo of the internal road network.
Below: The lower, southern 50-acre parcel included a disc (frisbee) golf course.





Above: Vicinity aerial map from MD Merlin Interactive (2017 photo)
Below: Typical open grown, broad-crowned, overstory oak.





Above: Tree #19, a 44-inch diameter, specimen white oak.
Below: Aluminum tags and nails were used to document the 82 specimen trees.

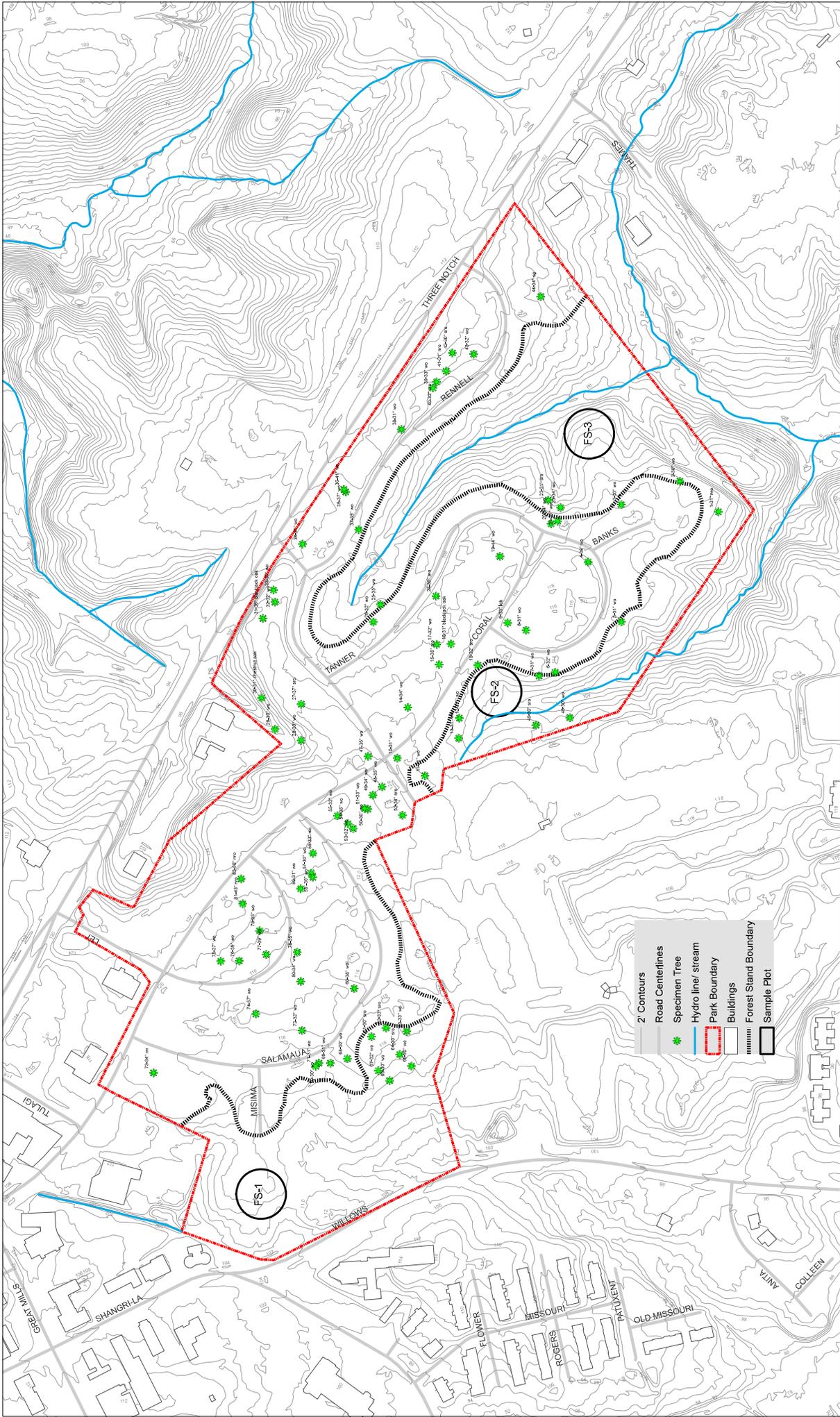




Above: A typical photo of the internal road network.
Below: The lower, southern 50-acre parcel included a disc (frisbee) golf course.



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Lexington Manor Passive Park Concept Plan
GIS Base Map

**Forest Stand Delineation/
Specimen Tree Survey**

DRAFT JANUARY 24, 2019

Data Source: St. Mary's County



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**ESA Inc. Specimen Tree Survey
Field Data Collection**

Project Name: Lexington Manor Park
Date: 3/20/2019
Color of Flagging: N/A

Field Crew: MB, JC
Regulatory Requirement: 30 DBH
Aluminum Tags Used? Yes

ID #	Species	Scientific Name	DBH (inches)	Height (feet)	Crown (feet)	Observations ¹
1	Northern Red Oak	<i>Quercus rubra</i>	31	50	25	G - 2 primary leaders. On edge of lawn
2	White Oak	<i>Quercus alba</i>	31	45	20	G - Lacking NE crown. Near Tee #6
3	White Oak	<i>Quercus alba</i>	31	40	20	G - Northern crown not well developed. In lawn
4	White Oak	<i>Quercus alba</i>	39	40	30	G - Open grown. Along curb
5	White Oak	<i>Quercus alba</i>	31	40	20	G - Shared crown with adjacent 27" tree. On edge of lawn
6	White Oak	<i>Quercus alba</i>	32	45	20	G - On edge of lawn
7	White Oak	<i>Quercus alba</i>	31	45	20	F - Dead leader. On edge of lawn
8	White Oak	<i>Quercus alba</i>	31	40	30	F - Open grown. Some dieback
9	Loblolly	<i>Pinus taeda</i>	33	50	30	G - Open grown. At intersection
10	White Oak	<i>Quercus alba</i>	31	50	25	F - Lacking west crown. Roots in pavement
11	White Oak	<i>Quercus alba</i>	31	40	20	G - Two primary leaders. Near entrance
12	White Oak	<i>Quercus alba</i>	31	40	20	G - English ivy. On lawn edge
13	White Oak	<i>Quercus alba</i>	31	40	20	G - English ivy growth. 20% lean to west
14	White Oak	<i>Quercus alba</i>	34	45	25	F - 2 primary leaders. 3 broken limbs
15	Southern Red Oak	<i>Quercus falcata</i>	30	45	20	G - On edge of lawn
16	Black Jack Oak	<i>Quercus marilandica</i>	31	45	25	G - Lower limb pruning recommended
17	White Oak	<i>Quercus alba</i>	32	40	20	G - 2 primary leaders. Poison ivy growth
18	Southern Red Oak	<i>Quercus falcata</i>	32	45	30	G - Well developed crown
19	White Oak	<i>Quercus alba</i>	44	55	35	G - Excellent specimen
20	White Oak	<i>Quercus alba</i>	34	50	30	G - Shared crown with Specimen Tree 21. Nice grouping
21	White Oak	<i>Quercus alba</i>	31	45	20	G - Shared crown with Specimen Tree 20. Nice grouping
22	White Oak	<i>Quercus alba</i>	34	50	30	G - Along edge of woods
23	Southern Red Oak	<i>Quercus falcata</i>	31	40	20	G - In woods
24	Southern Red Oak	<i>Quercus falcata</i>	30	37	20	G - Open grown

ID #	Species	Scientific Name	DBH (inches)	Height (feet)	Crown (feet)	Observations ¹
25	White Oak	<i>Quercus alba</i>	35	50	20	G - 2 primary leaders
26	White Oak	<i>Quercus alba</i>	32	50	25	G - English ivy on tree. At edge of woods
27	Southern Red Oak	<i>Quercus falcata</i>	37	60	40	G - Excellent condition. open grown
28	White Oak	<i>Quercus alba</i>	30	45	25	F - English Ivy burden. Recommend removal of ivy. Lean to west
29	White Oak	<i>Quercus alba</i>	30	50	25	G - In woods near auto shop
30	Chestnut Oak	<i>Quercus montana</i>	32	50	30	G - 2 primary leaders
31	Black Jack Oak	<i>Quercus marilandica</i>	36	45	25	G - 2 primary leaders. Near MD 235
32	White Oak	<i>Quercus alba</i>	32	40	30	G - Open grown. Near MD 235
33	White Oak	<i>Quercus alba</i>	32	45	30	G - Open grown. Near MD 235
34	White Oak	<i>Quercus alba</i>	31	40	25	G - At MD 235 entrance. Next to twin 28" white oak
35	White Oak	<i>Quercus alba</i>	37	40	35	G - Open grown. Well developed crown
36	White Oak	<i>Quercus alba</i>	41	50	35	G - Open grown. Along fence and MD 235
37	White Oak	<i>Quercus alba</i>	35	50	35	G - Open grown
38	White Oak	<i>Quercus alba</i>	31	40	20	G - Open grown
39	White Oak	<i>Quercus alba</i>	33	55	30	G - 2 primary leaders
40	Southern Red Oak	<i>Quercus falcata</i>	32	40	20	G - Edge of wood line
41	Northern Red Oak	<i>Quercus rubra</i>	31	45	25	G - In woods
42	Southern Red Oak	<i>Quercus falcata</i>	30	55	35	G - 3 primary leaders. In woods
43	White Oak	<i>Quercus alba</i>	32	45	20	G - Edge of wood line
44	Sweet gum	<i>Liquidambar styraciflua</i>	34	45	30	G - Edge of wood line. Vine burden. Recommend vine removal
45	Southern Red Oak	<i>Quercus falcata</i>	30	55	30	G - In woods
46	White Oak	<i>Quercus alba</i>	30	45	25	G - In woods
47	White Oak	<i>Quercus alba</i>	35	40	30	G - At 4 way intersection
48	White Oak	<i>Quercus alba</i>	35	50	30	G - In picnic area. Well developed crown
49	White Oak	<i>Quercus alba</i>	34	50	25	G - In picnic area
50	White Oak	<i>Quercus alba</i>	30	50	20	G - 3 primary leaders. Interpretation center
51	White Oak	<i>Quercus alba</i>	33	45	20	G - Near interpretation center
52	Northern Red Oak	<i>Quercus rubra</i>	34	50	30	G - Along edge of pavement
53	White Oak	<i>Quercus alba</i>	36	45	25	G - Shared crown with Specimen Tree 54
54	White Oak	<i>Quercus alba</i>	32	45	20	G - Shared crown with Specimen Tree 53
55	White Oak	<i>Quercus alba</i>	31	40	20	G - Open grown
56	White Oak	<i>Quercus alba</i>	33	50	30	G - Open grown. Recommend pruning of lower limbs

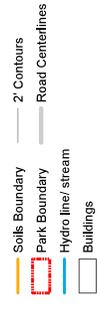
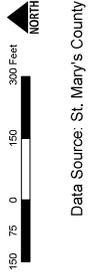
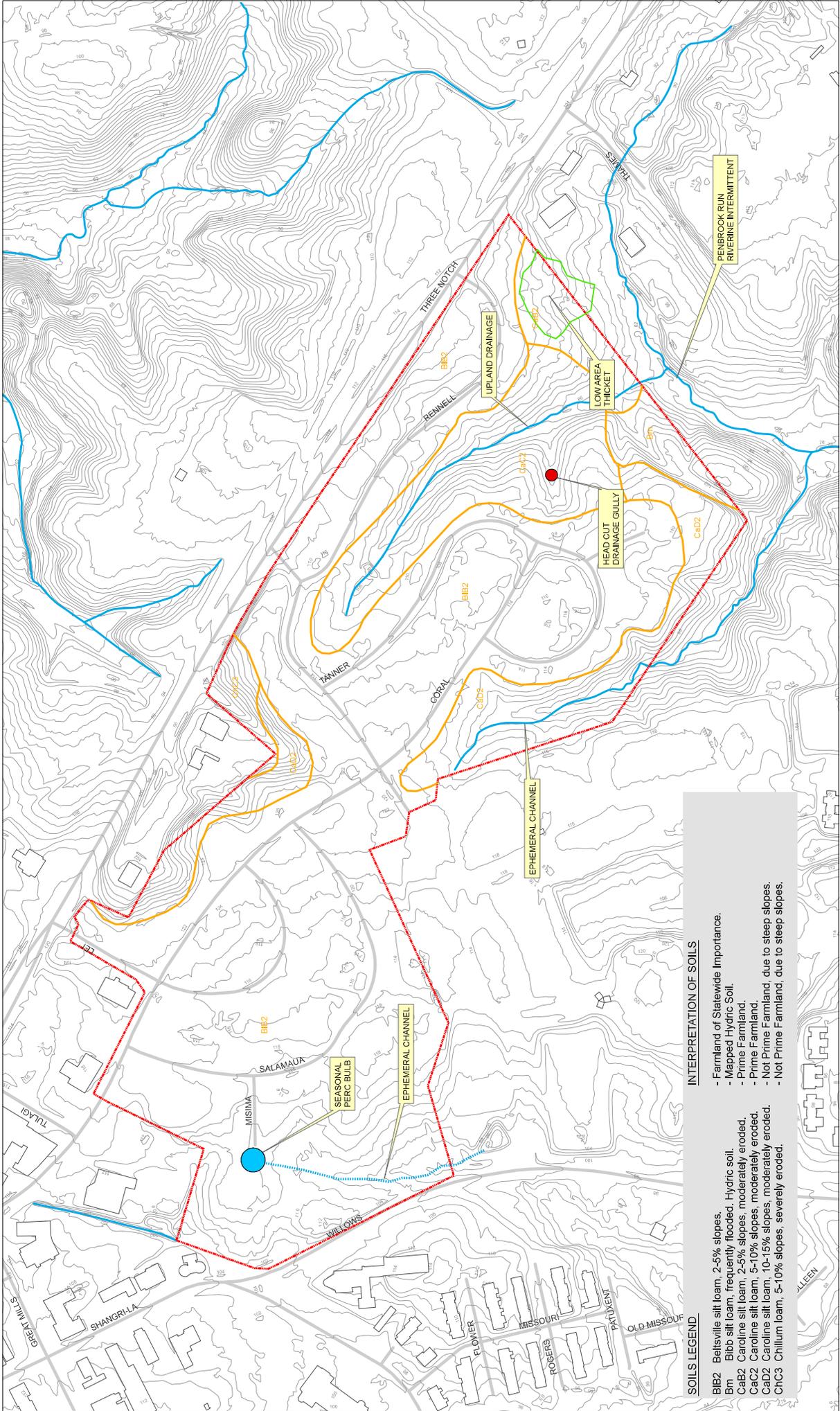
ID #	Species	Scientific Name	DBH (inches)	Height (feet)	Crown (feet)	Observations ¹
57	White Oak	<i>Quercus alba</i>	31	50	25	G - Shared crown with Specimen Tree 58
58	White Oak	<i>Quercus alba</i>	30	45	25	G - Shared crown with Specimen Tree 57
59	White Oak	<i>Quercus alba</i>	31	45	25	G - Weak southern crown growth
60	White Oak	<i>Quercus alba</i>	38	55	30	G - In grove of 3 high quality trees
61	Southern Red Oak	<i>Quercus falcata</i>	30	45	25	G - Along edge of woods
62	Southern Red Oak	<i>Quercus falcata</i>	33	45	30	G - 2 primary leaders
63	White Oak	<i>Quercus alba</i>	33	50	30	G - Well developed crown. In woods
64	White Oak	<i>Quercus alba</i>	30	50	20	G - In woods
65	White Oak	<i>Quercus alba</i>	30	45	25	G - In woods
66	White Oak	<i>Quercus alba</i>	30	50	25	G - Well developed crown. In woods
67	White Oak	<i>Quercus alba</i>	32	45	20	G - 2 primary leaders.
68	White Oak	<i>Quercus alba</i>	30	40	25	G - Open grown
69	White Oak	<i>Quercus alba</i>	31	40	20	G - Open grown
70	White Oak	<i>Quercus alba</i>	30	45	25	G - Shared crown with Specimen Tree 71
71	White Oak	<i>Quercus alba</i>	31	45	25	G - Shared crown with Specimen Tree 70
72	White Oak	<i>Quercus alba</i>	32	50	25	G - Open grown. Well developed crown
73	Red Maple	<i>Acer rubrum</i>	34	45	30	P - Recommend removal of this tree
74	White Oak	<i>Quercus alba</i>	55	50	40	G - Twin. open grown
75	White Oak	<i>Quercus alba</i>	37	60	45	
76	White Oak	<i>Quercus alba</i>	39	60	45	Specimen Tree 75, 76, and 77 all in a row. All in Good condition
77	White Oak	<i>Quercus alba</i>	39	60	40	
78	White Oak	<i>Quercus alba</i>	35	50	35	G - Open grown
79	White Oak	<i>Quercus alba</i>	35	45	25	F - Not well developed on southern side
80	White Oak	<i>Quercus alba</i>	34	45	25	G - Open grown
81	Northern Red Oak	<i>Quercus rubra</i>	43	45	30	G - Well developed crown
82	Northern Red Oak	<i>Quercus rubra</i>	50	50	35	F - Black secretions and fissures in bark. Well developed crown

Notes:

¹ G = Good Condition - Generally in healthy condition. Growth at ends of branches. Normal leaf size, distribution, and color. Excellent trunk condition. Healthy rooting and root zone.

F = Fair Condition - Generally in healthy condition, with some minor problems noted. Trunk may be impaired by structural defect. May have limited impact to roots and/or root zone.

P = Poor Condition - Generally poor condition, with significant problems noted. May include impaired growth, trunk with structural defects and/or disturbance to roots/root zone.



Lexington Manor Passive Park Concept Plan

GIS Base Map

NONTIDAL WETLAND AND WATERS CLASSIFICATION MAP

L/K/LA DRAFT JANUARY 24, 2019

Data Source: St. Mary's County

SOILS LEGEND

- BIB2 Beltsville silt loam, 2-5% slopes.
- Bm Bibb silt loam, frequently flooded, Hydric soil.
- CaB2 Caroline silt loam, 2-5% slopes, moderately eroded.
- CaC2 Caroline silt loam, 5-10% slopes, moderately eroded.
- CaD2 Caroline silt loam, 10-15% slopes, moderately eroded.
- ChC3 Chillum loam, 5-10% slopes, severely eroded.

INTERPRETATION OF SOILS

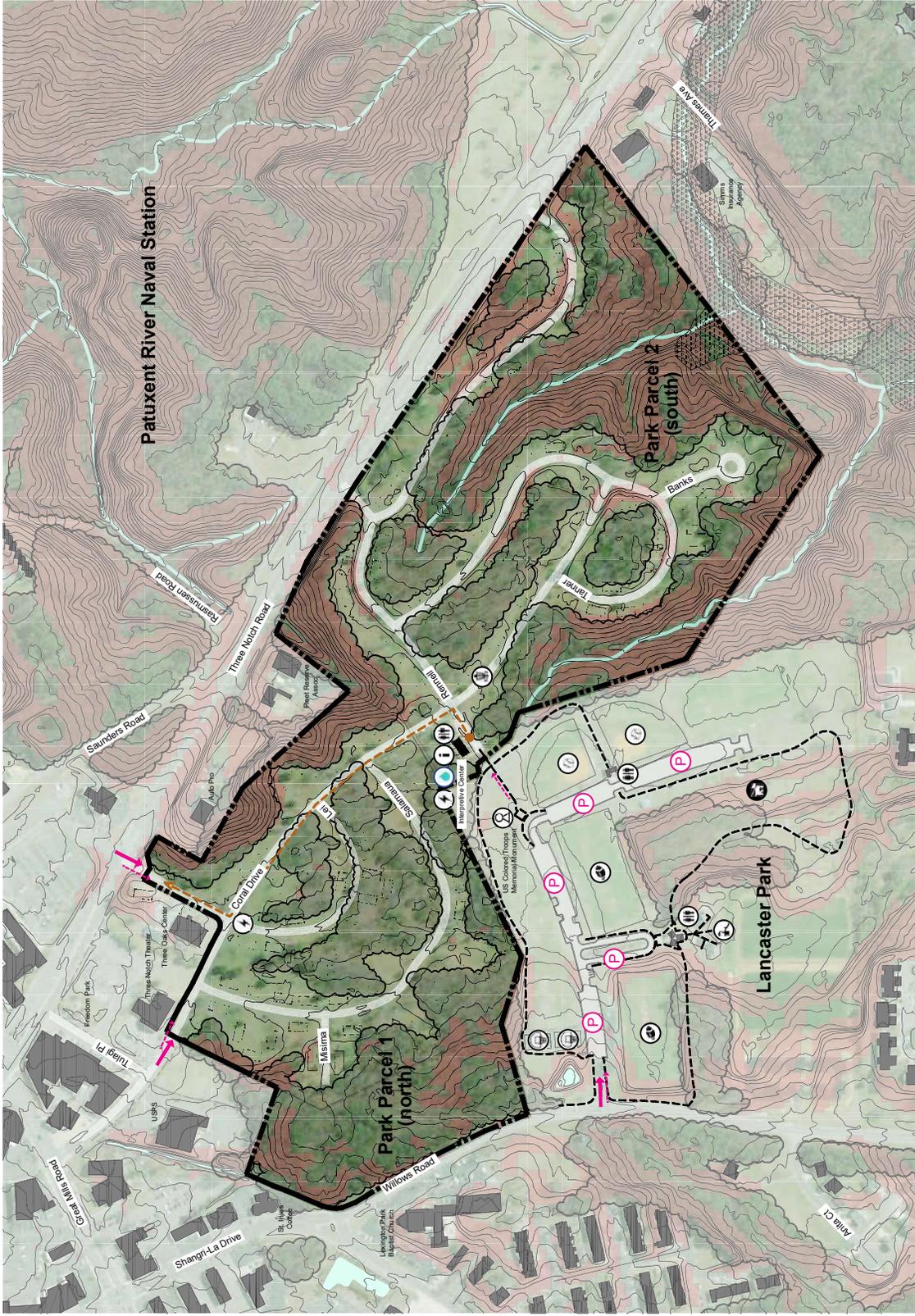
- Farmland of Statewide Importance.
- Mapped Hydric Soil.
- Prime Farmland.
- Not Prime Farmland, due to steep slopes.
- Not Prime Farmland, due to steep slopes.

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APPENDIX D

Existing Conditions Inventory Map

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LEXINGTON MANOR PASSIVE PARK - SITE INVENTORY BASE MAP

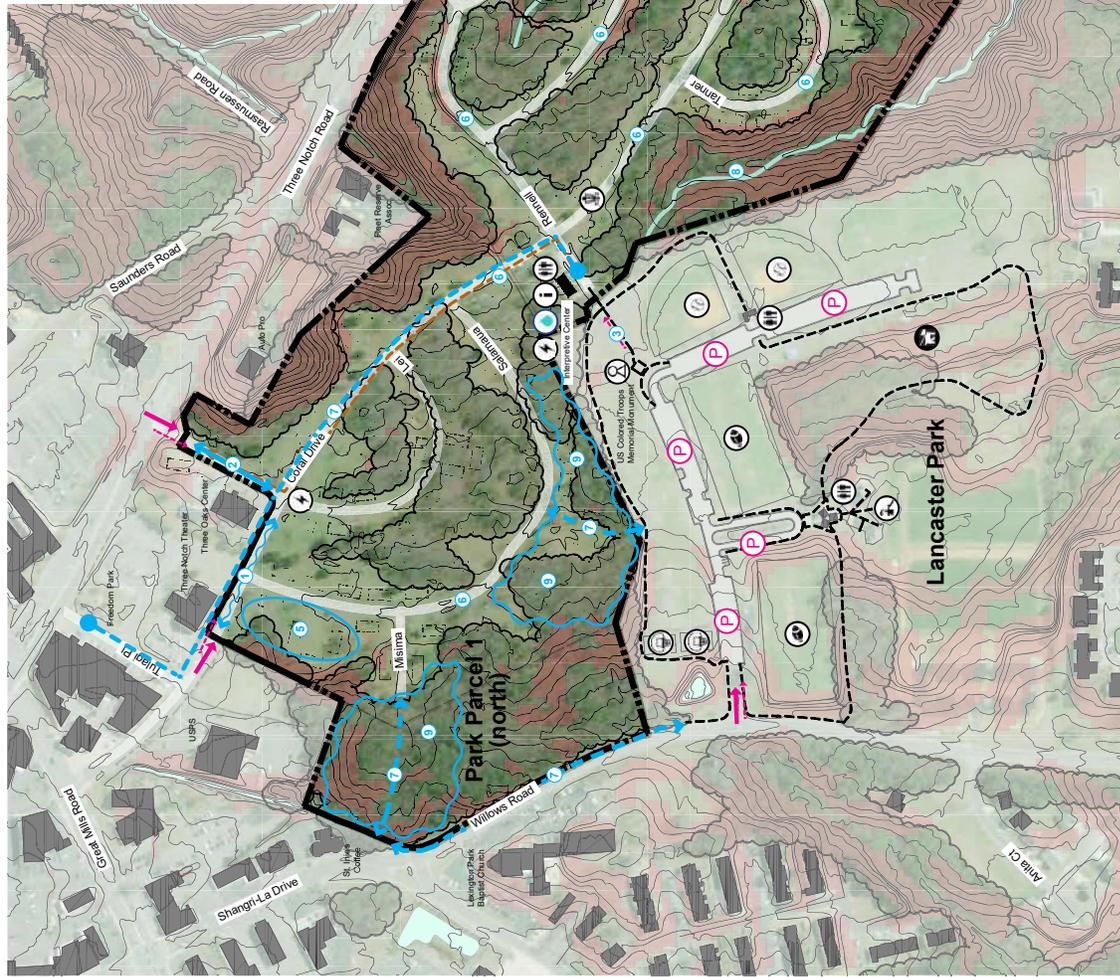
- FORMER ROAD (IMPERVIOUS SURFACE)
- HYDRO STREAM
- SLOPES OVER 5%
- EXISTING DENSE CANOPY
- HYDRO SWALS
- SEWER (APPROXIMATE)
- BI-CIRCULAR ACCESS
- PEDESTRIAN ACCESS
- EX. BUILDING
- FLAT TOPS (FOOTPRINT APPROXIMATE)
- 2 FT CONTOURS (ST. LARRY'S COUNTY)
- PATH
- PLAYGROUND
- PLAYTOPS (FOOTPRINT APPROXIMATE)

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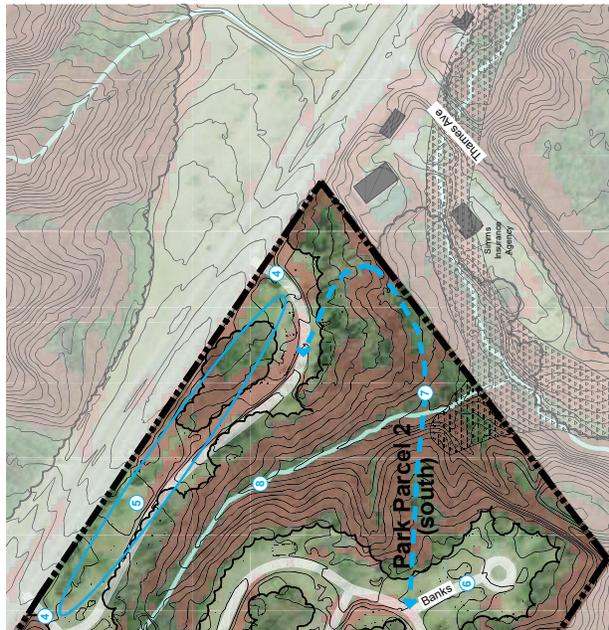
APPENDIX E

Site Analysis Map

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- ### Circulation/Access
- 1 Traffic/pedestrian crossing conflicts on Coral Drive
 - 2 Lei Drive connection to Three Notch Road provides access to Three Oaks Center
 - 3 Pedestrian access to Lexington Manor Park through Lancaster Park
 - 4 Rennell Avenue vehicular entrances at Three Notch Road are gated
 - 5 Limited designated parking
 - 6 Former residential roads and drainage infrastructure are cracked or in disrepair
 - 7 Path connections to community are limited
- ### Possible Action
- Eliminate or limit vehicular access on Coral Drive, east of Lei Drive
 - Maintain Lei Drive as through road
 - Maintain pedestrian access between U.S. Colored Troops Memorial Monument and the interpretive center; sign as park entrance
 - Remove curb cuts and eliminate access, or create new parking area
 - Park parking south of Coral Drive, access from Three Oaks Center; parking off of Three Notch Road at Rennell Avenue
 - Reduce roads to 10-12 feet wide, decreasing impervious surface; mill and resurface; on roads not crowned, maintain high side of road and remove low side for drainage or addition of bioswales or bioretention basins
 - Create new path connections to surrounding community; create new internal paths; create a heritage trail connecting U.S. Colored Troops Memorial Monument with Freedom Park at Tulagi Place



- ### Natural Features
- 8 Wooded stream valleys drain from north to south in Parcel 2
- ### Possible Actions
- Protect wooded stream corridors; protect healthy specimen trees throughout the park (tree survey forthcoming); remove dead trees and broken limbs; plant new trees, where appropriate, for shade, habitat, and garden aesthetic
- Clear underbrush to open view and visibility

— HYDRO STREAM
 — EXISTING DENSE CANOPY
 — SLOPES OVER 5%
 — HYDRO SWALS
 — EX. BUILDING
 — FLAT TOPS/FOOTPRINT (APPROXIMATE)

— FORMER ROAD (IMPERVIOUS SURFACE)
 — PATH
 — SEWER (APPROXIMATE)
 — BICYCLAR ACCESS
 — PEDESTRIAN ACCESS

— 2 FT CONTOURS (ST. LARRY'S COUNTY)

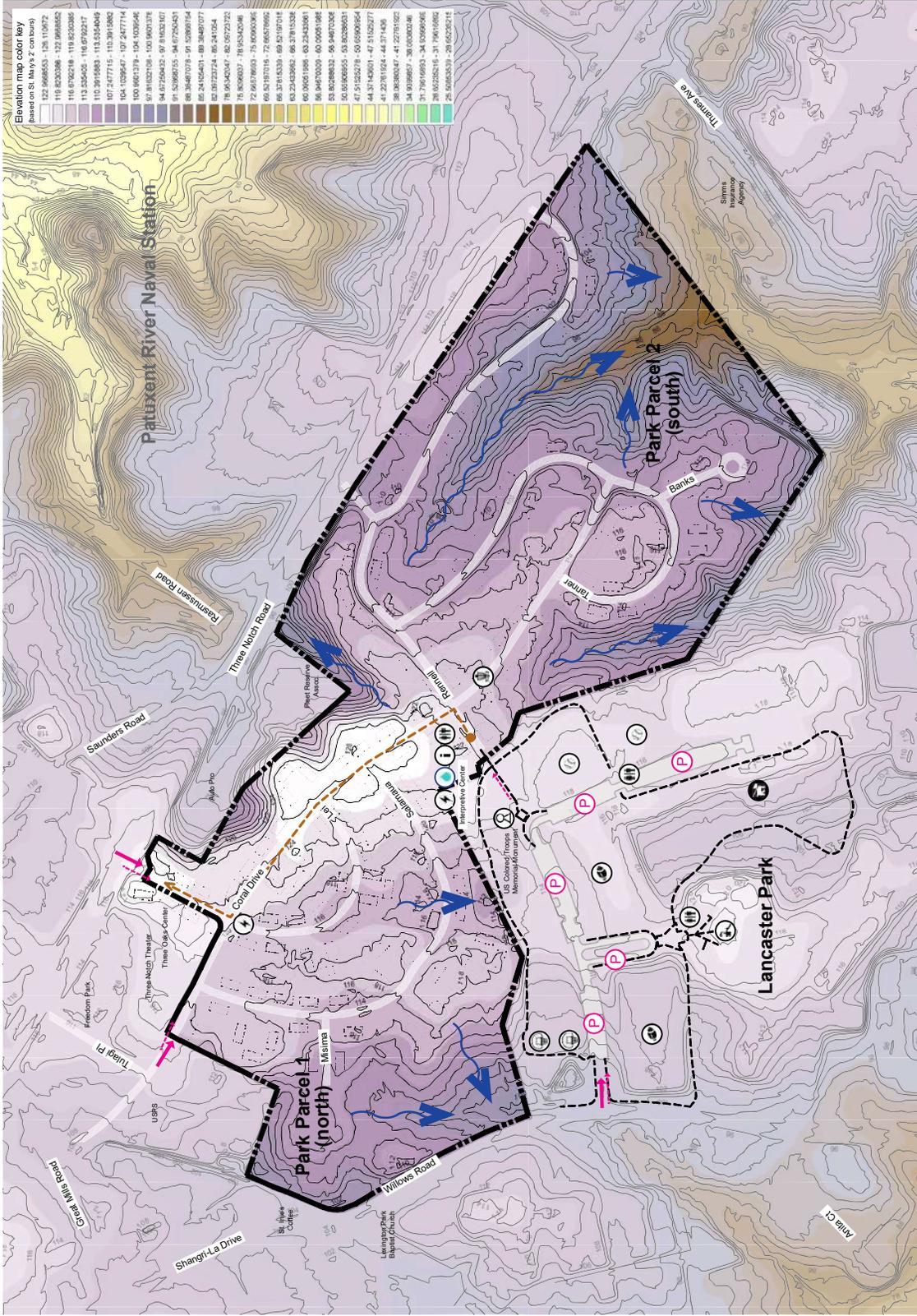
LEXINGTON MANOR PASSIVE PARK - SITE ANALYSIS

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APPENDIX F

Elevation Map

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Elevation map color key
 (Based on St. Mary's 2 contours)



- FORMER ROAD (IMPERVIOUS SURFACE) 2 FT CONTOURS (ST. MARY'S COUNTY)
- HYDRO STREAM
- HYDRO BASIN
- EXISTING DENSE CANOPY
- HYDRO STREAM
- SEWER (approximate)
- PATH
- FLAT TOPS (FOOTPRINT (APPROXIMATE))
- EX. BUILDING
- BI-CIRCULAR ACCESS
- REDIST. FROM ACCESS
- DIRECTION OF FLOW
- OF SURFACE WATER

LEXINGTON MANOR PASSIVE PARK - SITE INVENTORY BASE MAP

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APPENDIX G

Table of Federal Funding Programs that support bicycle and pedestrian projects

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Pedestrian and Bicycle Funding Opportunities

U.S. Department of Transportation Transit, Highway, and Safety Funds

Revised August 9, 2018

This table indicates potential eligibility for pedestrian and bicycle projects under U.S. Department of Transportation surface transportation funding programs. Additional restrictions may apply. See notes and basic program requirements below, and see program guidance for detailed requirements. Project sponsors should fully integrate nonmotorized accommodation into surface transportation projects. Section 1404 of the Fixing America's Surface Transportation (FAST) Act modified 23 U.S.C. 109 to require federally-funded projects on the National Highway System to consider access for other modes of transportation, and provides greater design flexibility to do so.

U.S. Department of Transportation Transit, Highway, and Safety Funds																			
Activity or Project Type	BUILD	INFRA	TIFIA	FTA	ATI	CMAQ	HSIP	NHPP	STBG	IA	RTP	SRTS	PLAN	NHTSA	NHTSA	402	405	FLTP	
Access enhancements to public transportation (includes benches, bus pads)	\$	~\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
ADA/504 Self Evaluation / Transition Plan														\$					\$
Bicycle plans					\$									\$					\$
Bicycle helmets (project or training related)									\$	\$SRTS				\$					\$*
Bicycle helmets (safety promotion)									\$	\$SRTS				\$					\$
Bicycle lanes on road	\$	~\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Bicycle parking	~\$	~\$	~\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Bike racks on transit	\$	~\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Bicycle repair station (air pump, simple tools)	~\$	~\$	~\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Bicycle share (capital and equipment; not operations)	\$	~\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Bicycle storage or service centers (example: at transit hubs)	~\$	~\$	~\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Bridges / overcrossings for pedestrians and/or bicyclists	\$	~\$	\$	\$	\$	\$*	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Bus shelters and benches	\$	~\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Coordinator positions (State or local)						\$ 1 per State			\$	\$SRTS				\$					\$
Crosswalks (new or retrofit)	\$	~\$	\$	\$	\$	\$*	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Curb cuts and ramps	\$	~\$	\$	\$	\$	\$*	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Counting equipment					\$		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$*			\$
Data collection and monitoring for pedestrians and/or bicyclists					\$		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$*			\$
Historic preservation (pedestrian and bicycle and transit facilities)	\$	~\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Landscaping, streetscaping (pedestrian and/or bicycle route; transit access); related amenities (benches, water fountains); generally as part of a larger project	~\$	~\$	~\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Lighting (pedestrian and bicyclist scale associated with pedestrian/bicyclist project)	\$	~\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Maps (for pedestrians and/or bicyclists)					\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$*			\$
Paved shoulders for pedestrian and/or bicyclist use	\$	~\$	\$	\$	\$	\$*	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$

Key: \$ = Funds may be used for this activity (restrictions may apply). ~\$ = Eligible, but not competitive unless part of a larger project. \$* = See program-specific notes for restrictions.

Key: \$ = Funds may be used for this activity (restrictions may apply). ~\$ = Eligible, but not competitive unless part of a larger project. \$* = See program-specific notes for restrictions.

Activity or Project Type	U.S. Department of Transportation											Pedestrian and Bicycle Funding Opportunities				
	BUILD	INFRA	TIFIA	FTA	ATI	CMAQ	HSIP	NHPP	STBG	TA	RTP	SRTS	PLAN	NHTSA	NHTSA	FLTPP
Pedestrian plans				\$						\$	\$	\$				
Recreational trails	~\$	~\$	~\$							\$	\$					
Road Diets (pedestrian and bicycle portions)	\$	~\$	\$				\$			\$						
Road Safety Assessment for pedestrians and bicyclists							\$			\$						
Safety education and awareness activities and programs to inform pedestrians, bicyclists, and motorists on ped/bike safety										\$SRTS	\$SRTS	\$	\$*	\$*	\$*	
Safety education positions										\$SRTS	\$SRTS	\$		\$*		
Safety enforcement (including police patrols)										\$SRTS	\$SRTS	\$		\$*		
Safety program technical assessment (for peds/bicyclists)										\$SRTS	\$SRTS	\$	\$*	\$		
Separated bicycle lanes	\$	~\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Shared use paths / transportation trails	\$	~\$	\$	\$	\$	\$*	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Sidewalks (new or retrofit)	\$	~\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Signs / signals / signal improvements	\$	~\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Signed pedestrian or bicycle routes	\$	~\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Spot improvement programs	\$	~\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Stormwater impacts related to pedestrian and bicycle projects	\$	~\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Traffic calming	\$	~\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Trail bridges	\$	~\$	\$	\$	\$	\$*	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Trail construction and maintenance equipment										\$RTP	\$RTP	\$				
Trail/highway intersections	\$	~\$	\$	\$	\$	\$*	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Trailside and trailhead facilities (includes restrooms and water, but not general park amenities; see program guidance)	~\$*	~\$*	~\$*							\$*	\$*	\$*				\$
Training																
Training for law enforcement on ped/bicyclist safety laws										\$SRTS	\$SRTS	\$	\$*	\$*	\$*	
Tunnels / undercrossings for pedestrians and/or bicyclists	\$	~\$	\$	\$	\$	\$*	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$

Abbreviations
 ADA/504: Americans with Disabilities Act of 1990 / Section 504 of the Rehabilitation Act of 1973
 BUILD: Better Utilizing Investments to Leverage Development Transportation Discretionary Grants
 INFRA: Infrastructure for Rebuilding America Discretionary Grant Program
 TIFIA: Transportation Infrastructure Finance and Innovation Act (loans)
 FTA: Federal Transit Administration Capital Funds
 ATI: Associated Transit Improvement (1% set-aside of FTA)
 CMAQ: Congestion Mitigation and Air Quality Improvement Program
 HSIP: Highway Safety Improvement Program
 NHPP: National Highway Performance Program
 STBG: Surface Transportation Block Grant Program
 TA: Transportation Alternatives Set-Aside (formerly Transportation Alternatives Program)
 RTP: Recreational Trails Program
 SRTS: Safe Routes to School Program / Activities
 PLAN: Statewide Planning and Research (SPR) or Metropolitan Planning funds
 NHTSA 402: State and Community Highway Safety Grant Program
 NHTSA 405: National Priority Safety Programs (Nonmotorized safety)
 FLTPP: Federal Lands and Tribal Transportation Programs (Federal Lands Access Program, Federal Lands Transportation Program, Tribal Transportation Program, Nationally Significant Federal Lands and Tribal Projects)

Program-specific notes: Federal-aid funding programs have specific requirements that projects must meet, and eligibility must be determined on a case-by-case basis.

- BUILD: Subject to annual appropriations. See <https://www.transportation.gov/BUILDgrants> for details.
- INFRA: See <https://www.transportation.gov/buildamerica/infra-grants> for details. Focus on projects that generate national or regional economic, mobility, and safety benefits.
- TIFIA: Program offers assistance only in the form of secured loans, loan guarantees, or standby lines of credit, but can be combined with other grant sources, subject to total Federal assistance limitations.
- FTA/ATI: Project funded with FTA transit funds must provide access to transit. See [Bicycles and Transit](#) and the FTA Final Policy Statement on the [Eligibility of Pedestrian and Bicycle Improvements under Federal Transit Law](#).
 - Bicycle infrastructure plans and projects funded with FTA funds must be within a 3 mile radius of a transit stop or station, or if further than 3 miles, must be within the distance that people could be expected to safely and conveniently bike to use the particular stop or station.
 - Pedestrian infrastructure plans and projects funded with FTA funds must be within a ½ mile radius of a transit stop or station, or if further than ½ mile, must be within the distance that people could be expected to safely and conveniently walk to use the particular stop or station.
 - FTA funds cannot be used to purchase bicycles for bike share systems.
 - FTA encourages grantees to use FHWA funds as a primary source for public right-of-way projects.
- CMAQ projects must demonstrate emissions reduction and benefit air quality. See the CMAQ guidance at www.fhwa.dot.gov/environment/air_quality/cmaq/ for a list of projects that may be eligible for CMAQ funds. Several activities may be eligible for CMAQ funds as part of a bicycle and pedestrian-related project, but not as a highway project. CMAQ funds may be used for shared use paths, but may not be used for trails that are primarily for recreational use.
- HSIP projects must be consistent with a State's [Strategic Highway Safety Plan](#) and (1) correct or improve a hazardous road location or feature, or (2) address a highway safety problem.
- NHPP projects must benefit National Highway System (NHS) corridors.
- STBG and TA Set-Aside: Activities marked "\$SRTS" means eligible only as an SRTS project benefiting schools for kindergarten through 8th grade. Bicycle transportation nonconstruction projects related to safe bicycle use are eligible under STBG, but not under TA (23 U.S.C. 217(a)).
- RTP must benefit recreational trails, but for any recreational trail use. RTP projects are eligible under TA and STBG, but States may require a transportation purpose.
- SRTS: FY 2012 was the last year for SRTS funds, but SRTS funds are available until expended.
- Planning funds must be used for planning purposes, for example:
 - Maps: System maps and GIS;
 - Safety education and awareness: for transportation safety planning;
 - Safety program technical assessment: for transportation safety planning;
 - Training: bicycle and pedestrian system planning training.
- Federal Lands and Tribal Transportation Programs (FLTP) projects must provide access to or within Federal or tribal lands:
 - Federal Lands Access Program (FLAP): Open to State and local entities for projects that provide access to or within Federal or tribal lands.
 - Federal Lands Transportation Program: For Federal agencies for projects that provide access within Federal lands.
 - Tribal Transportation Program: available for federally-recognized tribal governments for projects within tribal boundaries and public roads that access tribal lands.
- NHTSA 402 project activity must be included in the State's Highway Safety Plan. Contact the State Highway Safety Office for details: <http://www.ghsa.org/html/about/shsos.html>
- NHTSA 405 funds are subject to State eligibility, application, and award. Project activity must be included in the State's Highway Safety Plan. Contact the State Highway Safety Office for details: <http://www.ghsa.org/html/about/shsos.html>

Cross-cutting notes

- FHWA Bicycle and Pedestrian Guidance: http://www.fhwa.dot.gov/environment/bicycle_pedestrian/
- **Applicability of 23 U.S.C. 217(i) for Bicycle Projects:** 23 U.S.C. 217(i) requires that bicycle facilities "be principally for transportation, rather than recreation, purposes". However, sections 133(b)(6) and 133(h) list "recreational trails projects" as eligible activities under STBG. Therefore, the requirement in 23 U.S.C. 217(i) does not apply to recreational trails projects (including for bicycle use) using STBG funds. Section 217(i) continues to apply to bicycle facilities other than trail-related projects, and section 217(i) continues to apply to bicycle facilities using other Federal-aid Highway Program funds (NHPP, HSIP, CMAQ). The transportation requirement under section 217(i) is applicable only to bicycle projects; it does not apply to any other trail use or transportation mode.
- There may be occasional DOT or agency incentive grants for specific research or technical assistance purposes.
- Aspects of DOT initiatives may be eligible as individual projects. Activities above may benefit safe, comfortable, multimodal networks; environmental justice; and equity.