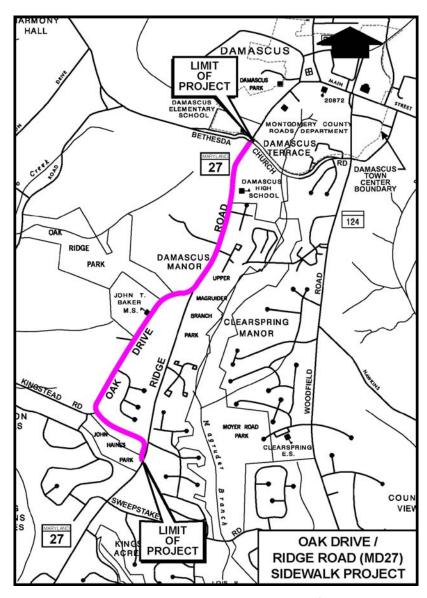
FACILITY PLANNING ENVIRONMENTAL REPORT

For

OAK DRIVE/RIDGE ROAD (MD 27)
SIDEWALK AND BIKEWAY IMPROVEMENTS
From OAK DRIVE (south) To BETHESDA CHURCH ROAD

Facility Planning Study - Phase I









ACKNOWLEDGEMENTS

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INTRODUCTION

OAK DRIVE/RIDGE ROAD SIDEWALK AND BIKEWAY IMPROVEMENT PROJECT'S NATURAL RESOURCE INVENTORY.

In March 2009, the Montgomery County Department of Transportation (MCDOT) initiated a Facility Planning Study to evaluate sidewalk and bikeway improvements along 1.0 mile of Oak Drive (between its southern and northern intersections with Ridge Road) and 1.5 miles of Ridge Road (MD 27) between its intersection with Oak Drive to the south and Bethesda Church Road to the north (see Figure 1). These roadway segments are located just south of the Damascus Town Center.

The MCDOT has a long-standing investment in conserving natural, cultural, and socioeconomic resources. As part of the Oak Drive / Ridge Road sidewalk and bikeway improvement study's efforts, this report has been prepared to assess existing conditions and identify any natural environmental,

The resource inventory:

- Includes information about existing resources; it does not propose programs or regulations
- Includes readily available information obtained from County Master Plans
- Includes supplemental information obtained by field reviews

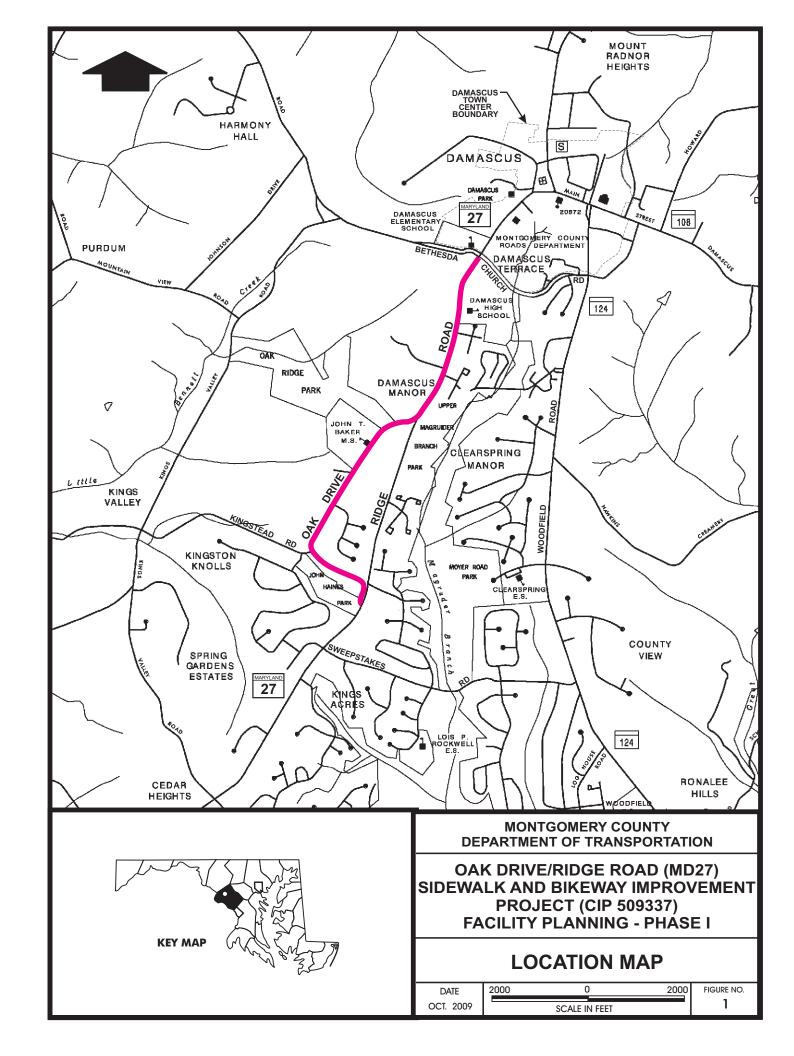
cultural and socioeconomic resources within the study area (*see Figures 2a and 2b*), as a basis for determining impacts by potential improvements.

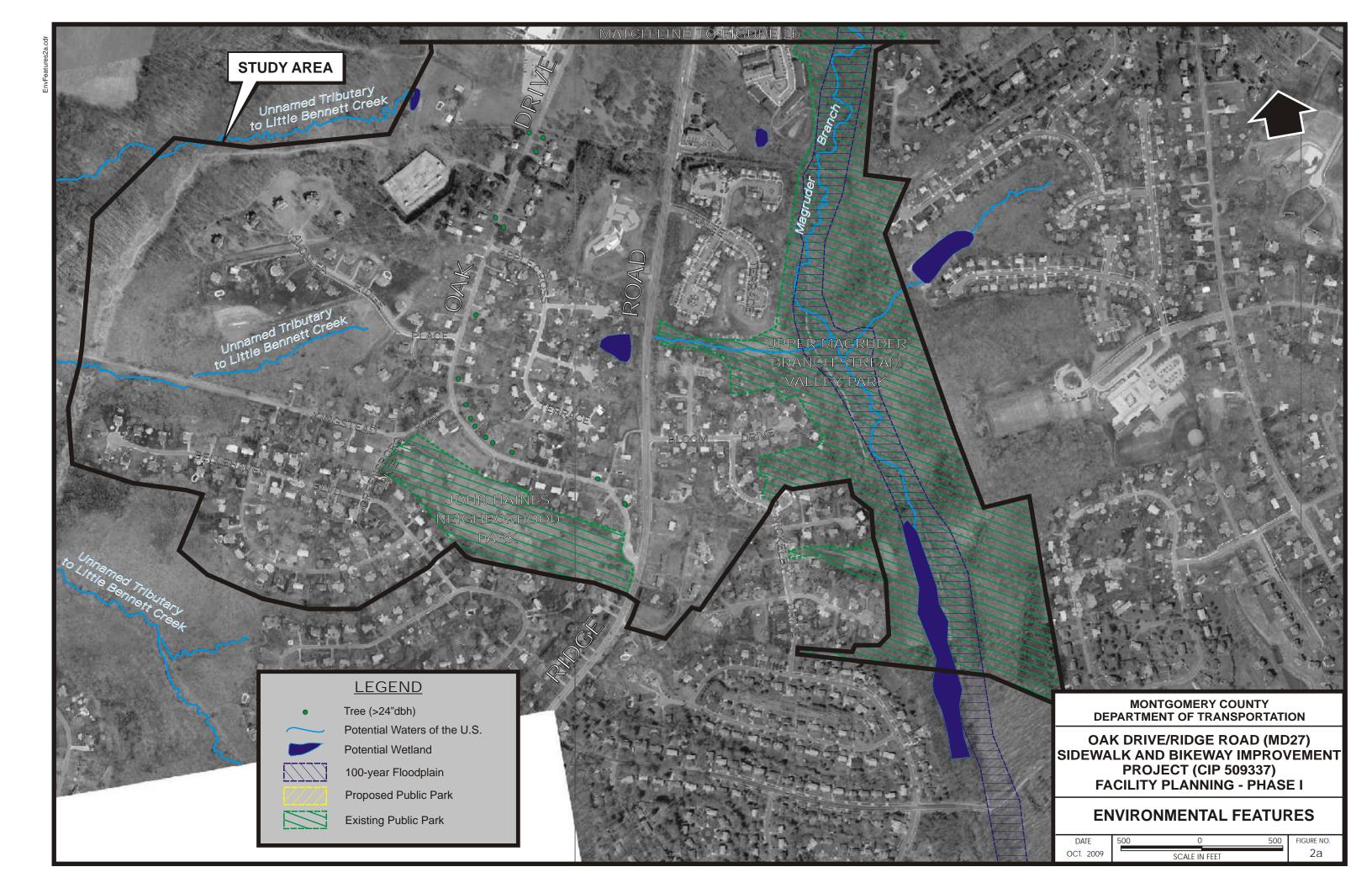


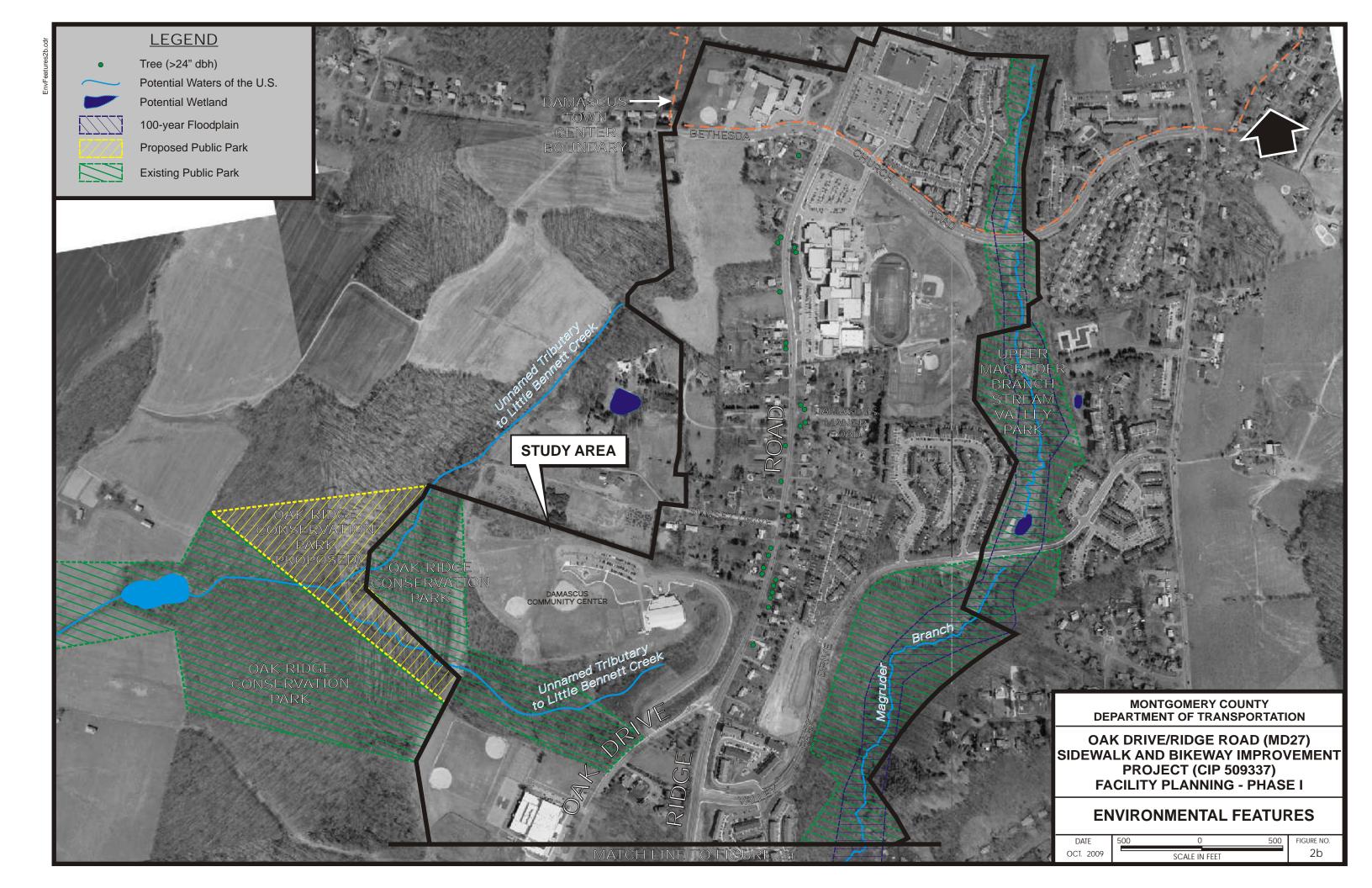
Within the study area, natural environmental, cultural, and socioeconomic resources were identified using a variety of available data including the 2006 Damascus Master Plan, interactive internet mapping resources supplied by MCDOT and Maryland-National Capital Park and Planning Commission (M-NCPPC), as well as supplementary field reviews (see Appendix A, Master Plan excerpts).

Federal, state and local agencies were contacted to assist in the development of this inventory, including the U.S. Fish and Wildlife Service (USFWS), The Maryland Department of the Environment (MDE), Maryland Department of Natural Resources (DNR), MCDOT, M-NCPPC, Montgomery County Department of Environmental Protection (MCDEP), Montgomery County Office of Historic Preservation, and Montgomery County Department of Parks (see Appendix B, Agency Correspondence).









NATURAL ENVIRONMENTAL RESOURCES

The following section describes the natural environmental aspects of the study area, including groundwater and soils; waters of the United States, including wetlands; floodplains; forest resources; parkland; rare, threatened and endangered (RTE) species; and potential hazardous materials and underground storage tanks (USTs).

Groundwater and Soils

The study area lies at an elevation of approximately 700 feet above mean sea level (msl), with slopes of approximately 3-8 percent, sloping toward Magruder Branch to the southeast; however, slopes along the western side of Oak Drive are toward Little Bennett Creek to the west. The Ground Water Atlas of the United States, Delaware, Maryland, New Jersey, North Carolina, Pennsylvania, Virginia, West Virginia (USGS, 1997) indicates that in the vicinity of the study area, groundwater is stored in crystalline rock aquifers of the Piedmont Physiographic Province. It is characterized by rolling hills underlain by Pre-Cambrian (more than 570 million years ago (mya)) early Paleozoic Era (approximately 300 mya) metamorphic and igneous rock of the Wissahickon Formation. These sedimentary units are local sources of groundwater; however, these aguifers are neither extensive nor well developed.

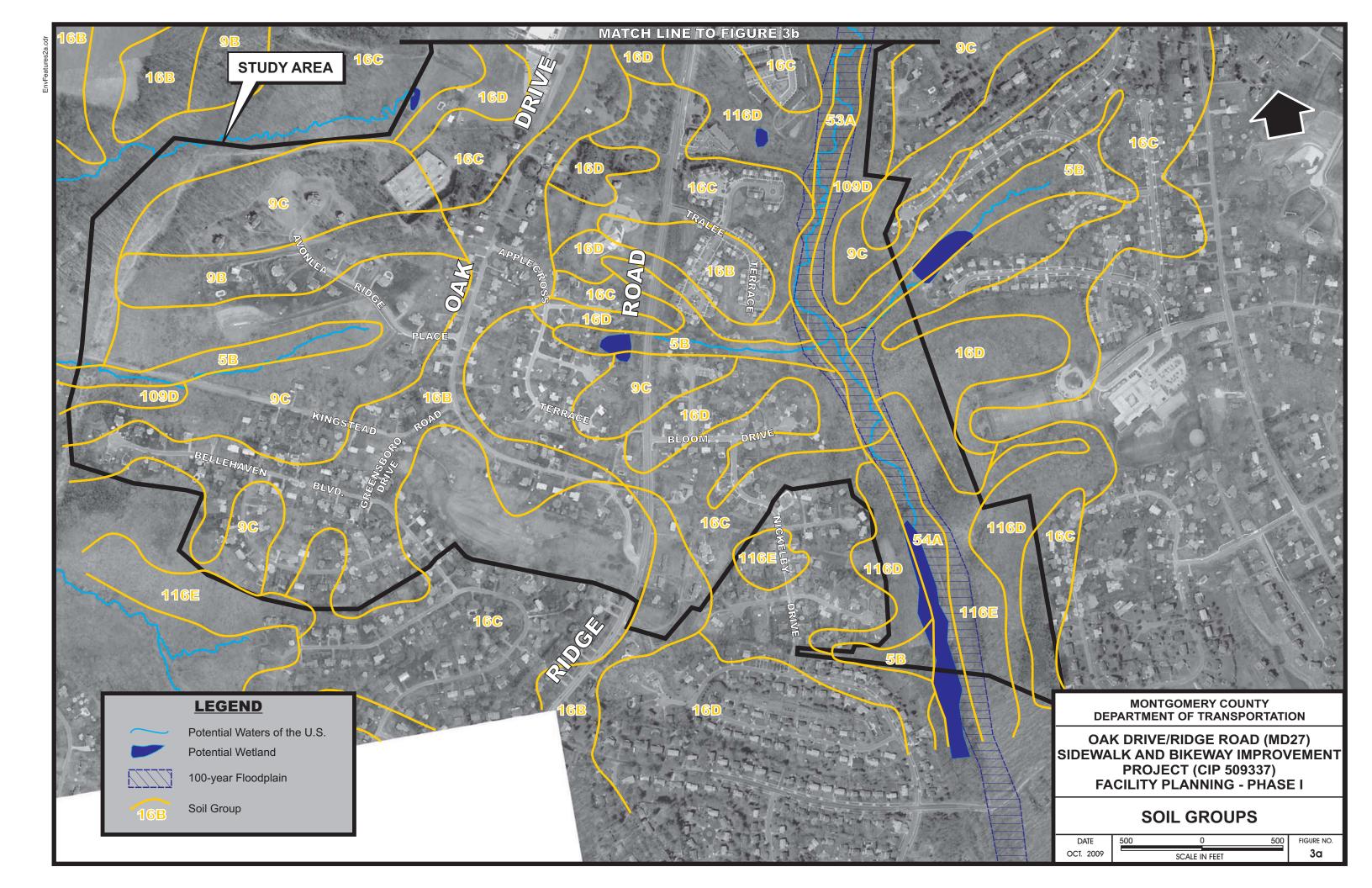
The study area is not located within a sole-source aquifer, which is defined by the Environmental Protection Agency (EPA) as an area with few or no alternative sources to the groundwater resource, and

where if contamination occurred, using an alternative source would be extremely expensive. Recharge rates vary greatly within the Wissahickon Aquifer, depending on precipitation, runoff, and fracture density of the rock. Shallow groundwater flow in humid regions generally mimics topography; therefore, groundwater is expected to flow southerly toward the Potomac River.

The Soil Survey of Montgomery County, Maryland (USDA-NRCS, 1995) indicates the study area consists of a mixture of thirteen soil series (see Figures 3a & 3b). For brevity of this report, only soils identified adjacent to Oak Drive and Ridge Road within the study area (seven soil series) have been incorporated into a table (see Page 3), noting the soil series name, percent slope and descriptive characteristics of each soil. All soils in the table are listed as hydric in the Hydric Soils of the United States List (2009). Hydric soils are soils that formed under conditions of saturation, flooding or ponding long enough during the growing season to develop anaerobic conditions in the upper part. The concept of hydric soils includes soils developed under sufficiently wet conditions to support the growth and regeneration of hydrophytic vegetation. Soils that are sufficiently wet because of artificial measures are also included in the concept of hydric soils. In addition, soils in which the hydrology has been artificially modified are hydric if the soil, in an unaltered state, was hydric. Some series, designated as hydric, have phases that are not hydric depending on water table, flooding, and ponding characteristics.

Three soil types appear to dominate the areas directly adjacent to Oak Drive and Ridge Road (9B, 16B and 16C). The majority of soil types adjacent to Oak Drive and Ridge Road, within the study area, are identified as well drained soils and generally slope less than 15 percent.





NATURAL ENVIRONMENTAL RESOURCES

Oak Drive is entirely surrounded by Brinklow-Blocktown channery silt loams (16B and 16C), with the exception of a small sliver of Lignanore-Hyattstown channery silt loam (9B) near the Damascus Community Center. Ridge Road, between its southern and northern intersections with Oak

Drive, crosses through a mixture of soils (5B, 9C, 16B, 16C, 16D, and 116D). North of the northern intersection with Oak Drive, Ridge Road is almost entirely encompassed by Lignanore-Hyattstown channery silt loams (9B).

SOIL TYPE	PERCENT SLOPES	DESCRIPTION				
Glenville Silt Loam (5B)	3 to 8 percent slopes	This soil unit is deep and moderately well drained or somewhat poorly drained. It is on low areas on uplands and along drainage-ways. Slopes generally are smooth. A small amount of this soil occurs in the southern part of the study area.				
Linganore-Hyattstown channery Silt Loams (9B)	3 to 8 Percent slopes	These soil units are well drained and gently sloping. It is located on broad ridgetops and sideslopes. Slopes are generally smooth, but a few are dissected by small drainageways. This soil occurs in the northern and southwestern portions of the study area.				
Linganore-Hyattstown channery Silt Loams (9C)	8 to 15 percent slopes	This soil unit is well drained and strongly sloping. It is located on broad ridgetops and sideslopes. Slopes are generally smooth, but a few are dissected by small drainageways. This soil occurs in the throughout the entire study area, with the majority occurring west of Oak Drive.				
Brinklow-Blocktown channery Silt Loams (16B)	3 to 8 percent slopes	This soil unit is well drained and gently sloping. It is located on broad ridgetops and sideslopes. Slopes are generally smooth, but a few are dissected by small drainageways. This soil occurs in the central to southern portion of the study area.				
Brinklow-Blocktown channery Silt Loams (16C)	8 to 15 percent slopes	This soil unit is well drained and strongly sloping. It is located on broad ridgetops and sideslopes. Slopes are generally smooth, but a few are dissected by small drainageways. This soil occurs in the central to southern portion of the study area.				
Brinklow-Blocktown channery Silt Loams (16D)	15 to 25 percent slopes	This soil unit is well drained and moderately steeply sloping. It is located on sideslopes in the uplands. Slopes are generally smooth, but a few are dissected by small drainageways. This soil occurs in the central and southern portion of the study area.				
Blocktown channery silt loams (116D)	15 to 25 percent slopes, very rocky	This soil unit is shallow and well drained. It is located on broad ridgetops and sideslopes. This soil occurs in the central and southern portion of the study area.				



Waters of the U.S., including Wetlands

The Oak Drive/Ridge Road (MD 27) study area is located within three watersheds (see Appendix A-1):

- Bennett Creek:
- Little Bennett Creek; and
- Upper Great Seneca Creek.

The Bennett Creek Watershed encompasses less than ten acres of the entire study area; it is located in the northwest portion of the Bethesda Church Road/Ridge Road intersection. The Little Bennett Creek and Upper Great Seneca Creek watersheds encompass the majority of the study area, with Little Bennett Creek west of Oak Drive and Ridge Road (north of its northern intersection with Oak Drive) and Upper Great Seneca Creek east of Oak Drive and Ridge Road.

Little Bennett Creek and Bennett Creek Watersheds

MCDEP notes that the Bennett Creek Watershed is predominantly zoned as an agricultural preserve, and has somewhat less overall forest cover than the Little Bennett Creek Watershed. This watershed is influenced by imperviousness and related runoff

impacts from the Damascus Town Center located in the top of the drainage. There are no streams within this watershed that are located within the study area.

Within Little Bennett Creek

watershed are the headwaters of Little Bennett Creek (designated Use IV-P, Recreational Trout Waters and Public Water Supply), which is just south of the Bennett Creek Watershed. Little Bennett Creek flows southwesterly into Frederick County where it meets the Monocacy River and eventually flows into the Potomac River. MCDEP has designated this portion of the Little Bennett Creek watershed as a Watershed Preservation Area (see Appendix A-2) due to the high

stream quality in this area (it supports cold-water trout streams above Route 355), and the existence of extensive parkland (i.e., Little Bennett Regional Park) that functions to preserve watershed conditions. Primary factors affecting its stream condition have been cited as areas of channel widening and sedimentation due to impacts of past land use practices. Unnamed tributaries to Little Bennett Creek are located within the study area.

Upper Great Seneca Creek Watershed

Magruder Branch (and unnamed tributaries, designated Use I-P, Public Water Supply) is located in the study area, within the Upper Great Seneca Creek watershed. Magruder Branch is a large tributary of Seneca Creek that begins in south Damascus and flows through county parkland (e.g., Upper Magruder Branch Stream Valley Park) before it joins Great Seneca down river of Woodfield Road. MCDEP notes that Magruder Branch contains a system of vernal pools, built as mitigation for an adjoining hiker-biker trail system, that supports a diverse amphibian community. The Upper Great Seneca Creek watershed is designated by MCDEP as a Watershed Protection Area (see Appendix A-3) that

should receive a regular level of protection through application of existing environmental guidelines and regulations. Primary factors affecting the condition of Magruder Branch have been cited as impacts from

older developed areas and high density uses associated with the growth of Damascus; there are varying levels of habitat degradation. However, it should be noted that many of the newer communities contain stormwater controls, and much of the stream valley is protected by large tracts of forested parkland. No impacts are anticipated to the unnamed tributaries to Little Bennett Creek or Magruder Branch within the study area.



For more information on water-

sheds and water resources within

the study area, please visit

MCDEP's website at: http://

www.montgomerycountymd.gov

A review of National Wetlands Inventory (NWI, 1981-2002) and 1993 DNR wetland data (MDPV, 2007) identified four potential wetland areas, four Unnamed Tributaries to Little Bennett Creek, Magruder Branch, and two Unnamed Tributaries to Magruder Branch, within the Oak Drive/Ridge Road (MD 27) study area (see Figures 2a & 2b).

Field reviews were conducted in April 2009 to identify and GPS potential waters of the U.S., including wetlands, within 50 feet from existing Oak Drive and Ridge Road (MD 27) right-of-way from Oak Drive (north) to Bethesda Church Road. Unnamed Tributaries to Little Bennett Creek all flow in a southwesterly direction away from Oak Drive; there are no anticipated impacts to any of these tributaries by this proposed project. Unnamed Tributaries to Magruder Branch and Magruder Branch mainstem, flow in a southeasterly direction, paralleling Ridge Road. The tributaries are currently crossed by Ridge Road (just south of Valley Park Drive and between Tralee Terrace and Bloom Drive) and are culverted under the roadway. There are no anticipated impacts to Magruder Branch mainstem by this proposed project.

Floodplains

As shown on *Figures 2a & 2b*, the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) (No. 24031C0065D) indicates that there are 100-year floodplains associated with Magruder Branch. The floodplains are located along the eastern edge of the study area, within the County-owned Upper Magruder Branch Stream Valley Park. There are no direct impacts anticipated to this 100-year floodplain.

Forest Resources

Forest stands were identified within the study area based on aerial photography and during field reviews conducted in April 2009. Forested areas within the study area are concentrated within Upper Magruder Branch Stream Valley Park (see Figures 2a & 2b) and Oak Ridge Conservation Park (see Figure 2b). DNR mapping (MDPV, 2007) indicates potential habitat for Forest Interior Dwelling Bird Species (FIDS) may exist within these forested areas. The only forested area that could potentially be impacted by this project is forest associated with Oak Ridge Conservation Park, directly adjacent to Oak Drive. At this time, DNR has not referenced the potential for FIDS habitat in any of the forested areas adjacent to Oak Drive in their written correspondence for this project.



Areas have been identified within the study area using DNR's Green Infrastructure (GI) data set (MDPV 2007), including unfragmented natural areas, called "hubs", which include large blocks of contiguous interior forest and large wetland complexes, linear stretches of land, called "corridors", such as stream valleys that allow animals and seeds to move between "hubs", and areas of disconnect between the "hubs" and "corridors", or "gaps". As noted in



the 2006 *Damascus Master Plan* and 2003 *Environmental Resources Inventory for Damascus and Vicinity*, the majority of these areas are already within existing or planned public ownership or within private open space.

Green Infrastructure "corridor" and "hub" areas were identified within the study area, with boundaries closely mimicking those of Oak Ridge Conservation Park and Upper Magruder Branch Stream Valley Park. Ideally, the forested areas within these two parks would connect, providing a corridor link between the two parks. Currently, the area between the two parks is considered a "gap" in green infrastructure. The proposed project may incur very minor impacts to the edge of the GI gap/corridor area associated with Oak Ridge Conservation Park due to potential sidewalk and bikeway improvements. Montgomery County, in coordination with the regulatory agencies, can use GI data as a mitigation tool in the planning process to locate areas of land that could be targeted for protection or restoration to help ensure habitat for Maryland's plants and wildlife, as well as to promote a healthier environment including improved outdoor recreation, clean drinking water, and erosion prevention.

Field reviews identified 40 trees as ≥24" diameter at breast height (dbh) within the 50-foot buffer around Oak Drive and Ridge Road (MD 27) north of its intersection with Oak Drive (see Figures 2a & 2b). The majority of trees identified were Norway Maple (14), followed by Silver Maple (7) and Red Maple (7). Pin Oak, Norway Spruce, Black Locust, Willow Oak, Northern Red Oak, and White Pine Specimen trees were also identified. Of those trees identified, 16 meet Specimen Tree criteria (generally ≥30" dbh, but species dependant). No trees identified meet State Champion criteria.

Parkland

Existing and proposed parkland within the study area was inventoried using the 2006 Damascus Master Plan, GIS (MDPV 2007) and through coordination with M-NCPPC - Montgomery County Department of Parks (MCDP) (see Appendix A-4, B-4, and Figures 2a & 2b). Existing park properties identified within the study area include the Damascus Community Center, which is under the jurisdiction of Montgomery County Department of Recreation, and three park properties under jurisdiction of M-NCPPC-MCDP, including the Upper Magruder Stream Valley Park, Oak Ridge Conservation Park, and John Haines Neighborhood Park. M-NCPPC-MCDP has noted that none of the three park properties under their jurisdiction were funded through Program Open Space (POS) or Land and Water Conservation Funds (LWCF).

Damascus Community Center

The Damascus Community Center is located along Oak Drive near the northern intersection of Oak Drive and Ridge Road (MD 27) on approximately 38-acres. The Community Center is a 31,064 square-foot facility featuring a variety of amenities (see "Employment Centers and Community Facilities" on page 10 for more information). When the





NATURAL ENVIRONMENTAL RESOURCES

Community Center was constructed, sidewalks were put in place along Oak Drive; therefore, this sidewalk and bikeway improvement project is not looking to construct new sidewalk or bikeway improvements in this location. In light of this, no direct impacts are anticipated to the Damascus Community Center as a result of this project.

Upper Magruder Stream Valley Park

The Upper Magruder Stream Valley Park protects approximately 231 acres along the Magruder Branch from Damascus Recreational Park (south of the study area) north to Damascus Boulevard (just north of the study area). Although the park is not developed for active recreation, visitors are welcome to walk along recreation trails. A small portion of this park encompasses an unnamed tributary to Magruder Branch and abuts Ridge Road between Tralee Terrace and Bloom Drive. In addition, a planned 40foot wide hiker/biker trail connecting Upper Magruder Stream Valley Park to Ridge Road is shown on County tax maps just north of Tralee Terrace. At this time, no improvements are proposed along Ridge Road in this location; therefore, no direct impacts are anticipated to the Upper Magruder Stream Valley Park or the planned hiker/biker trail as a result of this project.

Oak Ridge Conservation Park

Acquired by M-NCPPC in 1976, Oak Ridge Conservation Park is comprised of two discontinuous undeveloped parcels, totaling 64.5 acres. One parcel is accessed from Kings Valley Road while the other parcel is located adjacent to Oak Drive, between John T. Baker Middle School and Damascus Community Center. In 1998, the school received a grant from the Chesapeake Bay Trust for creation of a nature trail in the park. There are plans to make the park a contiguous parcel by incorporating the parcel of land between the two existing parkland parcels.



John Haines Neighborhood Park

The 13.6-acre John Haines Neighborhood Park is located between Oak Drive, Kingstead Road and Greensboro Drive. The park features a playground and multi-use field. M-NCPPC acquired the park in 1974; there are no plans for expansion.

As alternatives are developed (and potential direct impacts identified), coordination will continue with Montgomery County Department of Recreation for the Damascus Community Center property and with M-NCPPC-MCDP for the Oak Ridge Conservation Park and John Haines Neighborhood Park.

Rare, Threatened and Endangered Species

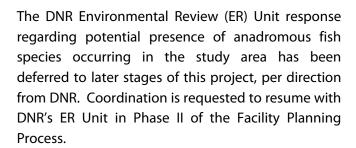
Requests for information regarding the presence of known Federal and/or state-listed rare, threatened or endangered (RTE) plant and animal species have been submitted to DNR and USFWS (see Appendix B-1 & B-2).

USFWS has stated that except for occasional transient individuals, no federally proposed or listed endangered or threatened species are known to exist within the project impact area. Therefore, no Biological Assessment or further Section 7 Consultation with the USFWS is required.



NATURAL ENVIRONMENTAL RESOURCES

DNR's Wildlife and Heritage Service (WHS) has determined that there are no State or Federal records for rare, threatened or endangered species within the study area. As a result, DNR-WHS has no specific comments or requirements pertaining to protection measures at this time. DNR-WHS does note that although no surveys are required, their database records indicate there are occurrences of state rare American Chestnut (*Castanea dentate*) located within close proximity to the study area. Since the population of this native plant has declined historically, the DNR-WHS encourages efforts to help conserve it across the state of Maryland. No American Chestnut trees were identified during field reviews for this project.



Potential Hazardous Materials and Underground Storage Tanks (USTs)

Coordination with MDE and MCDEP was initiated to identify any information on regulated underground storage tanks (USTs) (active and abandoned or removed) (see Appendix B-3). The MCDEP responded they do not have any records related to hazardous waste sites, or underground storage tanks, involving the properties within the study area. Coordination with MDE is on-going; any information obtained from MDE regarding potential hazardous materials and/or USTs will be summarized and added to Appendix B of this report.





CULTURAL RESOURCES

The Montgomery County Historic Preservation Office (MCHPO) was contacted to assist in the identification of any potential cultural resources located within the study area, including those of an historic or archeological nature. The MCHPO referred the study team to the Montgomery County Atlas GIS website to identify existing and potential historic or archeological resources. A review of the Montgomery County Atlas GIS website, M-NCPPC's MCAtlas website, and study area master plans did not identify any historical or archeological resources/sites within the study A few historic sites were identified adjacent to or near the study area; they are depicted on the Damascus Master Plan Historic Sites excerpt in *Appendix A-5*.



Land use and zoning have been identified within the study area using 2007 Maryland Property View GIS Database. Census data from the U.S. Census Bureau has been used to develop profiles of population, income and housing information for the study area and Montgomery County.

Employment Centers and Community Facilities

Places of employment identified within the study area include: the Ridgeview Center, a small shopping center located in the northern portion of the study area in the northeast quadrant of the Ridge Road/Bethesda Church Road intersection, which contains retail and office uses such as, Weis Market, shops, Chevy Chase Bank and Damascus Medical facility, and the Damascus Veterinary Hospital located in the southern portion of the study area on the east side of Ridge Road, south of Bloom Drive.

Three schools are located in the study area. They are: Damascus Elementary School and Damascus High School, both located in the northern portion of the study area in the northwest and southeast quadrants, respectively, of the Ridge Road/Bethesda Church Road intersection, and John T. Baker Middle School, located in the central portion of the study area on the west side of Oak Drive, south of the northern intersection of Ridge Road and Oak Drive. Also, the future Oak Drive Elementary School site is located in the central portion of the study area on the east side of Oak Drive, opposite John T. Baker Middle School. One religious facility has been identi-

fied in the study area: Saint Anne's Episcopal Church located in the southern portion of the study area on the west side of Ridge Road, south of the Ridge Road/Tralee Terrace intersection. Preschool/daycare services are also provided at the religious facility through the Children's Center of Damascus at Saint Anne's. The Damascus Community Recreation Center, operated by the Montgomery County Department of Recreation, is located in the central portion of the study area on the west side of Ridge Road, south of Sunset Drive. The recreation center, which is accessed from Oak Drive, provides a variety of amenities including a gymnasium, exercise room, social hall, kitchen, senior community lounge, hobby craft and kiln room, game room, conference room, athletic field, outdoor multipurpose court, and playground. There are no fire or police stations located in the study area. Nearby fire stations providing fire, rescue and emergency medical services to the study area include: Station 13 in Damascus, Station 35 in Clarksburg and Station 17 in Laytonsville. Police service is provided by 5th District Police Station in Germantown.

Appendix A-6 depicts community facilities throughout the Damascus Master Plan area.





Land Use

Land use within the study area has been inventoried based on 2007 Maryland Property View Data for Montgomery County, as indicated on *Figure 4*, and is summarized below. Areas denoted as "exempt" are those that are typically operated exclusively for the promotion of social welfare and are not organized for profit. Proposed Land Use and Density, as shown in the Damascus Master Plan. Can be found in *Appendix A-7*

LAND USE	% OF STUDY AREA
Residential	33%
Residential Condominium	1%
Apartments	1%
Exempt	36%
Exempt Commercial	17%
Commercial	3%
Agricultural	1%
Remaining Roadway ROW	8%

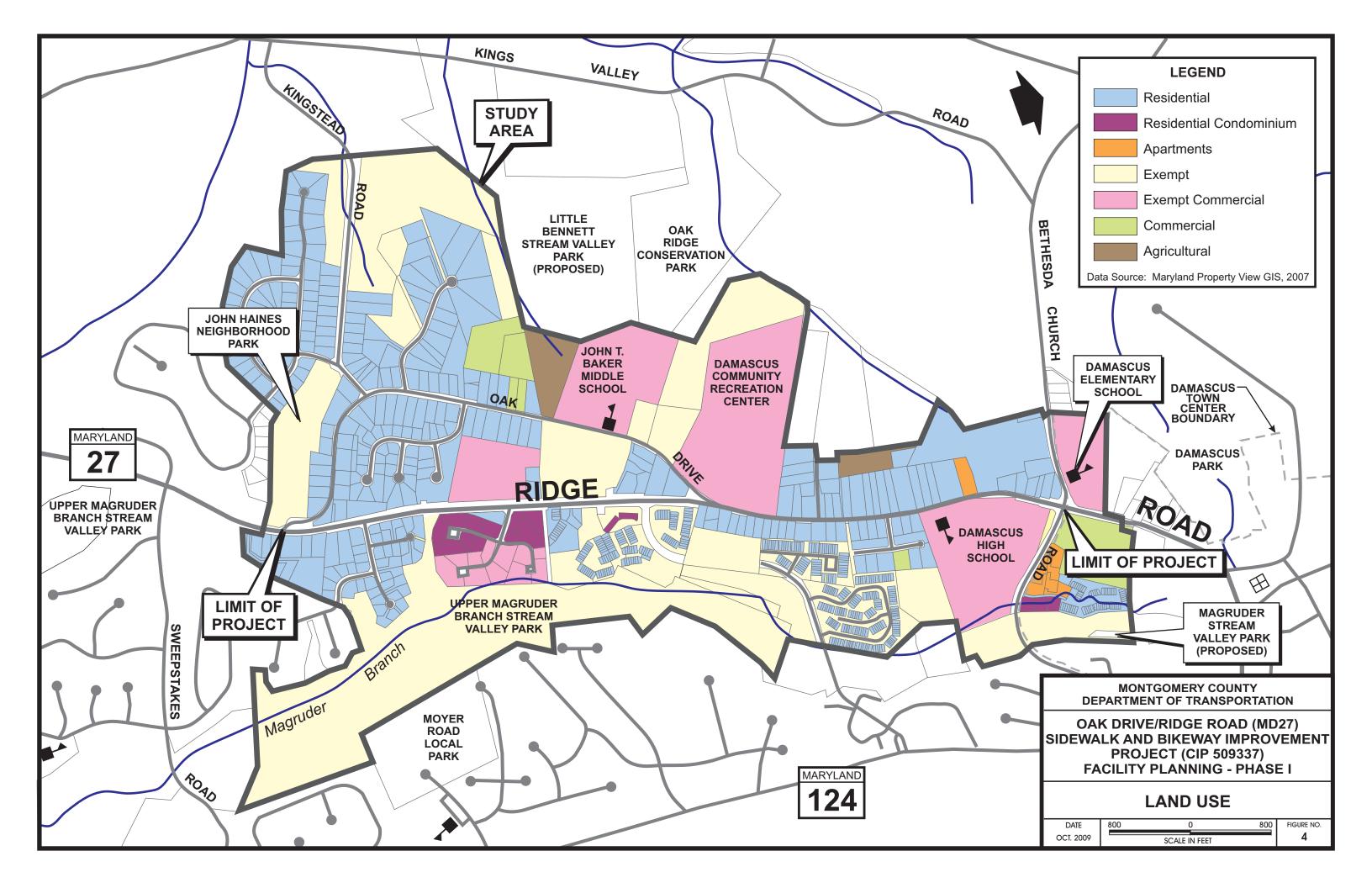
Zoning

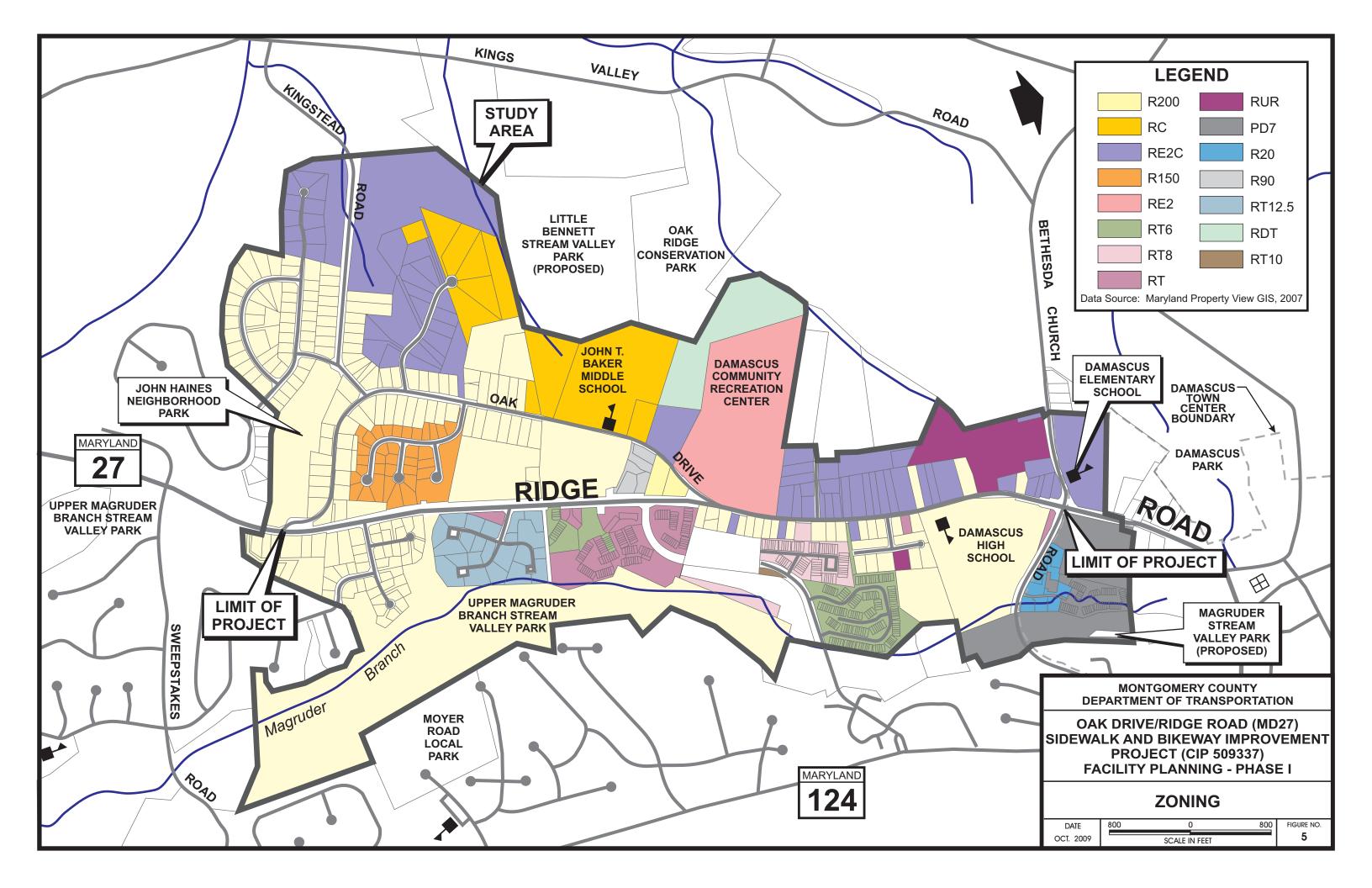
Zoning in the study area is shown on *Figure 5*. Information was compiled using 2007 Maryland Property View Data. The study area zoning categories are described below.

ZONING CODE	DESCRIPTION			
RC	Rural Cluster Zone (Minimum of five acres for each dwelling; cluster option: minimum lot area of 40,000 square feet. The intent of this zone is to provide designated areas for a compatible mixture of agricultural uses and low-density residential development to Promote agriculture and to protect scenic and environmentally sensitive areas.)			
RD-2	Residential, One-Family (Minimum lot area of two acres for each dwelling.)			

ZONING CODE	DESCRIPTION
RDT	Rural Density Transfer Zone (Minimum 25 acres for each dwelling; transfer option for TDR's; minimum lot area of 40,000 square feet.)
RE-2C	Residential, One-Family (Minimum tract area of 50 acres; minimum lot area of 25,000 square feet, minimum two acres for each dwelling.)
R-200	Residential, One-Family (Minimum lot area of 20,000 square feet for each dwelling.)
R-150	Residential, One-Family (Minimum lot area of 10,500 square feet, average of 15,000 square feet for each dwelling.)
R-90	Residential, One-Family (Minimum lot area of 9,000 square feet for each dwelling.)
R-20	Multiple-Family, Medium Density Residential (Minimum net lot area of 2,000 square feet for each dwelling.)
RT	Residential, Townhouse (undefined minimum lot area and/or number of dwellings
RT-6	Residential, Townhouse (Minimum tract area of 20,000 square feet; six dwellings per acre.)
RT-8	Residential, Townhouse (Minimum tract area of 20,000 square feet; eight dwellings per acre.)
RT-10	Residential, Townhouse (Minimum tract area of 20,000 square feet; ten dwellings per acre.)
RT-12.5	Residential, Townhouse (Minimum tract area of 20,000 square feet; twelve and one-half dwellings per acre.)
PD-7	Planned Development, Medium Low Density Category (Minimum area to construct 50 or more dwelling units. Residential uses that are permitted are based on the density category and size of development which establishes the minimum percentage required for each dwelling unit type within the planned development.)
RUR	Rural Zone (Minimum lot area of five acres for each dwelling. The intent of this zone is to preserve rural areas for agriculture and other natural resource development, residential uses of a rural character, extensive recreational facilities, and protection of scenic and environmentally sensitive areas).







Development Activity and Public Projects

No proposed public projects have been identified within the study area. Planned development within the study area has been identified based on information about active development projects obtained from the M-NCPPC, Research and Technology Center website (*See table below*).

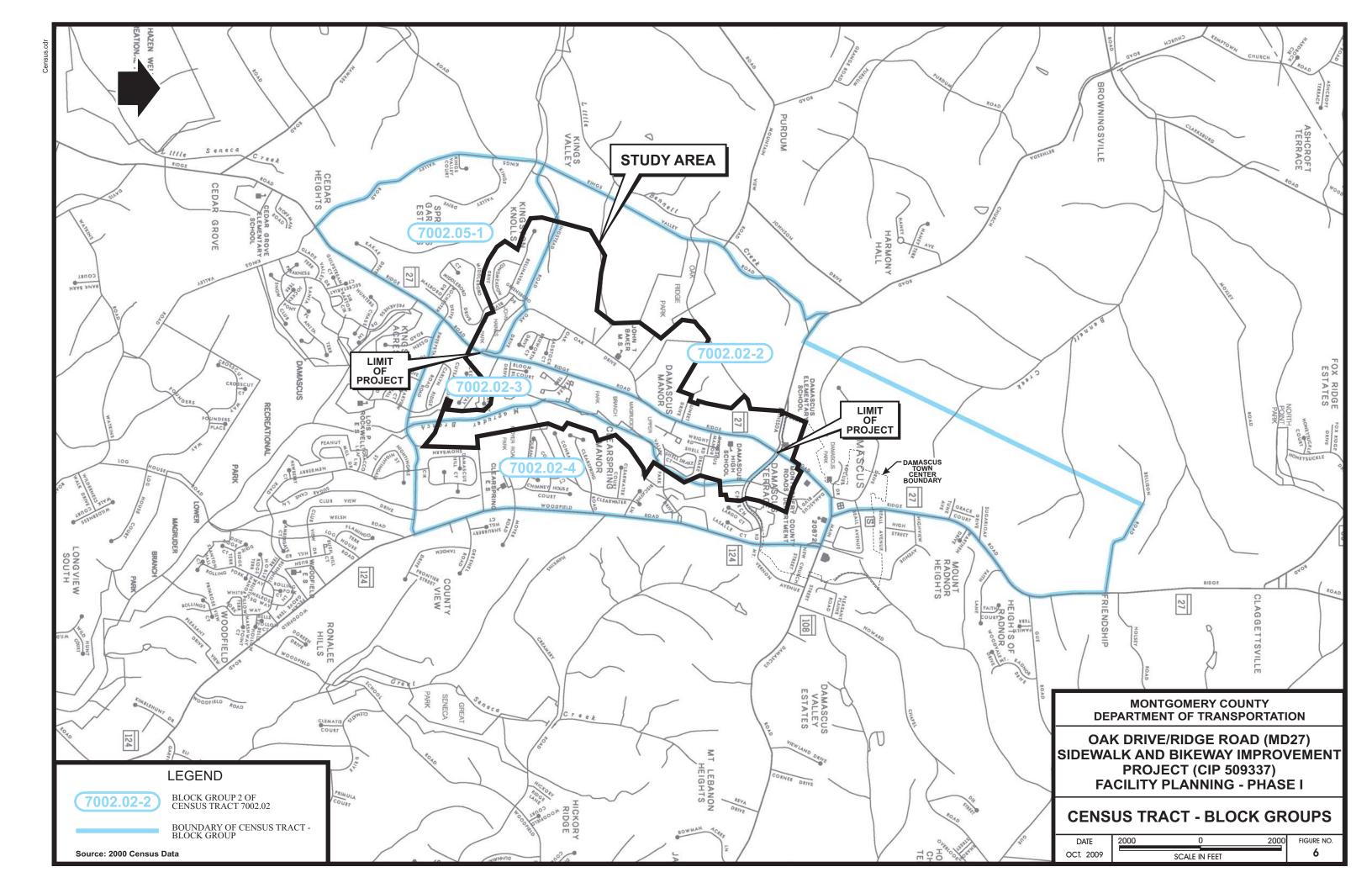


Population, Income, and Housing

An analysis of population, income and housing information for Montgomery County and the study area has been performed using 2000 Census data from the U.S. Census Bureau. As shown on Figure 6, the study area lies within four census tract-block groups. (Block groups are sub-areas of their respective census tract and therefore, an individual block group encompasses a smaller geographic area than the census tract.) Census data for Block Groups 2, 3 and 4 of Census Tract 7002.02 and Block Group 1 of Census Tract 7002.05 were used to compile study area demographics. The geographic area encompassed by the study area census tract-block groups approximates the boundaries of the study area, but is larger than the study area.

DEVELOPMENT ACTIVITY/ PUBLIC PROJECT	ACTIVITY/PROJECT DESCRIPTION
Avonlea	Located on Kingstead Road, west of Oak Drive, this residential development totaling 20 single-family, detached units was approved with condition on March 16, 2000. Development of the site is nearing the approved number of units.
Baum Property	Located on the west side of Valley Park Drive at Coltrane Drive, east of Ridge Road, this residential development totaling 42 single-family, attached units was approved with condition on January 20, 2005. This townhome development is currently under construction.
Chesney's Subdivision	Located on the west side of Ridge Road, 200 feet north of the Ridge Road/ Tralee Terrace intersection, this residential subdivision was approved on June 13, 1996. One of the two single-family, detached units that were approved has been built.
Damascus Smart-Miner	Located on the south side of Bethesda Church Road, 500 feet west of Ridge Road, this residential development totaling 15 single-family, detached units was approved with condition on June 5, 2008. Development of the site has not commenced.
Greenhills	Located on the east side of Ridge Road at Tralee Terrace, this residential development totaling four single-family, attached units was approved with condition on December 6, 2007. Development of the site has not commenced.





A comparison of the study area and County demographic profiles developed using 2000 Census data indicates the following:

- The age distribution of the study area population is similar to that of Montgomery County.
- The racial population characteristics differ for the study area and the County. For the study area, 86.4 percent of the population are White, 6.9 percent are Black/African American and 2.1 percent are Asian or Pacific Islander; whereas Countywide, 64.8 percent of the population are White, 15.1 percent are Black/African American and 11.3 percent are Asian or Pacific Islander.
- For the study area, 13.1 percent of owner-occupied single family units were valued from \$50,000 \$99,999, 32.8 percent were valued from \$150,000 \$199,999 and 3.3 percent were valued at \$300,000 or more; whereas Countywide, 3.1 percent of owner-occupied single family units were valued from \$50,000 \$99,999, 22.6 percent were valued from \$150,000 \$199,999 and 30.1 percent were valued at \$300,000 or more. (Based on 2000 Census data collected from a one in six sample.)
- For the study area, 3.3 percent of households had a household income (1999) of \$150,000 or more, whereas Countywide, 15.0 percent of households had a household income (1999) of \$150,000 or more. (Based on 2000 Census data that provides information about household income in 1999 collected from a one in six sample.)

Population, income and housing data for Montgomery County and the study area are summarized in the following table on Page 14:





Parameter	Montgomery County	Percent of Total	Block Group 2 Tract 7002.02	Block Group 3 Tract 7002.02	Block Group 4 Tract 7002.02	Block Group 1 Tract 7002.05	Study Area	Percent of total
Total Population	873,341	-	725	1,724	2,785	873	6,107	-
Age Group								
0-17	221,758	25.4%	209	603	964	253	2,209	33.2%
18-44	342,414	39.2%	245	792	1,188	266	2,491	40.8%
45-64	211,012	24.2%	181	268	519	281	1,249	20.5%
65+	98,157	11.2%	90	61	114	73	338	5.5%
Race								
White	565,719	64.8%	681	1,464	2,290	842	5,277	86.4%
Black/African American	132,256	15.1%	17	129	260	16	422	6.9%
Asian or Pacific Islander	99,063	11.3%	2	57	70	2	131	2.1%
American Indian and								
Alaska Native	2,544	0.3%	7	5	6	1	19	0.3%
Other	73,759	8.4%	18	69	159	12	258	4.2%
Housing Units								
Total Housing Units	334,632	-	268	611	982	284	2,145	-
Housing Values (Specified	Owner-Occupied S	Single-Family U	nits)**					
<\$50,000	1,308	0.7%	0	9	7	0	16	1.1
\$50,000 - \$99,999	5,972	3.1%	0	92	85	13	190	13.1
\$100,000 - \$149,999	32,427	16.9%	38	158	155	17	368	25.5
\$150,000 - \$199,000	43,330	22.6%	132	118	210	14	474	32.8
\$200,000—\$299,000	50,872	26.6%	45	25	116	163	349	24.2
\$300,000+	57,642	30.1%	0	0	0	48	48	3.3
Total Owner Occupied Units	191,551	-	215	402	573	255	1,445	-
Household Income in 1999	(Households)**							
<\$10,000	12,040	3.7%	9	19	40	0	68	3.2%
\$10,000—\$14,999	8,046	2.5%	21	8	48	0	77	3.6%
\$15,000—\$24,999	18,325	5.6%	0	40	128	0	168	7.8%
\$25,000—\$34,999	24,406	7.5%	37	50	101	20	208	9.7%
\$35,000—\$49,999	41,248	12.7%	56	96	131	28	311	14.5%
\$50,000—\$74,000	65,955	20.3%	68	173	197	102	540	25.1%
\$75,000—\$99,999	49,573	15.3%	65	112	164	72	413	19.2%
\$1000,000—\$149,999	56,565	17.4%	36	83	132	46	297	13.8%
\$150,000+	48,782	15.0%	7	7	26	30	70	3.3%

Data Source: 2000 U.S. Census Bureau



^{*} Based on 2000 Census data collected from a one in six sample.

^{**} Based on 2000 Census data that provides information about household income in 1999 collected from a one in six sample

CONCLUSION

The MCDOT will utilize the natural, cultural and socioeconomic resource information identified in this report throughout the life of the Oak Drive/Ridge Road (MD 27) Sidewalk and Bikeway Improvement Project. Stakeholders will be invited to review and provide feedback on the information presented herein. Feedback received on this report will be used to continually improve the resource inventory.

Existing resource information (as identified in this report and from stakeholder feedback) will be depicted on project mapping, which will be available for the public to view at upcoming public workshops. All resource information will be taken into consideration during the development of project alternates. Impacts to natural, cultural and socioeconomic resources will be avoided and/or minimized when at all possible. Unavoidable impacts to these resources by proposed project alternates will be disclosed to the public, and mitigation for these impacts will be determined through coordination with the appropriate regulatory resource agencies.





SOURCES

Approved and Adopted Damascus Master Plan (June 2006). Maryland-National Capital Park and Planning Commission (M-NCPPC).

Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) No. 24031C0065D. 2006.

Ground Water Atlas of the United States, Delaware, Maryland, New Jersey, North Carolina, Pennsylvania, Virginia, West Virginia (1997). United States Geological Survey (USGS)

Hydric Soils of the United States. January 2009. United States Department of Agriculture (USDA) - Natural Resources Conservation Service (NRCS).

Maryland-National Capital Park and Planning Commission, Montgomery County Department of Park and Planning. Environmental Resources Inventory for Damascus and Vicinity. July 2003.

Maryland-National Capital Park and Planning Commission. Online GIS Interactive Database. Viewed June 2009. http://www.mcatlas.org/

Maryland Property View (MDPV) GIS Database. 2007. Montgomery County GIS Data.

Montgomery County Department of Environmental Protection (MCDEP) website. Viewed June 2009. http://www.montgomerycountymd.gov/dep

Montgomery County Government Map Viewer. Viewed June 2009. http://gis2.montgomerycountymd.gov/ ims/mcgmaps/viewer.htm

National Wetlands Inventory (1981 – 2002) compiled by Maryland State Geographic Information Committee (MSGIC). Provided by Maryland Property View GIS Data (2007 edition).

Soil Survey of Montgomery County, Maryland. 1995. United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS).

U.S. Census Bureau 2000. http://www.census.gov



APPENDIX A: DAMASCUS MASTER PLAN EXCERPTS

- A-1 Damascus Master Plan and Watershed Boundaries
- A-2 Bennett and Little Bennett Watershed Management Categories
- A-3 Upper Great Seneca Watershed Management Categories
- A-4 Damascus Area Proposed Amendments to the Countywide Park and Trails Plan
- A-5 Historic Sites
- A-6 Community Facilities
- A-7 Proposed Land Use and Density

APPENDIX B: AGENCY CORRESPONDENCE

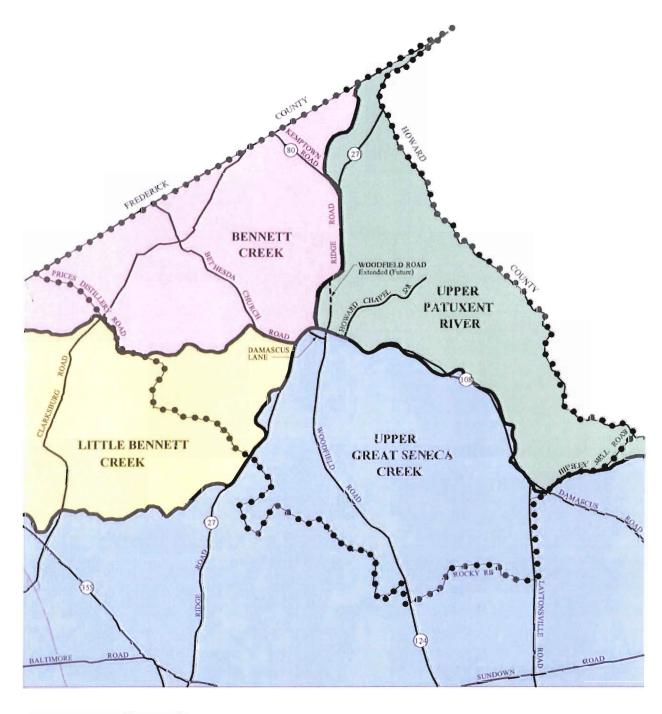
- B-1 US Fish and Wildlife Service
- B-2 MD Department of Natural Resources
- B-3 Montgomery County Department of Environmental Protection
- B-4 Montgomery County Department of Parks, M-NCPPC



APPENDIX A: DAMASCUS MASTER PLAN EXCERPTS

- A-1 Damascus Master Plan and Watershed Boundaries
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- A-5 Historic Sites
- A-6 Community Facilities
- A-7 Proposed Land Use and Density

Watersheds



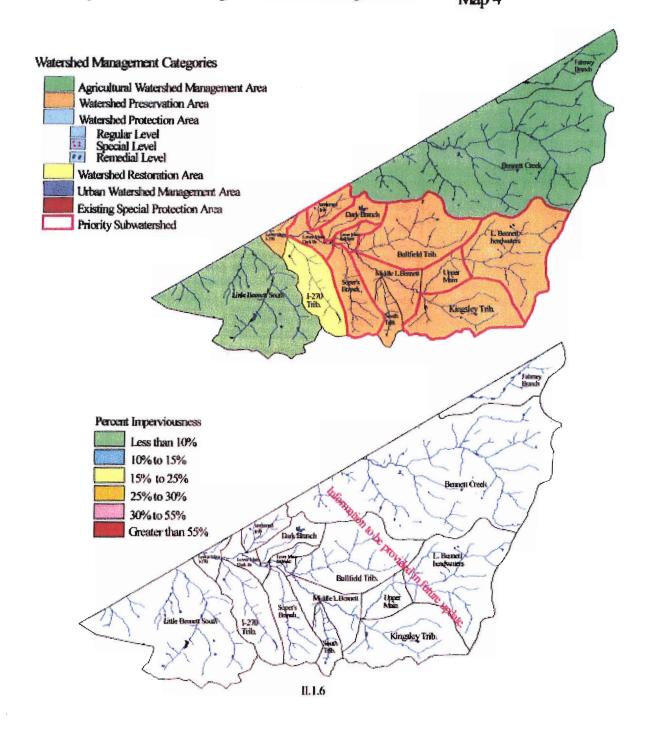
• • • • Master Plan Area Boundary

Watershed Boundary



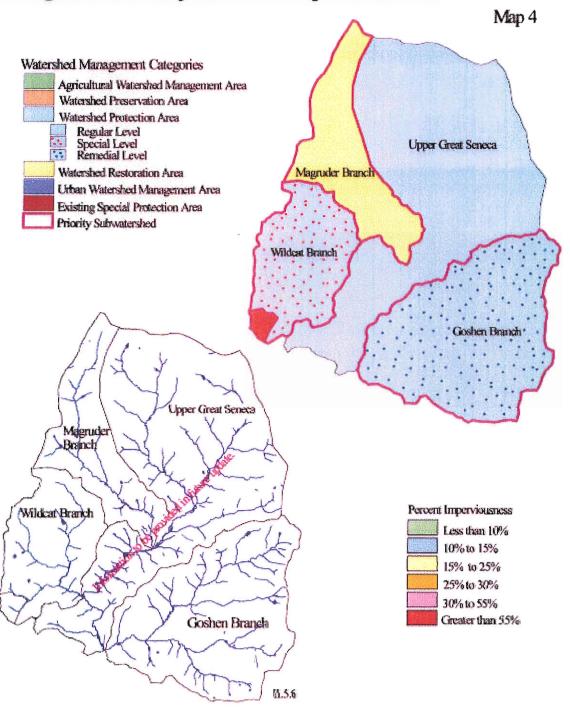
A-2

Bennett and Little Bennett Watershed Management Categories and Projected Development Map 4

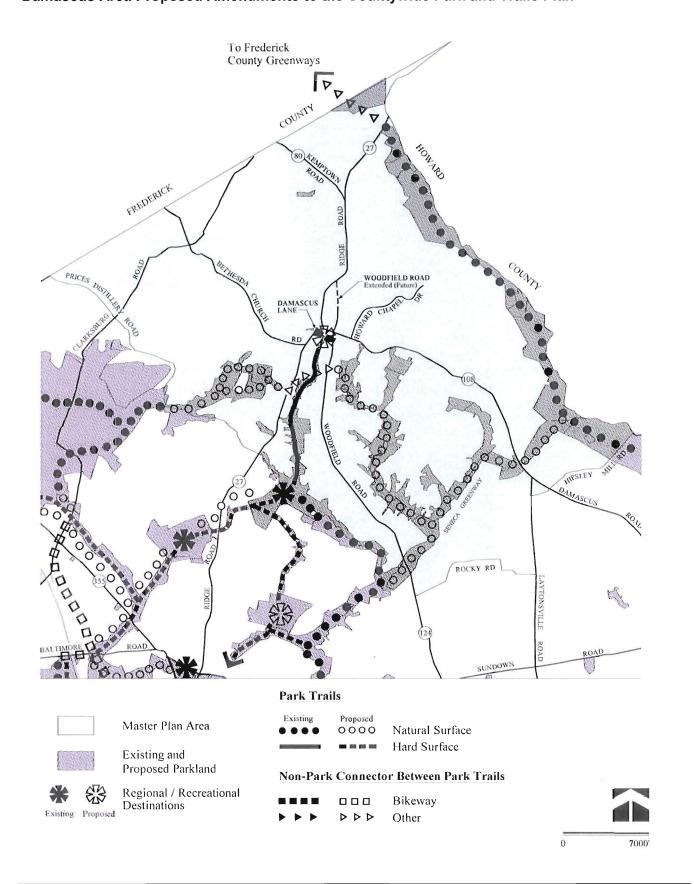


A-3

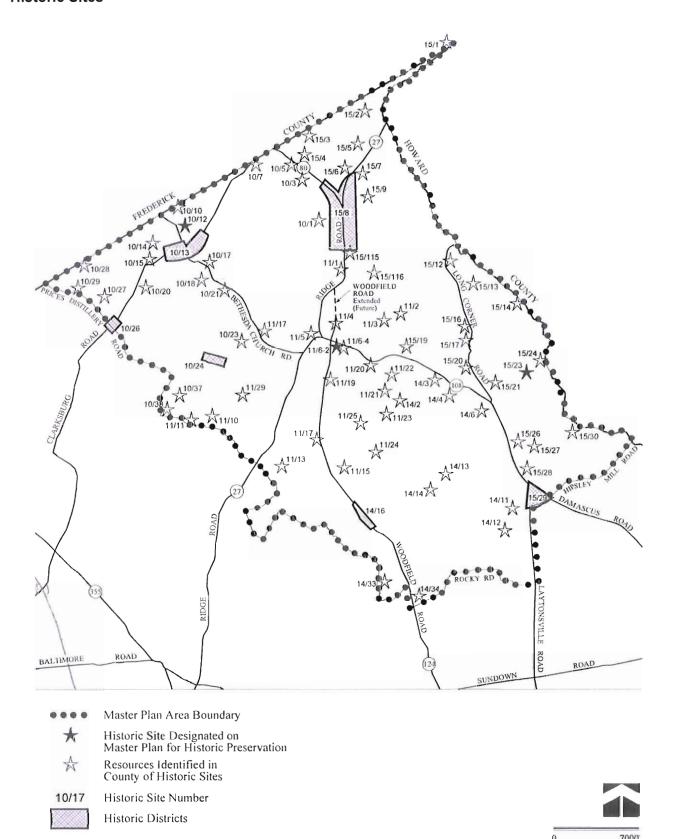
Upper Great Seneca Watershed Management Categories and Projected Development Levels



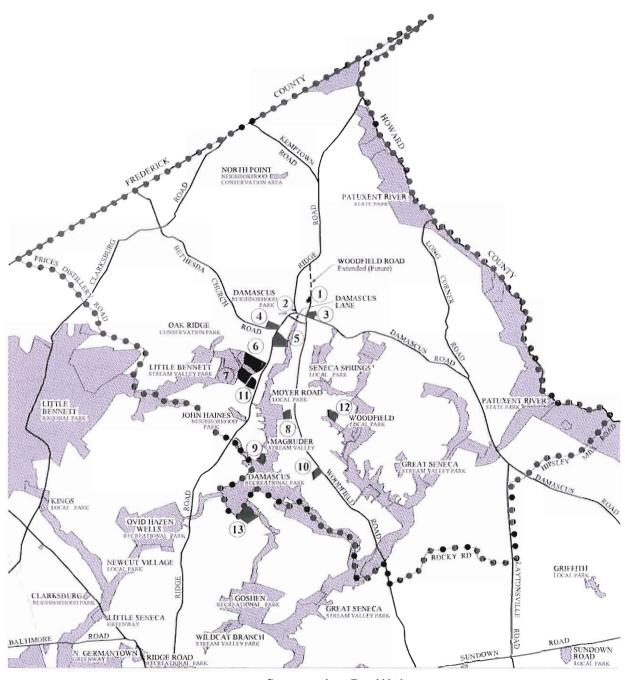
Damascus Area Proposed Amendments to the Countywide Park and Trails Plan



Historic Sites



Community Facilities



Community Facilities

Master Plan Area Boundary



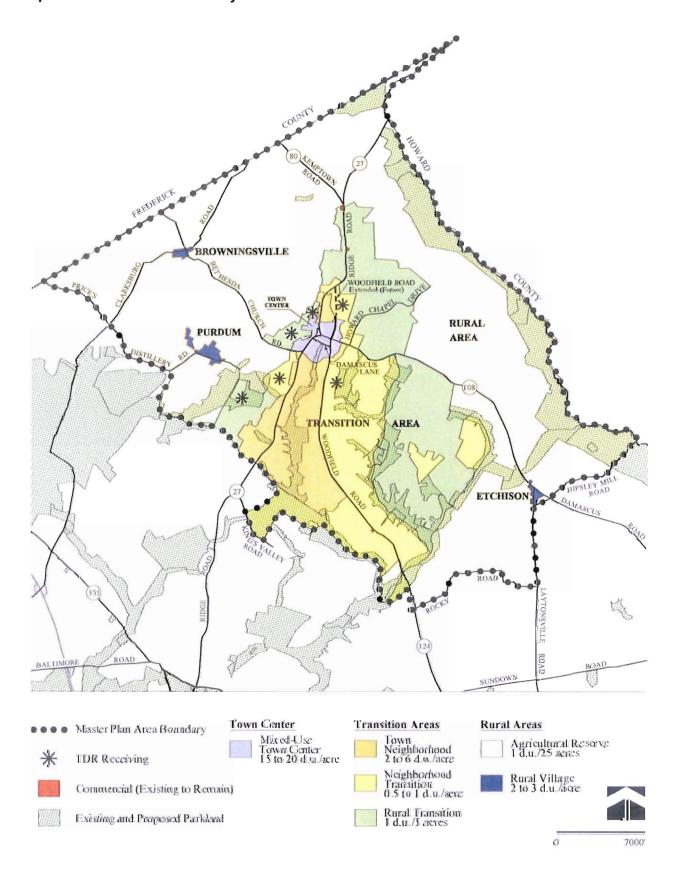
Community Facilities

Future school sites to be converted to park if not needed for school purposes (7) Baker Middle School

- 1) Damascus U.S. Post Office
- 2) Fire Station Damascus Co.13
- 3 Damaseus Library / Senior Center
- 4 Damascus Elementary School
- (5) Damascus High School
- Damascus Community Recreation Center
- 8 Clearspring Elementary School
- 9 Rockwell Elementary School
- (10) Woodfield Elementary School
- (11) Future Oak Drive Elementary School
- 12 Future Hawkins Creamery Road* Elementary School
- (13) Future Kingsbridge Middle School



Proposed Land Use and Density



APPENDIX B: AGENCY CORRESPONDENCE

- B-1 US Fish and Wildlife Service
- B-2 MD Department of Natural Resources
- B-3 Montgomery County Department of Environmental Protection
- B-4 Montgomery County Department of Parks, M-NCPPC



United States Department of the Interior

FISH AND WILDLIFE SERVICE Chesapeake Bay Field Office 177 Admiral Cochrane Drive Annapolis, MD 21401 410/573-4575



B-1

April 10, 2009

The Wilson T. Ballard Company 17 Gwynns Mill court Owings Mills, MD 21117 2 17

THE WILSON T. BALLARD CO

RE: Oak Drive/Ridge Road (MD 27) Bike and Sidewalk improvements Facility Planning Phase I

Dear: Jennifer L. Roher

This responds to your letter, received March 23, 2009, requesting information on the presence of species which are federally listed or proposed for listing as endangered or threatened within the vicinity of the above reference project area. We have reviewed the information you enclosed and are providing comments in accordance with section 7 of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*).

Except for occasional transient individuals, no federally proposed or listed endangered or threatened species are known to exist within the project impact area. Therefore, no Biological Assessment or further section 7 Consultation with the U.S. Fish and Wildlife Service is required. Should project plans change, or if additional information on the distribution of listed or proposed species becomes available, this determination may be reconsidered.

This response relates only to federally protected threatened or endangered species under our jurisdiction. For information on the presence of other rare species, you should contact Lori Byrne of the Maryland Wildlife and Heritage Division at (410) 260-8573.

Effective August 8, 2007, under the authority of the Endangered Species Act of 1973, as amended, the U.S. Fish and Wildlife Service (Service) removed (delist) the bald eagle in the lower 48 States of the United States from the Federal List of Endangered and Threatened Wildlife. However, the bald eagle will still be protected by the Bald and Golden Eagle Protection Act, Lacey Act and the Migratory Bird Treaty Act. As a result, starting on August 8, 2007, if your project may cause "disturbance" to the bald eagle, please consult the "National Bald Eagle Management Guidelines" dated May 2007.

If any planned or ongoing activities cannot be conducted in compliance with the National Bald Eagle Management Guidelines (Eagle Management Guidelines), please contact the Chesapeake Bay Ecological Services Field Office at 410-573-4573 for technical assistance. The Eagle Management Guidelines can be found at:

$\underline{http://www.fws.gov/migratorybirds/issues/BaldEagle/NationalBaldEagleManagementGuidelines.pdf.}$

In the future, if your project can not avoid disturbance to the bald eagle by complying with the Eagle Management Guidelines, you will be able to apply for a permit that authorizes the take of bald and golden eagles under the Bald and Golden Eagle Protection Act, generally where the take to be authorized is associated with otherwise lawful activities. This proposed permit process will not be available until the Service issues a final rule for the issuance of these take permits under the Bald and Golden Eagle Protection Act.

An additional concern of the Service is wetlands protection. Federal and state partners of the Chesapeake Bay Program have adopted an interim goal of no overall net loss of the Basin's remaining wetlands, and the long term goal of increasing the quality and quantity of the Basin's wetlands resource base. Because of this policy and the functions and values wetlands perform, the Service recommends avoiding wetland impacts. All wetlands within the project area should be identified, and if construction in wetlands is proposed, the U.S. Army Corps of Engineers, Baltimore District, should be contacted for permit requirements. They can be reached at (410) 962-3670.

We appreciate the opportunity to provide information relative to fish and wildlife issues, and thank you for your interests in these resources. If you have any questions or need further assistance, please contact Devin Ray at (410) 573-4531.

Sincerely,

Leopoldo Miranda Field Supervisor

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April 16, 2009

Ms. Jennifer L. Rohrer The Wilson T. Ballard Company 17 Gwynns Mill Court Owings Mills, MD 21117

RE:

Environmental Review for Oak Drive/Ridge Road (MD 27), Bike and Sidewalk Improvements, Facility Planning Phase I, File: 100-263.03, Montgomery County,

Maryland.

Dear Ms. Rohrer:

The Wildlife and Heritage Service has determined that there are no State or Federal records for rare, threatened or endangered species within the boundaries of the project site as delineated. As a result, we have no specific comments or requirements pertaining to protection measures at this time. Please note however that the utilization of state funds, the need to obtain a state-authorized permit, or changes to the plan might warrant additional evaluations that could lead to protection or survey recommendations by the Wildlife and Heritage Service. Please contact us again for further coordination if this project falls into one of those categories.

We would also like to point out that our initial evaluation of this project should not be interpreted as meaning that it is not possible for rare, threatened or endangered species to be present. Certain species could be present without documentation because adequate surveys may not have been conducted in the past. Although we are not requiring any surveys, we would like to bring to your attention that Wildlife and Heritage Service's Natural Heritage database records do indicate that there are occurrences of state rare American Chestnut (Castanea dentata) located within close proximity to the project site. If the appropriate habitat for this species is present, it could potentially occur on the project site itself. Habitat for American Chestnut is described as: Rich woods (Radford et al 1968); dry, rich, usually acid, gravelly or rocky ground, often of uplands (Hough 1983). Since the population of this native plant has declined historically we would encourage efforts to help conserve it across the state. Feel free to contact us if you would like technical assistance regarding the conservation of this important species.

Thank you for allowing us the opportunity to review this project. If you should have any further questions regarding this information, please contact me at (410) 260-8573.

Sincerely,

Lori A. Byrne,

Environmental Review Coordinator

Wildlife and Heritage Service

Louia. Byman

MD Dept. of Natural Resources

ER#

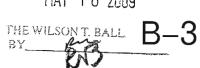
2009.0471.mo

Cc:

D. Brinker, DNR



DEPARTMENT OF ENVIRONMENTAL PROTECTION



Robert Hoyt

Director

Isiah Leggett

County Executive

May 11, 2009

Ms. Jennifer Rohrer The Wilson T. Ballard Co. 17 Gwynns Mill Court Owings Mills, MD 21117

Re: Request for Documents under the Maryland Public Information Act

(MPIA) pertaining to numerous properties along Oak Drive and Ridge Road in

Damascus, Maryland.

Dear Ms. Rohrer:

Thank you for contacting the Department of Environmental Protection (DEP) regarding your request for information about a Phase 1 Environmental Assessment.

In response to your request received April 7, 2009, we conducted a search of our records and found nothing related to hazardous waste sites, or underground storage tanks involving the properties noted above.

The DEP does not issue well permits, underground storage tank permits or other permits associated with the storage, treatment or discharge of wastewater or hazardous materials. While we are sometimes notified of problems associated with these incidents, actual permit activities are within the jurisdiction of the Maryland Department of the Environment (MDE). You may contact MDE at 1-800-633-6101 or 410-537-3000 to obtain more information. In addition, you may contact the Montgomery County Office of Emergency Management and Homeland Security at 240-777-2300 for information on the storage of hazardous materials and aboveground storage tanks.

If you have any questions concerning the information in this letter, please feel free to contact Steve Martin at 240-777-7746 or by email at steve.martin@montgomerycountymd.gov.

Sincerely,

Stan Edwards, Division Chief Environmental Policy and Compliance

cc: Steve Martin, DEP, Division of Environmental Policy and Compliance



Montgomery County Department of Parks

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

April 28, 2009

DECENTED APR 3 0 2009

THE WILSON T. BALLARD CO.

Jennifer L. Rohrer Wilson T. Ballard Company 17 Gwynns Mill Court Owings mills, MD 21117

Re:

Oak Drive/Ridge Road (MD 27) Sidewalk Project

Facility Planning Phase I File: 100-263.03

Dear Jennifer:

With respect to your recent letter regarding the above referenced item, I am including for your reference maps of four (4) parks immediately adjacent to this the project area. These include: 1) Upper Magruder Branch Stream Valley Park, 2) Oak Ridge Conservation Park, 3) John Haines Neighborhood Park, and 4) Damascus Community Center. Maps of other parks mentioned in your letter, namely, 1) Damascus Local Park, 2) Moyer Road Local Park, and 3) Damascus Recreation Park are not included as these parks are not immediately adjacent to the project area.

For the four (4) parks that are potentially impacted by this project, one, the Damascus Community Center property is under the jurisdiction of the Montgomery County Department of Recreation and the other three parks are under the jurisdiction of M-NCPPC. If you need to contact someone for more information concerning the Damascus Community Center property or about impacts to that property, please get in touch with:

Jeffrey A. Bourne Department of Recreation 4010 Randolph Road Silver Spring, MD 20902

If you need to contact someone about direct impacts to the other parklands, please contact:

Mitra Pedoeem Department of Parks 9500 Brunett Avenue Silver Spring, MD 20901

As for the three parks under M-NCPPC's jurisdiction: 1) none of the affected parcels were funded through Program Open Space or Land and Water Conservation Funds, 2) except for John Haines Neighborhood Park (copy of development plan is enclosed), the other parks are undeveloped except for recreation trails, 3) frequency of public use is not surveyed in any of these parks, 4) except for John

Haines Neighborhood Park, there are no Park Master Plans available that show proposed development beyond what is existing.

If I can provide further information in this regard, please let me know.

Sincerely,

William E. Gries

Land Acquisition Specialist