

**Attachment K:**  
Natural Resources Inventory  
Memorandum



# MEMORANDUM

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**Date:** July 27, 2017  
**To:** Joana Conklin – Montgomery County Department of Transportation (MCDOT)  
**From:** Sarah Falcone – RK&K  
**CC:** Erron Ramsey, Greg O’Hare, and Michelle Harden – RK&K  
**Re:** US 29 Bus Rapid Transit Corridor Planning Study – Natural Resources Inventory

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Rummel, Klepper & Kahl, LLP (RK&K) conducted a Natural Resources Inventory (NRI), including wetlands and waters delineation, walk-through forest stand characterization, and tree survey within the project study areas in April 2017. The project is located along 14 miles of US 29 in Montgomery County, Maryland.

The Montgomery County Department of Transportation (MCDOT), in coordination with the Federal Transit Administration (FTA), is proposing a new, 14-mile BRT service along US 29 from the Burtonsville Park and Ride to Silver Spring Transit Center. The project includes new BRT service along existing travel lanes and shoulders; design and construction of eleven station stops along the corridor; implementation of Transit Signal Priority (TSP) at several signalized intersections; and improvements to landscapes, sidewalk, and bicycle facilities. The proposed US 29 BRT Improvements Project service plan includes two routes: 1) Briggs Chaney Park and Ride to Silver Spring Transit Center via Lockwood Drive/ Stewart Lane, and 2) Burtonsville Park and Ride directly to Silver Spring Transit Center (**Appendix A, Figure 1**).

Supplemental information supporting the NRI is included in Appendices A through E, as follows:

Appendix A: Figures  
Appendix B: Photographic Record  
Appendix C: Tree Inventory Table  
Appendix D: Agency Correspondence  
Appendix E: Natural Resources Figures

## BACKGROUND INFORMATION

RK&K environmental scientists conducted a desktop investigation of mapped information prior to beginning the field investigation. The desktop investigation of the available mapped information identified site topography; vegetative cover; non-tidal waters and wetlands and their associated buffers; 100-year floodplain; and hydric and highly erodible soils. Mapped resources reviewed for this project included:

- The United States Geologic Survey (USGS) Geographic Information System (GIS) Quadrangle Mapping
- The United States Department of Agriculture, Natural Resource Conservation Service (USDA-NRCS) *Web Soil Survey (WSS) for Montgomery County, Maryland*
- Federal Emergency Management Agency (FEMA) GIS data
- Maryland Department of Natural Resources (MDNR) Wetlands and Waters GIS data

- U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) GIS data

Letters requesting database review for rare, threatened and endangered (RTE) species, fisheries resources, and cultural resources were sent by RK&K to the following agencies:

- Maryland Department of Natural Resources Wildlife and Heritage Section (MDNR-WH)
- Maryland Department of Natural Resources Project Review Division (MDNR-PRD)
- U.S. Fish and Wildlife Service (USFWS)
- Maryland Historical Trust (MHT)

Desktop investigation results are summarized below:

### Topography

The elevations within the project study areas range from approximately 226 to 494 feet. The topography within the project study areas is characterized as relatively flat, and gently sloping (**Appendix A, Figure 2**).

### Geology and Soils

The project study areas are located within the Piedmont Plateau Physiographic Province. This province is composed of hard, crystalline igneous and metamorphic rocks and extends from the inner edge of the Coastal Plain westward to Catoctin Mountain, the eastern boundary of the Blue Ridge Province.

Bedrock in the eastern part of the Piedmont consists of schist, gneiss, gabbro, and other highly metamorphosed sedimentary and igneous rocks of probable volcanic origin. The rocks of the western part of the Piedmont are diverse and include phyllite, slate, marble, and moderately to slightly metamorphosed volcanic rocks. Gently undulating plains underlain by un-metamorphosed bedrock of Triassic red shale, siltstone, and sandstone occur in three areas in the western Piedmont.

The USDA-NRCS Web Soil Survey for Montgomery County identified 10 mapped soil units within the study areas, as shown in **Appendix A, Figures 3a-3k**, with two soils classified as predominately non-hydric, and eight soils classified as non-hydric. (**Table 1**).

**Table 1: Mapped Soils**

Map Unit Symbol	Map Unit Name	*K-Factor	**Hydric Rating	Hydrologic Soil Group	Drainage Class
1C	Gaila silt loam, 8 to 15 percent slopes	0.43	5	B	Well drained
2B	Glenelg silt loam, 3 to 8 percent slopes	0.37	0	C	Well drained
2C	Glenelg silt loam, 8 to 15 percent slopes	0.37	0	B	Well drained
2UC	Glenelg-Urban land complex, 8 to 15 percent slopes	0.28	0	B	Well drained
57B	Chillum silt loam, 3 to 8 percent slopes	0.49	0	B	Well drained
57C	Chillum silt loam, 8 to 15 percent slopes	0.49	0	B	Well drained

Map Unit Symbol	Map Unit Name	*K-Factor	**Hydric Rating	Hydrologic Soil Group	Drainage Class
59B	Beltsville silt loam, 3 to 9 percent slopes	0.49	0	C	Moderately well drained
61UB	Croom-Urban land complex, 0 to 8 percent slopes	0.20	0	D	Well drained
67UB	Urban land-Wheaton complex, 0 to 8 percent slopes	--	5	D	--
400	Urban land	--	0	D	--

\**Erodibility Coefficient* – Value assigned to soil types by NRCS.  $K > 0.35$  are considered to be highly erodible soils

\*\**Hydric Rating* – Value is based on the percentage of hydric soils within the soil type. Non-hydric soils have a value of 0, predominantly non-hydric soils have a value between 0 and 33, partially hydric soils have a value between 33 and 66, predominantly hydric soils have a value between 66 and 99, and hydric soils have a value of 100.

### 100-Year Floodplain

Approximately 45,911 square feet (SF) of Federal Emergency Management Agency (FEMA) 100-year floodplains fall within the project study areas at Station Stop 4 – Burnt Mills, according to Montgomery County FEMA GIS data (**Appendix A, Figures 3a-3k**).

Construction and operations of the project would not have an impact on the existence of 100-year floodplains in the study corridor. The US 29 BRT Project meets the requirements of Executive Order (EO) 13690, *Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input*.

### Wetlands and Waters of the United States

The project is located within the Anacostia River Watershed (hydrologic unit code 02140205), and waterways in the surrounding area are designated as Use Class IV. The NWI mapping and MDNR GIS wetland mapping do not identify any wetlands or waterways within the project study areas (**Appendix A, Figures 3a-3k**).

### Rare, Threatened, and Endangered Species

Requests for information on the presence of fisheries resources and RTE species were sent to the Maryland Department of Natural Resources Project Review Division (MDNR-PRD) and Wildlife and Heritage Section (MDNR-WH) on April 3, 2017. MDNR-WH responded in a letter dated April 26, 2017 that there are records of the Acuminate Crayfish (*Cambarus acuminatus*), a species with In Need of Conservation status in Maryland, documented along the project study corridor at the US 29 crossings over Northwest Branch and Paint Branch. It is encouraged that best management practices for erosion and sediment control are adhered to during any work near these stream crossings in order to reduce the likelihood of adverse impacts to the Acuminate Crayfish and other important aquatic species in these streams. MDNR-PRD responded in a letter dated May 4, 2017 that the project crosses an unnamed tributary to Paint Branch which is classified as a Use I stream, and the Northwest Branch of the Anacostia River which is classified as a Use IV stream, and that in general, no in-stream work may occur in Use I streams from March 1 through June 15 and in Use IV streams from March 1 through May 31. USFWS online database confirmed on March 22, 2017 that no federally proposed or listed threatened or endangered species are known to occur in the project study areas. Agency correspondence documents can be found in **Appendix D**.

The proposed project will include construction near the Anacostia River at Station Stop 4— Burnt Mills, and near an unnamed tributary to the Paint Branch at Station Stop 7— Stewart Lane. While it is not anticipated for the US 29 BRT Improvements Project to cross either of these streams, any shifts in the proposed limits of disturbance that would require in-stream work would occur outside of the restricted time windows for spawning fish in Use I and Use IV streams. Additionally, best management practices for erosion and sediment control would be adhered to during any work near these stream crossings in order to reduce the likelihood of adverse impacts to the Acuminate Crayfish and other important aquatic species in these streams.

### **Cultural Resources**

A letter initiating the Section 106 process for the US 29 BRT Improvements Project was sent to the Maryland Historical Trust (MHT) on April 25, 2017. This letter requested concurrence on the Area of Potential Effect (APE), identified historic resources along the study corridor, and determined a finding of No Adverse Effect. MHT concurred with the No Adverse Effect finding in a letter sent on May 25, 2017.

### **WETLANDS/WATERS OF THE U.S. DELINEATION – Field Investigation/Results**

RK&K conducted wetlands and waters delineation within the project study areas in April 2017. No wetlands or waters were identified.

### **FIELD INVESTIGATIONS**

#### **WETLANDS/WATERS OF THE U.S. DELINEATION - Methods**

A team of two environmental scientists delineated waters of the U.S., including wetlands, within the project study areas. Wetlands were delineated in accordance with the *U.S. Army Corps of Engineers Wetlands Delineation Manual, Y-87-1* (Environmental Laboratory, 1987); U.S. Army Corps of Engineers. 2010. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region Version 2.0*, ed., ERDC/EL TR-10-20. Vicksburg, MS: U.S. Army Engineer Research and Development Center Routine wetland determination methods with onsite inspection were used to determine the presence of wetlands in the project study areas.

Waters of the U.S., other than wetlands, were delineated using the limits defined in 33 C.F.R. § 328. The boundaries of non-tidal waters of the U.S. other than wetlands were set at the ordinary high water mark (OHW). The OHW was determined in the field using physical characteristics established by the fluctuations of water (e.g., change in plant community, changes in the soil character, shelving) in accordance with U.S. Army Corps of Engineers Regulatory Guidance Letter No. 05-05.

Clean Water Act jurisdiction of delineated features was determined in accordance with the June 5, 2007 joint guidance issued by U.S. Environmental Protection Agency and U.S. Army Corps of Engineers following the U.S. Supreme Court's decision in the consolidated cases *Rapanos v. United States* and *Carabell v. United States* (*Rapanos*); and the January 19, 2001 joint guidance issued by U.S. Environmental Protection Agency and U.S. Army Corps of Engineers following U.S. Supreme Court's decision in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (*SWANCC*).

#### **FOREST STAND CHARACTERIZATION AND TREE SURVEY – Field Investigation**

RK&K did not identify any forest stands within the project study areas. Two hundred and twenty-two individual trees were identified, including six significant trees ( $\geq 24$  inches diameter at breast height (DBH)) and six specimen trees ( $\geq 30$ " DBH).

## FOREST STAND CHARACTERIZATION AND TREE SURVEY - Methods

The investigation methods for the forest stand characterization and tree survey were based on the Montgomery County Code Chapter 22A, using methodology described in the *Environmental Guidelines, Guidelines For Environmental Management Of Development In Montgomery County* (Maryland-National Capitol Park and Planning Commission (M-NCPPC), 2000); and *Trees, Approved Technical Manual* ((MNCPPC), 1992). The *Trees, Approved Technical Manual* defines a forest as “a biological community dominated by trees and other woody plants covering a land area of 10,000 square feet or greater. Forest includes (1) areas that have at least 100 trees per acre with at least 50% of those having a two-inch or greater diameter at 4.5 feet above the ground and larger; and (2) forest areas that have been cut but not cleared. Forest does not include orchards.”

A characterization of forest types and overall conditions was completed for the project study areas using a Walk-Through Forest Stand Analysis datasheet. The forest characteristics recorded include the type of forest community; dominant species in the canopy, understory and herbaceous layer; dominant canopy size class; percent canopy closure; stand successional stage; downed woody debris; invasive species present; invasive species percent cover; and general stand conditions.

An inventory of all stand-alone trees  $\geq 6''$  DBH, including significant ( $\geq 24$  inches DBH) and specimen ( $\geq 30''$  DBH or 75% of the size of the state champion) trees, was completed within the project study areas. The inventory also included all trees within the state right-of-way (ROW) regardless of size. The tree species, DBH, and condition were recorded for each of the inventoried trees. The condition of each tree was assessed by an ocular estimation of growth form, visible signs of decay, live crown ratio, and indications of disease or insect infestation. Each inventoried tree was numbered consecutively. Data obtained from the field reconnaissance was collected using an iPad and external GPS receiver.

## FOREST STAND CHARACTERIZATION AND TREE SURVEY – Results

### Inventoried Trees

RK&K inventoried 222 trees, including six significant trees ( $\geq 24$  inches DBH) (**Table 2**) and six specimen trees ( $\geq 30''$  DBH) (**Table 3**) within the project study areas. Photographs of the project study areas are located in **Appendix B**, information regarding inventoried trees is summarized in the Tree Inventory Table in **Appendix C**, and the locations of the trees are displayed on the Natural Resources Figures in **Appendix E**.

**Table 2. Significant Trees**

Tree ID	Scientific Name	Common Name	DBH	Condition
T89	<i>Quercus phellos</i>	Willow oak	26	Fair
T103	<i>Quercus phellos</i>	Willow oak	28	Good/fair
T104	<i>Quercus rubra</i>	Northern red oak	26	Good/fair
T105	<i>Picea abies</i>	Norway spruce	25	Fair
T148	<i>Quercus coccinea</i>	Scarlet oak	27	Fair/poor
T210	<i>Quercus coccinea</i>	Scarlet oak	25	Good/fair

**Table 3. Specimen Trees**

Tree ID	Scientific Name	Common Name	DBH	Condition
T96	<i>Quercus alba</i>	White oak	39	Good
T98	<i>Quercus alba</i>	White oak	39	Good/fair
T99	<i>Quercus rubra</i>	Northern red oak	32	Good/fair
T117	<i>Acer saccharinum</i>	Silver maple	55	Fair/poor

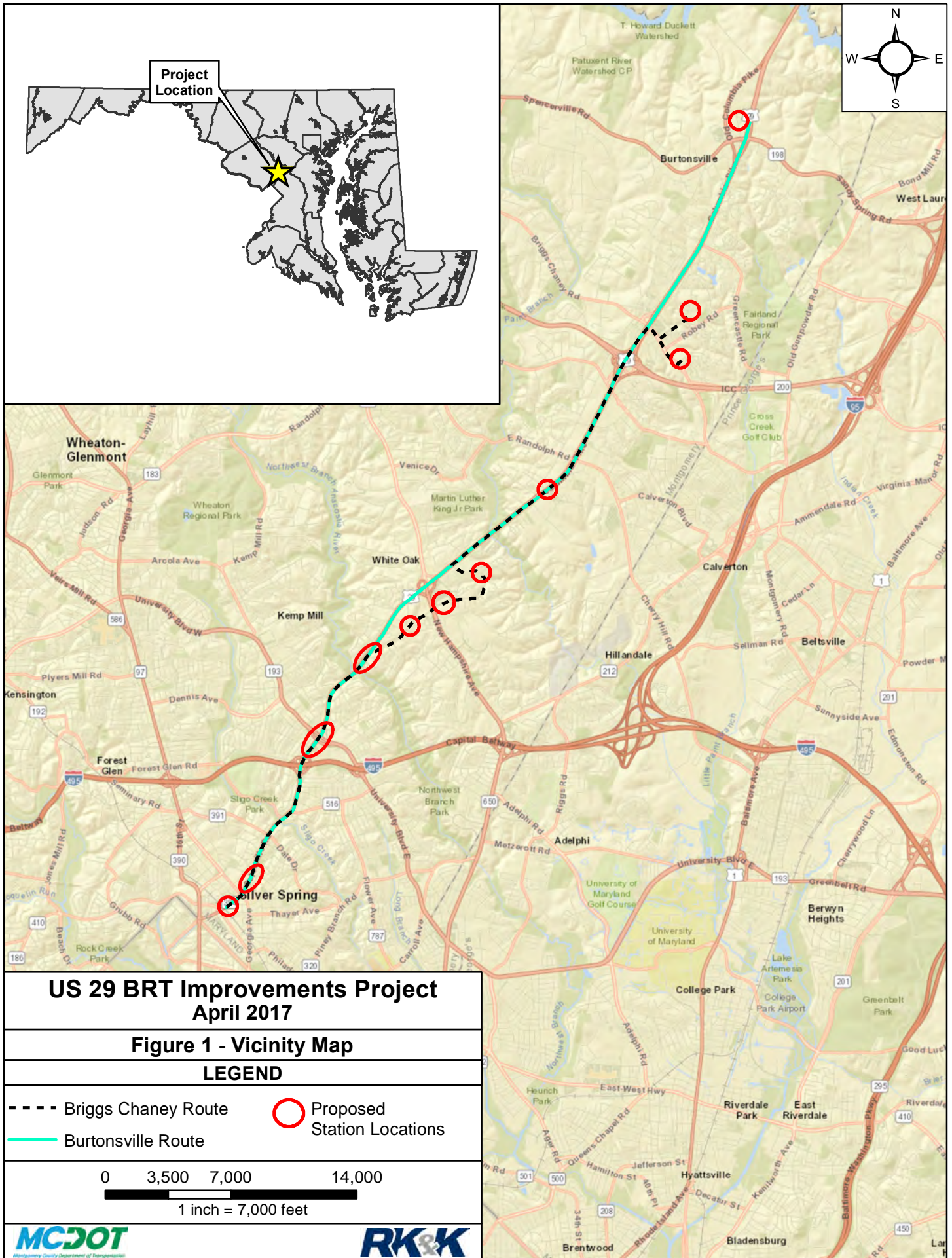
T118	<i>Acer saccharinum</i>	Silver maple	52	Fair
T119	<i>Fraxinus pennsylvanica</i>	Green ash	32	Good/fair

Tree impacts will be avoided and minimized to the greatest extent practicable using tree protection measures as specified in the Maryland-National Capital Park and Planning Commission (M-NCPPC) Trees Approved Technical Manual and the Montgomery County Roadside Tree Protection Law. Tree protection measures may include tree protection fencing, root pruning, branch pruning, and supplemental watering. Critical Root Zone (CRZ) impacts will be limited to one third or less of the total CRZ when possible.

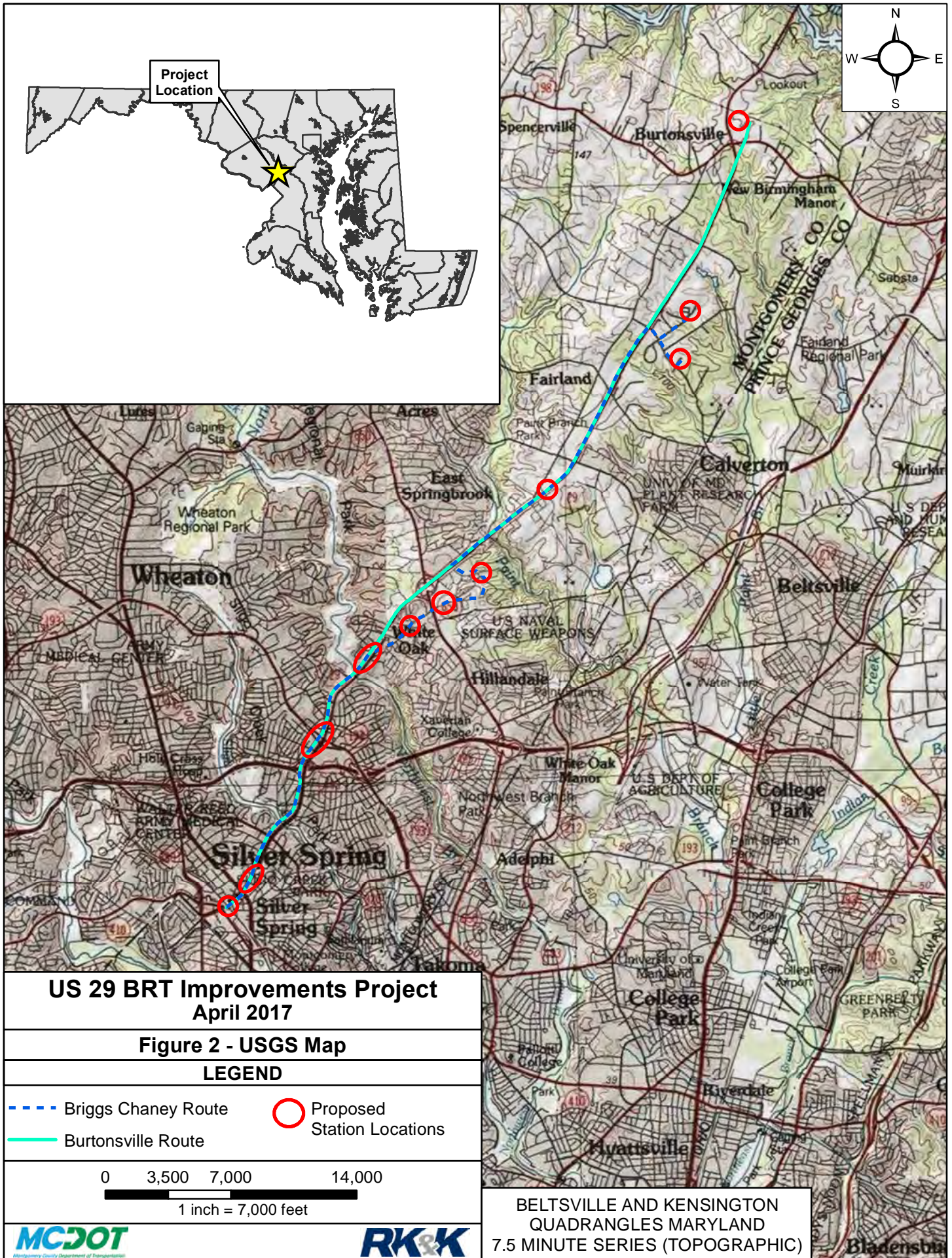
The US 29 BRT Project will be exempt from Forest Conservation Plan submittal requirements under the Montgomery County Chapter 22A - Forest Conservation Law (Section 22A-5e and 22A-9), as a county highway Capital Improvements Project (CIP). Impacts to trees within state and county road ROW will be mitigated in accordance with the Montgomery County Roadside Tree Protection Law and the Maryland Roadside Tree Law. Tree removal within state road ROW will be mitigated 1:1, with the installation of one tree for every tree removed, in accordance with Maryland Department of Natural Resources (DNR) requirements. The Montgomery County Roadside Tree Protection Law requires payment of \$500 into the Montgomery County Department of Transportation (MCDOT) street tree planting fund for removal of roadside trees designated on a MCDOT street tree inventory or  $\geq 6$ " DBH within the county road ROW, and planting of one tree within the immediate vicinity of the project area as mitigation for the roadside tree removal. An additional fee of \$250 is required for each replacement tree that cannot be planted within the immediate vicinity of the project area. A mitigation planting plan will be developed for tree replacement within the study areas where possible during the final project design stages for review and approval by MCDOT.

## Appendix A: Figures

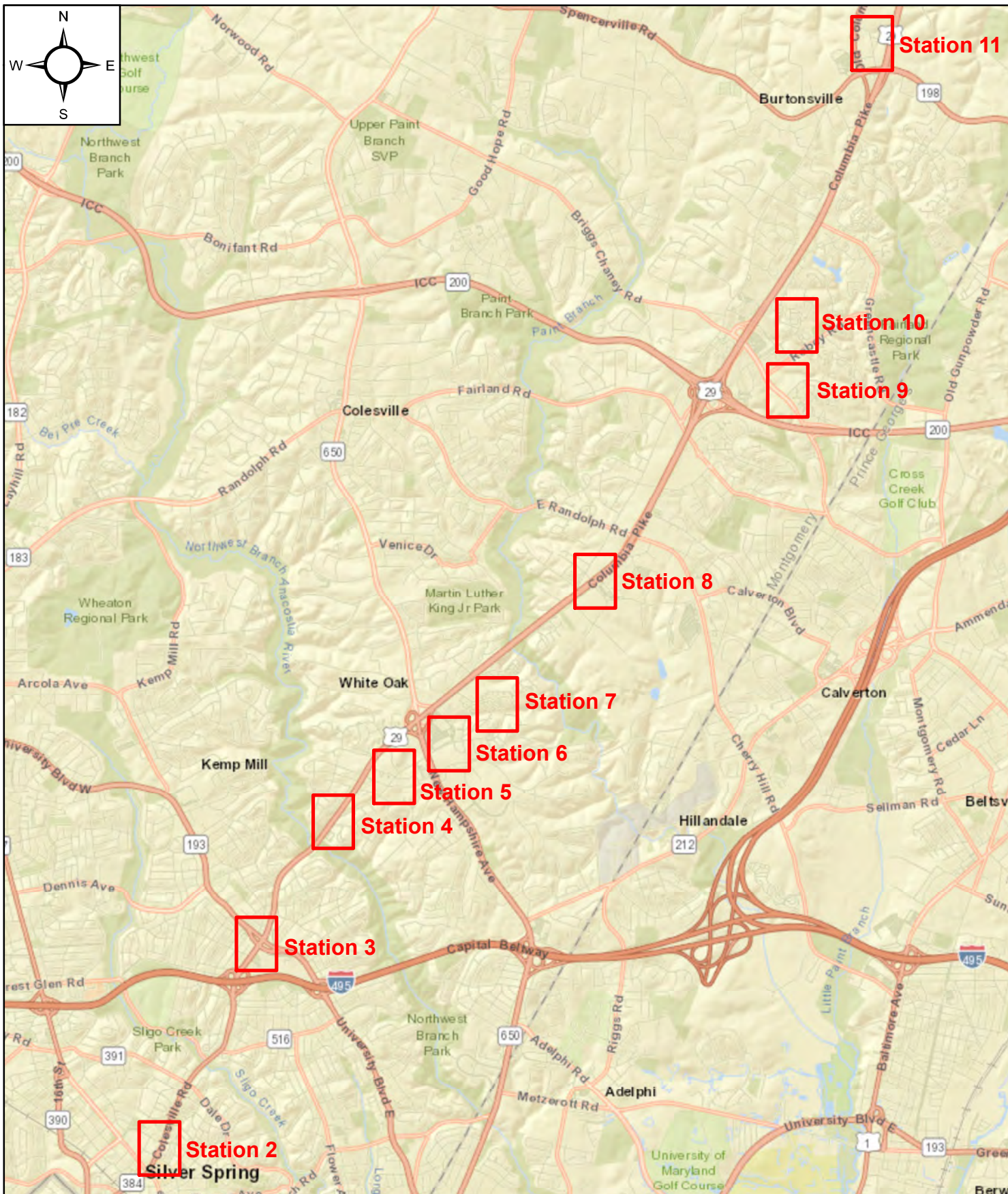




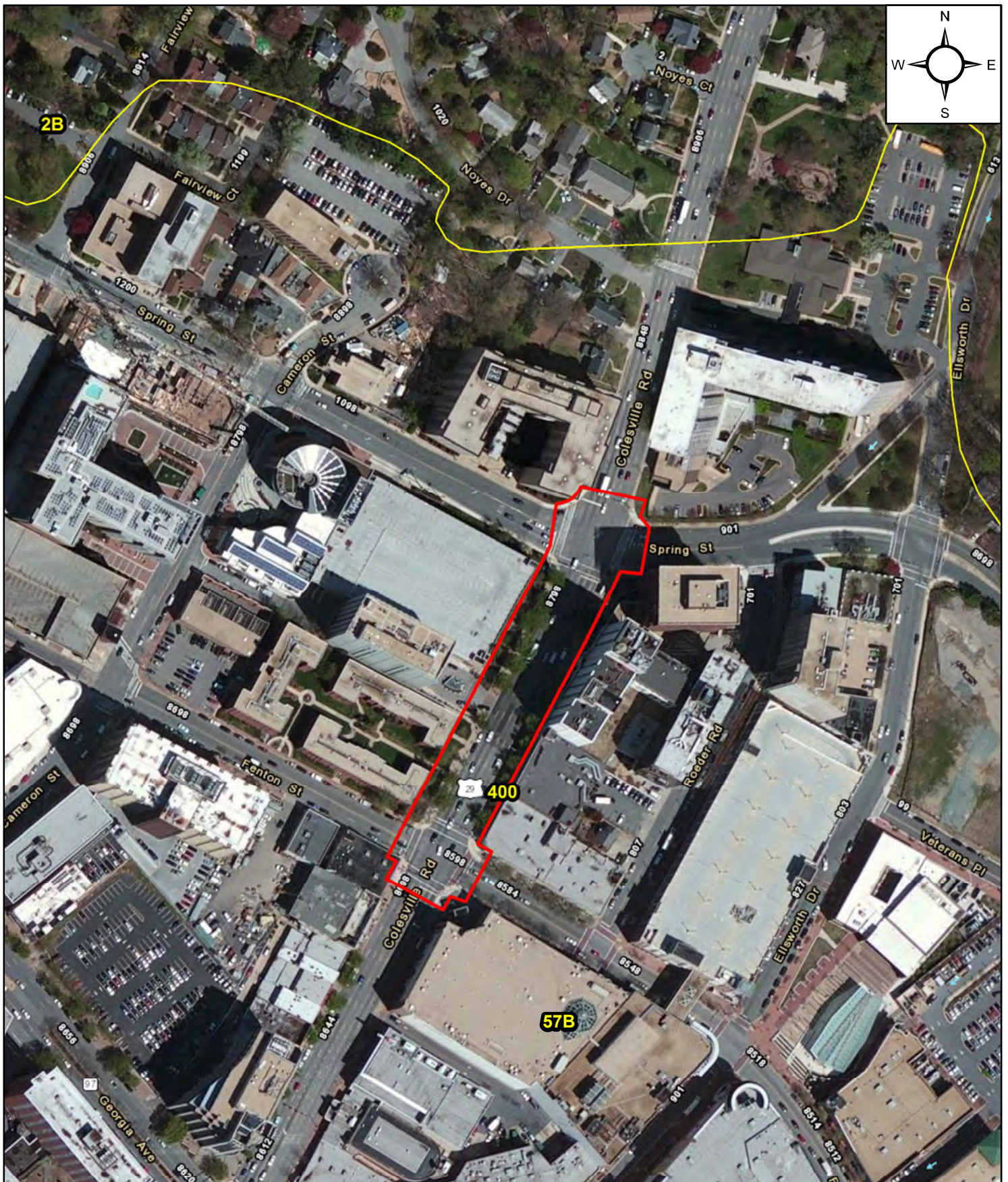












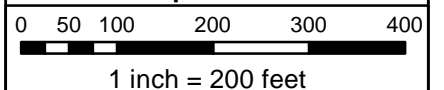
**Environmental Map**  
Figure 3b  
Station 2 - Fenton Street



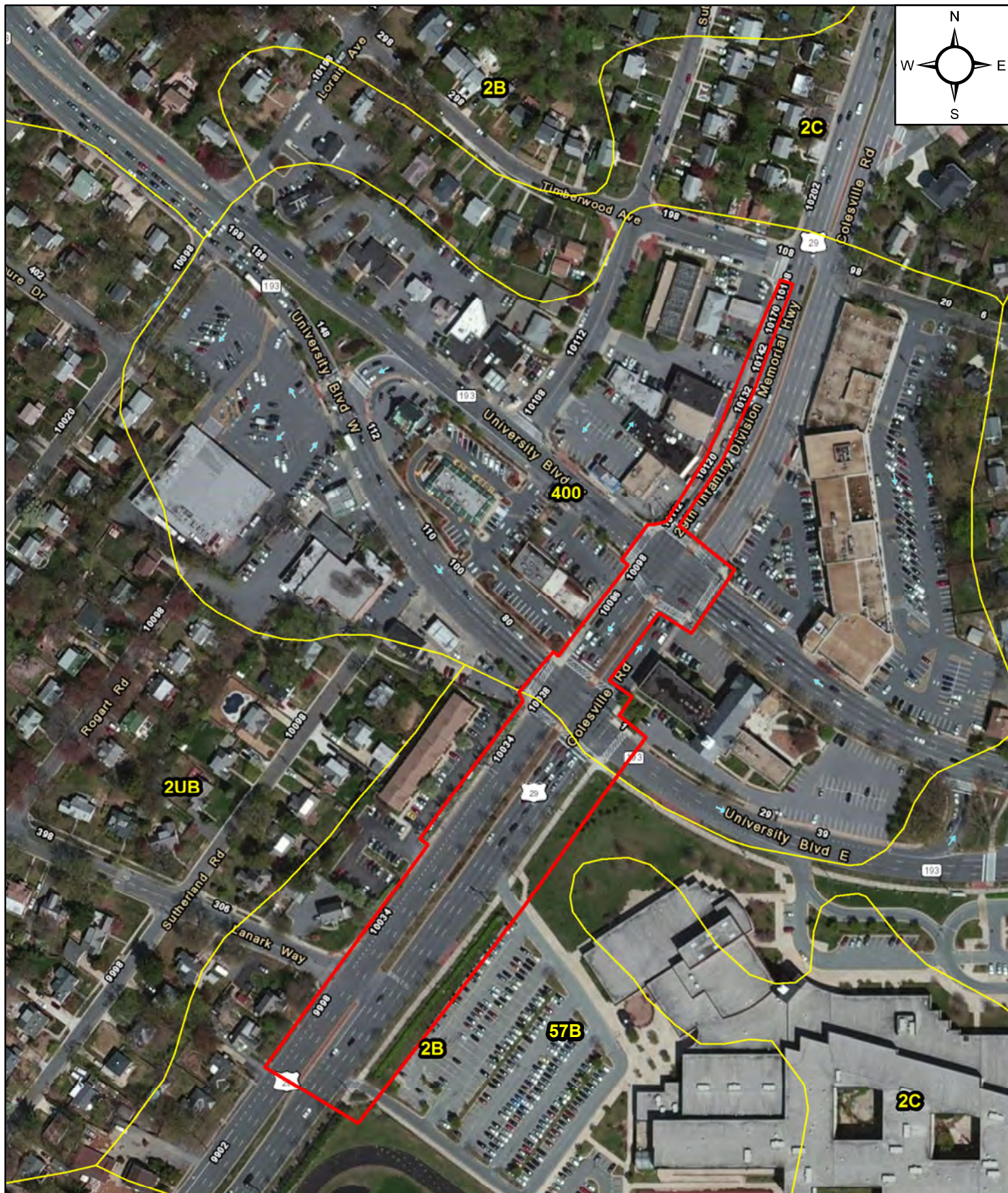
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| <span style="border: 2px solid blue; display: inline-block; width: 20px; height: 10px; vertical-align: middle;"></span> DNR Waters         | <span style="border: 2px dashed pink; display: inline-block; width: 20px; height: 10px; vertical-align: middle;"></span> FEMA 100-Year Floodplain |
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**US 29 Bus Rapid Transit  
Corridor Planning Study**  
April 2017







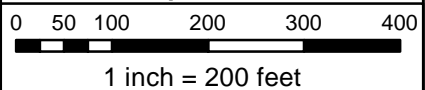
**Environmental Map**  
Figure 3c  
Station 3 - University Boulevard



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**US 29 Bus Rapid Transit  
Corridor Planning Study  
April 2017**







# Environmental Map

Figure 3d

Station 4 - Burnt Mills



## LEGEND

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## US 29 Bus Rapid Transit Corridor Planning Study

April 2017

0 50 100 200 300 400



1 inch = 200 feet





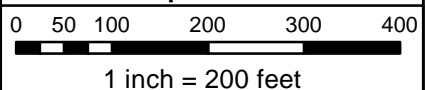
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Figure 3e  
Station 5 - Oak Leaf Drive



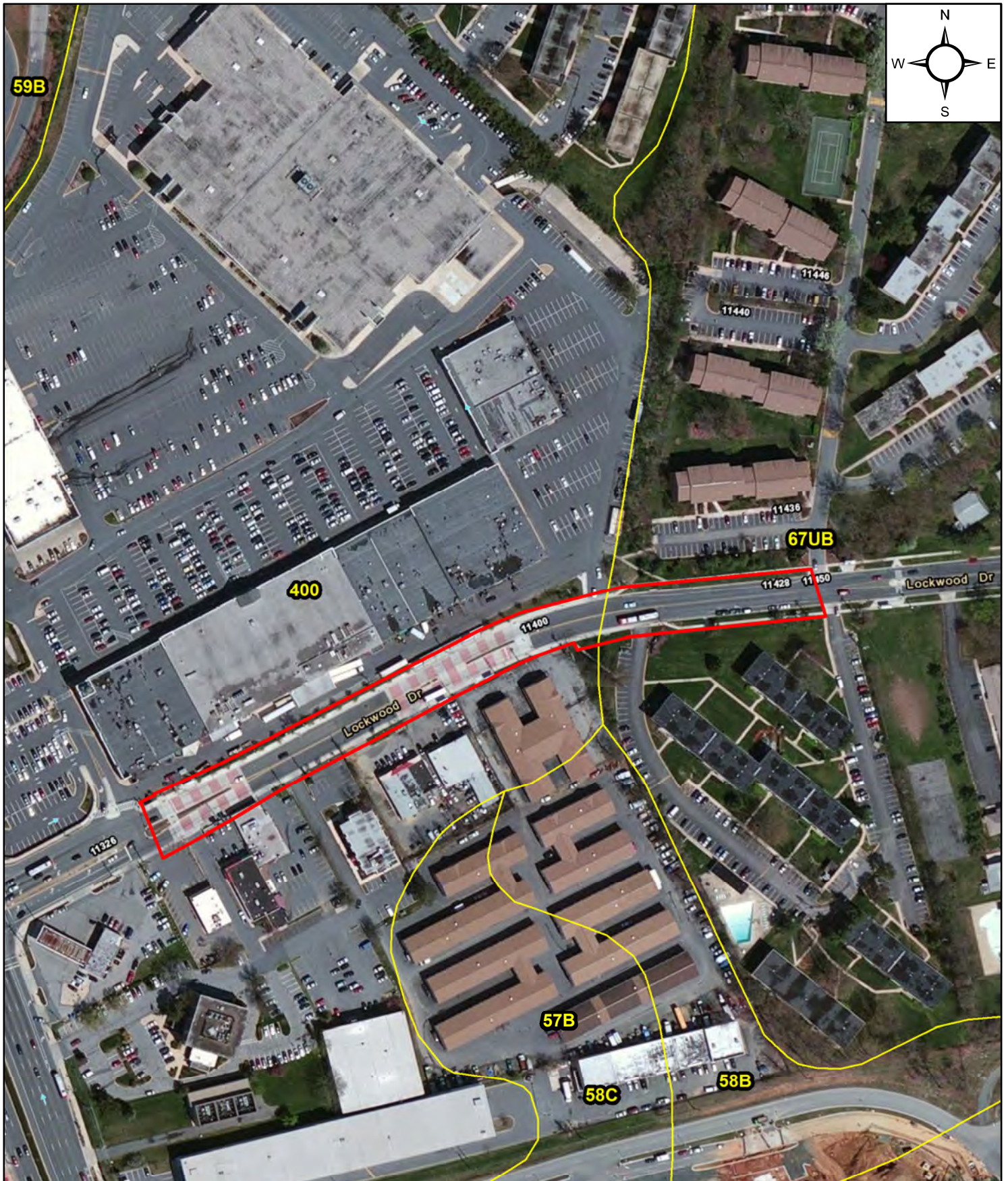
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**US 29 Bus Rapid Transit  
Corridor Planning Study**  
April 2017







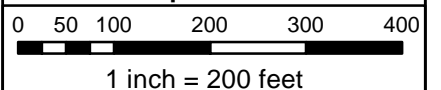
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Figure 3f  
Station 6 - White Oak Transit Center



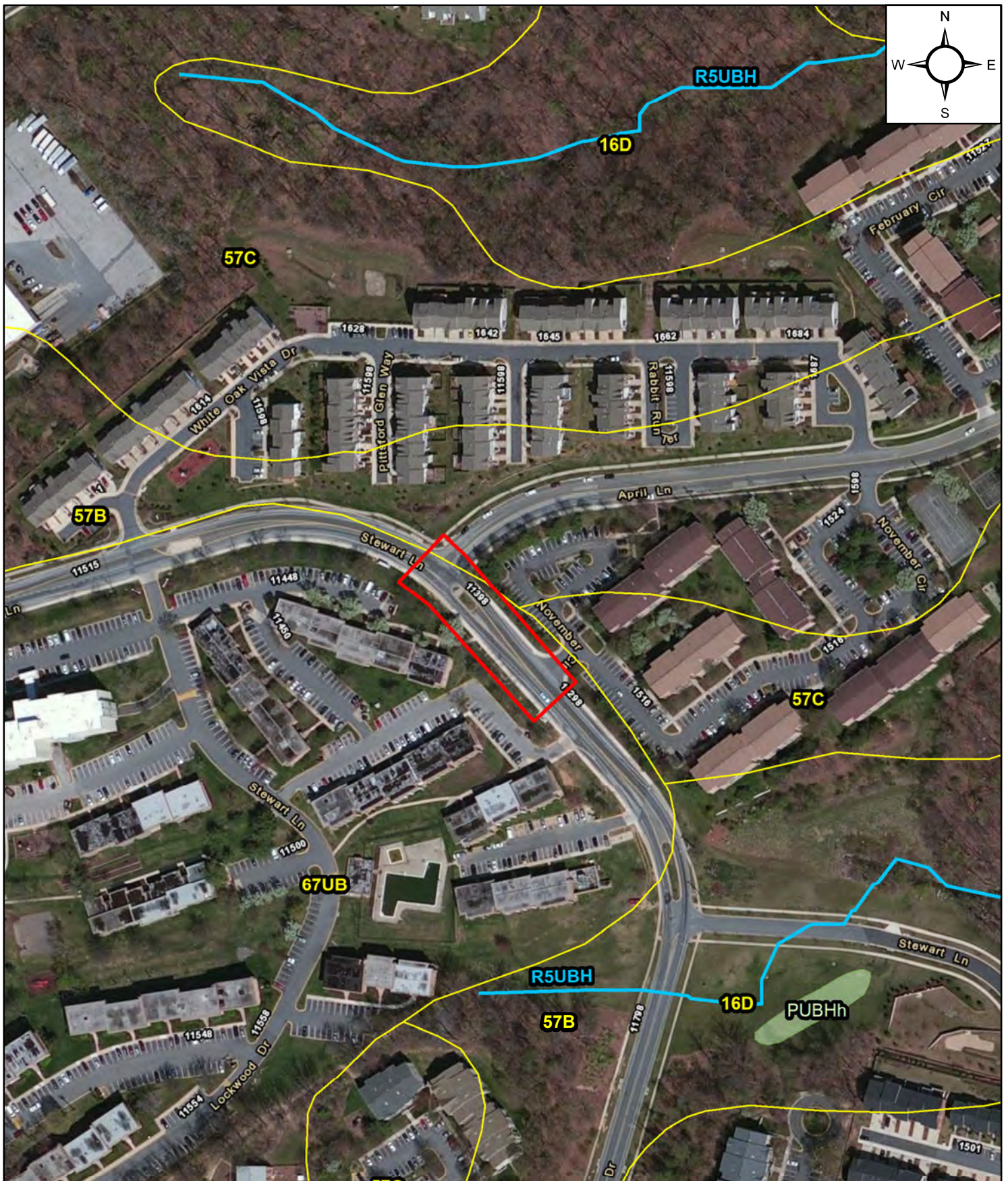
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**US 29 Bus Rapid Transit  
Corridor Planning Study**  
April 2017







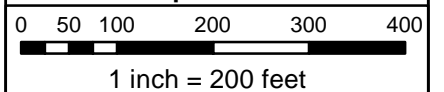
**Environmental Map**  
Figure 3g  
Station 7 - Stewart Lane



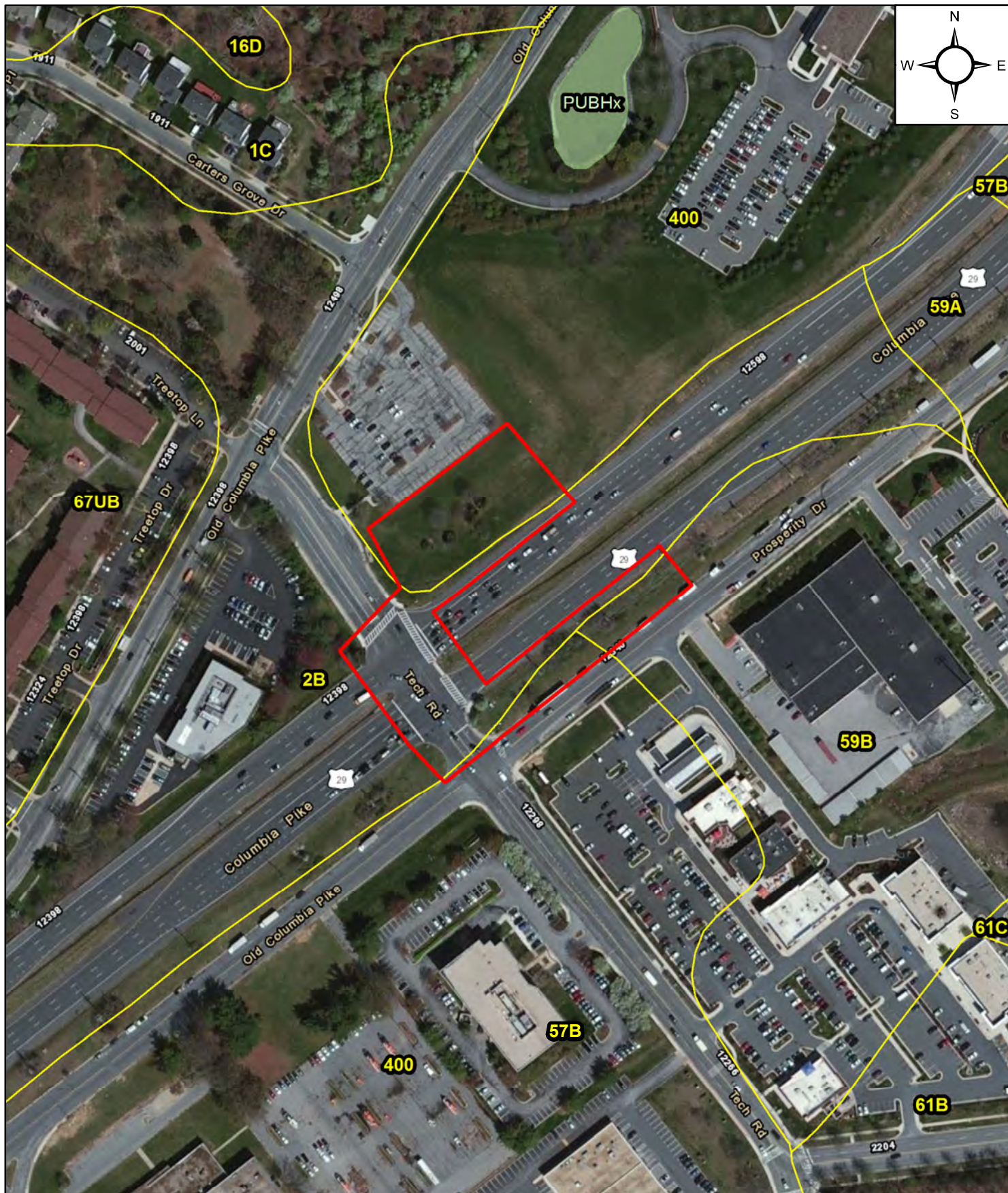
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| <span style="border-bottom: 2px solid blue; display: inline-block; width: 20px; margin-right: 5px;"></span> DNR Waters   | <span style="background: repeating-linear-gradient(-45deg, transparent, transparent 2px, pink 2px, pink 4px); border: 1px solid pink; display: inline-block; width: 20px; height: 10px; margin-right: 5px;"></span> FEMA 100-Year Floodplain |
| <span style="background-color: lightgreen; border: 1px solid green; display: inline-block; width: 20px; height: 10px; margin-right: 5px;"></span> DNR Wetlands | <span style="border: 2px solid yellow; display: inline-block; width: 20px; height: 10px; margin-right: 5px;"></span> SSURGO Soils  |

**US 29 Bus Rapid Transit  
Corridor Planning Study**  
April 2017







# Environmental Map

Figure 3h

Station 8 - Tech Road



## LEGEND

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<span style="background-color: lightgreen; display: inline-block; width: 20px; height: 10px;"></span> DNR Wetlands	<span style="border: 2px solid yellow; display: inline-block; width: 20px; height: 10px;"></span> SSURGO Soils

## US 29 Bus Rapid Transit Corridor Planning Study

April 2017

0 50 100 200 300 400

1 inch = 200 feet





# Environmental Map

Figure 3i

Station 9 - Briggs Chaney Park & Ride



## LEGEND

	Study Area		NWI Wetlands
	DNR Waters		FEMA 100-Year Floodplain
	DNR Wetlands		SSURGO Soils

## US 29 Bus Rapid Transit Corridor Planning Study

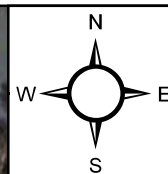
April 2017

0 50 100 200 300 400



1 inch = 200 feet





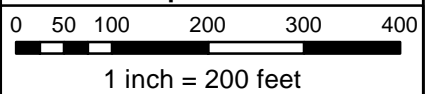
**Environmental Map**  
Figure 3j  
Station 10 - Castle Ridge



**LEGEND**

- Study Area
- DNR Waters
- DNR Wetlands
- NWI Wetlands
- FEMA 100-Year Floodplain
- SSURGO Soils

**US 29 Bus Rapid Transit  
Corridor Planning Study  
April 2017**







# Environmental Map

Figure 3k

Station 11 - Burtonsville Park & Ride



## LEGEND

<span style="border: 2px solid red; display: inline-block; width: 20px; height: 10px;"></span> Study Area	<span style="background-color: #e0f7fa; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> NWI Wetlands
<span style="border-bottom: 2px solid blue; display: inline-block; width: 20px;"></span> DNR Waters	<span style="background-color: #ffe0b2; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> FEMA 100-Year Floodplain
<span style="background-color: #c8e6c9; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> DNR Wetlands	<span style="border: 2px solid yellow; display: inline-block; width: 20px; height: 10px;"></span> SSURGO Soils

## US 29 Bus Rapid Transit Corridor Planning Study

April 2017

0 50 100 200 300 400

1 inch = 200 feet

## Appendix B: Photographic Record





Station 2 – Fenton Street, facing north



Station 3 – University Boulevard, facing south



Station 4 – Burnt Mills, facing north



Station 5 – Oak Leaf Drive, facing north





Station 6 – White Oak Transit Center, facing west



Station 7 – Stewart Lane, facing north



Station 8 – Tech Road, facing northwest



Station 9 – Briggs Chaney Park & Ride, facing southeast





Station 10 – Castle Ridge, facing south



Station 11 – Burtonsville Park & Ride, facing northeast

Appendix C:  
Tree Inventory Table

Tree ID	Scientific Name	Common Name	DBH	Condition	Comments
T1	<i>Koelreuteria paniculata</i>	Goldenrain tree	15	Good	Pruned
T2	<i>Koelreuteria paniculata</i>	Goldenrain tree	12	Good	Pruned
T3	<i>Koelreuteria paniculata</i>	Goldenrain tree	12	Fair	Crack in base of trunk
T4	<i>Koelreuteria paniculata</i>	Goldenrain tree	14	Good	Pruned
T5	<i>Koelreuteria paniculata</i>	Goldenrain tree	16	Good/fair	Moderate dead wood
T6	<i>Koelreuteria paniculata</i>	Goldenrain tree	16	Fair	Significant dead wood
T7	<i>Koelreuteria paniculata</i>	Goldenrain tree	16	Good/fair	Pruned, minor dead wood
T8	<i>Koelreuteria paniculata</i>	Goldenrain tree	3	Good	
T9	<i>Koelreuteria paniculata</i>	Goldenrain tree	14	Good	Pruned
T10	<i>Koelreuteria paniculata</i>	Goldenrain tree	10	Good/fair	Pruned , minor dead wood
T11	<i>Koelreuteria paniculata</i>	Goldenrain tree	14	Good/fair	Pruned , moderate dead wood
T12	<i>Koelreuteria paniculata</i>	Goldenrain tree	20	Good/fair	Pruned , minor dead wood
T13	<i>Betula</i> sp.	Birch sp.	18	Good	Pruned
T14	<i>Juniperus virginiana</i>	Eastern redcedar	15	Fair	Minor dead wood and broken branches
T15	<i>Juniperus virginiana</i>	Eastern redcedar	23	Fair	Minor trunk wound, uneven crown, minor broken branches
T16	<i>Acer rubrum</i>	Red maple	8	Good	
T17	<i>Juglans nigra</i>	Black walnut	4	Good/fair	Pruned, minor broken branches, split below 4.5', DBH 3 and 4
T18	<i>Platanus occidentalis</i>	Sycamore	11	Good/fair	Suckering
T19	<i>Platanus occidentalis</i>	Sycamore	9	Good/fair	
T20	<i>Lagerstroemia indica</i>	Crape myrtle	2	Good	
T21	<i>Lagerstroemia indica</i>	Crape myrtle	2	Good	
T22	<i>Lagerstroemia indica</i>	Crape myrtle	2	Good	
T23	<i>Lagerstroemia indica</i>	Crape myrtle	2	Good	
T24	<i>Lagerstroemia indica</i>	Crape myrtle	2	Good	
T25	<i>Lagerstroemia indica</i>	Crape myrtle	2	Good	
T26	<i>Lagerstroemia indica</i>	Crape myrtle	2	Good	
T27	<i>Lagerstroemia indica</i>	Crape myrtle	2	Good	
T28	<i>Lagerstroemia indica</i>	Crape myrtle	2	Good	
T29	<i>Lagerstroemia indica</i>	Crape myrtle	2	Good	
T30	<i>Lagerstroemia indica</i>	Crape myrtle	2	Good	
T31	<i>Lagerstroemia indica</i>	Crape myrtle	2	Good	
T32	<i>Malus</i> sp.	Crabapple sp.	20	Good	Pruned
T33	<i>Platanus x acerifolia</i>	London planetree	8	Good	
T34	<i>Platanus x acerifolia</i>	London planetree	6	Good	
T35	<i>Juniperus virginiana</i>	Eastern redcedar	6	Good	Multistem (4), btwn 5&6"
T36	<i>Juniperus virginiana</i>	Eastern redcedar	9	Good	Multistem (3 main)
T37	<i>Juniperus virginiana</i>	Eastern redcedar	9	Good	Multistem (4 main), btwn 6&9"
T38	<i>Platanus x acerifolia</i>	London planetree	8	Good	
T39	<i>Platanus x acerifolia</i>	London planetree	9	Good	
T40	<i>Lagerstroemia indica</i>	Crape myrtle	3	Good	Multistem (3)
T41	<i>Lagerstroemia indica</i>	Crape myrtle	3	Good	Multistem (3), btwn 2&3"
T42	<i>Platanus x acerifolia</i>	London planetree	6	Good	
T43	<i>Lagerstroemia indica</i>	Crape myrtle	3	Good	Multistem (3)
T44	<i>Lagerstroemia indica</i>	Crape myrtle	3	Good	Multistem (3), btwn 2&3"
T45	<i>Platanus x acerifolia</i>	London planetree	6	Good	

T46	<i>Pyrus calleryana</i>	Bradford pear	3	Poor	Almost dead
T47	<i>Platanus x acerifolia</i>	London planetree	10	Good	Slight lean
T48	<i>Platanus x acerifolia</i>	London planetree	4	Fair	Significant lean
T49	<i>Pyrus calleryana</i>	Bradford pear	3	Good	
T50	<i>Platanus x acerifolia</i>	London planetree	3	Good	Split below 4.5', both 3"
T51	<i>Pyrus calleryana</i>	Bradford pear	3	Good	
T52	<i>Platanus x acerifolia</i>	London planetree	5	Good	
T53	<i>Platanus x acerifolia</i>	London planetree	7	Good	
T54	<i>Malus</i> sp.	Crabapple sp.	7	Good	Split, DBH 6&7"
T55	<i>Acer rubrum</i>	Red maple	8	Good/fair	Root damage
T56	<i>Platanus x acerifolia</i>	London planetree	9	Good	
T57	<i>Platanus x acerifolia</i>	London planetree	8	Good	
T58	<i>Platanus x acerifolia</i>	London planetree	8	Fair	Significant trunk wound and decay
T59	<i>Platanus x acerifolia</i>	London planetree	8	Good	
T60	<i>Platanus x acerifolia</i>	London planetree	9	Good	
T61	<i>Koelreuteria paniculata</i>	Goldenrain tree	14	Good	
T62	<i>Platanus x acerifolia</i>	London planetree	7	Good	
T63	<i>Platanus x acerifolia</i>	London planetree	3	Good	
T64	<i>Platanus x acerifolia</i>	London planetree	8	Good/fair	Trunk wound at base
T65	<i>Platanus x acerifolia</i>	London planetree	3	Good	
T66	<i>Platanus x acerifolia</i>	London planetree	3	Good	
T67	<i>Platanus x acerifolia</i>	London planetree	10	Good/fair	Slight lean
T68	<i>Platanus x acerifolia</i>	London planetree	9	Good	
T69	<i>Platanus x acerifolia</i>	London planetree	10	Good/fair	Slight lean, minor dead wood
T70	<i>Platanus x acerifolia</i>	London planetree	6	Good	
T71	<i>Platanus x acerifolia</i>	London planetree	10	Good	
T72	<i>Platanus x acerifolia</i>	London planetree	8	Good	
T73	<i>Platanus x acerifolia</i>	London planetree	7	Good/fair	Minor trunk wound and decay
T74	<i>Platanus x acerifolia</i>	London planetree	8	Good	
T75	<i>Platanus x acerifolia</i>	London planetree	3	Good	
T76	<i>Platanus x acerifolia</i>	London planetree	3	Good	
T77	<i>Platanus x acerifolia</i>	London planetree	3	Good	
T78	<i>Platanus x acerifolia</i>	London planetree	3	Good	
T79	<i>Platanus x acerifolia</i>	London planetree	3	Fair	Broken leader
T80	<i>Prunus mahaleb</i>	Mahaleb cherry	12	Good/fair	Minor dead wood and broken branches
T81	<i>Prunus mahaleb</i>	Mahaleb cherry	9	Good/fair	Minor dead wood and broken branches
T82	<i>Prunus mahaleb</i>	Mahaleb cherry	13	Good/fair	Minor dead wood and broken branches
T83	<i>Prunus mahaleb</i>	Mahaleb cherry	10	Good/fair	Minor dead wood and broken branches
T84	<i>Prunus mahaleb</i>	Mahaleb cherry	12	Good	
T85	<i>Prunus mahaleb</i>	Mahaleb cherry	14	Poor	Major trunk wound and decay, broken branches
T86	<i>Acer rubrum</i>	Red maple	8	Good/fair	Included bark
T87	<i>Quercus phellos</i>	Willow oak	11	Good/fair	Pruned, minor dead wood and broken branches
T88	<i>Quercus phellos</i>	Willow oak	17	Good	
T89	<i>Quercus phellos</i>	Willow oak	26	Fair	Heavily pruned (leader pruned), moderate dead wood
T90	<i>Quercus phellos</i>	Willow oak	16	Good/fair	Pruned, uneven crown

T91	<i>Quercus phellos</i>	Willow oak	21	Good	Pruned
T92	<i>Quercus phellos</i>	Willow oak	13	Fair	Uneven crown, many broken branches
T93	<i>Quercus phellos</i>	Willow oak	16	Good/fair	Pruned, uneven crown
T94	<i>Quercus phellos</i>	Willow oak	16	Good/fair	Pruned, uneven crown
T95	<i>Liriodendron tulipifera</i>	Tulip poplar	23	Fair/poor	Broken leader, moderate broken branches, vines, lean
T96	<i>Quercus alba</i>	White oak	39	Good	Flag hung on barbed wire
T97	<i>Juglans nigra</i>	Black walnut	9	Fair	Pruned, uneven crown, vines
T98	<i>Quercus alba</i>	White oak	39	Good/fair	Minor broken branches, vines
T99	<i>Quercus rubra</i>	Northern red oak	32	Good/fair	Lean, vines
T100	<i>Koelreuteria paniculata</i>	Goldenrain tree	4	Good/fair	Minor trunk wound and decay
T101	<i>Quercus phellos</i>	Willow oak	21	Fair	Heavily pruned, uneven crown
T102	<i>Quercus phellos</i>	Willow oak	19	Good	Willow oak?
T103	<i>Quercus phellos</i>	Willow oak	28	Good/fair	Pruned, exposed roots
T104	<i>Quercus rubra</i>	Northern red oak	26	Good/fair	Pruned, minor broken branches
T105	<i>Picea abies</i>	Norway spruce	25	Fair	Lean, moderate dead wood and broken branches, pruned
T106	<i>Quercus phellos</i>	Willow oak	11	Good	
T107	<i>Quercus phellos</i>	Willow oak	5	Good	
T108	<i>Quercus phellos</i>	Willow oak	7	Good	
T109	<i>Quercus phellos</i>	Willow oak	5	Good	
T110	<i>Quercus phellos</i>	Willow oak	6	Good	
T111	<i>Quercus rubra</i>	Northern red oak	5	Good	
T112	<i>Quercus rubra</i>	Northern red oak	12	Good	
T113	<i>Quercus rubra</i>	Northern red oak	14	Good	
T114	<i>Juniperus virginiana</i>	Eastern redcedar	8	Fair	Twin, smaller dbh 6", uneven crown, lean, vines
T115	<i>Juniperus virginiana</i>	Eastern redcedar	8	Fair	Multistem (3) - 6", 8", 4" dbh, vines, uneven crown
T116	<i>Acer rubrum</i>	Red maple	10	Good/fair	Sapsucker holes
T117	<i>Acer saccharinum</i>	Silver maple	55	Fair/poor	Heavily pruned (pruned leader), exposed roots, included bark, dead wood
T118	<i>Acer saccharinum</i>	Silver maple	52	Fair	Vines into crown, heavily pruned, dead branches
T119	<i>Fraxinus pennsylvanica</i>	Green ash	32	Good/fair	Pruned, minor dead wood, exposed roots
T120	<i>Prunus</i> sp.	Cherry sp.	5	Good	
T121	<i>Prunus</i> sp.	Cherry sp.	5	Good	
T122	<i>Prunus</i> sp.	Cherry sp.	6	Good	
T123	<i>Prunus serrulata</i>	Japanese flowering cherry	7	Good	
T124	<i>Prunus serrulata</i>	Japanese flowering cherry	6	Good	
T125	<i>Prunus serrulata</i>	Japanese flowering cherry	6	Fair	
T126	<i>Prunus serrulata</i>	Japanese flowering cherry	6	Good	
T127	<i>Prunus serrulata</i>	Japanese flowering cherry	5	Good	
T128	<i>Prunus serrulata</i>	Japanese flowering cherry	6	Good/fair	
T129	<i>Prunus serrulata</i>	Japanese flowering cherry	6	Fair	Trunk hole
T130	<i>Prunus serrulata</i>	Japanese flowering cherry	5	Fair	Trunk wounds
T131	<i>Prunus serrulata</i>	Japanese flowering cherry	5	Good/fair	
T132	<i>Prunus serrulata</i>	Japanese flowering cherry	5	Good	
T133	<i>Prunus serrulata</i>	Japanese flowering cherry	5	Good/fair	Trunk wounds
T134	<i>Prunus serrulata</i>	Japanese flowering cherry	5	Good	
T135	<i>Prunus serrulata</i>	Japanese flowering cherry	5	Good	

T136	<i>Prunus serrulata</i>	Japanese flowering cherry	6	Good/fair	Exposed roots
T137	<i>Prunus serrulata</i>	Japanese flowering cherry	4	Fair	Hole, missing bark
T138	<i>Prunus serrulata</i>	Japanese flowering cherry	5	Poor	Cavity
T139	<i>Prunus serrulata</i>	Japanese flowering cherry	5	Good/fair	
T140	<i>Prunus serrulata</i>	Japanese flowering cherry	6	Good	
T141	<i>Prunus serrulata</i>	Japanese flowering cherry	6	Good/fair	Missing bark
T142	<i>Prunus serrulata</i>	Japanese flowering cherry	6	Good	
T143	<i>Pinus strobus</i>	Eastern white pine	7	Good	
T144	<i>Pinus strobus</i>	Eastern white pine	8	Good	Split trunk, 7 smallest
T145	<i>Quercus coccinea</i>	Scarlet oak	15	Good	
T146	<i>Quercus coccinea</i>	Scarlet oak	19	Poor	Exposed roots, dead branches, trunk wounds, cut canopy
T147	<i>Quercus coccinea</i>	Scarlet oak	21	Poor	Exposed roots, dead branches, cut canopy
T148	<i>Quercus coccinea</i>	Scarlet oak	27	Fair/poor	Broken canopy
T149	<i>Quercus coccinea</i>	Scarlet oak	17	Fair	
T150	<i>Malus</i> sp.	Crabapple sp.	21	Good	Trunk wounds from pruning
T151	<i>Diospyros virginiana</i>	Common persimmon	12	Poor	Multistem btwn 7&8" dbh, heavy vines, dead branches,
T152	<i>Quercus rubra</i>	Northern red oak	17	Poor	Twin, smaller dbh 16", heavy vines, cut canopy
T153	<i>Liriodendron tulipifera</i>	Tulip poplar	21	Poor	Twin, smaller dbh 17", abnormal growth pattern, cut canopy, vines
T154	<i>Quercus rubra</i>	Northern red oak	14	Poor	Twin, smaller dbh 12", heavy vines, trunk wounds, cut canopy
T155	<i>Acer rubrum</i>	Red maple	18	Poor	4 stems - 13", 4", 5", trunk wounds, heavily pruned
T156	<i>Quercus laevis</i>	Turkey oak	10	Poor	Heavy vines completely cover trunk, dead branches
T157	<i>Juniperus virginiana</i>	Eastern redcedar	12	Good	Twin, smaller dbh 10"
T158	<i>Prunus</i> sp.	Cherry sp.	8	Good/fair	Multistem, btwn 2&3", trunk wounds
T159	<i>Quercus rubra</i>	Northern red oak	9	Good	
T160	<i>Juniperus virginiana</i>	Eastern redcedar	12	Good	
T161	<i>Juniperus virginiana</i>	Eastern redcedar	8	Good	Three stems, all 8" dbh
T162	<i>Juniperus virginiana</i>	Eastern redcedar	10	Good	Two stems, 7" dbh
T163	<i>Acer rubrum</i>	Red maple	17	Good/fair	Some dead branches
T164	<i>Acer rubrum</i>	Red maple	18	Fair	Dead branches, exposed roots
T165	<i>Fraxinus pennsylvanica</i>	Green ash	17	Fair	Dead branches
T166	<i>Morus rubra</i>	Red mulberry	5	Fair	10' high
T167	<i>Juniperus virginiana</i>	Eastern redcedar	6	Fair	Three stems, btwn 4&5" dbh
T168	<i>Morus rubra</i>	Red mulberry	5	Fair	
T169	<i>Fraxinus</i> sp.	Ash sp.	10	Good	
T170	<i>Fraxinus</i> sp.	Ash sp.	8	Good	
T171	<i>Quercus phellos</i>	Willow oak	8	Fair	
T172	<i>Quercus phellos</i>	Willow oak	8	Fair	Peeling bark, trunk crack, missing branches
T177	<i>Quercus phellos</i>	Willow oak	8	Fair	
T173	<i>Prunus</i> sp.	Cherry sp.	7	Good/fair	Cracked bark
T174	<i>Prunus</i> sp.	Cherry sp.	7	Good/fair	Some peeling bark
T175	<i>Prunus</i> sp.	Cherry sp.	8	Fair	Loose bark
T176	<i>Prunus</i> sp.	Cherry sp.	8	Fair	Peeling bark
T178	<i>Prunus</i> sp.	Cherry sp.	6	Good/fair	
T179	<i>Prunus</i> sp.	Cherry sp.	6	Fair	
T180	<i>Prunus</i> sp.	Cherry sp.	8	Good/fair	



T181	<i>Prunus</i> sp.	Cherry sp.	6	Fair	
T182	<i>Prunus</i> sp.	Cherry sp.	6	Good	
T183	<i>Prunus</i> sp.	Cherry sp.	6	Good	
T184	<i>Prunus</i> sp.	Cherry sp.	6	Poor	Trunk wounds
T185	<i>Prunus</i> sp.	Cherry sp.	8	Good/fair	Some peeling bark
T186	<i>Prunus</i> sp.	Cherry sp.	8	Fair	Peeling bark
T187	<i>Prunus</i> sp.	Cherry sp.	8	Good/fair	Minor trunk wounds
T188	<i>Prunus</i> sp.	Cherry sp.	9	Fair	Loose bark
T189	<i>Prunus</i> sp.	Cherry sp.	8	Fair	Loose bark
T190	<i>Prunus</i> sp.	Cherry sp.	8	Good/fair	Some peeling bark
T191	<i>Lagerstroemia indica</i>	Crape myrtle	4	Poor	Half tree dead, multistem
T192	<i>Quercus phellos</i>	Willow oak	10	Fair	Dead branches
T193	<i>Alnus</i> sp.	Alder sp.	2	Fair	Trunk wounds, multistem
T194	<i>Quercus phellos</i>	Willow oak	9	Fair	Dead branches, peeling bark at crown
T195	<i>Prunus</i> sp.	Cherry sp.	5	Fair	Peeling bark
T196	<i>Quercus phellos</i>	Willow oak	10	Fair	Trunk wounds, peeling bark
T197	<i>Quercus phellos</i>	Willow oak	11	Fair	Peeling bark, wounded branches, two stems, 6" dbh
T198	<i>Quercus phellos</i>	Willow oak	11	Fair	Peeling bark
T199	<i>Prunus</i> sp.	Cherry sp.	6	Fair	Trunk wounds
T200	<i>Prunus</i> sp.	Cherry sp.	6	Fair	Peeling bark, trunk wounds
T201	<i>Quercus phellos</i>	Willow oak	9	Fair	Peeling bark in canopy
T202	<i>Quercus phellos</i>	Willow oak	10	Good/fair	Some dead branches
T203	<i>Acer rubrum</i>	Red maple	5	Fair	Cracks in trunk
T204	<i>Acer rubrum</i>	Red maple	3	Poor	Trunk wound
T205	<i>Acer rubrum</i>	Red maple	6	Poor	Cracks in trunk
T206	<i>Acer rubrum</i>	Red maple	6	Fair	Cracks trunk
T207	<i>Acer rubrum</i>	Red maple	6	Fair	Cracks in trunk, cut branches
T208	<i>Acer rubrum</i>	Red maple	5	Fair	Broken bark
T209	<i>Acer rubrum</i>	Red maple	4	Poor	Trunk wound
T210	<i>Quercus coccinea</i>	Scarlet oak	25	Good/fair	Pruned branches, missing branches
T211	<i>Acer rubrum</i>	Red maple	4	Fair	Trunk cracks
T212	<i>Acer rubrum</i>	Red maple	5	Fair	Trunk wounds
T213	<i>Prunus serrulata</i>	Japanese flowering cherry	8	Poor	Trunk cavity
T214	<i>Prunus serrulata</i>	Japanese flowering cherry	7	Fair	Peeling bark
T215	<i>Prunus</i> sp.	Cherry sp.	6	Good	
T216	<i>Quercus acutissima</i>	Sawtooth oak	9	Poor	Hole in trunk
T217	<i>Quercus acutissima</i>	Sawtooth oak	11	Fair/poor	Peeling bark trunk wounds dead branches
T218	<i>Quercus acutissima</i>	Sawtooth oak	11	Fair/poor	Dead branches peeling bark
T219	<i>Prunus</i> sp.	Cherry sp.	5	Good	
T220	<i>Quercus acutissima</i>	Sawtooth oak	13	Fair	Peeling bark dead branches
T221	<i>Quercus acutissima</i>	Sawtooth oak	10	Fair	Peeling bark
T222	<i>Prunus</i> sp.	Cherry sp.	4	Good	Few cracks in trunk

Appendix D:  
Agency Correspondence



**Larry Hogan**, Governor  
**Boyd Rutherford**, Lt. Governor  
**Mark Belton**, Secretary  
**Joanne Throwe**, Deputy Secretary

April 26, 2017

Ms. Sarah Falcone  
Rummerl, Klepper & Kahl, LLP  
81 Mosher Street  
Baltimore, Maryland 21217

**RE: Environmental Review for US 29 Bus Rapid Transit Corridor Planning Study, MCDOT CIP #0501318, from Burtonsville Park-and-Ride to Silver Spring Transit Center, Montgomery County, Maryland.**

Dear Ms. Falcone:

The Wildlife and Heritage Service has determined that there are records of the Acuminate Crayfish (*Cambarus acuminatus*), a species with In Need of Conservation status in Maryland, documented within the study area for this project, at US 29 crossing over Northwest Branch and at Paint Branch. We would encourage the applicant to adhere stringently to all appropriate best management practices for sediment and erosion control during any work near these stream crossings, in order to reduce the likelihood of adverse impacts to the Acuminate Crayfish and other important aquatic species in these streams.

Please be sure to let us know if the limits of proposed disturbance or overall site boundaries change and we will provide you with an updated evaluation. 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  
MD Dept. of Natural Resources

ER# 2017.0595.mo  
Cc: D. Brinker, DNR



**Larry Hogan**, Governor  
**Boyd Rutherford**, Lt. Governor  
**Mark Belton**, Secretary  
**Joanne Throwe**, Deputy Secretary

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17-MIS-167

May 4<sup>th</sup>, 2017

Sarah Falcone  
RK&K  
3501 Concord Road, Suite 100  
York, PA 17402

Subject: Fisheries Information for US 29 Bus Rapid Transit Corridor Planning Study, MCDOT CIP# 0501318, Montgomery County Maryland

Dear Ms. Falcone;

The above referenced project has been reviewed to determine fisheries species near the proposed project. The proposed activities include construction of 10 stations along a corridor and the modification of existing platform at the southernmost station.

The project looks like it crosses an unnamed tributary to Paint Branch which is classified as a Use I stream, and the Northwest Branch of the Anacostia River which is classified as a Use IV stream. In general, no in-stream work may occur in Use I streams between March 1<sup>st</sup> through June 15<sup>th</sup> and in Use IV streams between March 1<sup>st</sup> through May 31<sup>st</sup> of any given year, to protect spawning fish.

DNR has documented many resident fish species from both Paint Branch and the Anacostia and its tributaries by our Maryland Biological Stream Survey. MBSS data can be accessed via the MDDNR web page at <http://streamhealth.maryland.gov>, allowing access to resource surveys.

If you have any further questions, please feel free to contact me at 410 260-8736.

Sincerely;

Christopher Aadland  
Environmental Review Program



**United States Department of the Interior**  
U.S. Fish & Wildlife Service  
Chesapeake Bay Field Office  
177 Admiral Cochrane Drive  
Annapolis, MD 21401  
410/573 4575



## Online Certification Letter

Today's date: March 22, 2017

Project: Consultation Code: 05E2CB00-2017-SLI-0974  
Event Code: 05E2CB00-2017-E-01801  
Project Name: US 29 BRT Improvements Project

Dear Applicant for online certification:

Thank you for using the U.S. Fish and Wildlife Service (Service) Chesapeake Bay Field Office online project review process. By printing this letter in conjunction with your project review package, you are certifying that you have completed the online project review process for the referenced project in accordance with all instructions provided, using the best available information to reach your conclusions. This letter, and the enclosed project review package, completes the review of your project in accordance with the Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884), as amended (ESA). This letter also provides information for your project review under the National Environmental Policy Act of 1969 (P.L. 91-190, 42 U.S.C. 4321-4347, 83 Stat. 852), as amended. A copy of this letter and the project review package must be submitted to this office for this certification to be valid. This letter and the project review package will be maintained in our records.

Based on this information and in accordance with section 7 of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.), we certify that except for occasional transient individuals, no federally proposed or listed endangered or threatened species are known to exist within the project 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 additional information on threatened or endangered species in Maryland, you should contact the Maryland Wildlife and Heritage Division at (410) 260-8573. For information in Delaware you should contact the Delaware Division of Fish and Wildlife, Wildlife Species Conservation and Research Program at (302) 735-8658. For information in the District of Columbia, you should contact the National Park Service at (202) 339-8309.

The U.S. Fish and Wildlife Service also works with other Federal agencies and states to minimize loss of wetlands, reduce impacts to fish and migratory birds, including bald eagles, and restore habitat for wildlife. Information on these conservation issues and how development projects can avoid affecting these resources can be found on our website ([www.fws.gov/chesapeakebay](http://www.fws.gov/chesapeakebay))

We appreciate the opportunity to provide information relative to fish and wildlife issues, and thank you for your interest in these resources. If you have any questions or need further assistance, please contact Chesapeake Bay Field Office Threatened and Endangered Species program at (410) 573-4527.

Sincerely,

Genevieve LaRouche  
Field Supervisor



# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Chesapeake Bay Ecological Services Field Office  
177 Admiral Cochrane Drive  
Annapolis, MD 21401-7307  
Phone: (410) 573-4599 Fax: (410) 266-9127

<http://www.fws.gov/chesapeakebay/>  
<http://www.fws.gov/chesapeakebay/endsppweb/ProjectReview/Index.html>

In Reply Refer To:

March 22, 2017

Consultation Code: 05E2CB00-2017-SLI-0974

Event Code: 05E2CB00-2017-E-01801

Project Name: US 29 BRT Improvements Project

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. This species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having

similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.), and projects affecting these species may require development of an eagle conservation plan ([http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at:

<http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>;

<http://www.towerkill.com>; and

<http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
  - USFWS National Wildlife Refuges and Fish Hatcheries
  - Wetlands
-

## Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Chesapeake Bay Ecological Services Field Office**

177 Admiral Cochrane Drive

Annapolis, MD 21401-7307

(410) 573-4599

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## Project Summary

Consultation Code: 05E2CB00-2017-SLI-0974

Event Code: 05E2CB00-2017-E-01801

Project Name: US 29 BRT Improvements Project

Project Type: TRANSPORTATION

Project Description: Implementation of a bus rapid transit (BRT) system along US 29. Eleven station locations will be added along 14 miles of roadway.

Project Location:

Approximate location of the project can be viewed in Google Maps:

<https://www.google.com/maps/place/39.07787592604663N76.94226229095962W>



Counties: Montgomery, MD

## Endangered Species Act Species

There is a total of 0 threatened, endangered, or candidate species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area. Please contact the designated FWS office if you have questions.

## Critical habitats

There are no critical habitats within your project area.

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# USFWS National Wildlife Refuges And Fish Hatcheries

Any activity proposed on [National Wildlife Refuge](#) lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuges or fish hatcheries within your project area.

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## Wetlands

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

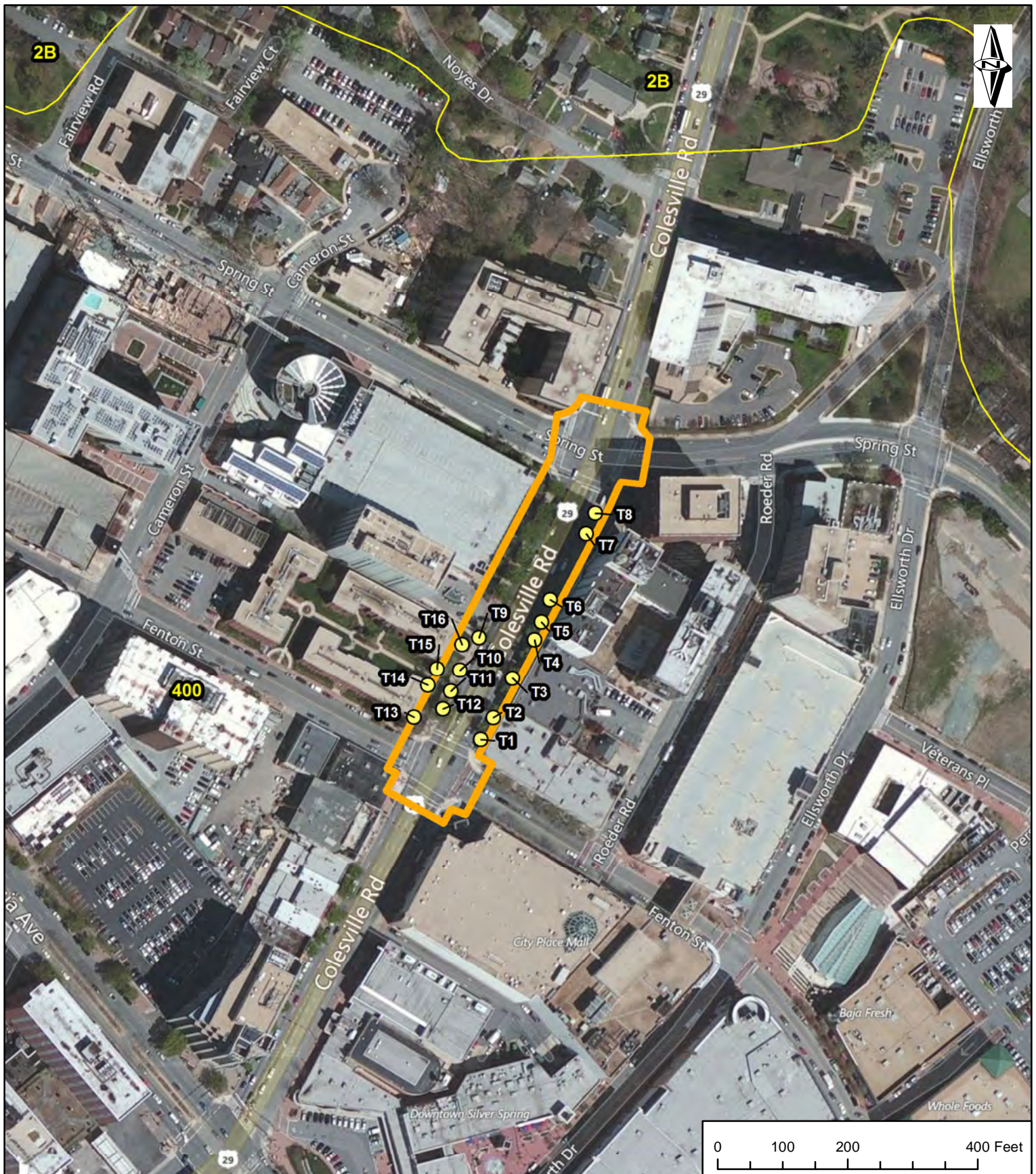
For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

There are no wetlands within your project area.

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## Appendix E: Natural Resources Figures





- Significant/Specimen Trees
- Inventoried Trees <24" DBH
- Critical Root Zone
- Study Area
- DNR Waters
- DNR Wetlands
- NWI Wetlands
- FEMA 100-Year Floodplain
- SSURGO Soils



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Montgomery County  
Department of Transportation

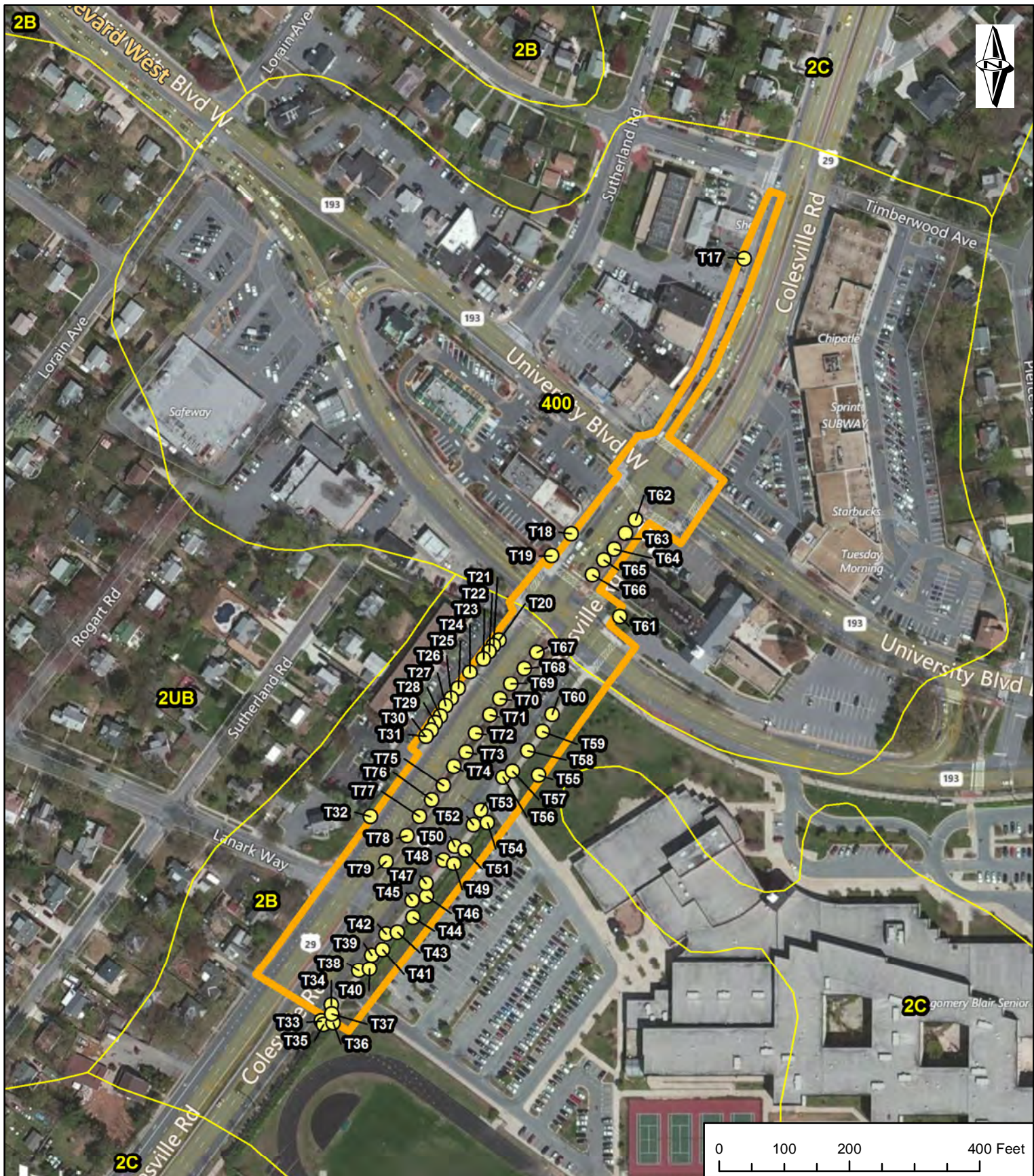
## US 29 Bus Rapid Transit

### Natural Resources


Page 1 of 10  
Fenton Street

April 2017





	Significant/Specimen Trees		DNR Wetlands
	Inventoried Trees <24" DBH		NWI Wetlands
	Critical Root Zone		FEMA 100-Year Floodplain
	Study Area		SSURGO Soils
	DNR Waters		

  
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**US 29**  
**Bus Rapid Transit**



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**Natural Resources**  
 Page 2 of 10  
 University Boulevard  
 April 2017



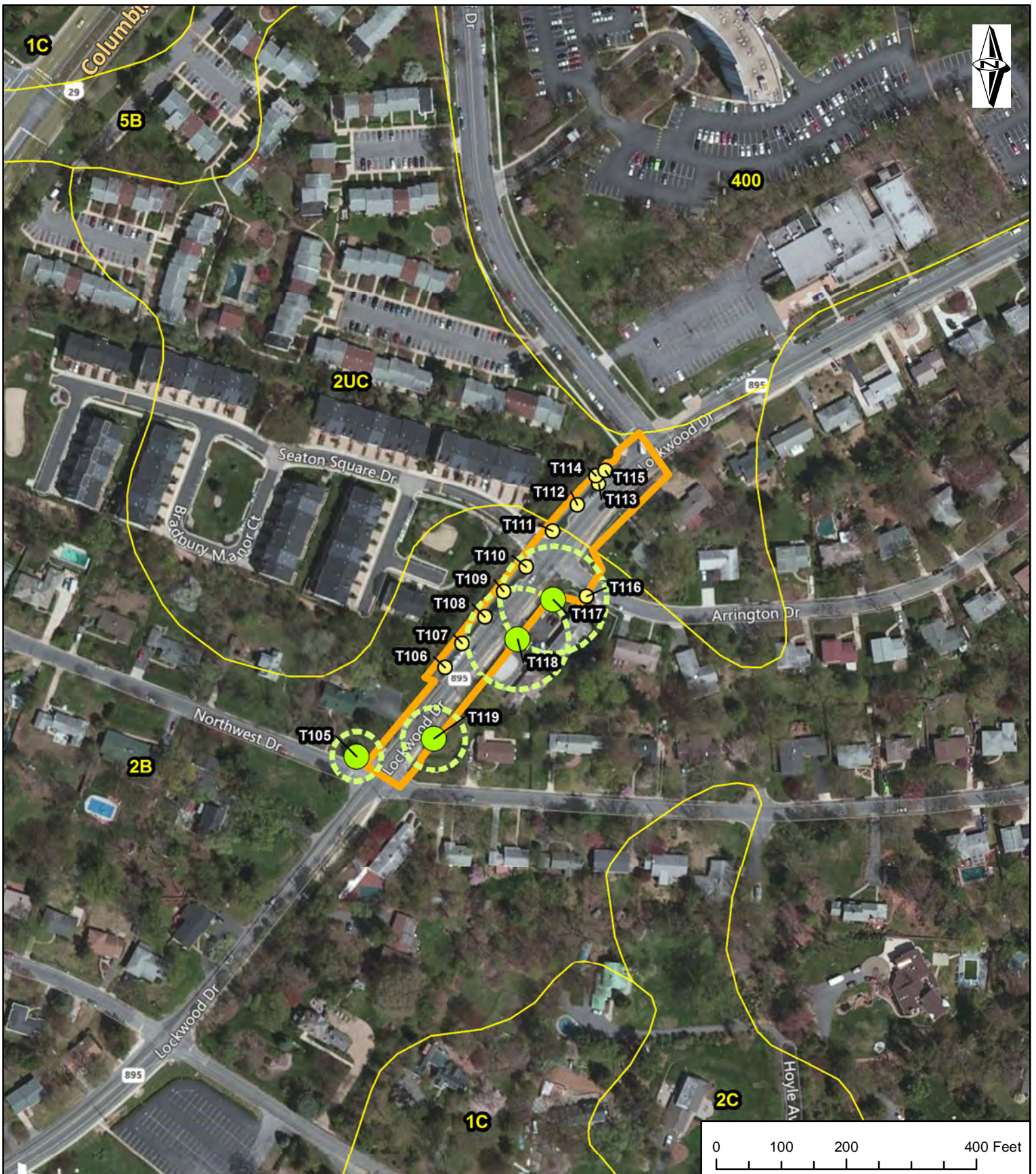


	Significant/Specimen Trees		DNR Wetlands
	Inventoried Trees <24" DBH		NWI Wetlands
	Critical Root Zone		FEMA 100-Year Floodplain
	Study Area		SSURGO Soils
	DNR Waters		



  
  
 Montgomery County  
 Department of Transportation

<b>US 29</b> <b>Bus Rapid Transit</b>
<b>Natural Resources</b> Page 3 of 10 Burnt Mills April 2017



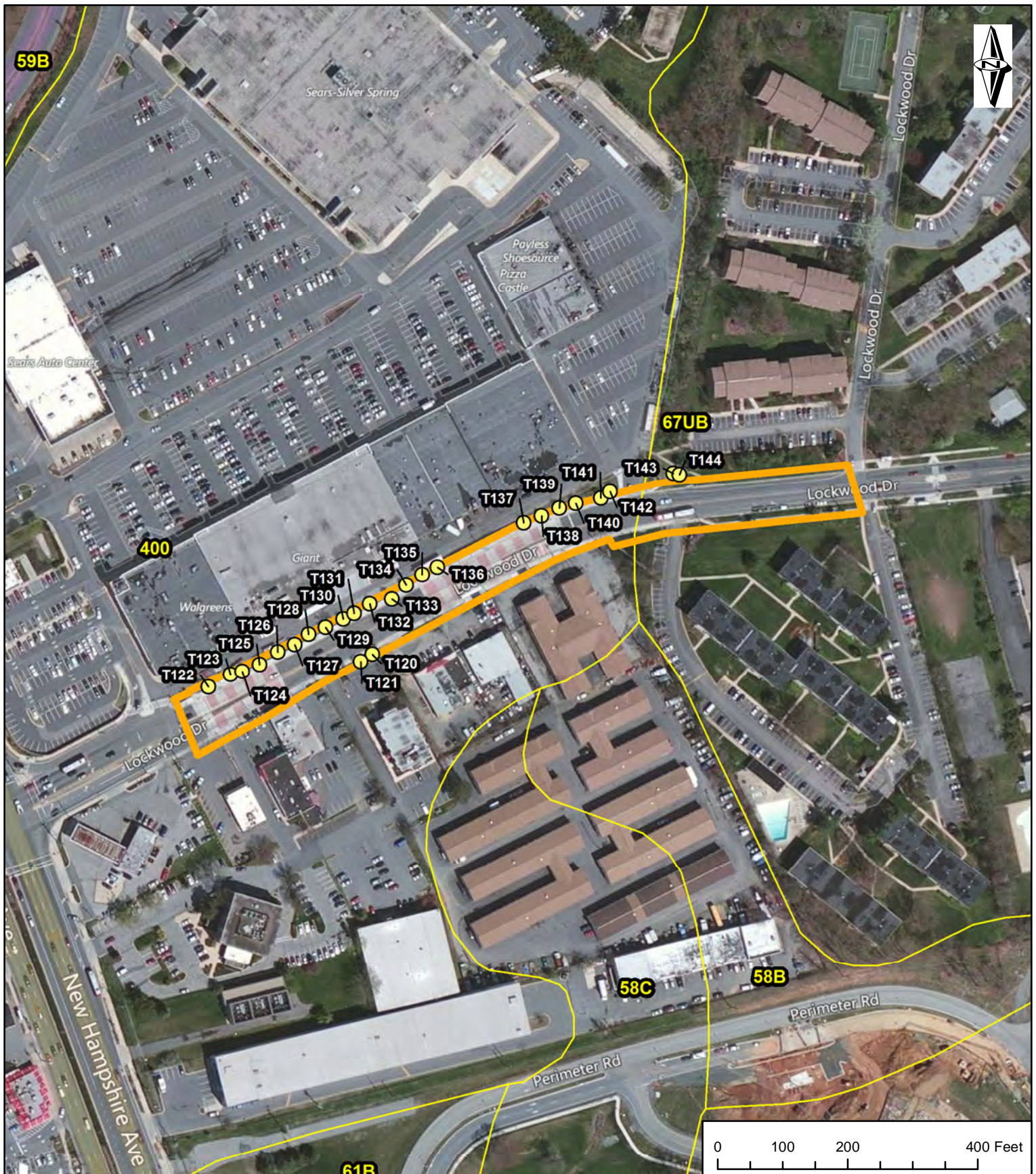


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	Inventoried Trees <24" DBH		NWI Wetlands
	Critical Root Zone		FEMA 100-Year Floodplain
	Study Area		SSURGO Soils
	DNR Waters		

  
  
 Montgomery County  
 Department of Transportation

<b>US 29</b> <b>Bus Rapid Transit</b>
<b>Natural Resources</b> Page 4 of 10 Oak Leaf Drive
April 2017





- Significant/Specimen Trees
- Inventoried Trees <24" DBH
- Critical Root Zone
- Study Area
- DNR Waters
- DNR Wetlands
- NWI Wetlands
- FEMA 100-Year Floodplain
- SSURGO Soils



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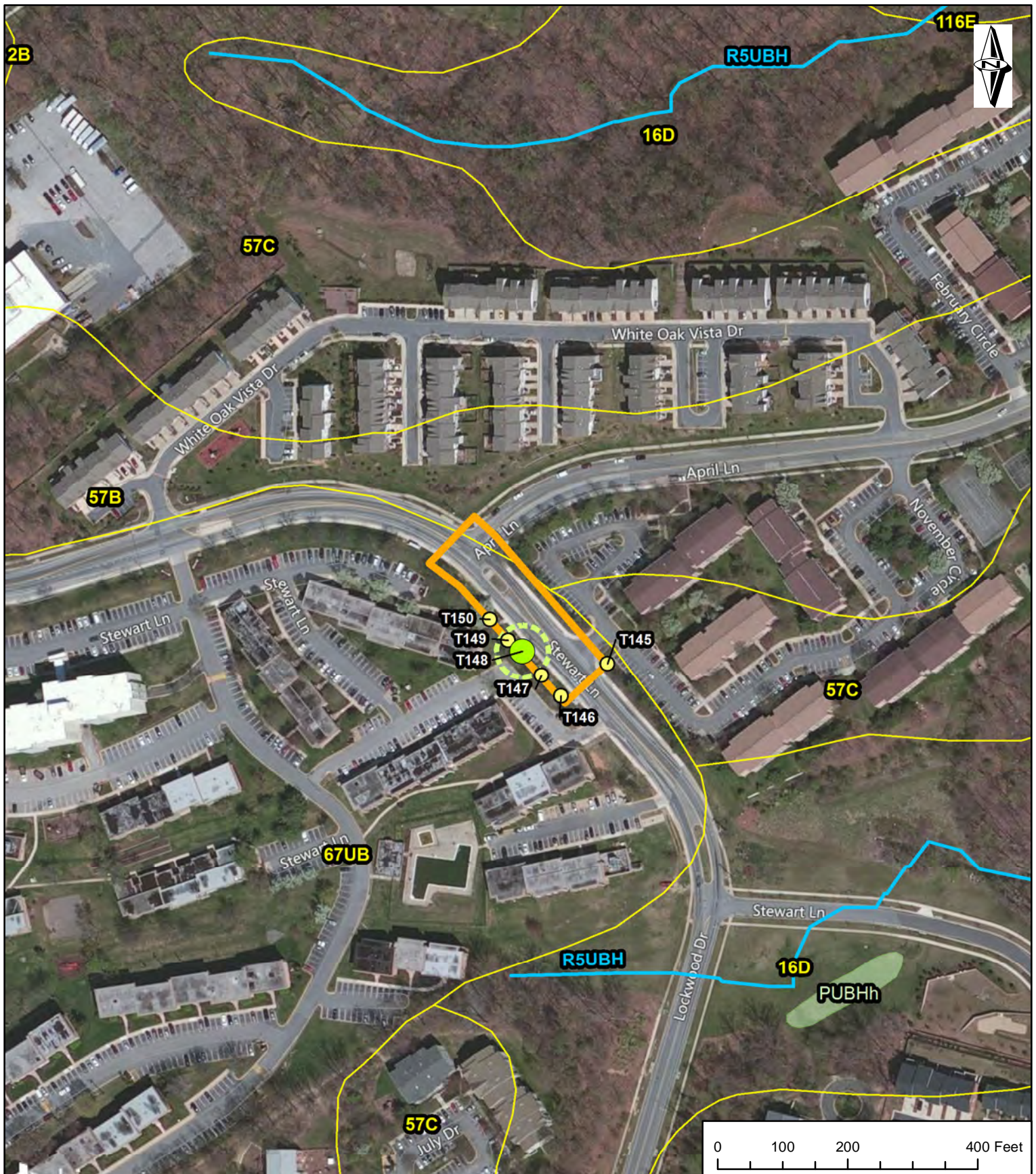
## US 29 Bus Rapid Transit

### Natural Resources

Page 5 of 10  
White Oak Transit Center

April 2017





- Significant/Specimen Trees
- Inventoried Trees <24" DBH
- Critical Root Zone
- Study Area
- DNR Waters
- DNR Wetlands
- NWI Wetlands
- FEMA 100-Year Floodplain
- SSURGO Soils



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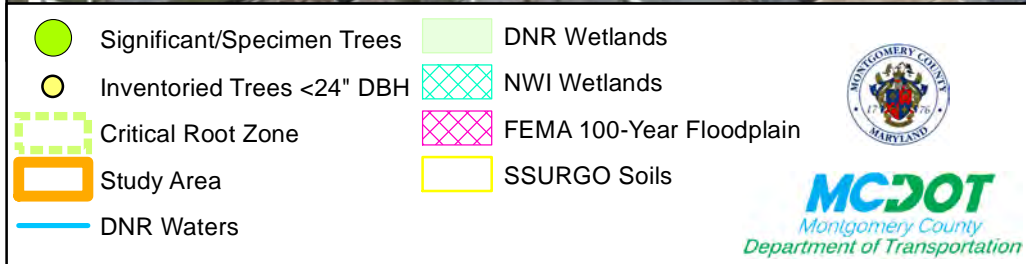
## US 29 Bus Rapid Transit

### Natural Resources

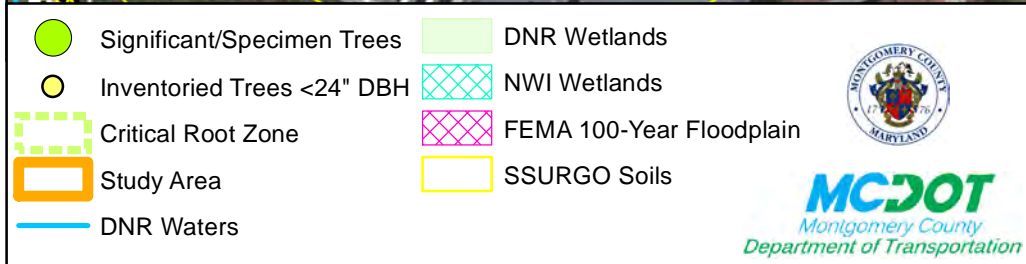
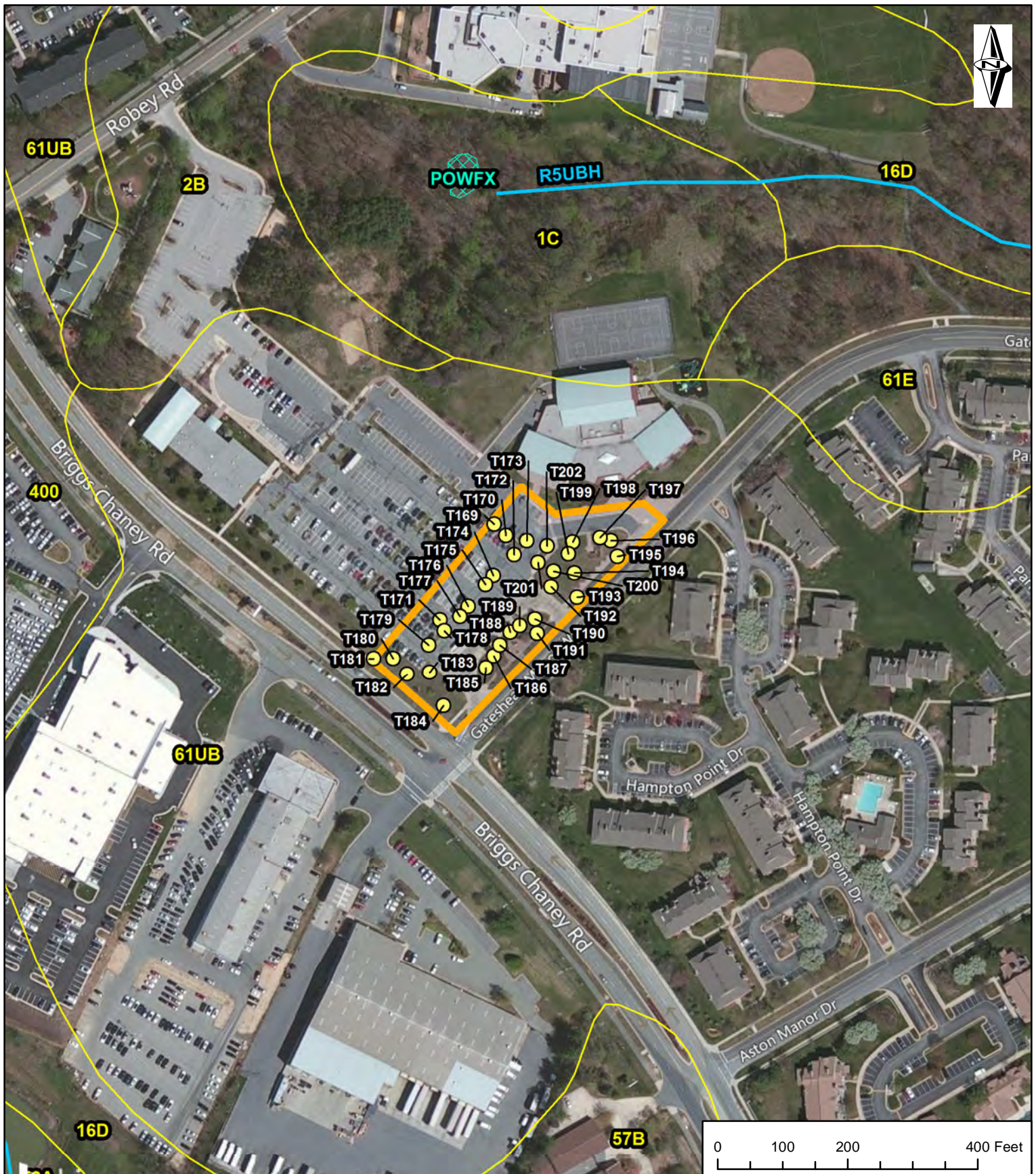
Page 6 of 10  
Stewart Lane

April 2017

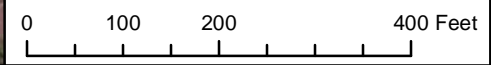










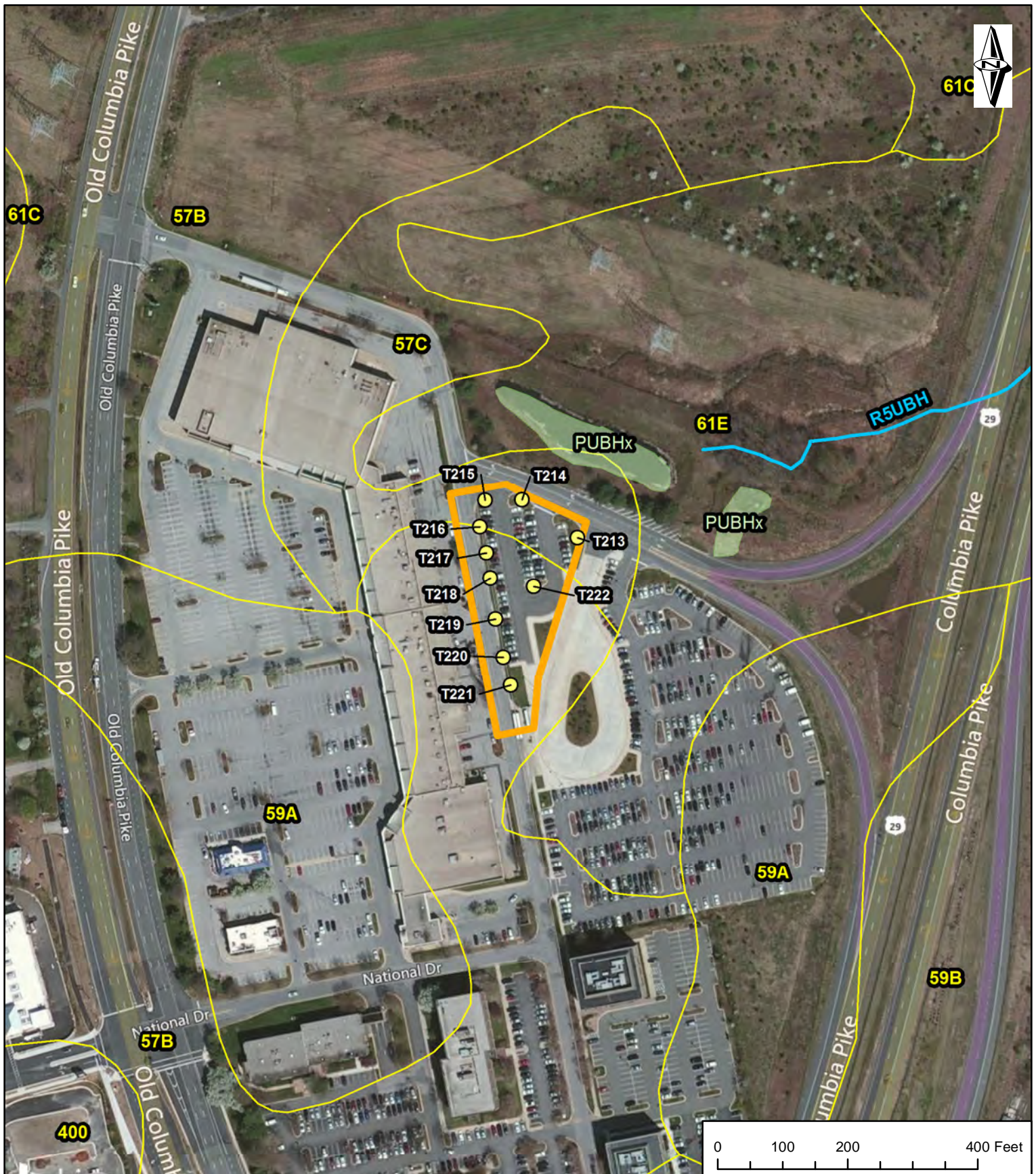




	Significant/Specimen Trees		DNR Wetlands
	Inventoried Trees <24" DBH		NWI Wetlands
	Critical Root Zone		FEMA 100-Year Floodplain
	Study Area		SSURGO Soils
	DNR Waters		

  
  
 Montgomery County  
 Department of Transportation





- Significant/Specimen Trees
- Inventoried Trees <24" DBH
- Critical Root Zone
- Study Area
- DNR Waters
- DNR Wetlands
- NWI Wetlands
- FEMA 100-Year Floodplain
- SSURGO Soils



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## US 29 Bus Rapid Transit

### Natural Resources

Page 10 of 10  
Burtonsville Park-And-Ride

April 2017

Tree ID	Scientific Name	Common Name	DBH	Condition	Comments
T1	<i>Koelreuteria paniculata</i>	Goldenrain tree	15	Good	Pruned
T2	<i>Koelreuteria paniculata</i>	Goldenrain tree	12	Good	Pruned
T3	<i>Koelreuteria paniculata</i>	Goldenrain tree	12	Fair	Crack in base of trunk
T4	<i>Koelreuteria paniculata</i>	Goldenrain tree	14	Good	Pruned
T5	<i>Koelreuteria paniculata</i>	Goldenrain tree	16	Good/fair	Moderate dead wood
T6	<i>Koelreuteria paniculata</i>	Goldenrain tree	16	Fair	Significant dead wood
T7	<i>Koelreuteria paniculata</i>	Goldenrain tree	16	Good/fair	Pruned, minor dead wood
T8	<i>Koelreuteria paniculata</i>	Goldenrain tree	3	Good	
T9	<i>Koelreuteria paniculata</i>	Goldenrain tree	14	Good	Pruned
T10	<i>Koelreuteria paniculata</i>	Goldenrain tree	10	Good/fair	Pruned , minor dead wood
T11	<i>Koelreuteria paniculata</i>	Goldenrain tree	14	Good/fair	Pruned , moderate dead wood
T12	<i>Koelreuteria paniculata</i>	Goldenrain tree	20	Good/fair	Pruned , minor dead wood
T13	<i>Betula</i> sp.	Birch sp.	18	Good	Pruned
T14	<i>Juniperus virginiana</i>	Eastern redcedar	15	Fair	Minor dead wood and broken branches
T15	<i>Juniperus virginiana</i>	Eastern redcedar	23	Fair	Minor trunk wound, uneven crown, minor broken branches
T16	<i>Acer rubrum</i>	Red maple	8	Good	
T17	<i>Juglans nigra</i>	Black walnut	4	Good/fair	Pruned, minor broken branches, split below 4.5', DBH 3 and 4
T18	<i>Platanus occidentalis</i>	Sycamore	11	Good/fair	Suckering
T19	<i>Platanus occidentalis</i>	Sycamore	9	Good/fair	
T20	<i>Lagerstroemia indica</i>	Crape myrtle	2	Good	
T21	<i>Lagerstroemia indica</i>	Crape myrtle	2	Good	
T22	<i>Lagerstroemia indica</i>	Crape myrtle	2	Good	
T23	<i>Lagerstroemia indica</i>	Crape myrtle	2	Good	
T24	<i>Lagerstroemia indica</i>	Crape myrtle	2	Good	
T25	<i>Lagerstroemia indica</i>	Crape myrtle	2	Good	
T26	<i>Lagerstroemia indica</i>	Crape myrtle	2	Good	
T27	<i>Lagerstroemia indica</i>	Crape myrtle	2	Good	
T28	<i>Lagerstroemia indica</i>	Crape myrtle	2	Good	
T29	<i>Lagerstroemia indica</i>	Crape myrtle	2	Good	
T30	<i>Lagerstroemia indica</i>	Crape myrtle	2	Good	
T31	<i>Lagerstroemia indica</i>	Crape myrtle	2	Good	
T32	<i>Malus</i> sp.	Crabapple sp.	20	Good	Pruned
T33	<i>Platanus x acerifolia</i>	London planetree	8	Good	
T34	<i>Platanus x acerifolia</i>	London planetree	6	Good	
T35	<i>Juniperus virginiana</i>	Eastern redcedar	6	Good	Multistem (4), btwn 5&6"
T36	<i>Juniperus virginiana</i>	Eastern redcedar	9	Good	Multistem (3 main)
T37	<i>Juniperus virginiana</i>	Eastern redcedar	9	Good	Multistem (4 main), btwn 6&9"
T38	<i>Platanus x acerifolia</i>	London planetree	8	Good	
T39	<i>Platanus x acerifolia</i>	London planetree	9	Good	
T40	<i>Lagerstroemia indica</i>	Crape myrtle	3	Good	Multistem (3)
T41	<i>Lagerstroemia indica</i>	Crape myrtle	3	Good	Multistem (3), btwn 2&3"
T42	<i>Platanus x acerifolia</i>	London planetree	6	Good	
T43	<i>Lagerstroemia indica</i>	Crape myrtle	3	Good	Multistem (3)
T44	<i>Lagerstroemia indica</i>	Crape myrtle	3	Good	Multistem (3), btwn 2&3"
T45	<i>Platanus x acerifolia</i>	London planetree	6	Good	



T46	<i>Pyrus calleryana</i>	Bradford pear	3	Poor	Almost dead
T47	<i>Platanus x acerifolia</i>	London planetree	10	Good	Slight lean
T48	<i>Platanus x acerifolia</i>	London planetree	4	Fair	Significant lean
T49	<i>Pyrus calleryana</i>	Bradford pear	3	Good	
T50	<i>Platanus x acerifolia</i>	London planetree	3	Good	Split below 4.5', both 3"
T51	<i>Pyrus calleryana</i>	Bradford pear	3	Good	
T52	<i>Platanus x acerifolia</i>	London planetree	5	Good	
T53	<i>Platanus x acerifolia</i>	London planetree	7	Good	
T54	<i>Malus</i> sp.	Crabapple sp.	7	Good	Split, DBH 6&7"
T55	<i>Acer rubrum</i>	Red maple	8	Good/fair	Root damage
T56	<i>Platanus x acerifolia</i>	London planetree	9	Good	
T57	<i>Platanus x acerifolia</i>	London planetree	8	Good	
T58	<i>Platanus x acerifolia</i>	London planetree	8	Fair	Significant trunk wound and decay
T59	<i>Platanus x acerifolia</i>	London planetree	8	Good	
T60	<i>Platanus x acerifolia</i>	London planetree	9	Good	
T61	<i>Koelreuteria paniculata</i>	Goldenrain tree	14	Good	
T62	<i>Platanus x acerifolia</i>	London planetree	7	Good	
T63	<i>Platanus x acerifolia</i>	London planetree	3	Good	
T64	<i>Platanus x acerifolia</i>	London planetree	8	Good/fair	Trunk wound at base
T65	<i>Platanus x acerifolia</i>	London planetree	3	Good	
T66	<i>Platanus x acerifolia</i>	London planetree	3	Good	
T67	<i>Platanus x acerifolia</i>	London planetree	10	Good/fair	Slight lean
T68	<i>Platanus x acerifolia</i>	London planetree	9	Good	
T69	<i>Platanus x acerifolia</i>	London planetree	10	Good/fair	Slight lean, minor dead wood
T70	<i>Platanus x acerifolia</i>	London planetree	6	Good	
T71	<i>Platanus x acerifolia</i>	London planetree	10	Good	
T72	<i>Platanus x acerifolia</i>	London planetree	8	Good	
T73	<i>Platanus x acerifolia</i>	London planetree	7	Good/fair	Minor trunk wound and decay
T74	<i>Platanus x acerifolia</i>	London planetree	8	Good	
T75	<i>Platanus x acerifolia</i>	London planetree	3	Good	
T76	<i>Platanus x acerifolia</i>	London planetree	3	Good	
T77	<i>Platanus x acerifolia</i>	London planetree	3	Good	
T78	<i>Platanus x acerifolia</i>	London planetree	3	Good	
T79	<i>Platanus x acerifolia</i>	London planetree	3	Fair	Broken leader
T80	<i>Prunus mahaleb</i>	Mahaleb cherry	12	Good/fair	Minor dead wood and broken branches
T81	<i>Prunus mahaleb</i>	Mahaleb cherry	9	Good/fair	Minor dead wood and broken branches
T82	<i>Prunus mahaleb</i>	Mahaleb cherry	13	Good/fair	Minor dead wood and broken branches
T83	<i>Prunus mahaleb</i>	Mahaleb cherry	10	Good/fair	Minor dead wood and broken branches
T84	<i>Prunus mahaleb</i>	Mahaleb cherry	12	Good	
T85	<i>Prunus mahaleb</i>	Mahaleb cherry	14	Poor	Major trunk wound and decay, broken branches
T86	<i>Acer rubrum</i>	Red maple	8	Good/fair	Included bark
T87	<i>Quercus phellos</i>	Willow oak	11	Good/fair	Pruned, minor dead wood and broken branches
T88	<i>Quercus phellos</i>	Willow oak	17	Good	
T89	<i>Quercus phellos</i>	Willow oak	26	Fair	Heavily pruned (leader pruned), moderate dead wood
T90	<i>Quercus phellos</i>	Willow oak	16	Good/fair	Pruned, uneven crown



T91	<i>Quercus phellos</i>	Willow oak	21	Good	Pruned
T92	<i>Quercus phellos</i>	Willow oak	13	Fair	Uneven crown, many broken branches
T93	<i>Quercus phellos</i>	Willow oak	16	Good/fair	Pruned, uneven crown
T94	<i>Quercus phellos</i>	Willow oak	16	Good/fair	Pruned, uneven crown
T95	<i>Liriodendron tulipifera</i>	Tulip poplar	23	Fair/poor	Broken leader, moderate broken branches, vines, lean
T96	<i>Quercus alba</i>	White oak	39	Good	Flag hung on barbed wire
T97	<i>Juglans nigra</i>	Black walnut	9	Fair	Pruned, uneven crown, vines
T98	<i>Quercus alba</i>	White oak	39	Good/fair	Minor broken branches, vines
T99	<i>Quercus rubra</i>	Northern red oak	32	Good/fair	Lean, vines
T100	<i>Koelreuteria paniculata</i>	Goldenrain tree	4	Good/fair	Minor trunk wound and decay
T101	<i>Quercus phellos</i>	Willow oak	21	Fair	Heavily pruned, uneven crown
T102	<i>Quercus phellos</i>	Willow oak	19	Good	Willow oak?
T103	<i>Quercus phellos</i>	Willow oak	28	Good/fair	Pruned, exposed roots
T104	<i>Quercus rubra</i>	Northern red oak	26	Good/fair	Pruned, minor broken branches
T105	<i>Picea abies</i>	Norway spruce	25	Fair	Lean, moderate dead wood and broken branches, pruned
T106	<i>Quercus phellos</i>	Willow oak	11	Good	
T107	<i>Quercus phellos</i>	Willow oak	5	Good	
T108	<i>Quercus phellos</i>	Willow oak	7	Good	
T109	<i>Quercus phellos</i>	Willow oak	5	Good	
T110	<i>Quercus phellos</i>	Willow oak	6	Good	
T111	<i>Quercus rubra</i>	Northern red oak	5	Good	
T112	<i>Quercus rubra</i>	Northern red oak	12	Good	
T113	<i>Quercus rubra</i>	Northern red oak	14	Good	
T114	<i>Juniperus virginiana</i>	Eastern redcedar	8	Fair	Twin, smaller dbh 6", uneven crown, lean, vines
T115	<i>Juniperus virginiana</i>	Eastern redcedar	8	Fair	Multistem (3) - 6", 8", 4" dbh, vines, uneven crown
T116	<i>Acer rubrum</i>	Red maple	10	Good/fair	Sapsucker holes
T117	<i>Acer saccharinum</i>	Silver maple	55	Fair/poor	Heavily pruned (pruned leader), exposed roots, included bark, dead wood
T118	<i>Acer saccharinum</i>	Silver maple	52	Fair	Vines into crown, heavily pruned, dead branches
T119	<i>Fraxinus pennsylvanica</i>	Green ash	32	Good/fair	Pruned, minor dead wood, exposed roots
T120	<i>Prunus</i> sp.	Cherry sp.	5	Good	
T121	<i>Prunus</i> sp.	Cherry sp.	5	Good	
T122	<i>Prunus</i> sp.	Cherry sp.	6	Good	
T123	<i>Prunus serrulata</i>	Japanese flowering cherry	7	Good	
T124	<i>Prunus serrulata</i>	Japanese flowering cherry	6	Good	
T125	<i>Prunus serrulata</i>	Japanese flowering cherry	6	Fair	
T126	<i>Prunus serrulata</i>	Japanese flowering cherry	6	Good	
T127	<i>Prunus serrulata</i>	Japanese flowering cherry	5	Good	
T128	<i>Prunus serrulata</i>	Japanese flowering cherry	6	Good/fair	
T129	<i>Prunus serrulata</i>	Japanese flowering cherry	6	Fair	Trunk hole
T130	<i>Prunus serrulata</i>	Japanese flowering cherry	5	Fair	Trunk wounds
T131	<i>Prunus serrulata</i>	Japanese flowering cherry	5	Good/fair	
T132	<i>Prunus serrulata</i>	Japanese flowering cherry	5	Good	
T133	<i>Prunus serrulata</i>	Japanese flowering cherry	5	Good/fair	Trunk wounds
T134	<i>Prunus serrulata</i>	Japanese flowering cherry	5	Good	
T135	<i>Prunus serrulata</i>	Japanese flowering cherry	5	Good	

T136	<i>Prunus serrulata</i>	Japanese flowering cherry	6	Good/fair	Exposed roots
T137	<i>Prunus serrulata</i>	Japanese flowering cherry	4	Fair	Hole, missing bark
T138	<i>Prunus serrulata</i>	Japanese flowering cherry	5	Poor	Cavity
T139	<i>Prunus serrulata</i>	Japanese flowering cherry	5	Good/fair	
T140	<i>Prunus serrulata</i>	Japanese flowering cherry	6	Good	
T141	<i>Prunus serrulata</i>	Japanese flowering cherry	6	Good/fair	Missing bark
T142	<i>Prunus serrulata</i>	Japanese flowering cherry	6	Good	
T143	<i>Pinus strobus</i>	Eastern white pine	7	Good	
T144	<i>Pinus strobus</i>	Eastern white pine	8	Good	Split trunk, 7 smallest
T145	<i>Quercus coccinea</i>	Scarlet oak	15	Good	
T146	<i>Quercus coccinea</i>	Scarlet oak	19	Poor	Exposed roots, dead branches, trunk wounds, cut canopy
T147	<i>Quercus coccinea</i>	Scarlet oak	21	Poor	Exposed roots, dead branches, cut canopy
T148	<i>Quercus coccinea</i>	Scarlet oak	27	Fair/poor	Broken canopy
T149	<i>Quercus coccinea</i>	Scarlet oak	17	Fair	
T150	<i>Malus</i> sp.	Crabapple sp.	21	Good	Trunk wounds from pruning
T151	<i>Diospyros virginiana</i>	Common persimmon	12	Poor	Multistem btwn 7&8" dbh, heavy vines, dead branches,
T152	<i>Quercus rubra</i>	Northern red oak	17	Poor	Twin, smaller dbh 16", heavy vines, cut canopy
T153	<i>Liriodendron tulipifera</i>	Tulip poplar	21	Poor	Twin, smaller dbh 17", abnormal growth pattern, cut canopy, vines
T154	<i>Quercus rubra</i>	Northern red oak	14	Poor	Twin, smaller dbh 12", heavy vines, trunk wounds, cut canopy
T155	<i>Acer rubrum</i>	Red maple	18	Poor	4 stems - 13", 4", 5", trunk wounds, heavily pruned
T156	<i>Quercus laevis</i>	Turkey oak	10	Poor	Heavy vines completely cover trunk, dead branches
T157	<i>Juniperus virginiana</i>	Eastern redcedar	12	Good	Twin, smaller dbh 10"
T158	<i>Prunus</i> sp.	Cherry sp.	8	Good/fair	Multistem, btwn 2&3", trunk wounds
T159	<i>Quercus rubra</i>	Northern red oak	9	Good	
T160	<i>Juniperus virginiana</i>	Eastern redcedar	12	Good	
T161	<i>Juniperus virginiana</i>	Eastern redcedar	8	Good	Three stems, all 8" dbh
T162	<i>Juniperus virginiana</i>	Eastern redcedar	10	Good	Two stems, 7" dbh
T163	<i>Acer rubrum</i>	Red maple	17	Good/fair	Some dead branches
T164	<i>Acer rubrum</i>	Red maple	18	Fair	Dead branches, exposed roots
T165	<i>Fraxinus pennsylvanica</i>	Green ash	17	Fair	Dead branches
T166	<i>Morus rubra</i>	Red mulberry	5	Fair	10' high
T167	<i>Juniperus virginiana</i>	Eastern redcedar	6	Fair	Three stems, btwn 4&5" dbh
T168	<i>Morus rubra</i>	Red mulberry	5	Fair	
T169	<i>Fraxinus</i> sp.	Ash sp.	10	Good	
T170	<i>Fraxinus</i> sp.	Ash sp.	8	Good	
T171	<i>Quercus phellos</i>	Willow oak	8	Fair	
T172	<i>Quercus phellos</i>	Willow oak	8	Fair	Peeling bark, trunk crack, missing branches
T177	<i>Quercus phellos</i>	Willow oak	8	Fair	
T173	<i>Prunus</i> sp.	Cherry sp.	7	Good/fair	Cracked bark
T174	<i>Prunus</i> sp.	Cherry sp.	7	Good/fair	Some peeling bark
T175	<i>Prunus</i> sp.	Cherry sp.	8	Fair	Loose bark
T176	<i>Prunus</i> sp.	Cherry sp.	8	Fair	Peeling bark
T178	<i>Prunus</i> sp.	Cherry sp.	6	Good/fair	
T179	<i>Prunus</i> sp.	Cherry sp.	6	Fair	
T180	<i>Prunus</i> sp.	Cherry sp.	8	Good/fair	



T181	<i>Prunus</i> sp.	Cherry sp.	6	Fair	
T182	<i>Prunus</i> sp.	Cherry sp.	6	Good	
T183	<i>Prunus</i> sp.	Cherry sp.	6	Good	
T184	<i>Prunus</i> sp.	Cherry sp.	6	Poor	Trunk wounds
T185	<i>Prunus</i> sp.	Cherry sp.	8	Good/fair	Some peeling bark
T186	<i>Prunus</i> sp.	Cherry sp.	8	Fair	Peeling bark
T187	<i>Prunus</i> sp.	Cherry sp.	8	Good/fair	Minor trunk wounds
T188	<i>Prunus</i> sp.	Cherry sp.	9	Fair	Loose bark
T189	<i>Prunus</i> sp.	Cherry sp.	8	Fair	Loose bark
T190	<i>Prunus</i> sp.	Cherry sp.	8	Good/fair	Some peeling bark
T191	<i>Lagerstroemia indica</i>	Crape myrtle	4	Poor	Half tree dead, multistem
T192	<i>Quercus phellos</i>	Willow oak	10	Fair	Dead branches
T193	<i>Alnus</i> sp.	Alder sp.	2	Fair	Trunk wounds, multistem
T194	<i>Quercus phellos</i>	Willow oak	9	Fair	Dead branches, peeling bark at crown
T195	<i>Prunus</i> sp.	Cherry sp.	5	Fair	Peeling bark
T196	<i>Quercus phellos</i>	Willow oak	10	Fair	Trunk wounds, peeling bark
T197	<i>Quercus phellos</i>	Willow oak	11	Fair	Peeling bark, wounded branches, two stems, 6"dbh
T198	<i>Quercus phellos</i>	Willow oak	11	Fair	Peeling bark
T199	<i>Prunus</i> sp.	Cherry sp.	6	Fair	Trunk wounds
T200	<i>Prunus</i> sp.	Cherry sp.	6	Fair	Peeling bark, trunk wounds
T201	<i>Quercus phellos</i>	Willow oak	9	Fair	Peeling bark in canopy
T202	<i>Quercus phellos</i>	Willow oak	10	Good/fair	Some dead branches
T203	<i>Acer rubrum</i>	Red maple	5	Fair	Cracks in trunk
T204	<i>Acer rubrum</i>	Red maple	3	Poor	Trunk wound
T205	<i>Acer rubrum</i>	Red maple	6	Poor	Cracks in trunk
T206	<i>Acer rubrum</i>	Red maple	6	Fair	Cracks trunk
T207	<i>Acer rubrum</i>	Red maple	6	Fair	Cracks in trunk, cut branches
T208	<i>Acer rubrum</i>	Red maple	5	Fair	Broken bark
T209	<i>Acer rubrum</i>	Red maple	4	Poor	Trunk wound
T210	<i>Quercus coccinea</i>	Scarlet oak	25	Good/fair	Pruned branches, missing branches
T211	<i>Acer rubrum</i>	Red maple	4	Fair	Trunk cracks
T212	<i>Acer rubrum</i>	Red maple	5	Fair	Trunk wounds
T213	<i>Prunus serrulata</i>	Japanese flowering cherry	8	Poor	Trunk cavity
T214	<i>Prunus serrulata</i>	Japanese flowering cherry	7	Fair	Peeling bark
T215	<i>Prunus</i> sp.	Cherry sp.	6	Good	
T216	<i>Quercus acutissima</i>	Sawtooth oak	9	Poor	Hole in trunk
T217	<i>Quercus acutissima</i>	Sawtooth oak	11	Fair/poor	Peeling bark trunk wounds dead branches
T218	<i>Quercus acutissima</i>	Sawtooth oak	11	Fair/poor	Dead branches peeling bark
T219	<i>Prunus</i> sp.	Cherry sp.	5	Good	
T220	<i>Quercus acutissima</i>	Sawtooth oak	13	Fair	Peeling bark dead branches
T221	<i>Quercus acutissima</i>	Sawtooth oak	10	Fair	Peeling bark
T222	<i>Prunus</i> sp.	Cherry sp.	4	Good	Few cracks in trunk