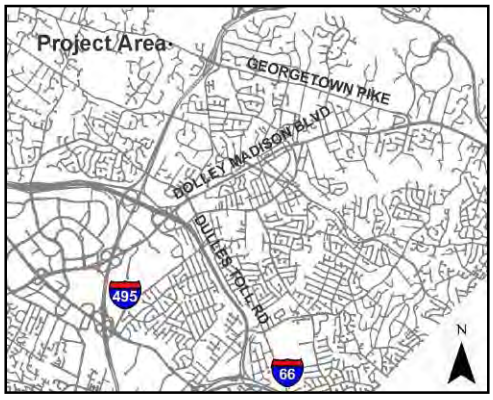
Project: SC9105 BMP Retrofit Project



Vicinity Map

Address: 7410 Georgetown Court
Location: Swinks Mill Neighborhood
Land Owner: Private Residential
PIN: 0213 20 0009
County Facility ID: 0109DP
Control Type: Water Quality
Drainage Area: 42.7 acres
Stream Name: Unnamed tributary to Scotts Run

Description: Retrofit the pond by modifying the outlet structure to detain a portion of the one-year storm event and adding a shallow wetland.

Potential Benefits: An estimated 2.8 lbs/yr of phosphorus will be removed and some wetland habitat will be provided. Approximately 40 percent of the runoff from the one-year storm event will be stored to control the peak flow and help reduce erosion in the downstream channel.

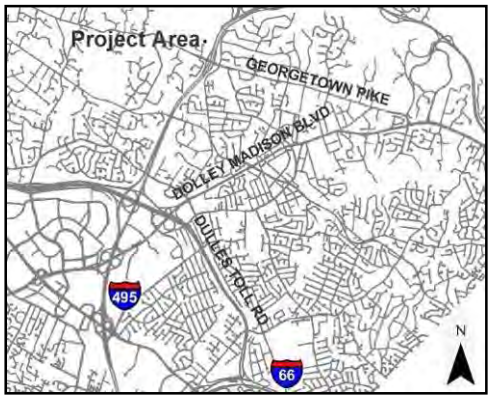
Project Design Considerations: Stream Restoration Project SC9204 is immediately downstream of this facility. Coordination and sequencing of these projects should be considered. There are minimal permitting requirements for this project. The facility can be accessed from Georgetown Court and no easement will be required. Impacts to trees will be minimized.

Project Area Map

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP Retrofit and Incidentals	1	LS	$11,000.00	$11,000.00
Grading and Excavation	400	CY	$35.00	$14,000.00
Shallow Wetland	150	SY	$2.00	$300.00
Erosion and Sediment Control	1	LS	$3,000.00	$3,000.00
Landscaping	1	LS	$2,000.00	$2,000.00
			Base Construction Cost	$30,300.00
			Mobilization (5%)	$1,515.00
			Subtotal 1	$31,815.00
			Contingency (25%)	$7,953.75
			Subtotal 2	$39,768.75
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$17,895.94
			Estimated Project Cost	**$60,000.00**

Project: SC9107 BMP Retrofit Project



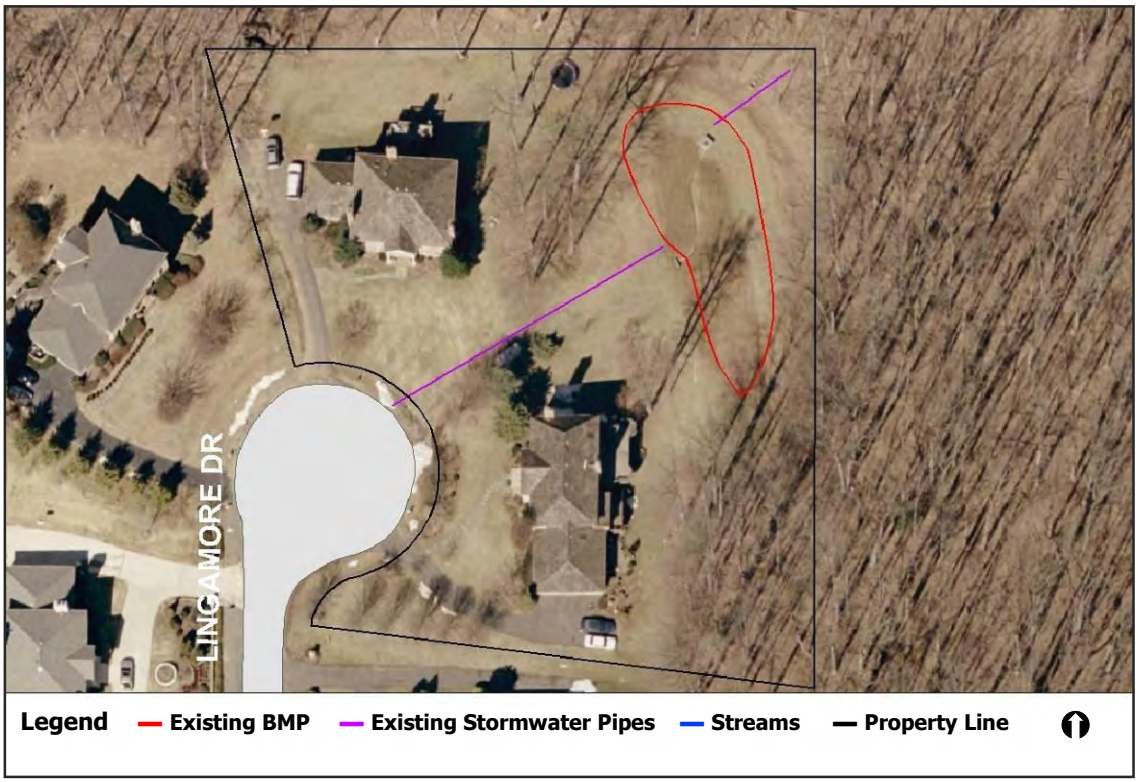
Vicinity Map

Address:	889 Linganore Drive
Location:	Linganore Neighborhood
Land Owner:	Private Residential
PIN:	0213 23 0012 and 0013
County Facility ID:	0553DP
Control Type:	Water Quantity
Drainage Area:	9.0 acres
Stream Name:	Unnamed tributary to Scotts Run

Description: The existing dry pond was designed to provide water quantity control only. Retrofit the pond by modifying the outlet structure to detain a portion of the one-year storm event and adding a shallow wetland.

Potential Benefits: An estimated 2.0 lbs/yr of phosphorus will be removed and some wetland habitat will be provided. All of the runoff from the one-year storm event will be stored to control the peak flow and help reduce erosion in the downstream channel.

Project Design Considerations: There are minimal environmental permitting requirements for this project. The facility can be accessed from Linganore Drive. An easement will not be required. Impacts to trees will be minimized.



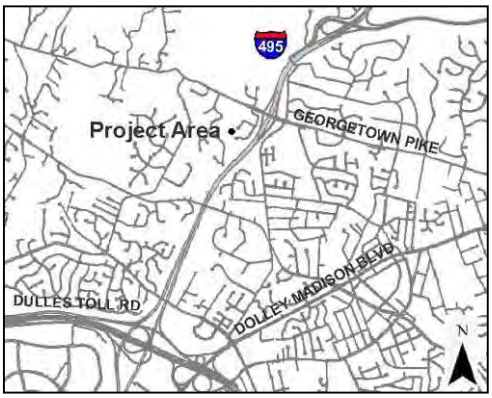
Project Area Map

Site Photo: Looking north at the pond from Linganore Drive

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP Retrofit and Incidentals	1	LS	$11,000.00	$11,000.00
Grading and Excavation	470	CY	$35.00	$16,450.00
Shallow Wetland	180	SY	$2.00	$360.00
Erosion and Sediment Control	1	LS	$3,000.00	$3,000.00
Landscaping	1	LS	$2,000.00	$2,000.00
			Base Construction Cost	$32,810.00
			Mobilization (5%)	$1,640.50
			Subtotal 1	$34,450.50
			Contingency (25%)	$8,612.63
			Subtotal 2	$43,063.13
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$10,932.47
			Estimated Project Cost	**$70,000.00**

Project: SC9108 BMP Retrofit Project



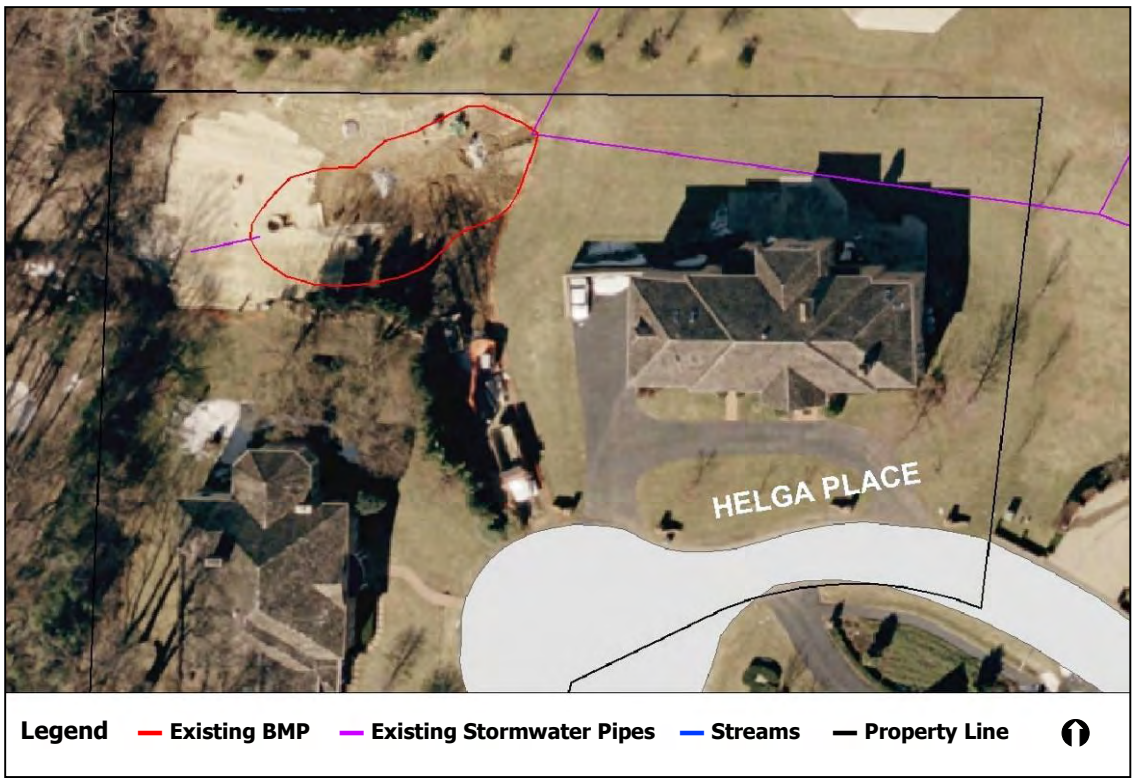
Vicinity Map

Address: 914 and 916 Helga Place
Location: Beaufort Park Neighborhood
Land Owner: Private Residential and Beaufort Park HOA
PIN: 0213 26 0015, 0016, and A
County Facility ID: 0710DP
Control Type: Water Quality
Drainage Area: 20.8 acres
Stream Name: Unnamed tributary to Scotts Run

Description: The riser is filled with trash and debris which may be affecting performance of this dry detention pond. Retrofit the pond by modifying the outlet structure to detain a portion of the one-year storm event and add a shallow wetland.

Potential Benefits: An estimated 1.4 lbs/yr of phosphorus will be removed and some wetland habitat will be provided. Approximately 41 percent of the runoff from the one-year storm event will be stored to control peak flow and help reduce erosion in the downstream channel.

Project Design Considerations: Stream Restoration Project SC9206 is immediately downstream of this facility. Coordination and sequencing of these projects should be considered. A portion of this facility is in the Chesapeake Bay Resource Protection Area which has special permitting requirements. The facility can be accessed from Helga Place and no easement will be required. Impacts to trees will be minimized.



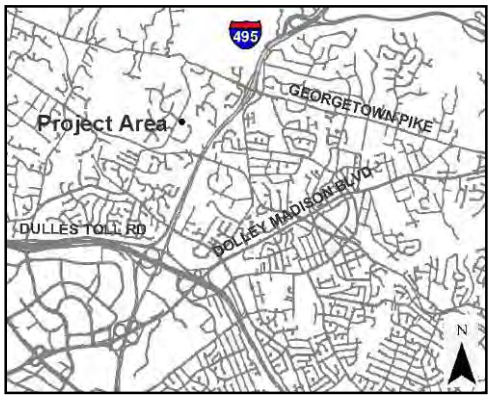
Project Area Map

Site Photo: *Facing west towards the outlet structure*

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP Retrofit and Incidentals	1	LS	$11,000.00	$11,000.00
Grading and Excavation	300	CY	$35.00	$10,500.00
Shallow Wetland	120	SY	$2.00	$240.00
Erosion and Sediment Control	1	LS	$3,000.00	$3,000.00
Landscaping	1	LS	$2,000.00	$2,000.00
			Base Construction Cost	$26,740.00
			Mobilization (5%)	$1,337.00
			Subtotal 1	$28,077.00
			Contingency (25%)	$7,019.25
			Subtotal 2	$35,096.25
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$15,793.31
			Estimated Project Cost	**$60,000.00**

Project: SC9111 BMP Retrofit Project



Vicinity Map

Address:	1009 Swinks Mill Road
Location:	Swinks Mill Neighborhood
Land Owner:	Private Residential
PIN:	0213 01 0026 and 0026F
County Facility ID:	None
Control Type:	Water Quantity
Drainage Area:	5.8 acres
Stream Name:	Scotts Run

Description: The existing dry pond was designed to provide water quantity control only. Retrofit the pond by modifying the outlet structure to detain a portion of the one-year storm event and adding a shallow wetland.

Potential Benefits: An estimated 1.3 lbs/yr of phosphorus will be removed and some wetland habitat will be provided. All of the runoff from the one-year storm event will be stored to control the peak flow and help reduce erosion in the downstream channel.

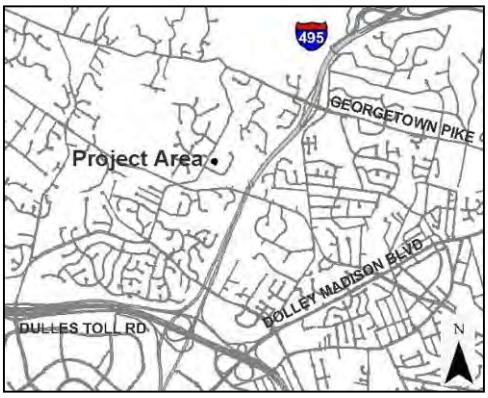
Project Design Considerations: There are minimal environmental permitting requirements for this project. The facility can be accessed from Swinks Mill Road. An easement will be required. Impacts to trees will be minimized.

Project Area Map

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP Retrofit and Incidentals	1	LS	$11,000.00	$11,000.00
Grading and Excavation	830	CY	$35.00	$29,050.00
Shallow Wetland	310	SY	$2.00	$620.00
Erosion and Sediment Control	1	LS	$3,000.00	$3,000.00
Landscaping	1	LS	$2,000.00	$2,000.00
			Base Construction Cost	$45,670.00
			Mobilization (5%)	$2,283.50
			Subtotal 1	$47,953.50
			Contingency (25%)	$11,988.38
			Subtotal 2	$59,941.88
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$26,973.84
			Estimated Project Cost	**$90,000.00**

Project: SC9112 BMP Retrofit Project



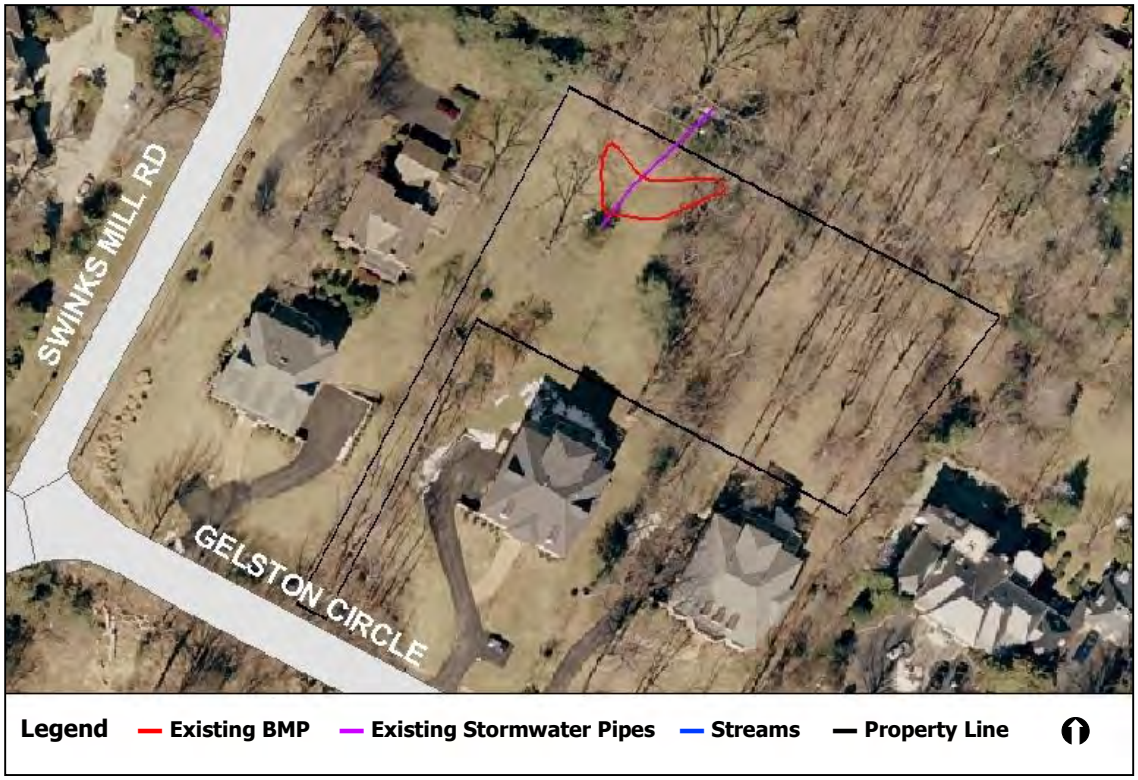
Vicinity Map

Address: 1033 Swinks Mill Road
Location: Urquhart Subdivision
Land Owner: Urquhart Subdivision Association
PIN: 0213 22 A
County Facility ID: DP0217
Control Type: Water Quantity
Drainage Area: 7.6 acres
Stream Name: Unnamed tributary to Scotts Run

Description: The existing dry detention pond was designed to provide water quantity control only. Retrofit the pond by modifying the outlet structure to provide water quality treatment and to detain the one-year storm event and adding a shallow wetland.

Potential Benefits: An estimated 1.7 lbs/yr of phosphorus will be removed and some wetland habitat will be provided. All of the runoff from the one-year storm event will be stored to control peak flow and help reduce erosion in the downstream channel.

Project Design Considerations: Stream Restoration Project SC9204 is downstream of this facility. Coordination and sequencing of these projects should be considered. This site is just upstream of BMP Retrofit Project SC9111. This project has minimal environmental permitting requirements. The facility can be accessed from Gelston Circle. An easement will be required for this project. Impacts to trees will be minimized.



Project Area Map

Site Photo: Facing northeast towards pond

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP Retrofit and Incidentals	1	LS	$11,000.00	$11,000.00
Grading and Excavation	130	CY	$35.00	$4,550.00
Shallow Wetland	50	SY	$2.00	$100.00
Erosion and Sediment Control	1	LS	$3,000.00	$3,000.00
Landscaping	1	LS	$2,000.00	$2,000.00
			Base Construction Cost	$20,650.00
			Mobilization (5%)	$1,032.50
			Subtotal 1	$21,682.50
			Contingency (25%)	$5,420.63
			Subtotal 2	$27,103.13
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$12,196.41
			Estimated Project Cost	**$40,000.00**

Project: SC9114 BMP Retrofit Project

Vicinity Map

Address: 1106 Mill Ridge
Location: Swinks Mill Woods Neighborhood
Land Owner: Private Residential and Reserve HOA
PIN: 0204 24 0013, 0014, and 204 29 A
County Facility ID: 0918DP
Control Type: Water Quantity
Drainage Area: 17.0 acres
Stream Name: Unnamed tributary to Scotts Run

Description: The existing dry detention pond was designed to provide water quantity control only. Retrofit the pond by modifying the outlet structure to detain the one-year storm event and adding a shallow wetland.

Potential Benefits: An estimated 3.7 lbs/yr of phosphorus will be removed and 0.1 acres of wetland habitat will be provided. All of the runoff from the one-year storm event will be stored to control peak flow and help reduce erosion in the downstream channel.

Project Design Considerations: Stream Restoration Project SC910 is downstream of this facility. Coordination and sequencing of these projects should be considered. This site has minimal environmental permitting requirements. The facility can be accessed from Mill Ridge and no easement will be required. Impacts to trees will be minimized.

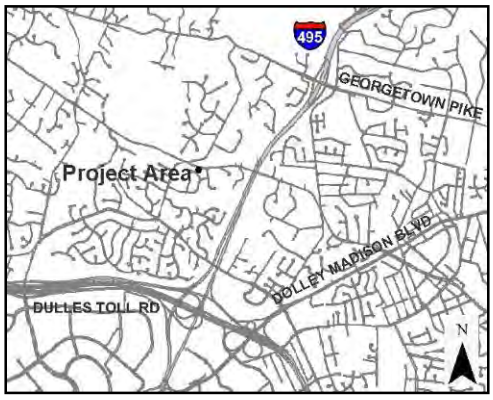
Project Area Map

Site Photo: Looking southeast at pond from the Montvale Way access road

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP Retrofit and Incidentals	1	LS	$11,000.00	$11,000.00
Grading and Excavation	710	CY	$35.00	$24,850.00
Shallow Wetland	270	SY	$2.00	$540.00
Erosion and Sediment Control	1	LS	$3,000.00	$3,000.00
Landscaping	1	LS	$2,000.00	$2,000.00
			Base Construction Cost	$41,390.00
			Mobilization (5%)	$2,069.50
			Subtotal 1	$43,459.50
			Contingency (25%)	$10,864.88
			Subtotal 2	$54,324.38
			Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)	$24,445.97
			Estimated Project Cost	**$80,000.00**

Project: SC9117 BMP Retrofit Project



Vicinity Map

Address: 1165 Old Stage Court
Location: Timberly Neighborhood
Land Owner: Private Residential
PIN: 0204 06 0004 and 0005
County Facility ID: 0061DP
Control Type: Water Quantity
Drainage Area: 4.0 acres
Stream Name: Unnamed tributary to Scotts Run

Description: The existing dry detention pond was not designed to provide water quality treatment and is causing flooding of the adjacent properties. Retrofit the pond by modifying the outlet structure to detain a portion of the one-year storm event. A bioswale will be constructed to replace the existing eroded ditch to the pond and a bioretention area will be constructed to provide increased infiltration and provide water quality treatment.

Potential Benefits: An estimated 0.6 lbs/yr of phosphorus will be removed and some wetland habitat will be provided. Approximately 46 percent of the runoff from the one-year storm event will be stored to control the peak flow and help reduce erosion in the downstream channel.

Project Design Considerations: Stream Restoration Project SC9220 is downstream of this facility and should not be initiated until this project has been completed. There are minimal environmental permitting requirements for this project. The facility can be accessed from Old Stage Court. An easement will be required for the bioswale. Impacts to trees will be minimized.

Project Area Map

Site Photo: Facing north towards the pond outlet

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP Retrofit and Incidentals	1	LS	$6,000.00	$6,000.00
Bioretention	30	SY	$250.00	$7,500.00
Erosion and Sediment Control	1	LS	$3,000.00	$3,000.00
Landscaping	1	LS	$2,000.00	$2,000.00
			Base Construction Cost	$18,500.00
			Mobilization (5%)	$925.00
			Subtotal 1	$19,425.00
			Contingency (25%)	$4,856.25
			Subtotal 2	$24,281.25
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$10,926.56
			Estimated Project Cost	**$40,000.00**

Project: SC9118 BMP Retrofit Project

Vicinity Map

Address: 1160 Old Gate Court
Location: Timberly Park Neighborhood
Land Owner: Fairfax County Park Authority
PIN: 0292 11 F
County Facility ID: 0060DP
Control Type: Water Quantity
Drainage Area: 2.7 acres
Stream Name: Scotts Run

Description: The existing dry pond was designed to provide water quantity control only. Retrofit the pond by modifying the outlet structure to detain a portion of the one-year storm event and adding a shallow wetland.

Potential Benefits: An estimated 0.6 lbs/yr of phosphorus will be removed and some wetland habitat will be provided. All of the runoff from the one-year storm event will be stored to control the peak flow and help reduce erosion in the downstream channel.

Project Design Considerations: Stream Restoration Project SC9219 is adjacent to this facility. Coordination and sequencing of these projects should be considered. There are minimal environmental permitting requirements for this project. The facility can be accessed from Old Gate Court. An easement will not be required. Impacts to trees will be minimized.

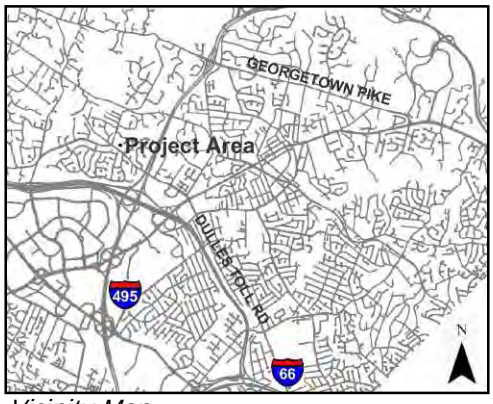
Project Area Map

Site Photo: Looking south at the outlet structure.

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP Retrofit and Incidentals	1	LS	$6,000.00	$6,000.00
Grading and Excavation	110	CY	$35.00	$3,850.00
Shallow Wetland	40	SY	$2.00	$80.00
Erosion and Sediment Control	1	LS	$3,000.00	$3,000.00
Landscaping	1	LS	$2,000.00	$2,000.00
			Base Construction Cost	$14,930.00
			Mobilization (5%)	$746.50
			Subtotal 1	$15,676.50
			Contingency (25%)	$3,919.13
			Subtotal 2	$19,595.63
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$8,818.03
			Estimated Project Cost	**$30,000.00**

Project: SC9122 BMP Retrofit Project



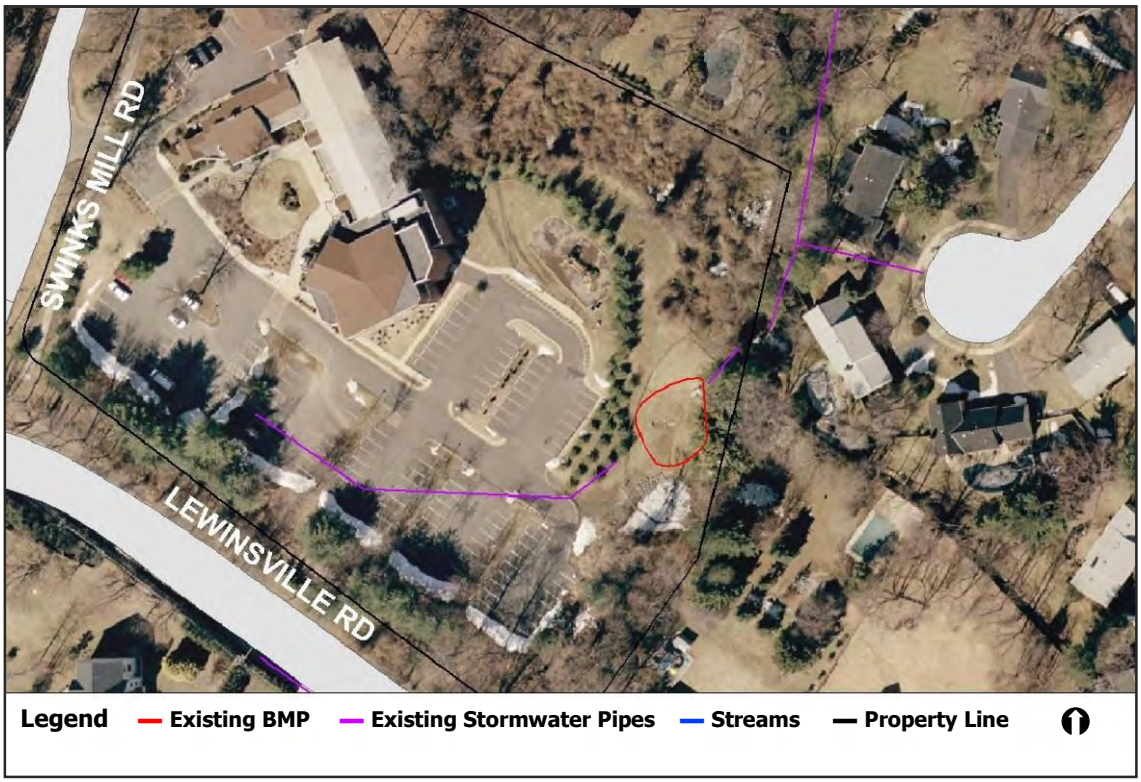
Vicinity Map

Address:	1219 Swinks Mill Road
Location:	Korean United Methodist Church
Land Owner:	Private Organization
PIN:	0292 01 0015
County Facility ID:	DP0178
Control Type:	Water Quantity
Drainage Area:	4.5 acres
Stream Name:	Unnamed tributary to Scotts Run

Description: The existing dry pond was designed to provide water quantity control only. Retrofit the pond by modifying the outlet structure to detain a portion of the one-year storm event and adding a shallow wetland.

Potential Benefits: An estimated 2.0 lbs/yr of phosphorus will be removed and some wetland habitat will be provided. All of the runoff from the one-year storm event will be stored to control the peak flow and help reduce erosion in the downstream channel.

Project Design Considerations: Stream Restoration Project SC9219 is immediately downstream of this facility. Coordination and sequencing of these projects should be considered. There are minimal environmental permitting requirements for this project. The facility can be accessed from Swinks Mill Road. An easement will be required. Impacts to trees will be minimized.



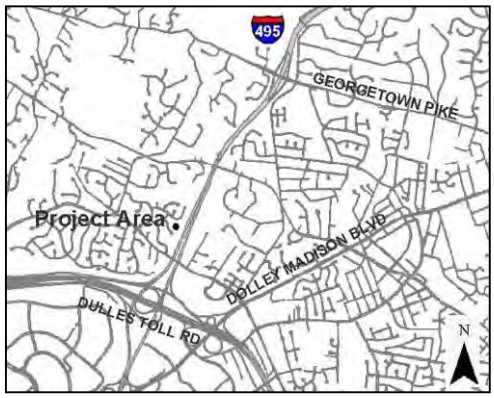
Project Area Map

Site Photo: Looking east at the riser structure.

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP Retrofit and Incidentals	1	LS	$6,000.00	$6,000.00
Grading and Excavation	190	CY	$35.00	$6,650.00
Shallow Wetland	70	SY	$2.00	$140.00
Erosion and Sediment Control	1	LS	$3,000.00	$3,000.00
Landscaping	1	LS	$2,000.00	$2,000.00
			Base Construction Cost	$17,790.00
			Mobilization (5%)	$889.50
			Subtotal 1	$18,679.50
			Contingency (25%)	$4,669.88
			Subtotal 2	$23,349.38
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$10,932.47
			Estimated Project Cost	**$40,000.00**

Project: SC9123 BMP Retrofit Project



Vicinity Map

Address:	East of 7601 Timberly Court
Location:	Timberly South Neighborhood
Land Owner:	Timberly South HOA
PIN:	0292 12 C
County Facility ID:	0369DP
Control Type:	Water Quantity
Drainage Area:	4.4 acres
Stream Name:	Scotts Run

Description: The existing dry detention pond was designed to provide water quantity control only. Retrofit the pond by modifying the outlet structure to detain the one-year storm event and adding a shallow wetland.

Potential Benefits: An estimated 2.2 lbs/yr of phosphorus will be removed and some wetland habitat will be provided. All of the runoff from the one-year storm event will be stored to control the peak flow and help reduce erosion in the downstream channel.

Project Design Considerations: Stream Restoration Project SC9220 is downstream of this facility. Coordination and sequencing of these projects should be considered. This facility is in a floodplain which has special permitting requirements. The facility can be accessed via dirt road from Lewinsville Road in a Virginia Power easement. Impacts to trees will be minimized.

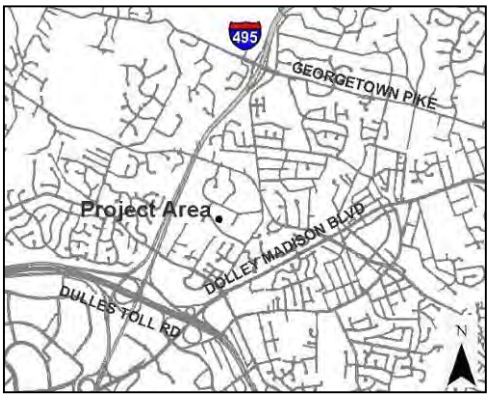
Project Area Map

Site Photo: Facing southeast towards the outlet structure

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP Retrofit and Incidentals	1	LS	$6,000.00	$6,000.00
Grading and Excavation	390	CY	$35.00	$13,650.00
Shallow Wetland	150	SY	$2.00	$300.00
Erosion and Sediment Control	1	LS	$3,000.00	$3,000.00
Landscaping	1	LS	$2,000.00	$2,000.00
			Base Construction Cost	$24,950.00
			Mobilization (5%)	$1,247.50
			Subtotal 1	$26,197.50
			Contingency (25%)	$6,549.38
			Subtotal 2	$32,746.88
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$14,736.09
			Estimated Project Cost	**$50,000.00**

Project: SC9124 BMP Retrofit Project



Vicinity Map

Address: South of 7309 Dulany Drive
Location: McLean Station Neighborhood
Land Owner: McLean Station HOA
PIN: 0301 18 A1
County Facility ID: 0272DP
Control Type: Water Quantity
Drainage Area: 13.0 acres
Stream Name: Unnamed tributary to Scotts Run

Description: The existing dry detention pond was designed to provide water quantity control only and is overgrown with vegetation. Retrofit the pond by modifying the outlet structure to detain the one-year storm event and adding a shallow wetland.

Potential Benefits: An estimated 6.5 lbs/yr of phosphorus will be removed and 0.1 acres of wetland habitat will be provided. All of the runoff from the one-year storm event will be stored to control the peak flow and help reduce erosion in the downstream channel.

Project Design Considerations: Stream Restoration Project SC9220 is downstream of this facility. Coordination and sequencing of these projects should be considered. This site has minimal environmental permitting requirements. The facility can be accessed from a private asphalt drive at the end of Coan Street. Do not use the access road off of Hooking Road; this road is not in the Fairfax County easement. Impacts to trees will be minimized.

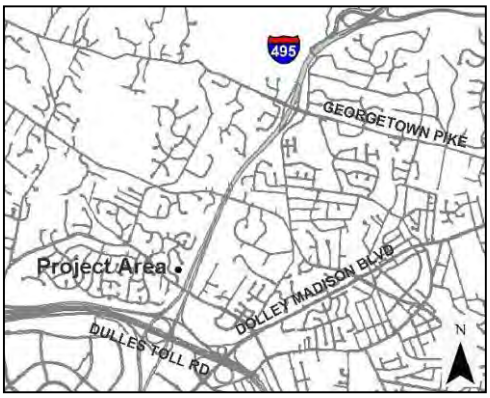
Project Area Map

Site Photo: Facing south away from outlet structure

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP Retrofit and Incidentals	1	LS	$11,000.00	$11,000.00
Grading and Excavation	1,460	CY	$35.00	$51,100.00
Shallow Wetland	280	SY	$2.00	$560.00
Erosion and Sediment Control	1	LS	$3,000.00	$3,000.00
Landscaping	1	LS	$2,000.00	$2,000.00
			Base Construction Cost	$67,660.00
			Mobilization (5%)	$3,383.00
			Subtotal 1	$71,043.00
			Contingency (25%)	$17,760.75
			Subtotal 2	$88,803.75
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$39,961.69
			Estimated Project Cost	**$130,000.00**

Project: SC9126 BMP Retrofit Project



Vicinity Map

Address:	Southeast of 1319 Timberly Lane
Location:	Timberly South Neighborhood
Land Owner:	Timberly South HOA
PIN:	0292 12 A
County Facility ID:	0068DP
Control Type:	Water Quantity
Drainage Area:	6.1 acres
Stream Name:	Scotts Run

Description: The existing dry detention pond was designed to provide water quantity control only and is overgrown with vegetation. Retrofit the pond by modifying the outlet structure to detain the one-year storm event and adding a shallow wetland.

Potential Benefits: An estimated 3.0 lbs/yr of phosphorus will be removed and some wetland habitat will be provided. All of the runoff from the one-year storm event will be stored to control the peak flow and help reduce erosion in the downstream channel.

Project Design Considerations: Stream Restoration Project SC9220 is downstream of this facility. Coordination and sequencing of these projects should be considered. This facility is in a floodplain which has special permitting requirements. The facility can be accessed from Timberly Lane. An easement will not be required. Impacts to trees will be minimized.

Project Area Map

Site Photo: Facing northwest away from outlet structure

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP Retrofit and Incidentals	1	LS	$11,000.00	$11,000.00
Grading and Excavation	490	CY	$35.00	$17,150.00
Shallow Wetland	180	SY	$2.00	$360.00
Erosion and Sediment Control	1	LS	$3,000.00	$3,000.00
Landscaping	1	LS	$2,000.00	$2,000.00
			Base Construction Cost	$33,510.00
			Mobilization (5%)	$1,675.50
			Subtotal 1	$35,185.50
			Contingency (25%)	$8,796.38
			Subtotal 2	$43,981.88
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$19,791.84
			Estimated Project Cost	**$70,000.00**

Project: SC9127 BMP Retrofit Project

Vicinity Map

Address: South of 7401 Windy Hill Court and west of 7400 Old Maple Square
Location: Windy Hill and Maplewood Neighborhoods
Land Owner: Windy Hill HOA and Maplewood HOA
PIN: 0301 26 A and 0301 29 C
County Facility ID: 0261DP and 1272DP
Control Type: Water Quantity and Water Quality
Drainage Area: 29.1 acres
Stream Name: Unnamed tributary to Scotts Run

Description: The downstream dry detention pond was designed to provide water quantity control only. Retrofit the pond by modifying the outlet structure to detain a portion of the one-year storm event and adding a shallow wetland. The upstream pond will be retrofit by modifying the outlet structure to detain the one-year storm event.

Potential Benefits: An estimated 4.4 lbs/yr of phosphorus will be removed and 0.1 acres of wetland habitat will be provided. Approximately 84 percent of the runoff from the one-year storm event will be stored to control the peak flow and help reduce erosion in the downstream channel.

Project Design Considerations: Stream Restoration Project SC9220 is downstream of these facilities. Coordination and sequencing of these projects should be considered. The downstream facility is in a floodplain which has special permitting requirements. Both facilities can be accessed from Windy Hill Road. No easements will be required. Impacts to trees will be minimized.

Project Area Map

Site Photo: At the 7400 Old Maple Square pond, looking southeast towards the pond

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP Retrofit and Incidentals	1	LS	$22,000.00	$22,000.00
Grading and Excavation	1,580	CY	$35.00	$55,300.00
Shallow Wetland	590	SY	$2.00	$1,180.00
Erosion and Sediment Control	1	LS	$6,000.00	$6,000.00
Landscaping	1	LS	$4,000.00	$4,000.00
			Base Construction Cost	$88,480.00
			Mobilization (5%)	$4,424.00
			Subtotal 1	$92,904.00
			Contingency (25%)	$23,226.00
			Subtotal 2	$116,130.00
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$52,258.50
			Estimated Project Cost	**$170,000.00**

Project: SC9128 New BMP Project

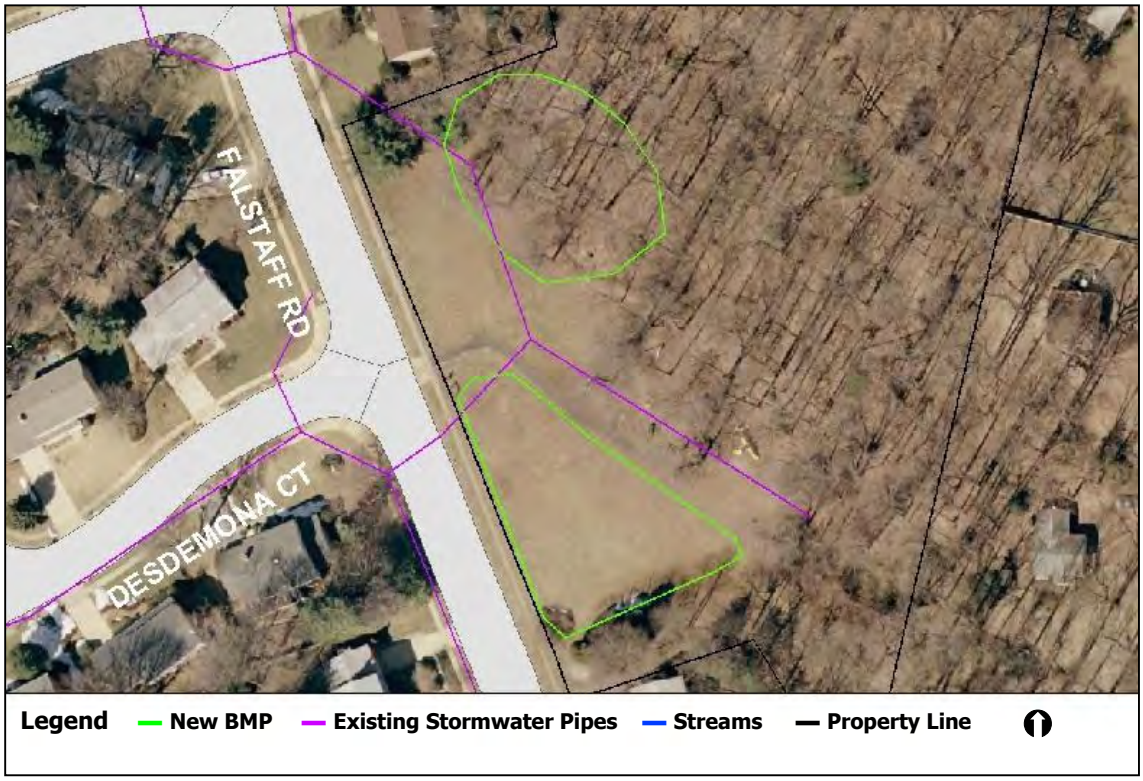
Vicinity Map

Address:	7717 Falstaff Road
Location:	McLean Hamlet Neighborhood
Land Owner:	Fairfax County Park Authority
PIN:	0292 05 E
Drainage Area:	46.7 acres
Stream Name:	Unnamed tributary to Scotts Run

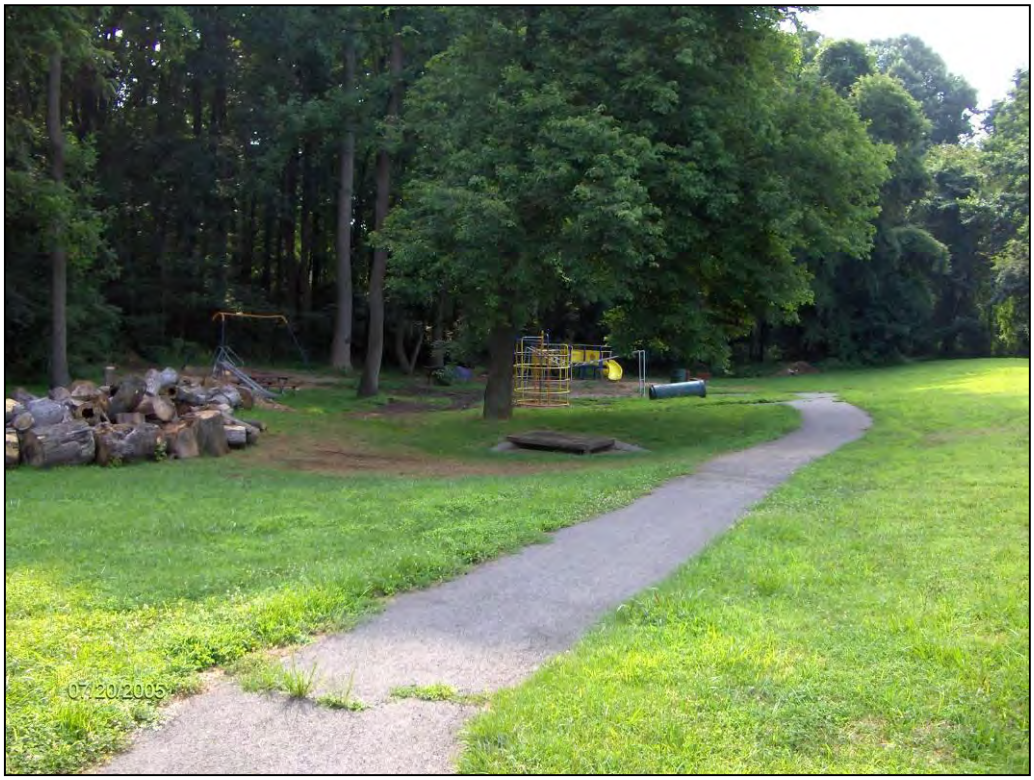
Description: There are no existing stormwater controls in this area. Construct two dry detention BMPs that will provide water quantity control and water quality treatment.

Potential Benefits: An estimated 23.3 lbs/yr of phosphorus will be removed and all of the runoff from the one-year storm event will be stored to control the peak flow and help reduce erosion in the downstream channel.

Project Design Considerations: Stream Restoration Project SC9220 is downstream of this project site. Coordination and sequencing of these projects should be considered. There are minimal environmental permitting requirements for this project. The site can be accessed from Falstaff Road. An easement will not be required. The BMP design should minimize tree removal.



Project Area Map



Site Photo: Looking south at playground

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP and Incidentals	1	LS	$30,000.00	$30,000.00
New Storm Pipe	1	LS	$60,000.00	$60,000.00
Clear and Grub	1	AC	$5,000.00	$5,000.00
Grading and Excavation	3,050	CY	$35.00	$106,750.00
Erosion and Sediment Control	1	LS	$12,000.00	$12,000.00
Landscaping	1	LS	$12,000.00	$12,000.00
			Base Construction Cost	$225,750.00
			Mobilization (5%)	$11,287.50
			Subtotal 1	$237,037.50
			Contingency (25%)	$59,259.38
			Subtotal 2	$296,296.88
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$133,333.59
			Estimated Project Cost	**$430,000.00**

Project: SC9132 New BMP Project

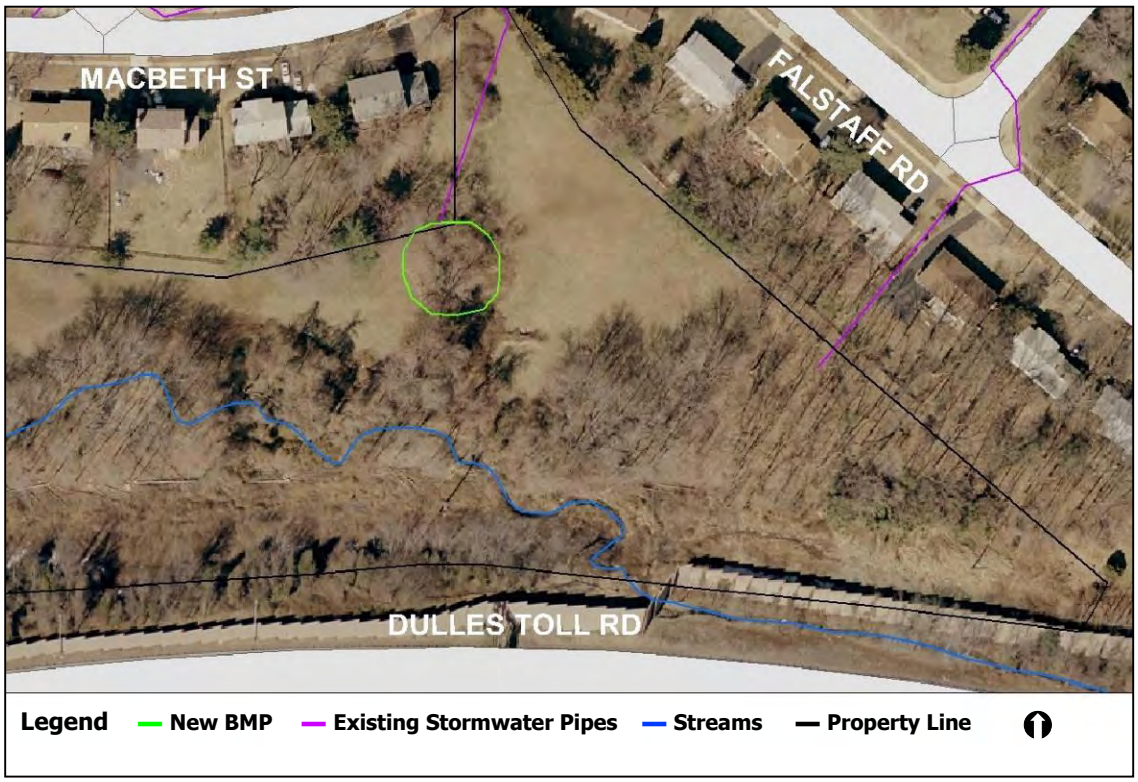
Vicinity Map

Address:	South of 1335 Macbeth Street
Location:	McLean Hamlet Park
Land Owner:	Fairfax County Park Authority
PIN:	0292 03 A
Drainage Area:	5.6 acres
Stream Name:	Unnamed tributary to Scotts Run

Description: There are no existing stormwater controls in this area. Construct a dry detention BMP that will provide water quantity control and water quality treatment.

Potential Benefits: An estimated 2.8 lbs/yr of phosphorus will be removed and all of the runoff from the one-year storm event will be stored to control the peak flow and help reduce erosion in the downstream channel.

Project Design Considerations: This project site is in the Chesapeake Bay Resource Protection Area which has special permitting requirements. The site is adjacent to Stream Restoration Project SC9230 and Neighborhood Stormwater Improvement Area SC9834. Coordination and sequencing of these projects should be considered. The project site can be accessed from Macbeth Street. An easement will not be required. The BMP design should minimize tree removal.



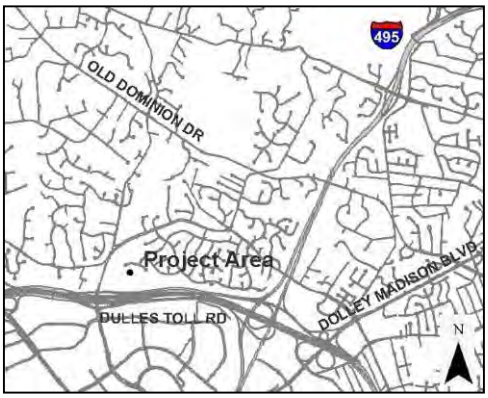
Project Area Map

Site Photo: Looking south from the outfall

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP and Incidentals	1	LS	$15,000.00	$15,000.00
New Storm Pipe	1	LS	$2,000.00	$2,000.00
Grading and Excavation	370	CY	$35.00	$12,950.00
Erosion and Sediment Control	1	LS	$6,000.00	$6,000.00
Landscaping	1	LS	$6,000.00	$6,000.00
			Base Construction Cost	$41,950.00
			Mobilization (5%)	$2,097.50
			Subtotal 1	$44,047.50
			Contingency (25%)	$11,011.88
			Subtotal 2	$55,059.38
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$24,776.72
			Estimated Project Cost	**$80,000.00**

Project: SC9135 BMP Retrofit Project



Vicinity Map

Address: East of 1359 Northwyke Court
Location: Spring Hill Road Neighborhood
Land Owner: Spring Hill Road HOA
PIN: 0291 20 B
County Facility ID: None
Control Type: Water Quantity
Drainage Area: 25.0 acres
Stream Name: Unnamed tributary to Scotts Run

Description: The existing dry detention pond was designed to provide water quantity control only. Retrofit the pond by modifying the outlet structure to detain a portion of the one-year storm event and adding a shallow wetland.

Potential Benefits: An estimated 12.5 lbs/yr of phosphorus will be removed and 0.1 acres of wetland habitat will be provided. Approximately 97 percent of the runoff from the one-year storm event will be stored to control the peak flow and help reduce erosion in the downstream channel.

Project Design Considerations: Stream Restoration Project SC9230 is adjacent to this facility. Coordination and sequencing of these projects should be considered. A portion of this facility is in the Chesapeake Bay Resource Protection Area which has special permitting requirements. The facility can be accessed from Northwyke Court, a private road. An easement will be required. Impacts to trees will be minimized.

Project Area Map

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP Retrofit and Incidentals	1	LS	$11,000.00	$11,000.00
Grading and Excavation	1,570	CY	$35.00	$54,950.00
Shallow Wetland	590	SY	$2.00	$1,180.00
Erosion and Sediment Control	1	LS	$3,000.00	$3,000.00
Landscaping	1	LS	$2,000.00	$2,000.00
			Base Construction Cost	$72,130.00
			Mobilization (5%)	$3,606.50
			Subtotal 1	$75,736.50
			Contingency (25%)	$18,934.13
			Subtotal 2	$94,670.63
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$42,601.78
			Estimated Project Cost	**$140,000.00**

Project: SC9137 New BMP Project

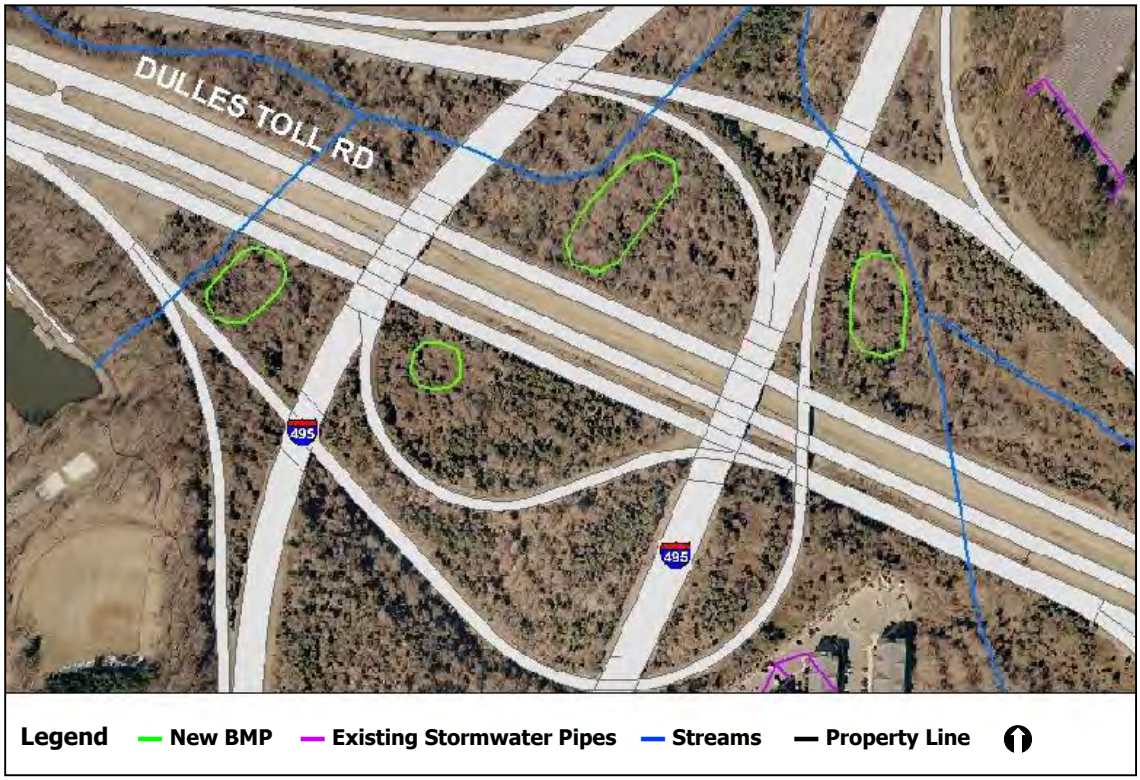
Vicinity Map

Address:	Dulles Toll Road and Interstate 495 Interchange
Location:	As shown
Land Owner:	VA Department of Transportation
Tax Map:	29-2
Drainage Area:	109.0 acres
Stream Name:	Scotts Run and unnamed tributary to Scotts Run

Description: Construct four dry detention BMPs within the interchange right of ways that will provide water quantity control and water quality treatment. The estimated buildable areas are as follows: 20,000 square feet for the southeast project site, 10,000 square feet for the southwest project site, 25,000 square feet for the northeast site and 40,000 square feet for the site in the northwest.

Potential Benefits: An estimated 54.5 lbs/yr of phosphorus will be removed and all of the runoff from the one-year storm event will be stored to control the peak flow and help reduce erosion in the downstream channel.

Project Design Considerations: Stream Restoration Projects SC9220 and SC9230 run through the project sites. Coordination and sequencing of these projects should be considered. Three of the project sites are in a portion of the Chesapeake Bay Resource Protection Area and one of them also lies in a floodplain. Both areas have special permitting requirements. The other project site has minimal environmental permitting requirements. The project sites can be accessed from the interchange's exit ramps. Easements will not be required. The BMP design should minimize tree removal.

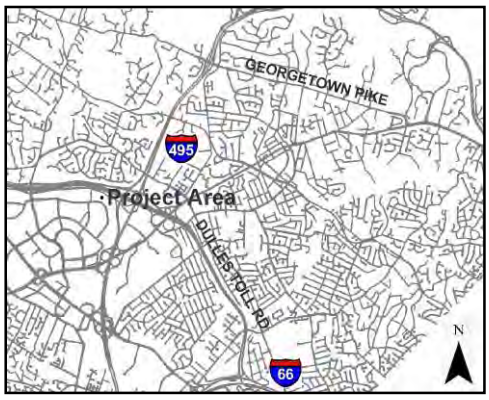


Project Area Map

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP and Incidentals	1	LS	$60,000.00	$60,000.00
New Storm Pipe	1	LS	$120,000.00	$120,000.00
Clear and Grub	3	AC	$5,000.00	$15,000.00
Grading and Excavation	7,040	CY	$35.00	$246,400.00
Erosion and Sediment Control	1	LS	$24,000.00	$24,000.00
Landscaping	1	LS	$24,000.00	$24,000.00
			Base Construction Cost	$489,400.00
			Mobilization (5%)	$24,470.00
			Subtotal 1	$513,870.00
			Contingency (25%)	$128,467.50
			Subtotal 2	$642,337.50
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$289,051.88
			Estimated Project Cost	**$940,000.00**

Project: SC9138 BMP Retrofit Project



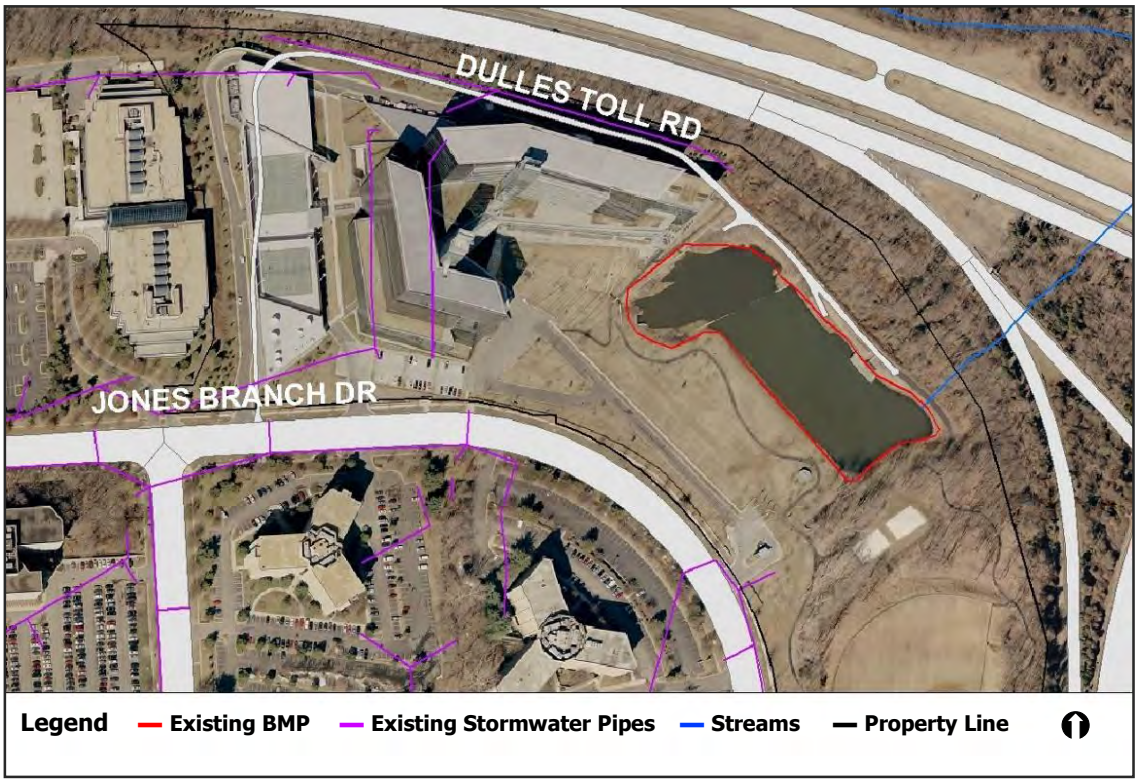
Vicinity Map

Address:	7980 Jones Branch Drive
Location:	Westpark
Land Owner:	Commercial Development
PIN:	0292 15 A7 and A8
County Facility ID:	WP0044
Control Type:	Water Quantity
Drainage Area:	48.9 acres
Stream Name:	Unnamed tributary to Scotts Run

Description: The existing wet pond was designed to provide water quantity control only. Retrofit the pond by modifying the outlet structure to detain a portion of the one-year storm event and adding an aquatic bench.

Potential Benefits: An estimated 13.7 lbs/yr of phosphorus will be removed and some wetland habitat will be provided. All of the runoff from the one-year storm event will be stored to control the peak flow and help reduce erosion in the downstream channel.

Project Design Considerations: There are minimal environmental permitting requirements for this project. The facility can be accessed from Jones Branch Drive. An easement will be required. Impacts to trees will be minimized.

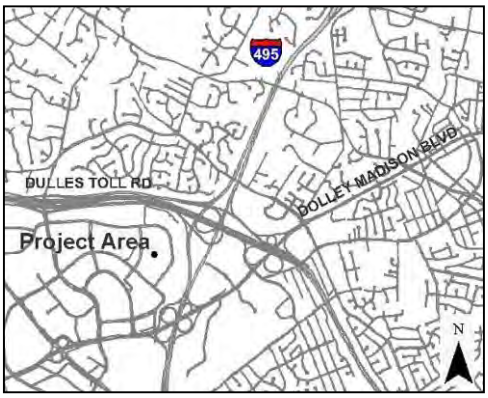


Project Area Map

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP Retrofit and Incidentals	1	LS	$11,000.00	$11,000.00
Grading and Excavation	8,180	CY	$35.00	$286,300.00
Shallow Wetland	3,070	SY	$2.00	$6,140.00
Erosion and Sediment Control	1	LS	$3,000.00	$3,000.00
Landscaping	1	LS	$2,000.00	$2,000.00
			Base Construction Cost	$308,440.00
			Mobilization (5%)	$15,422.00
			Subtotal 1	$323,862.00
			Contingency (25%)	$80,965.50
			Subtotal 2	$404,827.50
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$62,446.78
			Estimated Project Cost	**$590,000.00**

Project: SC9139 BMP Retrofit Project



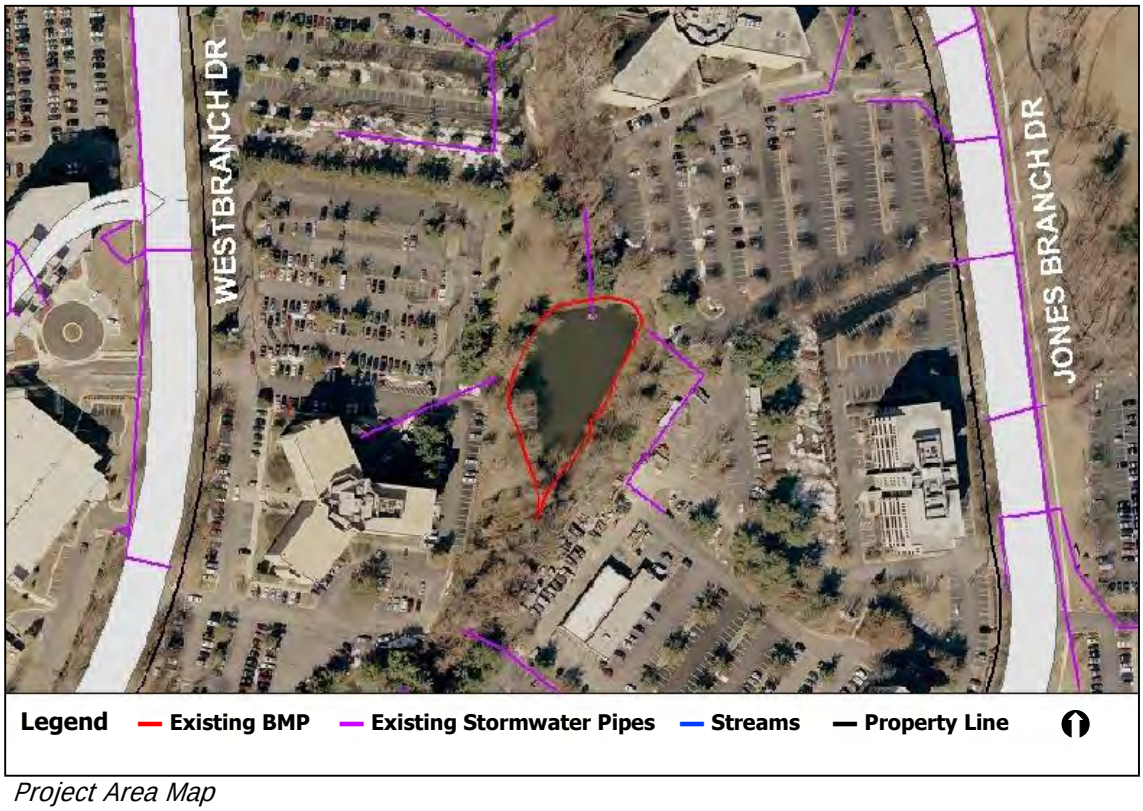
Vicinity Map

Address: 7927 Jones Branch Drive
Location: Westpark
Land Owner: Commercial Development
PIN: 0294 07 0011A, C1, and C2
County Facility ID: WP0046
Control Type: Water Quantity
Drainage Area: 27.9 acres
Stream Name: Unnamed tributary to Scotts Run

Description: The existing wet pond was designed to provide water quantity control only. Retrofit the pond by modifying the outlet structure to detain the one-year storm event and adding an aquatic bench.

Potential Benefits: An estimated 7.8 lbs/yr of phosphorus will be removed and 0.2 acres of wetland habitat will be provided. All of the runoff from the one-year storm event will be stored to control the peak flow and help reduce erosion in the downstream channel.

Project Design Considerations: Stream Restoration Project SC9230 is downstream of this facility. Coordination and sequencing of these projects should be considered. This facility is in a floodplain which has special permitting requirements. The facility can be accessed from Jones Branch Drive and Westbranch Drive. An easement will be required. Impacts to trees will be minimized.

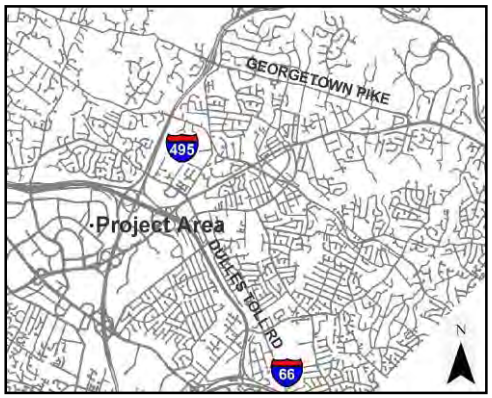


Project Area Map

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP Retrofit and Incidentals	1	LS	$11,000.00	$11,000.00
Grading and Excavation	2,070	CY	$35.00	$72,450.00
Aquatic Bench	780	SY	$2.00	$1,560.00
Erosion and Sediment Control	1	LS	$3,000.00	$3,000.00
Landscaping	1	LS	$2,000.00	$2,000.00
			Base Construction Cost	$90,010.00
			Mobilization (5%)	$4,500.50
			Subtotal 1	$94,510.50
			Contingency (25%)	$23,627.63
			Subtotal 2	$118,138.13
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$53,162.16
			Estimated Project Cost	**$180,000.00**

Project: SC9140 BMP Retrofit Project



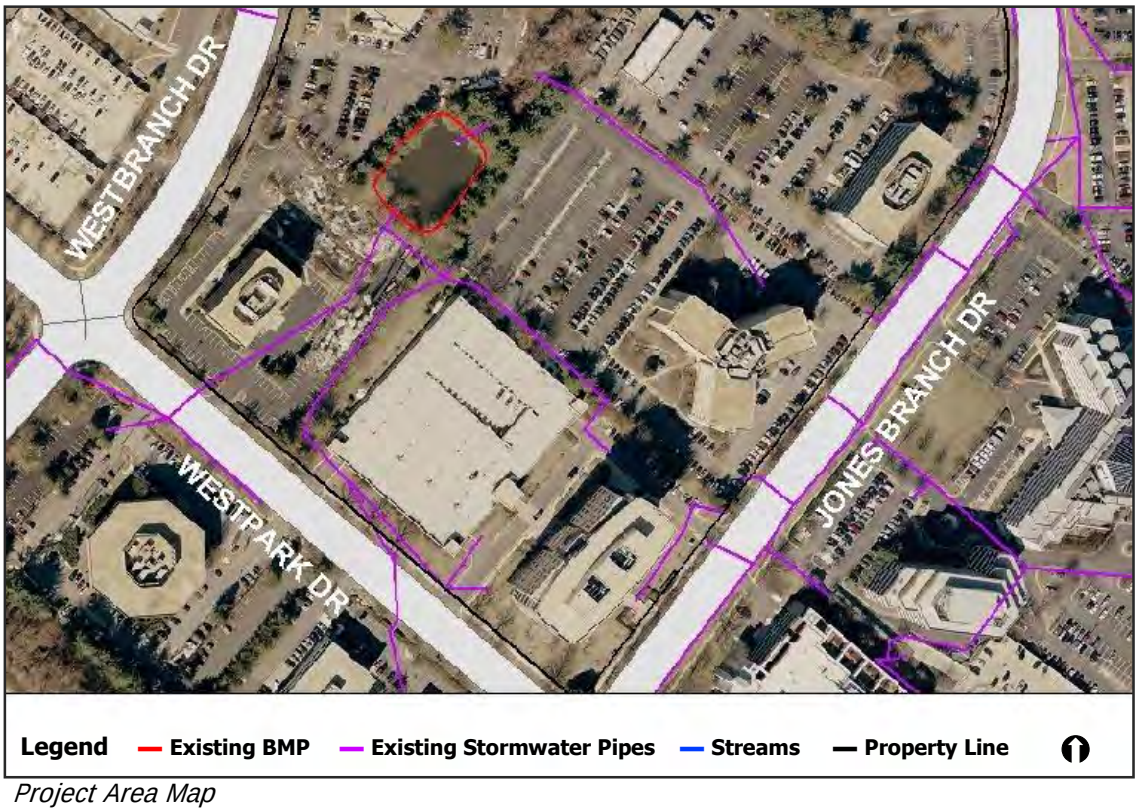
Vicinity Map

Address:	1517 West Branch Drive
Location:	Westpark
Land Owner:	Commercial Development
PIN:	0294 07 0011A
County Facility ID:	WP0071
Control Type:	Water Quantity
Drainage Area:	57.3 acres
Stream Name:	Unnamed tributary to Scotts Run

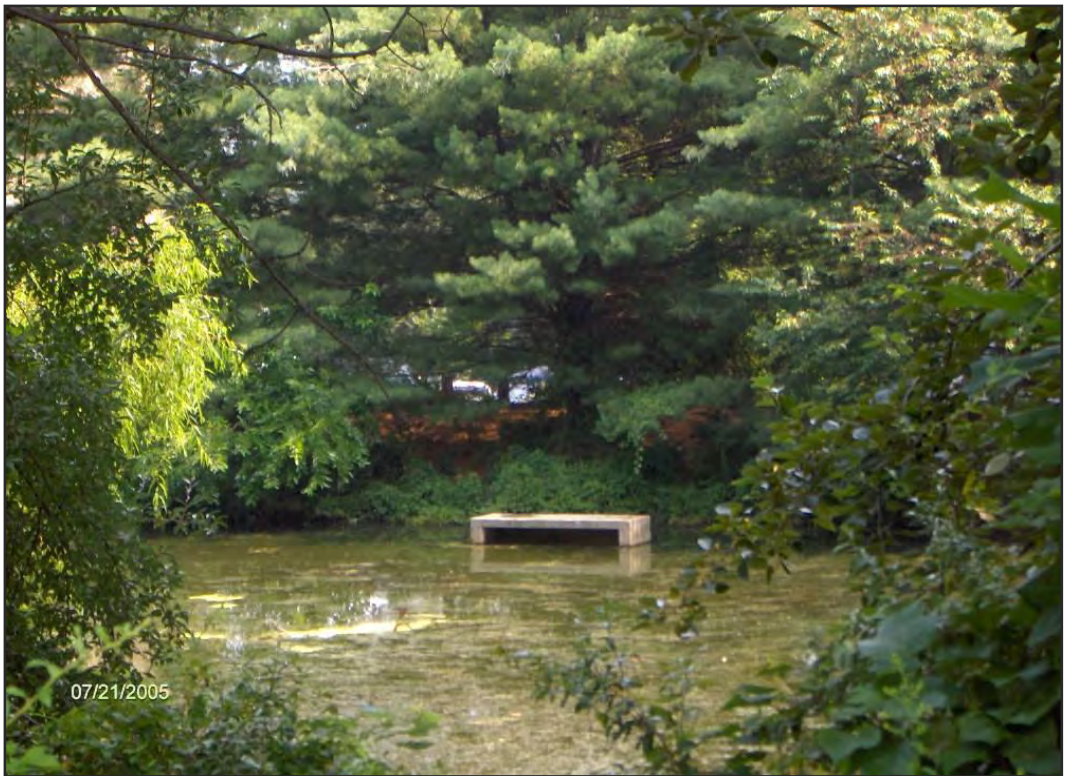
Description: The existing wet pond was designed to provide water quantity control only. Retrofit the pond by modifying the outlet structure to detain a portion of the one-year storm event and adding an aquatic bench.

Potential Benefits: An estimated 16.0 lbs/yr of phosphorus will be removed and some wetland habitat will be provided. Approximately 53 percent of the runoff from the one-year storm event will be stored to control the peak flow and help reduce erosion in the downstream channel.

Project Design Considerations: BMP Retrofit Project SC9139 is immediately downstream of this facility. Coordination and sequencing of these projects should be considered. This facility is in a floodplain which has special permitting requirements. The facility can be accessed from West Branch Drive. An easement will be required. Impacts to trees will be minimized.



Project Area Map

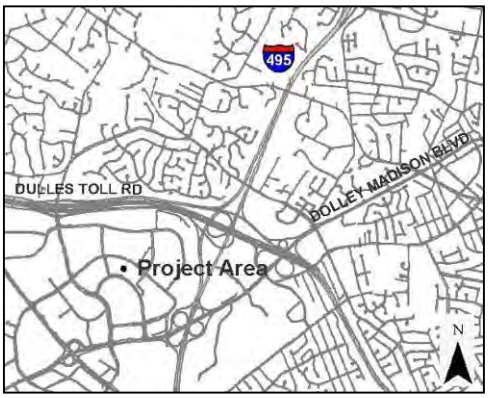


Site Photo: Looking northwest towards pond

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP Retrofit and Incidentals	1	LS	$11,000.00	$11,000.00
Grading and Excavation	1,430	CY	$35.00	$50,050.00
Shallow Wetland	540	SY	$2.00	$1,080.00
Erosion and Sediment Control	1	LS	$3,000.00	$3,000.00
Landscaping	1	LS	$2,000.00	$2,000.00
			Base Construction Cost	$67,130.00
			Mobilization (5%)	$3,356.50
			Subtotal 1	$70,486.50
			Contingency (25%)	$17,621.63
			Subtotal 2	$88,108.13
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$62,446.78
			Estimated Project Cost	**$130,000.00**

Project: SC9141 BMP Retrofit Project



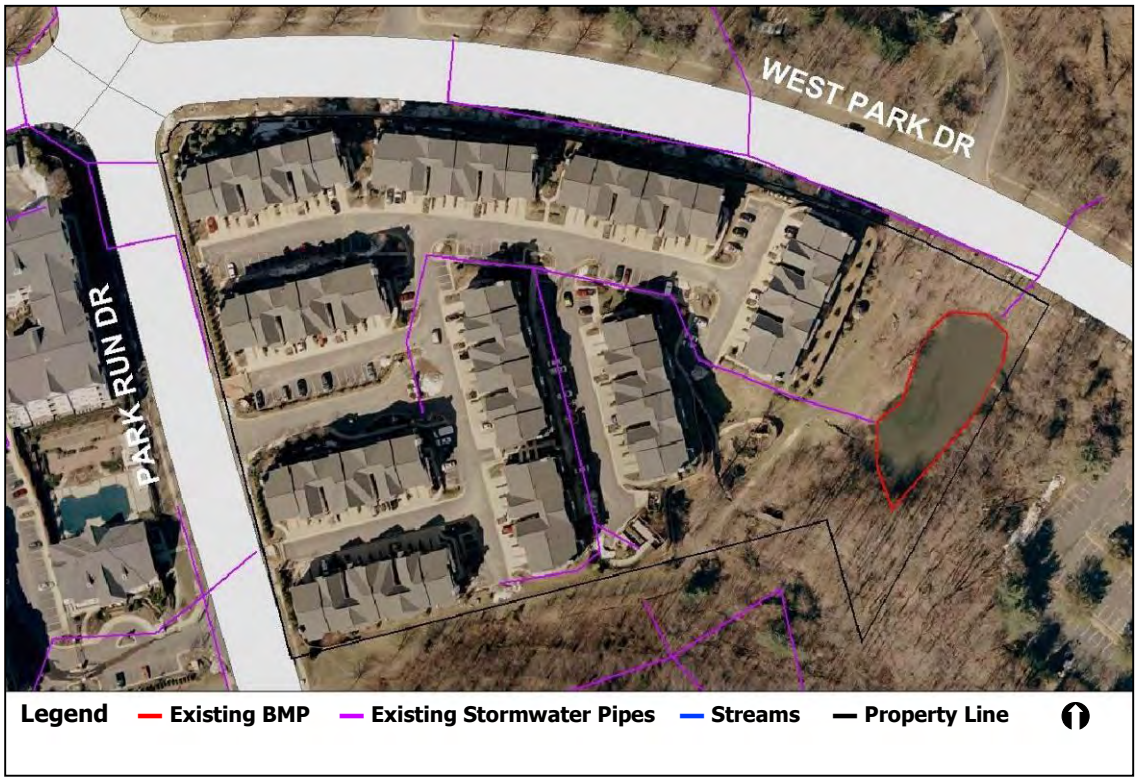
Vicinity Map

Address: 8003 West Park Drive
Location: Avalon Crescent Apartments
Land Owner: Residential Development
PIN: 0294 07 B
County Facility ID: WP0054
Control Type: Water Quantity
Drainage Area: 71.5 acres
Stream Name: Unnamed tributary to Scotts Run

Description: The existing wet pond was designed to provide water quantity control only. Retrofit the pond by modifying the outlet structure to detain the one-year storm event and adding an aquatic bench.

Potential Benefits: An estimated 17.8 lbs/yr of phosphorus will be removed and 0.1 acres of wetland habitat will be provided. All of the runoff from the one-year storm event will be stored to control the peak flow and help reduce erosion in the downstream channel.

Project Design Considerations: Stream Restoration Project SC9230 is downstream of this facility. Coordination and sequencing of these projects should be considered. The project site is in a floodplain and the Chesapeake Bay Resource Protection Area which have special permitting requirements. The facility can be accessed from Park Run Drive. An easement will be required. Impacts to trees will be minimized.



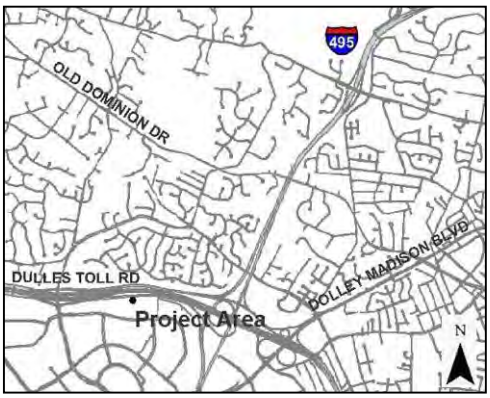
Project Area Map

Site Photo: Looking southwest from the outfall

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP Retrofit and Incidentals	1	LS	$11,000.00	$11,000.00
Grading and Excavation	980	CY	$35.00	$34,300.00
Aquatic Bench	370	SY	$2.00	$740.00
Erosion and Sediment Control	1	LS	$3,000.00	$3,000.00
Landscaping	1	LS	$2,000.00	$2,000.00
			Base Construction Cost	$51,040.00
			Mobilization (5%)	$2,552.00
			Subtotal 1	$53,592.00
			Contingency (25%)	$13,398.00
			Subtotal 2	$66,990.00
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$30,145.50
			Estimated Project Cost	**$100,000.00**

Project: SC9142 New BMP Project



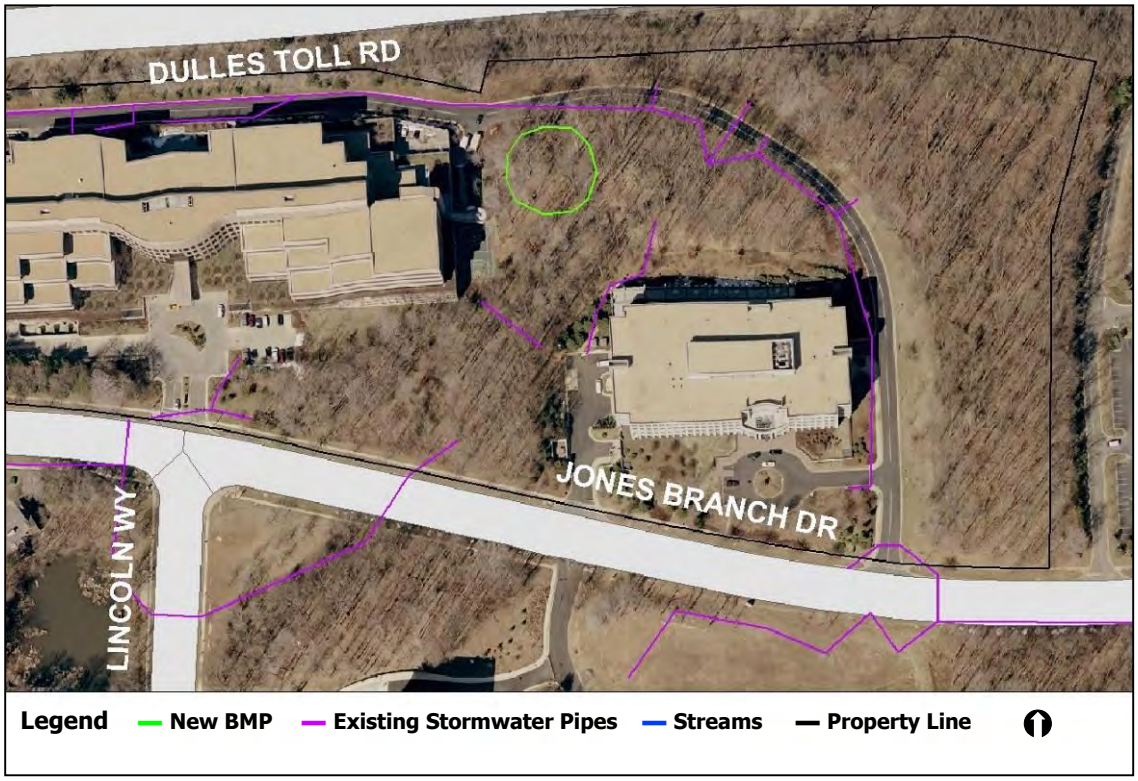
Vicinity Map

Address:	8000 Jones Branch Drive
Location:	Freddie Mac Campus
Land Owner:	Commercial Development
PIN:	0292 15 0004B2
Drainage Area:	6.0 acres
Stream Name:	Unnamed tributary to Scotts Run

Description: Construct a dry detention BMP near the Dulles Toll Road that will provide water quantity control and water quality treatment.

Potential Benefits: An estimated 5.5 lbs/yr of phosphorus will be removed and all of the runoff from the one-year storm event will be stored to control the peak flow and help reduce erosion in the downstream channel.

Project Design Considerations: A portion of this project site is in a floodplain which has special permitting requirements. This project site is upstream of Stream Restoration Project SC9230 which should not be implemented until this project is complete. The project site can be accessed from Jones Branch Drive. An easement will be required. The BMP design should minimize tree removal.

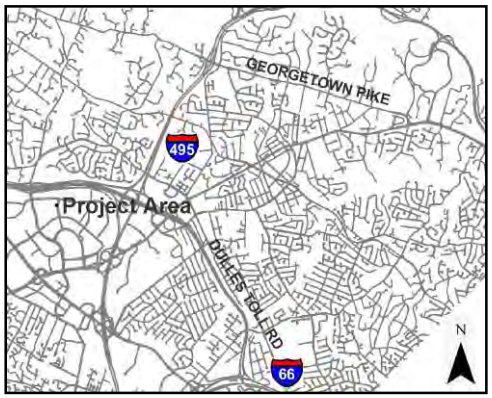


Project Area Map

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP and Incidentals	1	LS	$15,000.00	$15,000.00
New Storm Pipe	1	LS	$7,000.00	$7,000.00
Clear and Grub	0.5	AC	$5,000.00	$2,500.00
Grading and Excavation	870	CY	$35.00	$30,450.00
Erosion and Sediment Control	1	LS	$6,000.00	$6,000.00
Landscaping	1	LS	$6,000.00	$6,000.00
			Base Construction Cost	$66,950.00
			Mobilization (5%)	$3,347.50
			Subtotal 1	$70,297.50
			Contingency (25%)	$17,574.38
			Subtotal 2	$87,871.88
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$39,542.34
			Estimated Project Cost	**$130,000.00**

Project: SC9143 BMP Retrofit Project



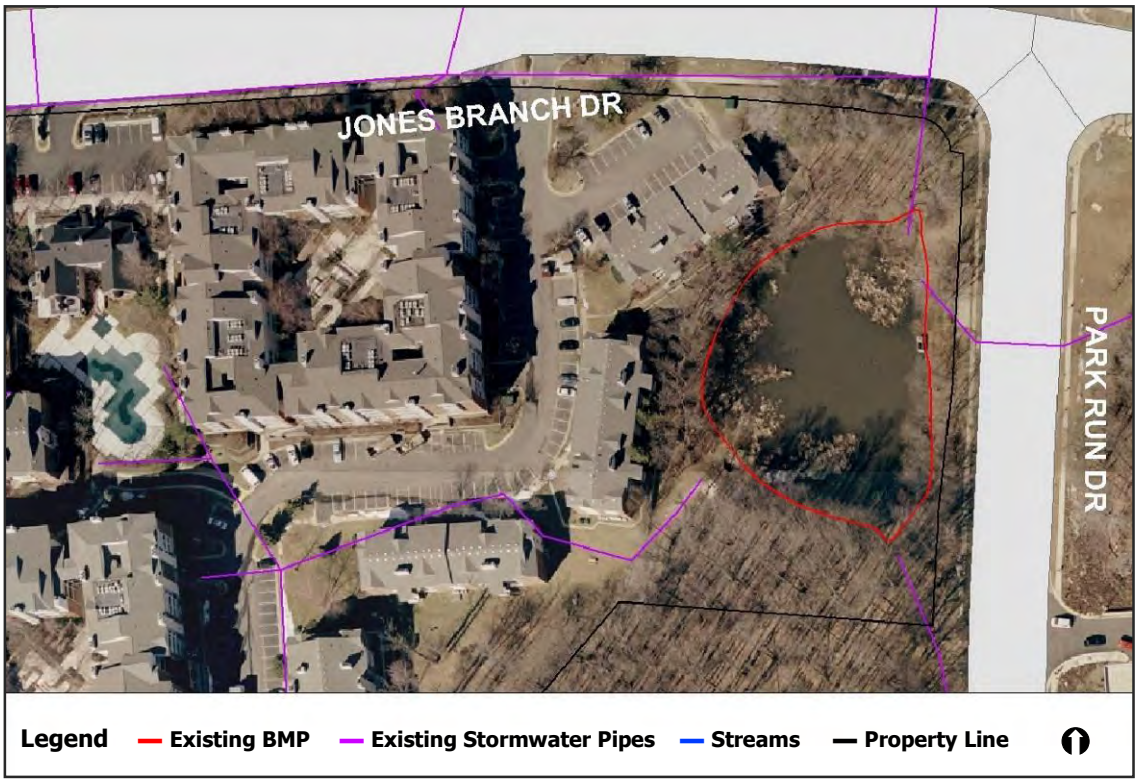
Vicinity Map

Address:	Intersection of Jones Branch Drive and Park Run Drive
Location:	Post Tysons Corner Apartments
Land Owner:	Residential Development
PIN:	0293 22 0001A
County Facility ID:	WP0071
Control Type:	Water Quantity
Drainage Area:	43.7 acres
Stream Name:	Unnamed tributary to Scotts Run

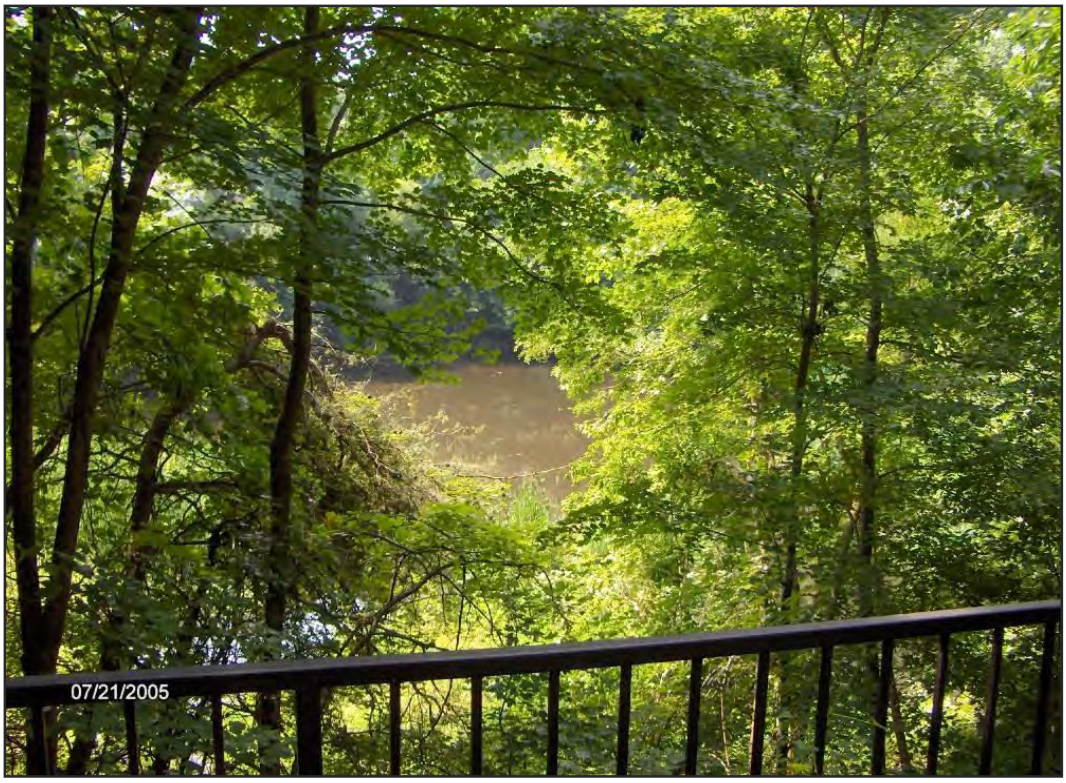
Description: The existing wet pond was designed to provide water quantity control only. Retrofit the pond by modifying the outlet structure to detain a portion of the one year storm event and adding an aquatic bench.

Potential Benefits: An estimated 8.8 lbs/yr of phosphorus will be removed and some wetland habitat will be provided. Approximately 53 percent of the runoff from the one-year storm event will be stored to control the peak flow and help reduce erosion in the downstream channel.

Project Design Considerations: There are minimal environmental permitting requirements for this project. The facility can be accessed from Park Run Drive. An easement will be required. Impacts to trees will be minimized.



Project Area Map

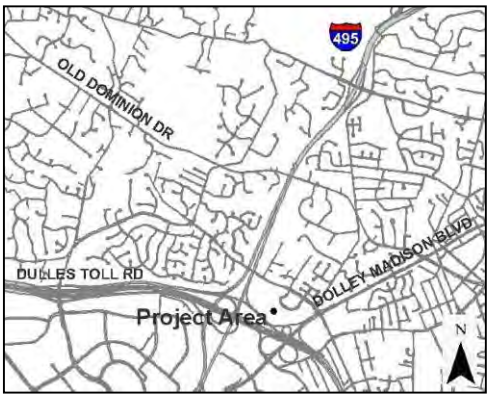


Site Photo: Looking west towards pond from Park Run Drive

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP Retrofit and Incidentals	1	LS	$11,000.00	$11,000.00
Grading and Excavation	2,510	CY	$35.00	$87,850.00
Shallow Wetland	940	SY	$2.00	$1,880.00
Erosion and Sediment Control	1	LS	$3,000.00	$3,000.00
Landscaping	1	LS	$2,000.00	$2,000.00
			Base Construction Cost	$105,730.00
			Mobilization (5%)	$5,286.50
			Subtotal 1	$111,016.50
			Contingency (25%)	$27,754.13
			Subtotal 2	$138,770.63
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$62,446.78
			Estimated Project Cost	**$210,000.00**

Project: SC9146 BMP Retrofit Project



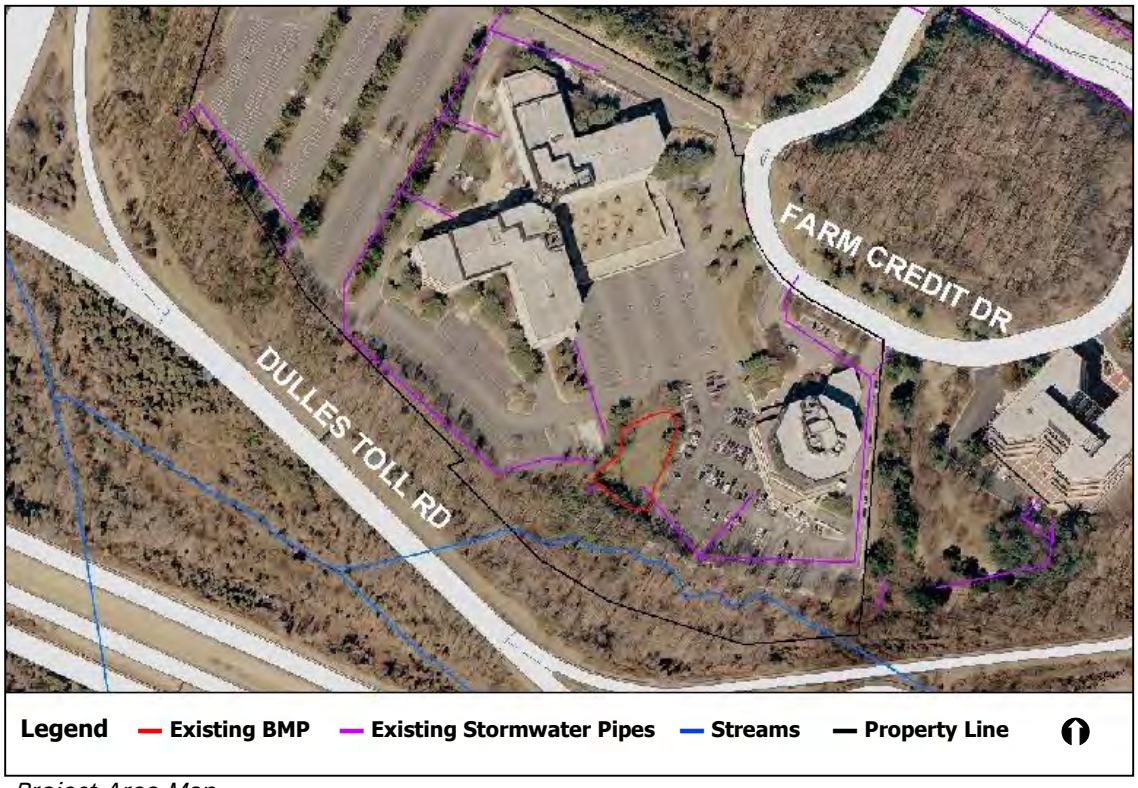
Vicinity Map

Address: West of 1501 Farm Credit Drive
Location: Tysons Corner
Land Owner: Commercial Development
PIN: 0301 01 0009E
County Facility ID: DP0168
Control Type: Water Quantity
Drainage Area: 65.1 acres
Stream Name: Unnamed tributary to Scotts Run

Description: The existing dry detention pond was designed to provide water quantity control only. Retrofit the pond by modifying the outlet structure to detain a portion of the one-year storm event and adding a shallow wetland. The picnic benches should be removed from the detention area.

Potential Benefits: An estimated 18.1 lbs/yr of phosphorus will be removed and some wetland habitat will be provided. Approximately 39 percent of the runoff from the one-year storm event will be stored to control the peak flow and help reduce erosion in the downstream channel.

Project Design Considerations: This facility is adjacent to Stream Restoration Project SC9230 which should not be implemented until this project is complete. A portion of this facility is in the Chesapeake Bay Resource Protection Area which has special permitting requirements. The facility can be accessed from Farm Credit Drive. An easement will be required. Impacts to trees will be minimized.



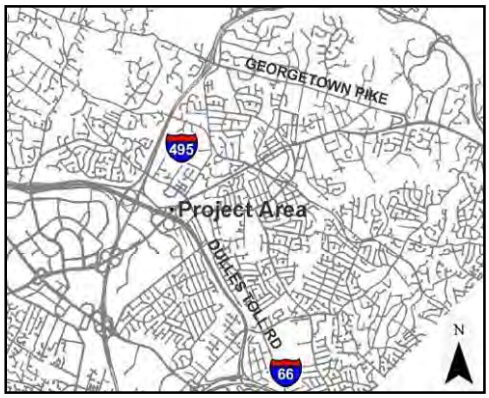
Project Area Map

Site Photo: Looking southwest towards the outlet structure of the pond.

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP Retrofit and Incidentals	1	LS	$11,000.00	$11,000.00
Grading and Excavation	1,220	CY	$35.00	$42,700.00
Shallow Wetland	230	SY	$2.00	$460.00
Erosion and Sediment Control	1	LS	$3,000.00	$3,000.00
Landscaping	1	LS	$2,000.00	$2,000.00
			Base Construction Cost	$59,160.00
			Mobilization (5%)	$2,958.00
			Subtotal 1	$62,118.00
			Contingency (25%)	$15,529.50
			Subtotal 2	$77,647.50
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$34,941.38
			Estimated Project Cost	**$120,000.00**

Project: SC9147 BMP Retrofit Project



Vicinity Map

Address: Dulles Toll Road and Chain Bridge Road Interchange
Location: Northeast cloverleaf
Land Owner: VA Department of Transportation
Tax Map: 30-3
County Facility ID: None
Control Type: Water Quantity
Drainage Area: 3.7 acres
Stream Name: Unnamed tributary to Scotts Run

Description: The existing dry pond was designed to provide water quantity control only. Retrofit the pond by modifying the outlet structure to detain a portion of the one-year storm event and adding a shallow wetland.

Potential Benefits: An estimated 1.8 lbs/yr of phosphorus will be removed and some wetland habitat will be provided. Approximately 52 percent of the runoff from the one-year storm event will be stored to control the peak flow and help reduce erosion in the downstream channel.

Project Design Considerations: There are minimal environmental permitting requirements for this project. The facility can be accessed from Chain Bridge Road. An easement will not be required. Impacts to trees will be minimized.

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP Retrofit and Incidentals	1	LS	$6,000.00	$6,000.00
Grading and Excavation	210	CY	$35.00	$7,350.00
Shallow Wetland	80	SY	$2.00	$160.00
Erosion and Sediment Control	1	LS	$3,000.00	$3,000.00
Landscaping	1	LS	$2,000.00	$2,000.00
			Base Construction Cost	$18,510.00
			Mobilization (5%)	$925.50
			Subtotal 1	$19,435.50
			Contingency (25%)	$4,858.88
			Subtotal 2	$24,294.38
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$10,932.47
			Estimated Project Cost	**$40,000.00**

Project: SC9149 BMP Retrofit Project

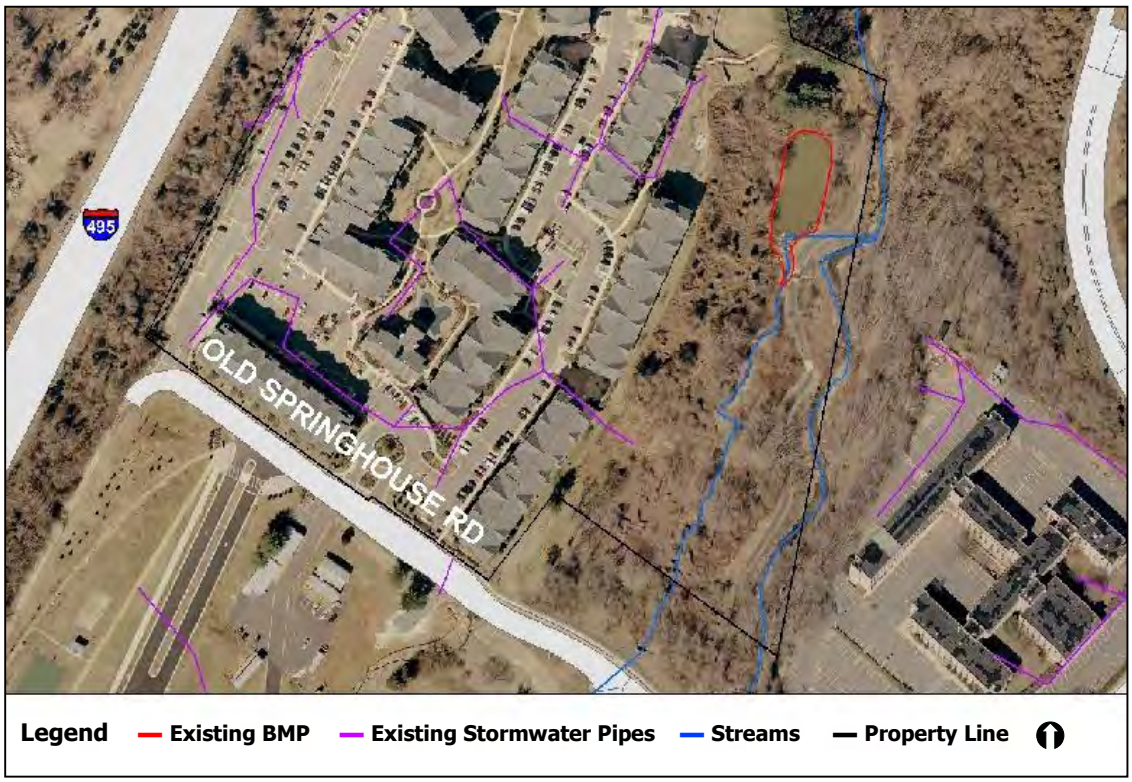
Vicinity Map

Address: Northwest of 1820 Dolley Madison Boulevard
Location: Gates of McLean Condominiums
Land Owner: Residential Development
PIN: 0294 01 0003A
County Facility ID: None
Control Type: Water Quantity
Drainage Area: 21.0 acres
Stream Name: Scotts Run

Description: The existing wet pond was designed to provide water quantity control only. Retrofit the pond by increasing the depth to detain a portion of the one-year storm event and adding an aquatic bench.

Potential Benefits: An estimated 9.8 lbs/yr of phosphorus will be removed and some wetland habitat will be provided. Approximately 75 percent of the runoff from the one-year storm event will be stored to control the peak flow and help reduce erosion in the downstream channel.

Project Design Considerations: Stream Restoration Project SC9220 is downstream of this facility and Buffer Restoration Project SC9352 is adjacent to this facility. Coordination and sequencing of these projects should be considered. This facility is in a floodplain and the Chesapeake Bay Resource Protection Area which have special permitting requirements. The facility is accessible from an Old Springhouse Road access road. An easement will be required. This property is subject to proffers which should be reviewed by the Fairfax County Department of Planning and Zoning before planning this project. Impacts to trees will be minimized.



Project Area Map

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Grading and Excavation	1,370	CY	$35.00	$47,950.00
Aquatic Bench	180	SY	$2.00	$360.00
Erosion and Sediment Control	1	LS	$3,000.00	$3,000.00
Landscaping	1	LS	$2,000.00	$2,000.00
			Base Construction Cost	$53,310.00
			Mobilization (5%)	$2,665.50
			Subtotal 1	$55,975.50
			Contingency (25%)	$13,993.88
			Subtotal 2	$69,969.38
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$31,486.22
			Estimated Project Cost	**$110,000.00**

Project: SC9150 BMP Retrofit Project

Vicinity Map

Address:	Dulles Toll Road and Dolley Madison Boulevard Interchange
Location:	Southwest cloverleaf
Land Owner:	VA Department of Transportation
Tax Map:	30-3
County Facility ID:	None
Control Type:	Water Quantity
Drainage Area:	81.1 acres
Stream Name:	Scotts Run

Description: The existing dry detention pond was designed to provide water quantity control only. Retrofit the pond by expanding the surface area to detain a portion of the one-year storm event and adding a shallow wetland.

Potential Benefits: An estimated 31.2 lbs/yr of phosphorus will be removed and 0.1 acres of wetland habitat will be provided. Approximately 79 percent of the runoff from the one-year storm event will be stored to control the peak flow and help reduce erosion in the downstream channel.

Project Design Considerations: There are minimal environmental permitting requirements for this project. The facility can be accessed from Chain Bridge Road. An easement will not be required. Impacts to trees will be minimized.

Project Area Map

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Grading and Excavation	4,000	CY	$35.00	$140,000.00
Aquatic Bench	500	SY	$2.00	$1,000.00
Erosion and Sediment Control	1	LS	$3,000.00	$3,000.00
Landscaping	1	LS	$2,000.00	$2,000.00
			Base Construction Cost	$146,000.00
			Mobilization (5%)	$7,300.00
			Subtotal 1	$153,300.00
			Contingency (25%)	$38,325.00
			Subtotal 2	$191,625.00
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$86,231.25
			Estimated Project Cost	**$280,000.00**

Project: SC9153 New BMP Project

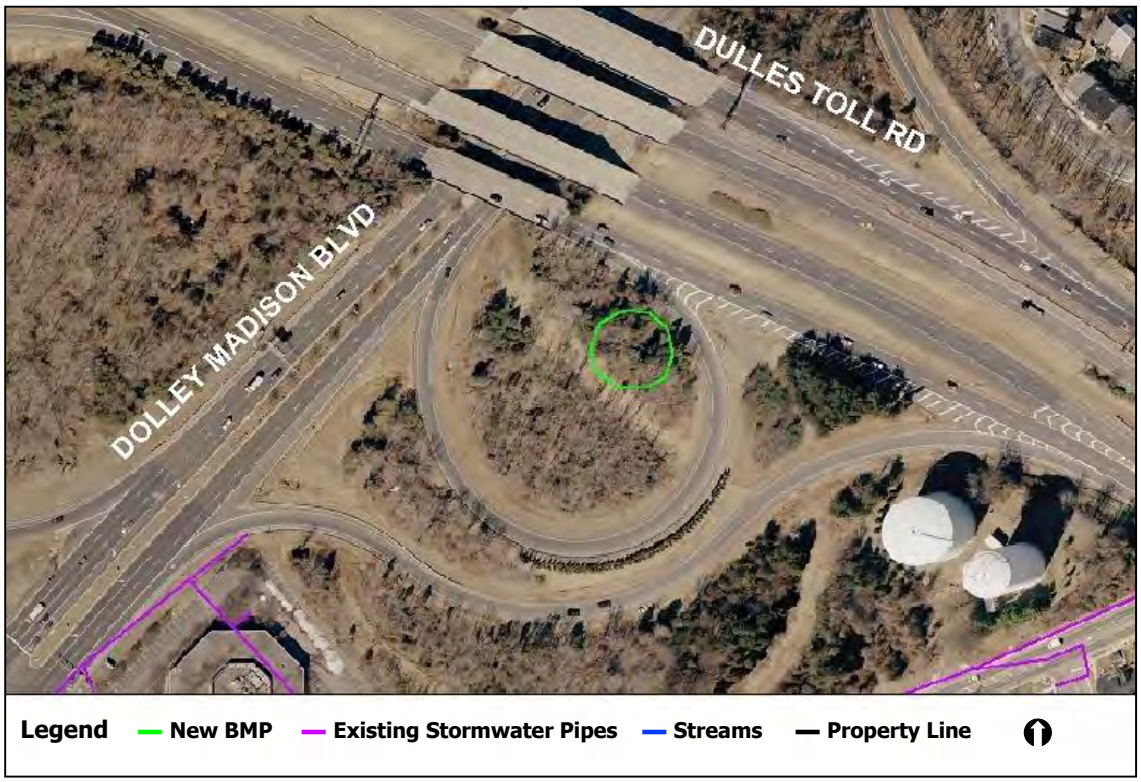
Vicinity Map

Address:	Dulles Toll Road and Dolley Madison Boulevard Interchange
Location:	Southeast cloverleaf
Land Owner:	VA Department of Transportation
Tax Map:	30-3
Drainage Area:	9.0 acres
Stream Name:	Unnamed tributary to Scotts Run

Description: Construct a dry detention BMP within the Dulles Toll Road right of way that will provide water quantity control and water quality treatment.

Potential Benefits: An estimated 3.5 lbs/yr of phosphorus will be removed and all of the runoff from the one-year storm event will be stored to control the peak flow and help reduce erosion in the downstream channel.

Project Design Considerations: Stream Restoration Project SC9220 is downstream of this project site. Coordination and sequencing of these projects should be considered. There are minimal environmental permitting requirements for this site. The project site can be accessed from a Dulles Toll Road exit ramp. An easement will not be required. The BMP design should minimize tree removal.

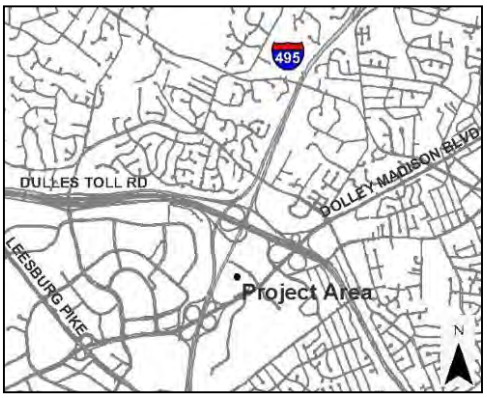


Project Area Map

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP and Incidentals	1	LS	$15,000.00	$15,000.00
New Storm Pipe	1	LS	$7,000.00	$7,000.00
Clear and Grub	0.25	AC	$5,000.00	$1,250.00
Grading and Excavation	600	CY	$35.00	$21,000.00
Erosion and Sediment Control	1	LS	$6,000.00	$6,000.00
Landscaping	1	LS	$6,000.00	$6,000.00
			Base Construction Cost	$56,250.00
			Mobilization (5%)	$2,812.50
			Subtotal 1	$59,062.50
			Contingency (25%)	$14,765.63
			Subtotal 2	$73,828.13
			Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)	$33,222.66
			Estimated Project Cost	**$110,000.00**

Project: SC9154 BMP Retrofit Project



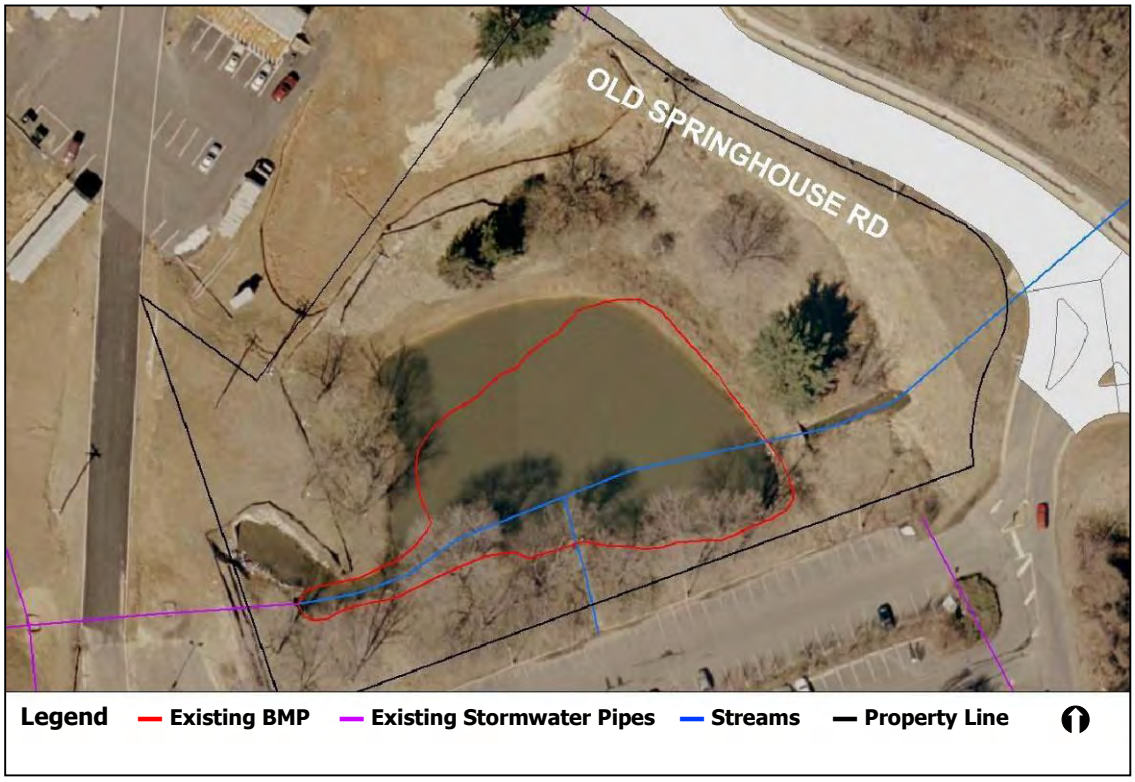
Vicinity Map

Address: North of 1820 Dolley Madison Boulevard
Location: Westgate Industrial Park
Land Owner: Commercial Development
PIN: 0294 05 0008A
County Facility ID: None
Control Type: Water Quantity
Drainage Area: 26.2 acres
Stream Name: Scotts Run

Description: The existing wet pond was designed to provide water quantity control only. Retrofit the pond by increasing the depth to detain the one-year storm event and adding an aquatic bench.

Potential Benefits: An estimated 12.8 lbs/yr of phosphorus will be removed and some wetland habitat will be provided. All of the runoff from the one-year storm event will be stored to control the peak flow and help reduce erosion in the downstream channel.

Project Design Considerations: The existing facility is adjacent to the Chesapeake Bay Resource Protection Area. The pond expansion should avoid this area which has special permitting requirements. Otherwise the environmental permitting requirements for this project are minimal. The facility can be accessed from Old Springhouse Road. An easement will be required. Impacts to trees will be minimized.



Project Area Map

Site Photo: Looking south at the pond.

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Grading and Excavation	1,510	CY	$35.00	$52,850.00
Aquatic Bench	190	SY	$2.00	$380.00
Erosion and Sediment Control	1	LS	$3,000.00	$3,000.00
Landscaping	1	LS	$2,000.00	$2,000.00
			Base Construction Cost	$58,230.00
			Mobilization (5%)	$2,911.50
			Subtotal 1	$61,141.50
			Contingency (25%)	$15,285.38
			Subtotal 2	$76,426.88
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$34,392.09
			Estimated Project Cost	**$120,000.00**

Project: SC9155 BMP Retrofit Project

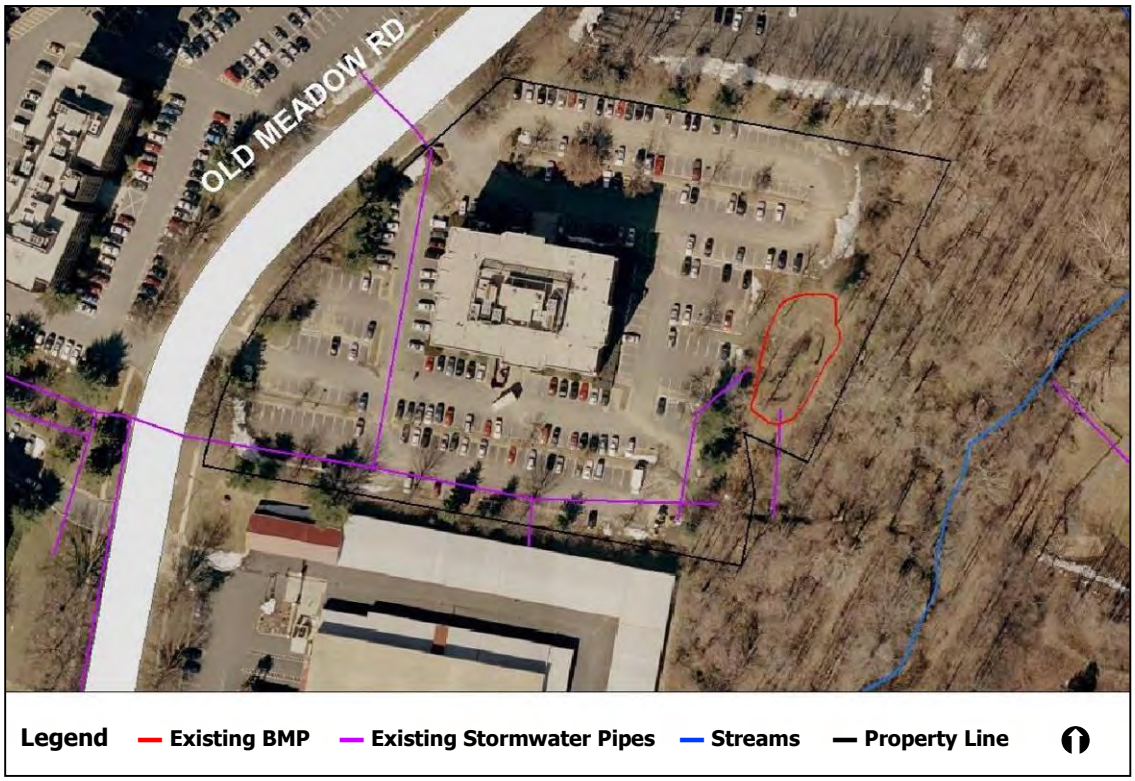
Vicinity Map

Address:	1749 Old Meadow Road
Location:	Westgate Research
Land Owner:	Commercial Development
PIN:	0294 06 0103
County Facility ID:	None
Control Type:	Water Quantity
Drainage Area:	4.0 acres
Stream Name:	Scotts Run

Description: The existing dry detention pond was designed to provide water quantity control only. Retrofit the pond by modifying the riser structure to detain a portion of the one-year storm event and adding a shallow wetland.

Potential Benefits: An estimated 3.7 lbs/yr of phosphorus will be removed and some wetland habitat will be provided. Approximately 80 percent of the runoff from the one-year storm event will be stored to control the peak flow and help reduce erosion in the downstream channel.

Project Design Considerations: Stream Restoration Project SC9220 is downstream of this facility. Coordination and sequencing of these projects should be considered. This project site is adjacent to BMP Retrofit Project SC9156 and upstream of Buffer Restoration Project SC9352. This facility is in the Chesapeake Bay Resource Protection Area which has special permitting requirements. The facility can be accessed from Old Meadow Road. An easement will be required. Impacts to trees will be minimized.

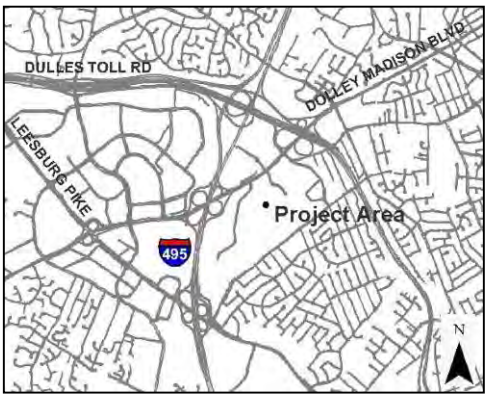


Project Area Map

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP Retrofit and Incidentals	1	LS	$6,000.00	$6,000.00
Grading and Excavation	430	CY	$35.00	$15,050.00
Shallow Wetland	160	SY	$2.00	$320.00
Erosion and Sediment Control	1	LS	$3,000.00	$3,000.00
Landscaping	1	LS	$2,000.00	$2,000.00
			Base Construction Cost	$26,370.00
			Mobilization (5%)	$1,318.50
			Subtotal 1	$27,688.50
			Contingency (25%)	$6,922.13
			Subtotal 2	$34,610.63
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$15,574.78
			Estimated Project Cost	**$60,000.00**

Project: SC9156 BMP Retrofit Project



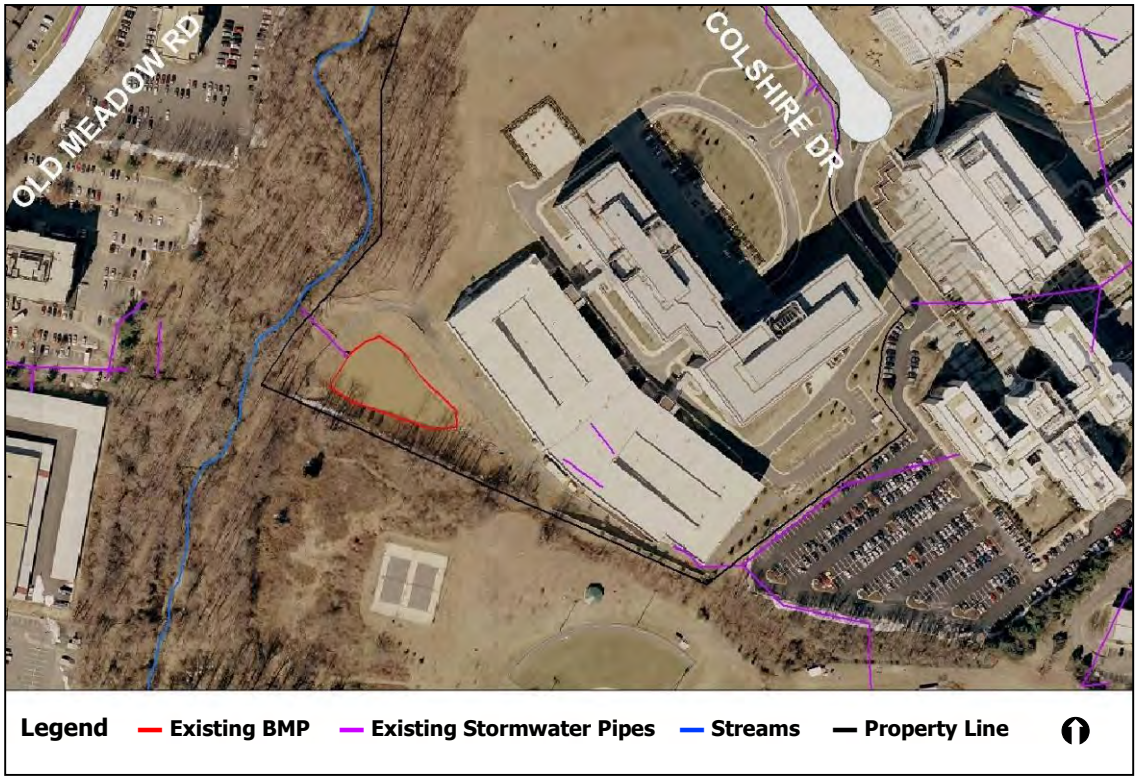
Vicinity Map

Address:	7525 Colshire Drive
Location:	Westgate
Land Owner:	Commercial Development
PIN:	0303 28 B2
County Facility ID:	None
Control Type:	Water Quality
Drainage Area:	16.5 acres
Stream name:	Scotts Run

Description: Retrofit the existing wet pond by modifying the riser structure to detain a portion of the one-year storm event and adding an aquatic bench.

Potential Benefits: An estimated 4.8 lbs/yr of phosphorus will be removed and 0.1 acres of wetland habitat will be provided. Approximately 88 percent of the runoff from the one-year storm event will be stored to control the peak flow and help reduce erosion in the downstream channel.

Project Design Considerations: Stream Restoration Project SC9220 is downstream of this facility. Coordination and sequencing of these projects should be considered. This site is adjacent to BMP Retrofit Project SC9155 and upstream of Buffer Restoration Project SC9352. This facility is in the Chesapeake Bay Resource Protection Area which has special permitting requirements. The facility can be accessed from Colshire Drive. An easement will be required. Impacts to trees will be minimized.



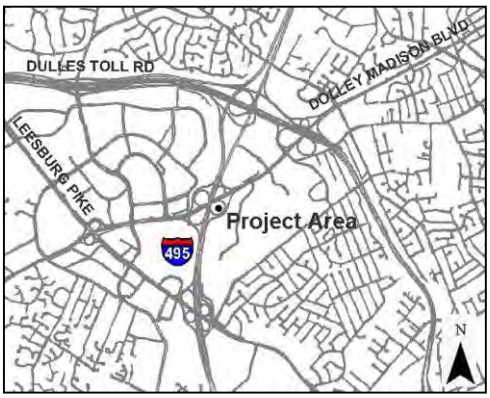
Project Area Map

Site Photo: Looking northeast at the pond

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP Retrofit and Incidentals	1	LS	$11,000.00	$11,000.00
Grading and Excavation	1,320	CY	$35.00	$46,200.00
Aquatic Bench	250	SY	$2.00	$500.00
Erosion and Sediment Control	1	LS	$3,000.00	$3,000.00
Landscaping	1	LS	$2,000.00	$2,000.00
			Base Construction Cost	$62,700.00
			Mobilization (5%)	$3,135.00
			Subtotal 1	$65,835.00
			Contingency (25%)	$16,458.75
			Subtotal 2	$82,293.75
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$37,032.19
			Estimated Project Cost	**$120,000.00**

Project: SC9157 New BMP Project



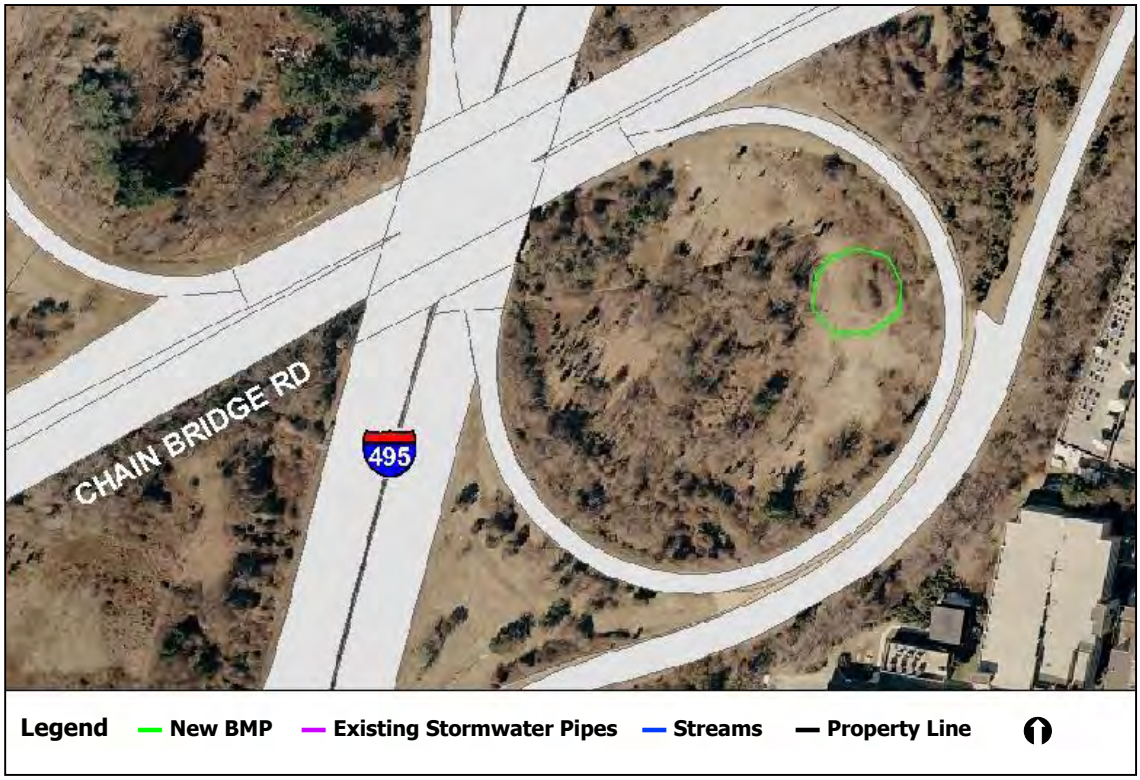
Vicinity Map

Address:	Interstate 495 and Chain Bridge Road Interchange
Location:	Southeast cloverleaf
Land Owner:	VA Department of Transportation
Tax Map:	29-4
Drainage Area:	6.1 acres
Stream Name:	Unnamed tributary to Scotts Run

Description: Construct a dry detention BMP within the Interstate 495 right of way that will provide water quantity control and water quality treatment. The new pond can be connected to the nearby storm drain network.

Potential Benefits: An estimated 6.0 lbs/yr of phosphorus will be removed and all of the runoff from the one-year storm event will be stored to control the peak flow and help reduce erosion in the downstream channel.

Project Design Considerations: Stream Restoration Project SC9220 is downstream of this project site. Coordination and sequencing of these projects should be considered. Buffer Restoration Project SC9352 is also downstream of this project site. There are minimal environmental permitting requirements for this site. The project site can be accessed from a Chain Bridge Road exit ramp. An easement will not be required. The BMP design should minimize tree removal.

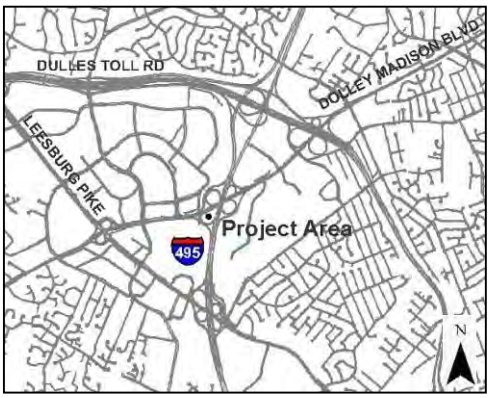


Project Area Map

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP and Incidentals	1	LS	$15,000.00	$15,000.00
New Storm Pipe	1	LS	$7,000.00	$7,000.00
Clear and Grub	0.25	AC	$5,000.00	$1,250.00
Grading and Excavation	600	CY	$35.00	$21,000.00
Erosion and Sediment Control	1	LS	$6,000.00	$6,000.00
Landscaping	1	LS	$6,000.00	$6,000.00
			Base Construction Cost	$56,250.00
			Mobilization (5%)	$2,812.50
			Subtotal 1	$59,062.50
			Contingency (25%)	$14,765.63
			Subtotal 2	$73,828.13
			Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)	$33,222.66
			Estimated Project Cost	**$110,000.00**

Project: SC9158 New BMP Project



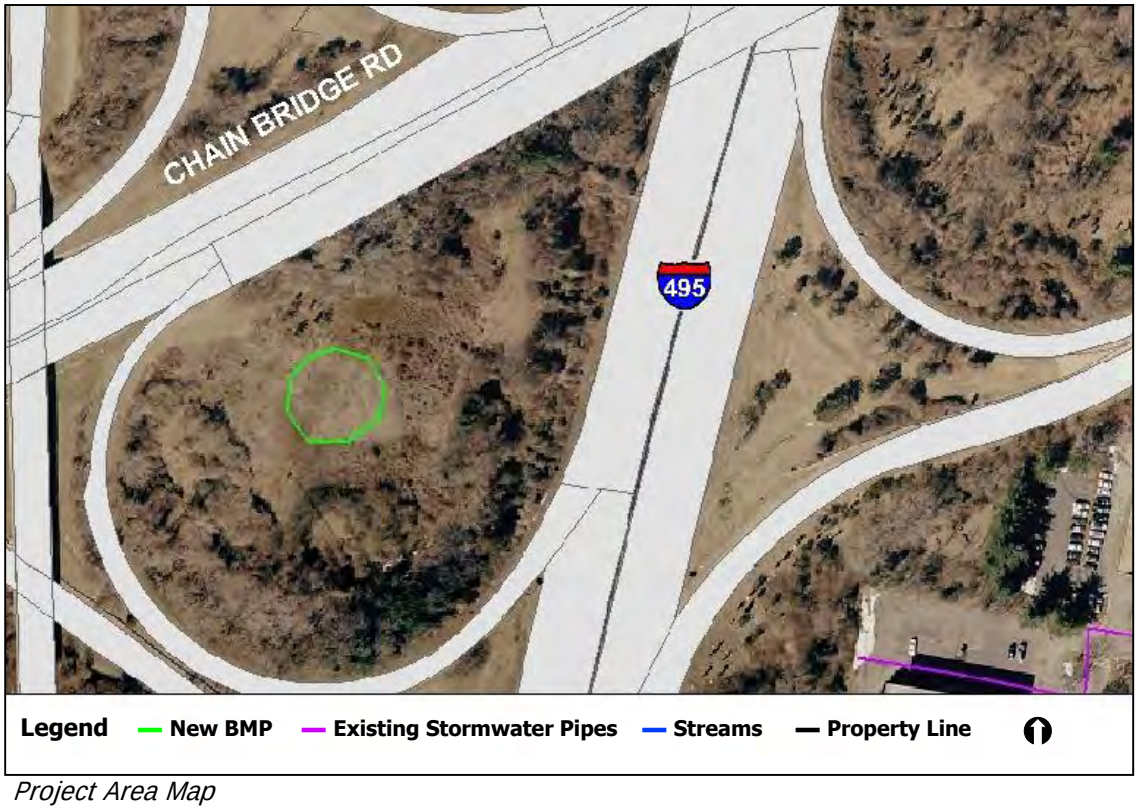
Vicinity Map

Address:	Interstate 495 and Chain Bridge Road Interchange
Location:	Southwest cloverleaf
Land Owner:	VA Department of Transportation
Tax Map:	29-4
Drainage Area:	6.1 acres
Stream Name:	Unnamed tributary to Scotts Run

Description: Construct a dry detention BMP within the Interstate 495 right of way that will provide water quantity control and water quality treatment. The new pond can be connected to the nearby storm drain network.

Potential Benefits: An estimated 6.0 lbs/yr of phosphorus will be removed and all of the runoff from the one-year storm event will be stored to control the peak flow and help reduce erosion in the downstream channel.

Project Design Considerations: Stream Restoration Project SC9220 is downstream of this project site. Coordination and sequencing of these projects should be considered. Buffer Restoration Project SC9352 is also downstream of this project site. There are minimal environmental permitting requirements for this site. The site can be accessed from an Interstate 485 exit ramp. An easement will not be required. The BMP design should minimize tree removal.

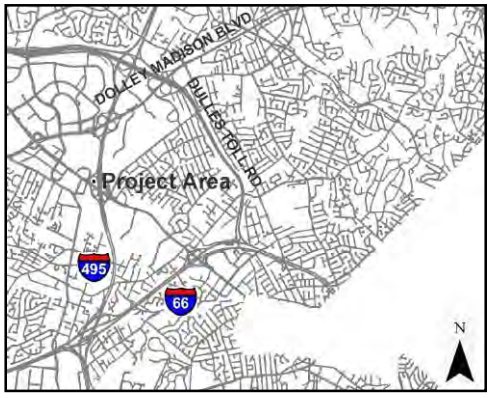


Project Area Map

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP and Incidentals	1	LS	$15,000.00	$15,000.00
New Storm Pipe	1	LS	$7,000.00	$7,000.00
Clear and Grub	0.25	AC	$5,000.00	$1,250.00
Grading and Excavation	600	CY	$35.00	$21,000.00
Erosion and Sediment Control	1	LS	$6,000.00	$6,000.00
Landscaping	1	LS	$6,000.00	$6,000.00
			Base Construction Cost	$56,250.00
			Mobilization (5%)	$2,812.50
			Subtotal 1	$59,062.50
			Contingency (25%)	$14,765.63
			Subtotal 2	$73,828.13
			Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)	$33,222.66
			Estimated Project Cost	**$110,000.00**

Project: SC9162 New BMP Project



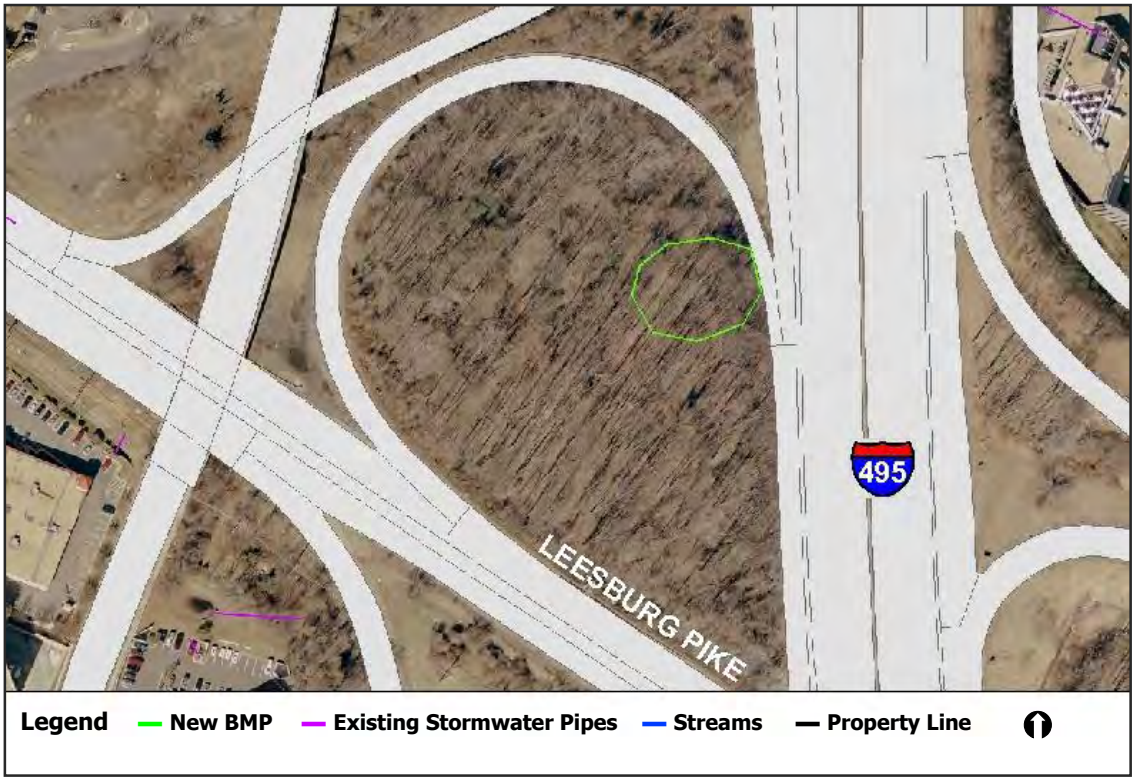
Vicinity Map

Address:	Interstate 495 and Leesburg Pike Interchange
Location:	Northwest Cloverleaf
Land Owner:	VA Department of Transportation
Tax Map:	39-2
Drainage Area:	9.4 acres
Stream Name:	Unnamed tributary to Scotts Run

Description: There are no existing stormwater controls in this area. Construct one dry detention BMP that will provide water quantity control and water quality treatment.

Potential Benefits: An estimated 9.3 lbs/yr of phosphorus will be removed and all of the runoff from the one-year storm event will be stored to control the peak flow and help reduce erosion in the downstream channel.

Project Design Considerations: There are minimal environmental permitting requirements for this project. The site can be accessed from Leesburg Pike. An easement will not be required. The BMP design should minimize tree removal.

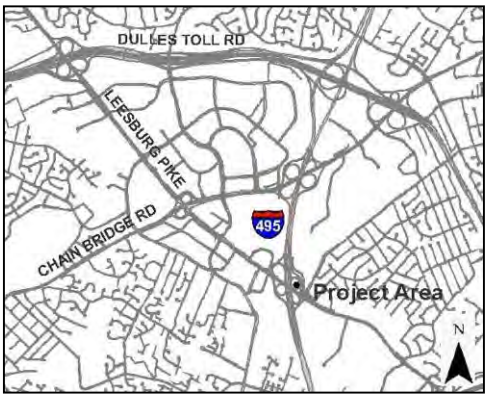


Project Area Map

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP and Incidentals	1	LS	$15,000	$15,000.00
New Storm Pipe	1	LS	$7,000	$7,000.00
Clear and Grub	0.25	AC	$5,000	$1,250.00
Grading and Excavation	930	CY	$35	$32,550.00
Erosion and Sediment Control	1	LS	$6,000	$6,000.00
Landscaping	1	LS	$6,000	$6,000.00
			Base Construction Cost	$67,800.00
			Mobilization (5%)	$3,390.00
			Subtotal 1	$71,190.00
			Contingency (25%)	$17,797.50
			Subtotal 2	$88,987.50
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$40,044.38
			Estimated Project Cost	**$130,000.00**

Project: SC9164 New BMP Project



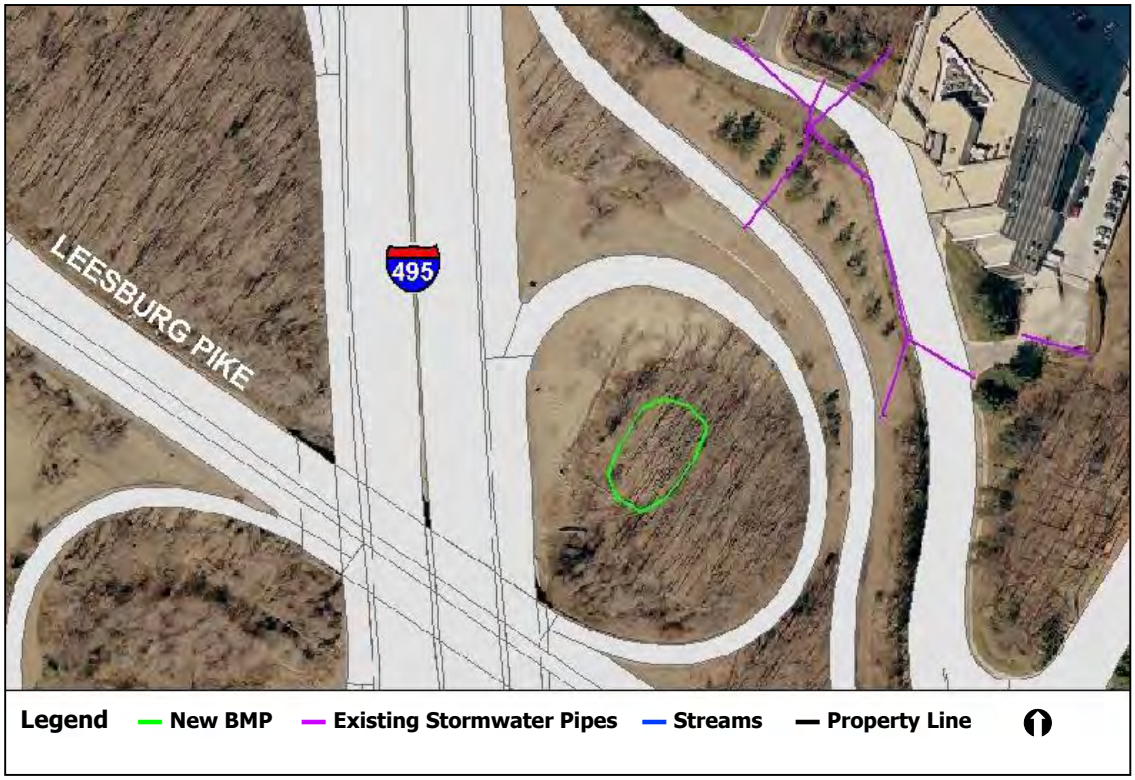
Vicinity Map

Address:	Interstate 495 and Leesburg Pike Interchange
Location:	Northeast cloverleaf
Land Owner:	VA Department of Transportation
Drainage Area:	15.0 acres
Tax Map:	39-2
Stream Name:	Unnamed tributary to Scotts Run

Description: Construct a dry detention BMP within the Interstate 495 right of way that will provide water quantity control and water quality treatment. The new pond can be connected to the nearby storm drain network.

Potential Benefits: An estimated 2.4 lbs/yr of phosphorus will be removed and all of the runoff from the one-year storm event will be stored to control the peak flow and help reduce erosion in the downstream channel.

Project Design Considerations: Stream Restoration Project SC9220 is downstream of this project site. Coordination and sequencing of these projects should be considered. Buffer Restoration Project SC9352 and Neighborhood Stormwater Improvement Area SC9861 are also downstream of this project site. There are minimal environmental permitting requirements for this site. The project site can be accessed from an Interstate 495 exit ramp. An easement will not be required. The BMP design should minimize tree removal.

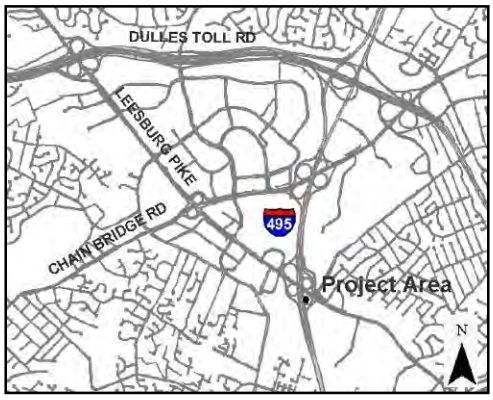


Project Area Map

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP and Incidentals	1	LS	$15,000.00	$15,000.00
New Storm Pipe	1	LS	$7,000.00	$7,000.00
Clear and Grub	0.25	AC	$5,000.00	$1,250.00
Grading and Excavation	600	CY	$35.00	$21,000.00
Erosion and Sediment Control	1	LS	$6,000.00	$6,000.00
Landscaping	1	LS	$6,000.00	$6,000.00
			Base Construction Cost	$56,250.00
			Mobilization (5%)	$2,812.50
			Subtotal 1	$59,062.50
			Contingency (25%)	$14,765.63
			Subtotal 2	$73,828.13
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$33,222.66
			Estimated Project Cost	**$110,000.00**

Project: SC9165 BMP Retrofit Project



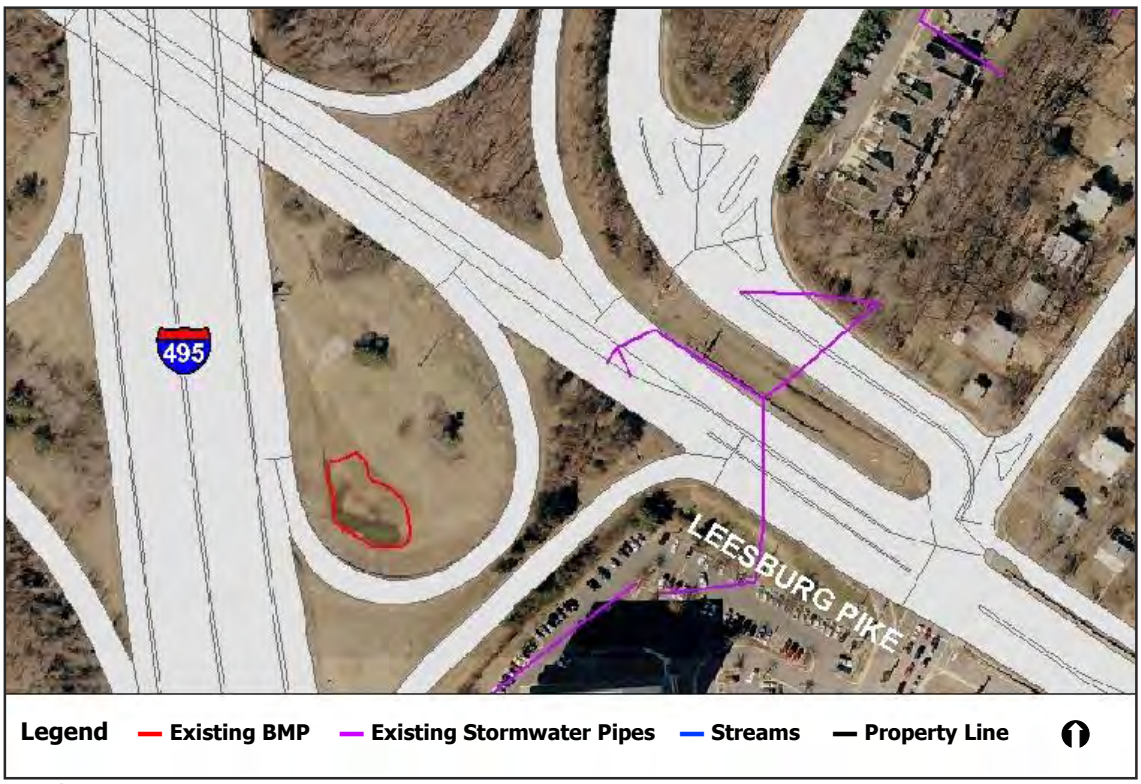
Vicinity Map

Address:	Interstate 495 and Leesburg Pike Interchange
Location:	Southeast Cloverleaf
Land Owner:	VA Department of Transportation
Tax Map:	39-2
County Facility ID:	None
Control Type:	Water Quality
Drainage Area:	4.5 acres
Stream name:	Unnamed tributary to Scotts Run

Description: Retrofit the existing wet pond by modifying the riser structure to detain the one-year storm event and adding an aquatic bench.

Potential Benefits: An estimated 0.9 lbs/yr of phosphorus will be removed and some wetland habitat will be provided. All of the runoff from the one-year storm event will be stored to control the peak flow and help reduce erosion in the downstream channel.

Project Design Considerations: Stream Restoration Project SC9220 is downstream of this facility. Coordination and sequencing of these projects should be considered. Buffer Restoration Project SC9352 is also downstream of this project site. There are minimal environmental permitting requirements for this site. The project site can be accessed from a Leesburg Pike exit ramp. An easement will not be required. Impacts to trees will be minimized.



Project Area Map

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP Retrofit and Incidentals	1	LS	$6,000.00	$6,000.00
Grading and Excavation	510	CY	$35.00	$17,850.00
Aquatic Bench	190	SY	$2.00	$380.00
Erosion and Sediment Control	1	LS	$3,000.00	$3,000.00
Landscaping	1	LS	$2,000.00	$2,000.00
			Base Construction Cost	$29,230.00
			Mobilization (5%)	$1,461.50
			Subtotal 1	$30,691.50
			Contingency (25%)	$7,672.88
			Subtotal 2	$38,364.38
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$17,263.97
			Estimated Project Cost	**$60,000.00**

Project: SC9167 New BMP Project

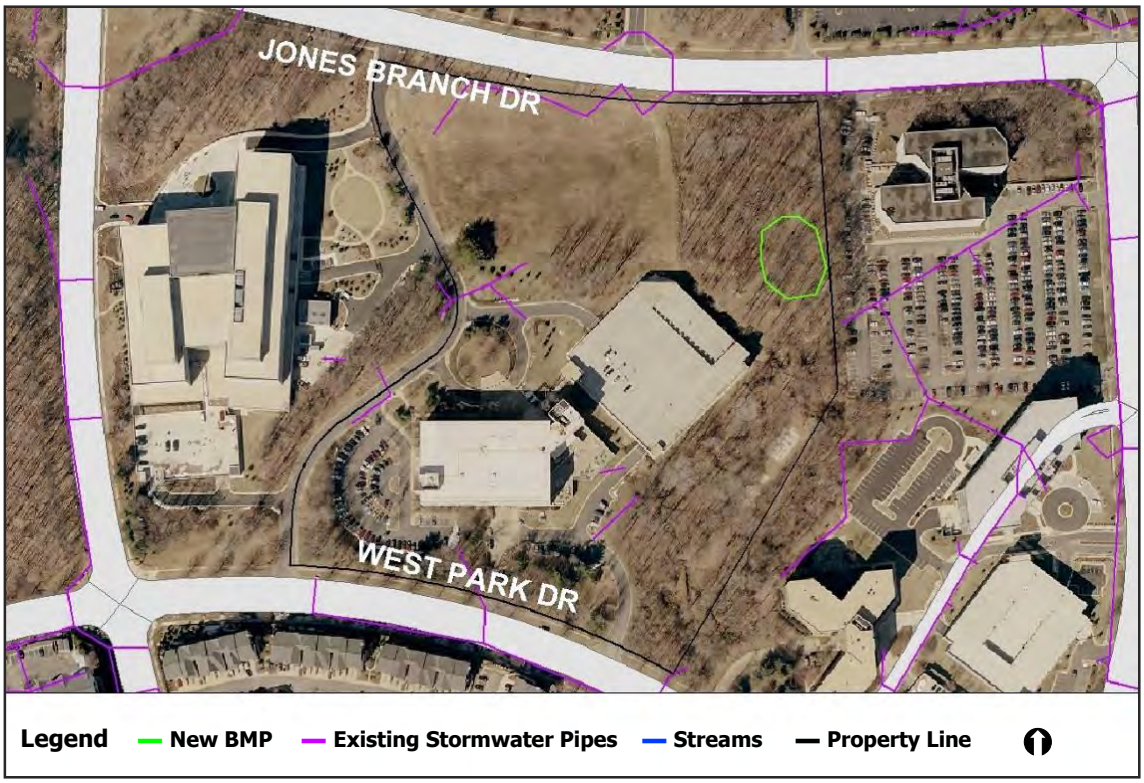
Vicinity Map

Address:	West of 1500 West Branch Drive
Location:	Westpark
Land Owner:	Commercial Development
PIN:	0292 15 B2
Drainage Area:	6.5 acres
Stream Name:	Unnamed tributary to Scotts Run

Description: There are no existing stormwater controls in this area. Construct one dry detention BMP that will provide water quantity control and water quality treatment.

Potential Benefits: An estimated 6.0 lbs/yr of phosphorus will be removed and all of the runoff from the one-year storm event will be stored to control the peak flow and help reduce erosion in the downstream channel.

Project Design Considerations: There are minimal environmental permitting requirements for this project. The site can be accessed from West Branch Drive. An easement will be required. The BMP design should minimize tree removal.

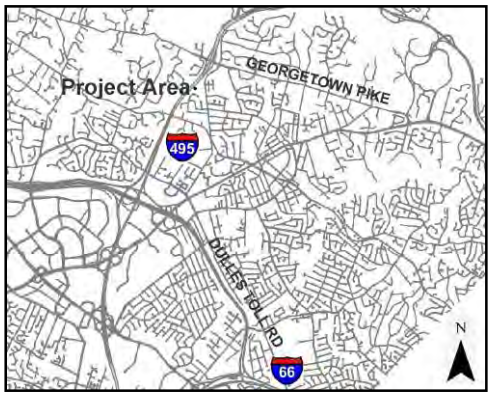


Project Area Map

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP and Incidentals	1	LS	$15,000	$15,000.00
New Storm Pipe	1	LS	$7,000	$7,000.00
Grading and Excavation	970	CY	$35	$33,950.00
Erosion and Sediment Control	1	LS	$6,000	$6,000.00
Landscaping	1	LS	$6,000	$6,000.00
			Base Construction Cost	$67,950.00
			Mobilization (5%)	$3,397.50
			Subtotal 1	$71,347.50
			Contingency (25%)	$17,836.88
			Subtotal 2	$89,184.38
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$40,132.97
			Estimated Project Cost	**$130,000.00**

Project: SC9174 BMP Retrofit Project



Vicinity Map

Address:	1020 Balls Hill Road
Location:	McLean Presbyterian Church
Land Owner:	Private Organization
PIN:	0213 01 0050
County Facility ID:	None
Control Type:	Water Quantity
Drainage Area:	7.3 acres
Stream Name:	Unnamed tributary to Scotts Run

Description: The existing dry pond was designed to provide water quantity control only. Retrofit the pond by modifying the outlet structure to detain a portion of the one-year storm event and adding a shallow wetland.

Potential Benefits: An estimated 6.8 lbs/yr of phosphorus will be removed and some wetland habitat will be provided. Approximately 91 percent of the runoff from the one-year storm event will be stored to control the peak flow and help reduce erosion in the downstream channel.

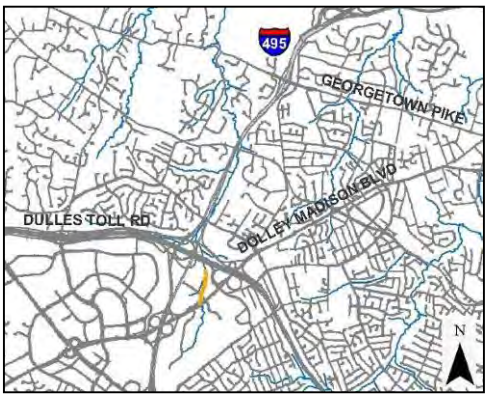
Potential Constraints: There are minimal environmental permitting requirements for this project. The facility can be accessed from Balls Hill Road. An easement will be required. Impacts to trees will be minimized.

Project Area Map

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP Retrofit and Incidentals	1	LS	$11,000.00	$11,000.00
Grading and Excavation	650	CY	$35.00	$22,750.00
Shallow Wetland	250	SY	$2.00	$500.00
Erosion and Sediment Control	1	LS	$3,000.00	$3,000.00
Landscaping	1	LS	$2,000.00	$2,000.00
			Base Construction Cost	$39,250.00
			Mobilization (5%)	$1,962.50
			Subtotal 1	$41,212.50
			Contingency (25%)	$10,303.13
			Subtotal 2	$51,515.63
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$23,182.03
			Estimated Project Cost	**$80,000.00**

Project: SC9352 Buffer Restoration Project



Vicinity Map

Location: Westgate Industrial Park and Gates of McLean Condominiums

Land Owner: VA Department of Transportation,

Residential Development, and Commercial Development

Tax Map: 29-4 and 30-3

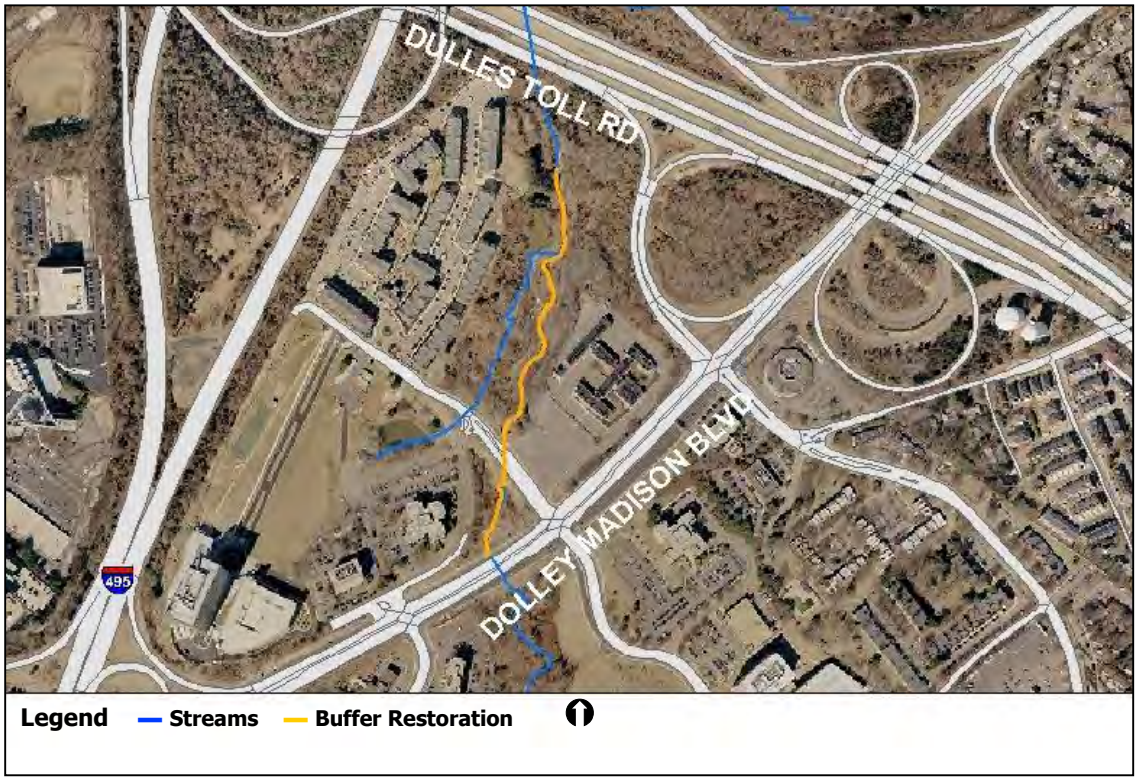
Potential Length: 1,850 linear feet

Stream Name: Scotts Run

Description: Evaluate the buffer vegetation adjacent to a portion of Scotts Run that runs from Dolley Madison Boulevard to the Dulles Toll Road and determine if buffer restoration is required.

Potential Benefits: Provide habitat, filter pollutants, and minimize erosion of stream banks.

Project Design Considerations: This project is in a floodplain and the Chesapeake Bay Resource Protection Area both of which have special permitting requirements. This project may require some clearing of trees and may have impacts to jurisdictional wetlands. Easements will be required.

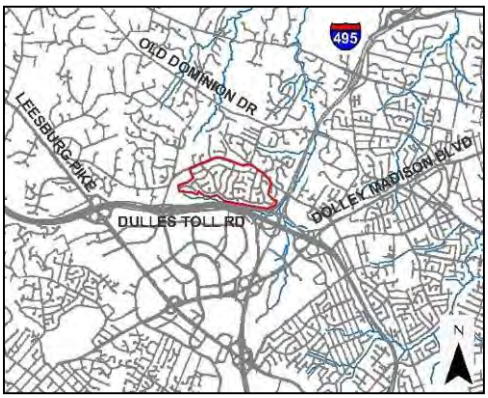


Project Area Map

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Buffer Restoration	1,850	LF	$25.00	$46,250.00
			Base Construction Cost	$46,250.00
			Mobilization (5%)	$2,312.50
			Subtotal 1	$48,562.50
			Contingency (25%)	$12,140.63
			Subtotal 2	$60,703.13
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$27,316.41
			Estimated Project Cost	**$90,000.00**

Project: SC9834 Neighborhood Stormwater Improvement Area



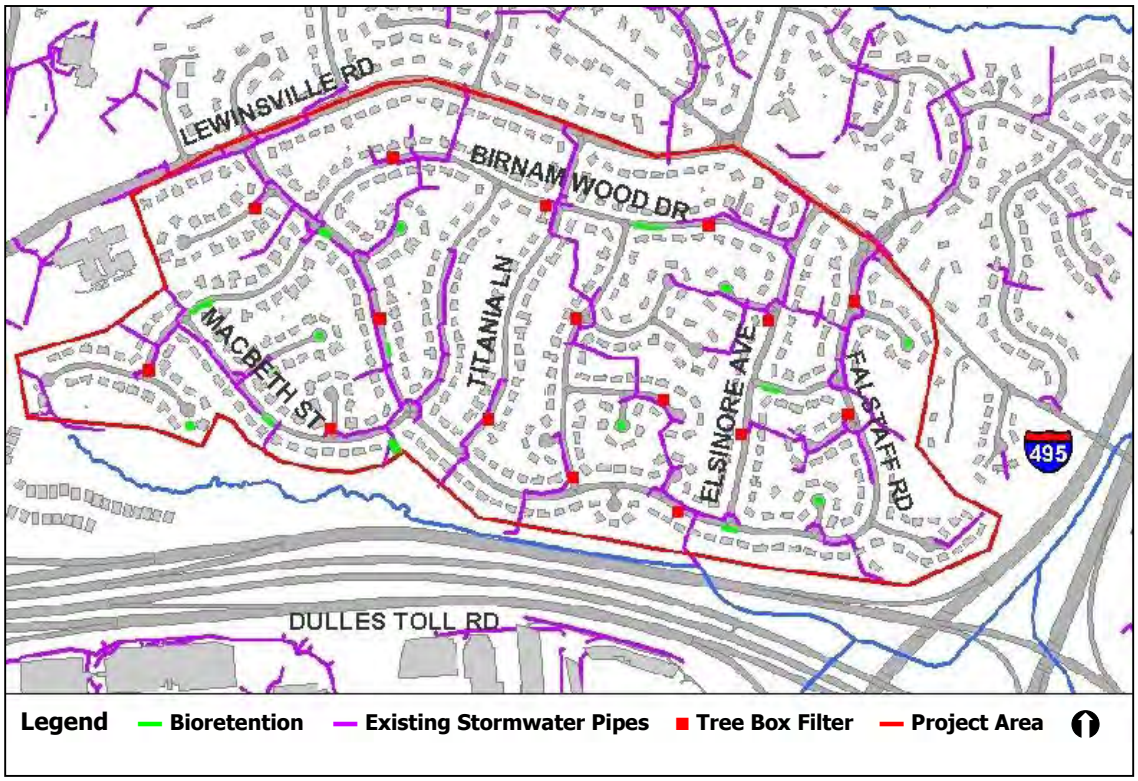
Vicinity Map

Location:	McLean Hamlet Neighborhood
Land Owner:	Private Residential and VA Department of Transportation
Tax Map:	29-2
Drainage Area:	14.5 acres
Stream Name:	Unnamed tributary to Scotts Run

Description: McLean Hamlet has no existing Stormwater controls. Conduct a storm drain study in the McLean Hamlet neighborhood located between the Dulles Toll Road and Lewinsville Road. The study should be accompanied by LID measures that will reduce the peak flows. Add bioretention areas in the grass right of way areas and replace sixteen curb drop inlets with tree box filters.

Potential Benefits: An estimated 13.5 lbs/yr of phosphorus will be removed. This project will also provide stormwater runoff flow reduction for small storm events.

Project Design Considerations: Stream Restoration Project SC9230 and New BMP Projects SC9128 and SC9132 are all adjacent to this project. Coordination and sequencing of these projects should be considered. Portions of this project site are in a Chesapeake Bay Resource Protection Area which has special permitting requirements. Installation of LID measures in these areas should be avoided. Easements will not be required. Impacts to trees will be minimized.



Project Area Map: Conceptual plan showing potential locations of LID measures.

Site Photo: Roadside area suitable for bioretention in the McLean Hamlet Neighborhood

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Storm Drain Study	1	LS	$100,000.00	$100,000.00
Tree Box Filters	16	EA	$5,000.00	$80,000.00
Bioretention	1,080	SY	$250.00	$270,000.00
Erosion and Sediment Control	1	LS	$3,000.00	$3,000.00
			Base Construction Cost	$453,000.00
			Mobilization (5%)	$22,650.00
			Subtotal 1	$475,650.00
			Contingency (25%)	$118,912.50
			Subtotal 2	$594,562.50
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$267,553.13
			Estimated Project Cost	**$870,000.00**

Project: SC9836 New LID Project

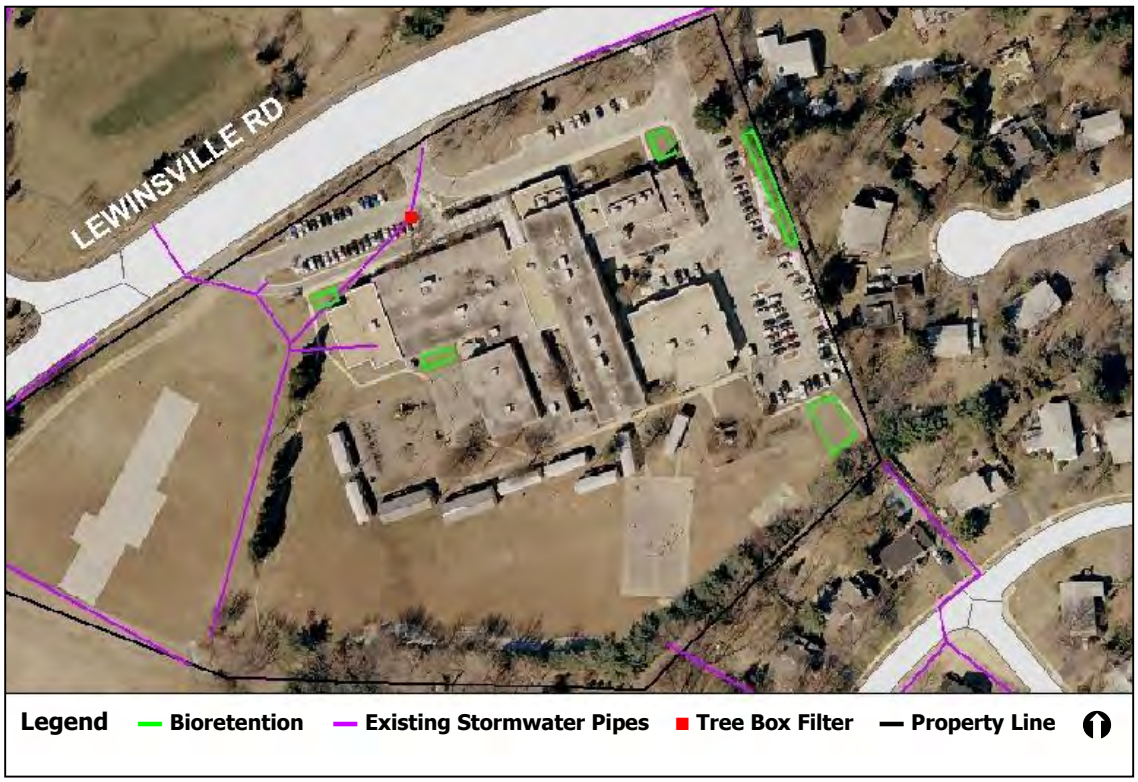
Vicinity Map

Address:	8201 Lewinsville Road
Location:	Spring Hill Elementary School
Land Owner:	Fairfax County Public Schools
PIN:	0292 01 0031
Drainage Area:	4.9 acres
Stream Name:	Unnamed tributary to Scotts Run

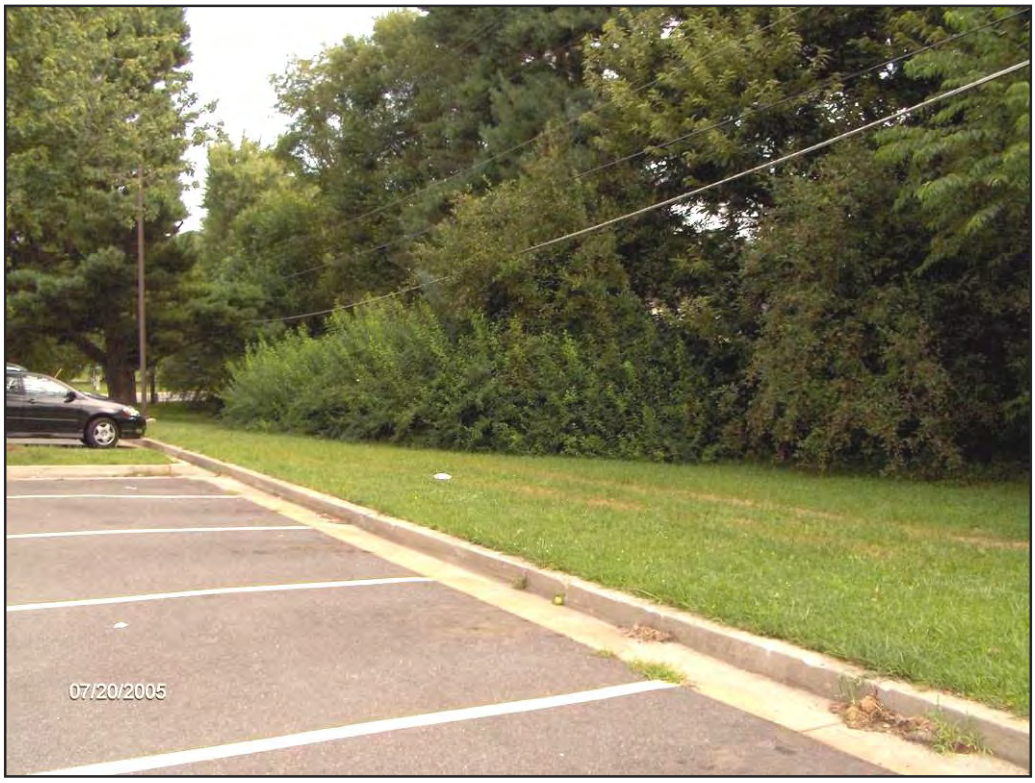
Description: The school site does not have existing stormwater controls. Add bioretention areas and bioswales in the grass areas and replace one curb drop inlet with a tree box filter in the parking lot.

Potential Benefits: An estimated 4.8 lbs/yr of phosphorus will be removed. This project will also provide stormwater runoff flow reduction for small storm events.

Project Design Considerations: Stream Restoration Project SC9230 is downstream of this site. Coordination and sequencing of these projects should be considered. There are minimal environmental permitting requirements for this project. The project site can be accessed from Lewinsville Road. An easement will not be required. There are no significant construction issues on this site. Impacts to trees will be minimized.



Project Area Map: Conceptual plan showing potential locations of LID measures.

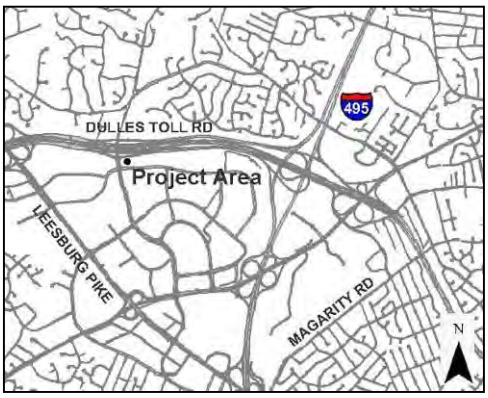


Site Photo: Looking north towards Lewinsville Road.

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Bioretention	510	SY	$250.00	$127,500.00
Tree Box Filters	1	EA	$5,000.00	$5,000.00
Erosion and Sediment Control	1	LS	$3,000.00	$3,000.00
			Base Construction Cost	$135,500.00
			Mobilization (5%)	$6,775.00
			Subtotal 1	$142,275.00
			Contingency (25%)	$35,568.75
			Subtotal 2	$177,843.75
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$80,029.69
			Estimated Project Cost	**$260,000.00**

Project: SC9844 New LID Project



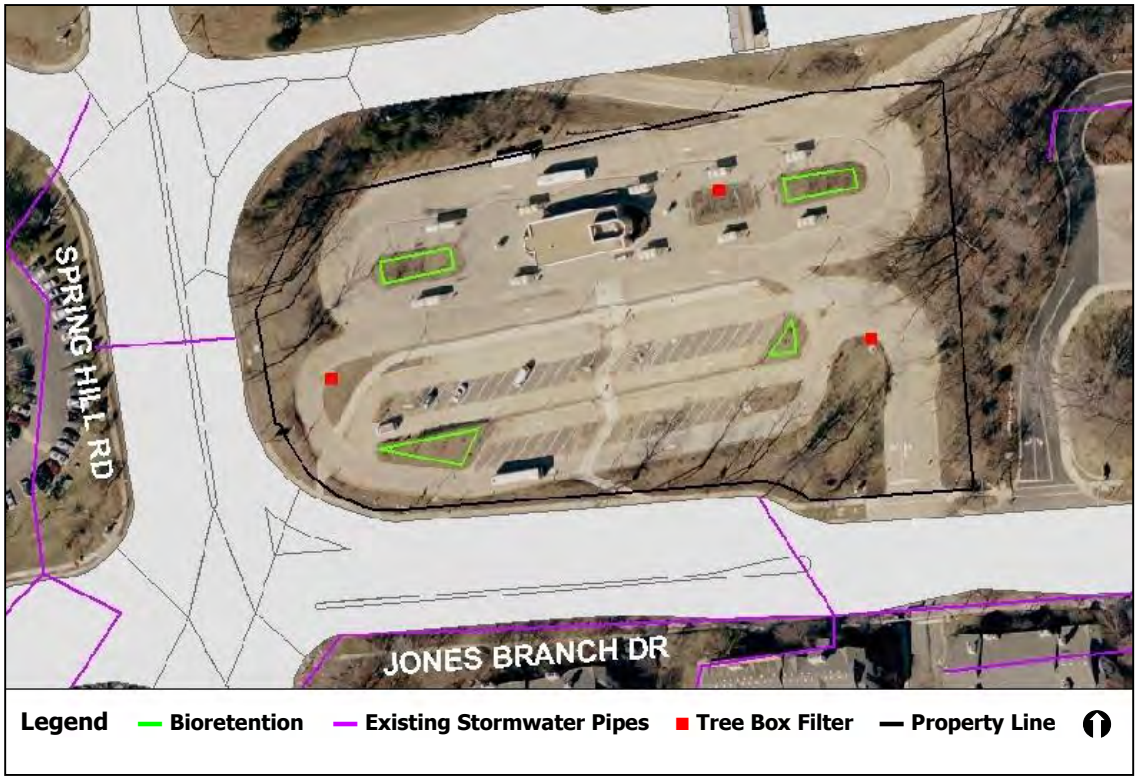
Vicinity Map

Address:	8300 Jones Branch Drive
Location:	Tysons Westpark Transit Station
Land Owner:	Fairfax County Board of Supervisors
PIN:	0291 14 A
Drainage Area:	3.1 acres
Stream Name:	Unnamed tributary to Scotts Run

Description: Add bioretention areas in the grass areas around the transit station and replace three curb drop inlets with tree box filters in the station.

Potential Benefits: An estimated 3.0 lbs/yr of phosphorus will be removed. This project will also provide stormwater runoff flow reduction for small storm events.

Project Design Considerations: There are minimal environmental permitting requirements for this project. The project site can be accessed from Jones Branch Drive. An easement will not be required. There are no significant construction issues on this site. Impacts to trees will be minimized.



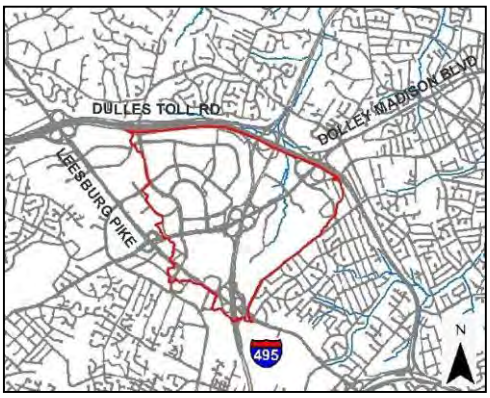
Project Area Map: Conceptual plan showing potential locations of LID measures.

Site Photo: Looking west at Transit Station.

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Bioretention	260	SY	$250.00	$65,000.00
Tree Box Filters	3	EA	$5,000.00	$15,000.00
Erosion and Sediment Control	1	LS	$3,000.00	$3,000.00
			Base Construction Cost	$83,000.00
			Mobilization (5%)	$4,150.00
			Subtotal 1	$87,150.00
			Contingency (25%)	$21,787.50
			Subtotal 2	$108,937.50
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$49,021.88
			Estimated Project Cost	**$160,000.00**

Project: SC9845 Tysons Corner Stormwater Strategy

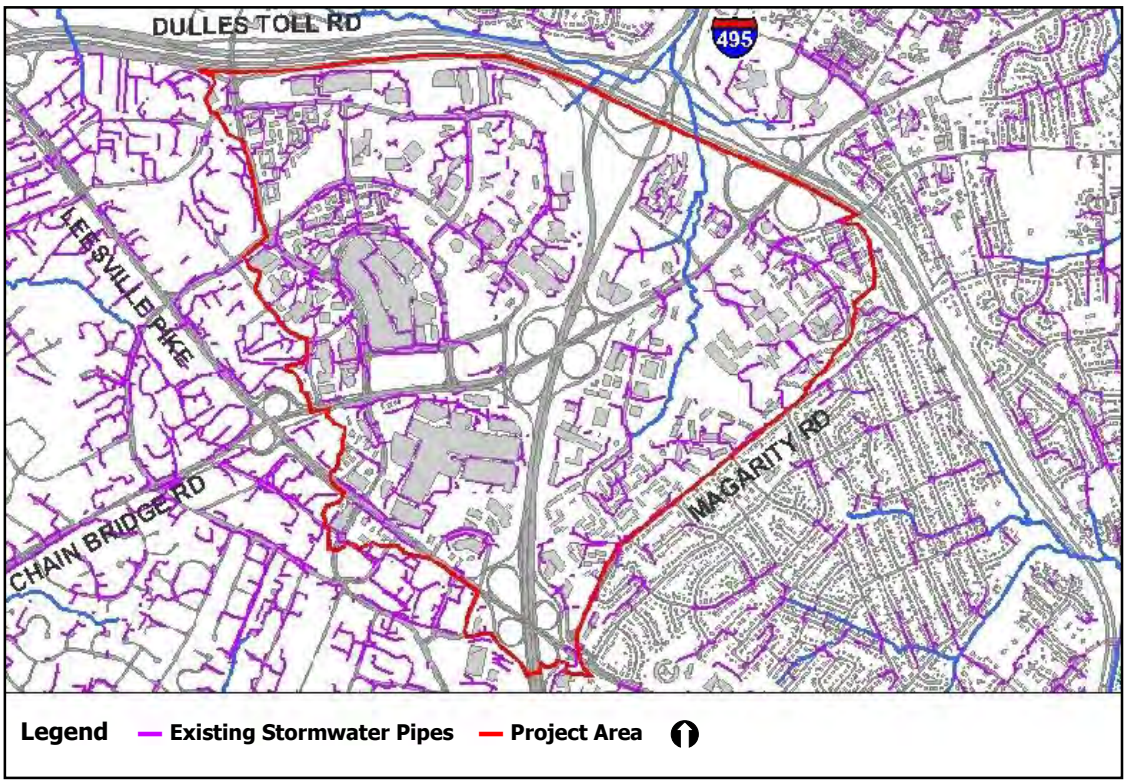


Vicinity Map

Location:	Tysons Corner
Land Owner:	Commercial Development and VA Department of Transportation
Tax Map:	29-1, 29-2, 29-3, 29-4, 30-3, and 39-2
Stream Name:	Scotts Run

Background: The headwaters of Scotts Run are in Tysons Corner, the largest commercial shopping area in Fairfax County. Tysons Corner is approximately 1,527 acres and has an imperviousness of almost 50 percent. This was caused primarily by development in the area prior to regulations that help control runoff amounts and water quality. Downstream of Tysons Corner the impervious area has contributed to poor stream habitat, erosion of stream banks and poor water quality. Further development is planned for Tysons Corner as the Washington Metropolitan Area Transit Authority expands the metrorail line through the area, potentially adding four metrorail stations to Tysons Corner. This development, as well as others in the area, will continue to negatively impact Scotts Run unless a stormwater management strategy is implemented.

The major stormwater management issue for Tysons Corner is the amount of developed area without stormwater management controls. Only 458 acres of land, or 30 percent, are currently controlled by stormwater management facilities. Another 525 acres, or 34 percent, could have stormwater management facilities, but do not. The remaining area is the roadways and right of way area which make up 544 acres or 35 percent of the total land area.



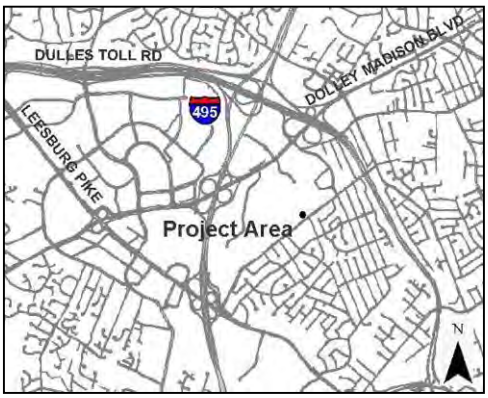
Project Area Map

Description: The recommended stormwater management plan strategy for the area is to provide additional stormwater management controls including Low Impact Development (LID) measures; new Best Management Practices (BMPs), retrofit existing BMPs, and additional stormwater management requirements for developed properties without existing BMPs. LID measures may include constructing bioretention areas in parking lot medians and in landscaped areas. In order to meet the stormwater runoff quantity and quality requirements, new BMPs may include wet ponds or dry ponds constructed on vacant or underutilized parcels. Underground manufactured BMPs could be placed in parking lots and tree box filters could replace existing curb drop inlets. Porous pavement could be used in overflow parking areas and green roofs could be installed on mixed use buildings as an amenity for the residential units.

Potential Benefits: The planned measures will help mitigate the effects of existing impervious areas that do not have stormwater controls and will provide a reduction in stormwater peak flows and pollutant discharge. The reduction in peak flows and the amount of pollutants will benefit the downstream reaches of Scotts Run and allow successful implementation of stream restoration.

Costs: The estimated cost for this study is $200,000. This cost does not include the cost of implementing the projects from the study.

Project: SC9859 New LID Project



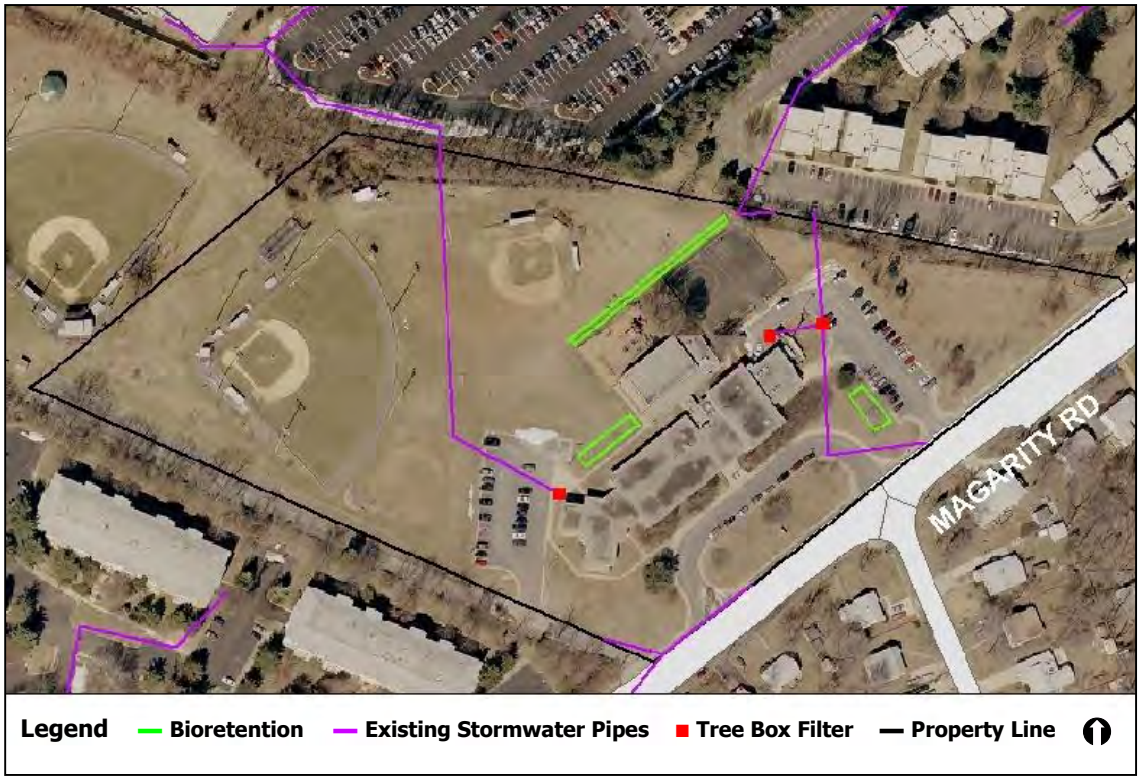
Vicinity Map

Address:	7500 Magarity Road
Location:	Westgate Elementary School
Land Owner:	Fairfax County Public Schools
PIN:	0303 01 0007B
Drainage Area:	3.7 acres
Stream Name:	Scotts Run

Description: The school site does not have any existing stormwater controls. Add bioretention areas and bioswales in the grass areas adjacent to the asphalt playground and parking lots and replace three curb drop inlets with tree box filters in the parking lots.

Potential Benefits: An estimated 2.9 lbs/yr of phosphorus will be removed. This project will also provide stormwater runoff flow reduction for small storm events.

Project Design Considerations: There are minimal environmental permitting requirements for this project. The project site can be accessed from Magarity Road. An easement will not be required. There are no significant construction issues on this site. Impacts to trees will be minimized.



Project Area Map: Conceptual plan showing potential locations of LID measures.

Site Photo: Looking northwest towards the basketball courts.

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Bioretention	250	SY	$250.00	$62,500.00
Tree Box Filters	3	EA	$5,000.00	$15,000.00
Erosion and Sediment Control	1	LS	$3,000.00	$3,000.00
			Base Construction Cost	$80,500.00
			Mobilization (5%)	$4,025.00
			Subtotal 1	$84,525.00
			Contingency (25%)	$21,131.25
			Subtotal 2	$105,656.25
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$47,545.31
			Estimated Project Cost	**$160,000.00**

Project: SC9861 Neighborhood Stormwater Improvement Area

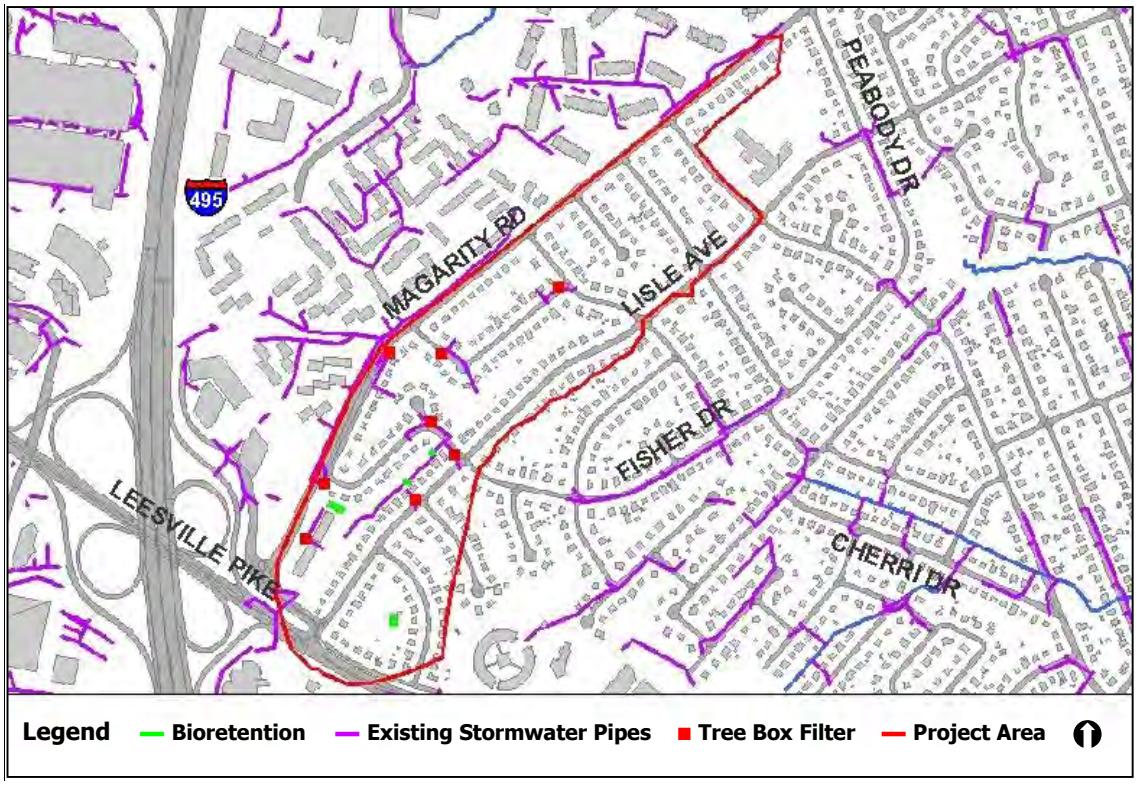
Vicinity Map

Location:	Scotts Hill Neighborhood
Land Owner:	Private Residential and VA Department of Transportation
Tax Map:	30-3, 39-2, and 40-1
Drainage Area:	6.0 acres
Stream Name:	Scotts Run

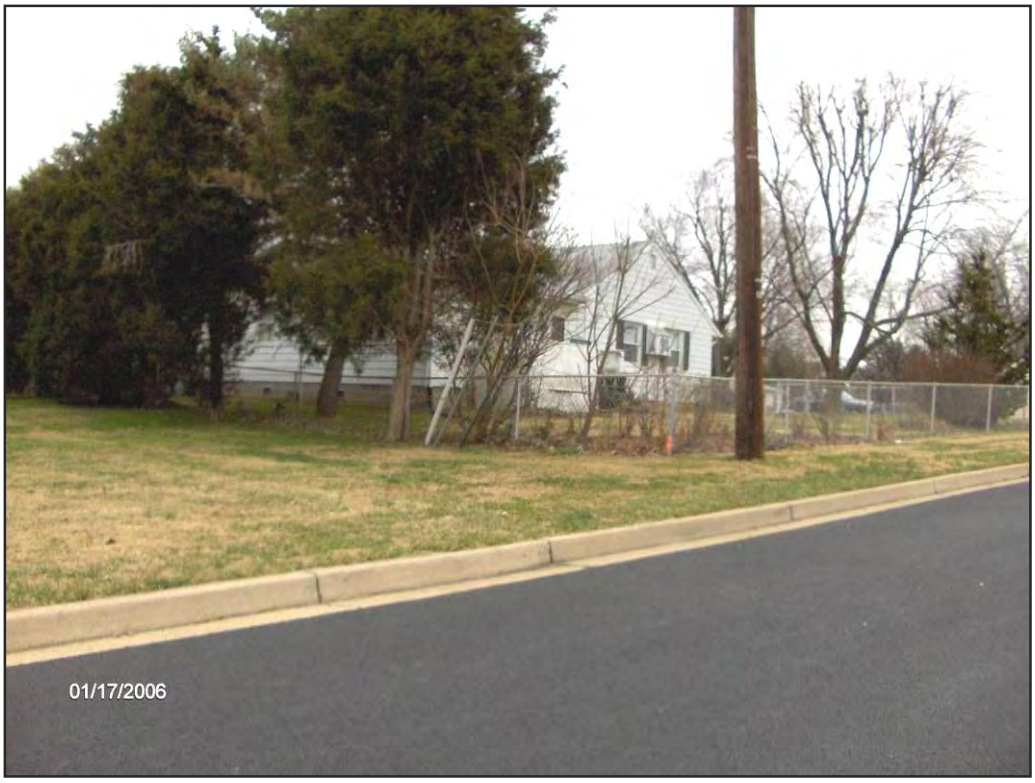
Description: The Scotts Hill neighborhood has no existing stormwater controls. Add bioretention areas in the grass right of way areas and replace eight curb drop inlets with tree box filters.

Potential Benefits: An estimated 5.6 lbs/yr of phosphorus will be removed. This project will also provide stormwater runoff flow reduction for small storm events.

Project Design Considerations: There are minimal environmental permitting requirements for this project. Easements will not be required. Impacts to trees will be minimized.



Project Area Map: Conceptual plan showing potential locations of LID measures.



Site Photo: Grass area suitable for bioretention in the Scotts Hill Neighborhood

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Tree Box Filters	8	EA	$5,000.00	$40,000.00
Bioretention	415	SY	$250.00	$103,750.00
Erosion and Sediment Control	1	LS	$3,000.00	$3,000.00
			Base Construction Cost	$146,750.00
			Mobilization (5%)	$7,337.50
			Subtotal 1	$154,087.50
			Contingency (25%)	$38,521.88
			Subtotal 2	$192,609.38
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				$86,674.22
			Estimated Project Cost	**$280,000.00**