

Project: PM9106 BMP Retrofit Project



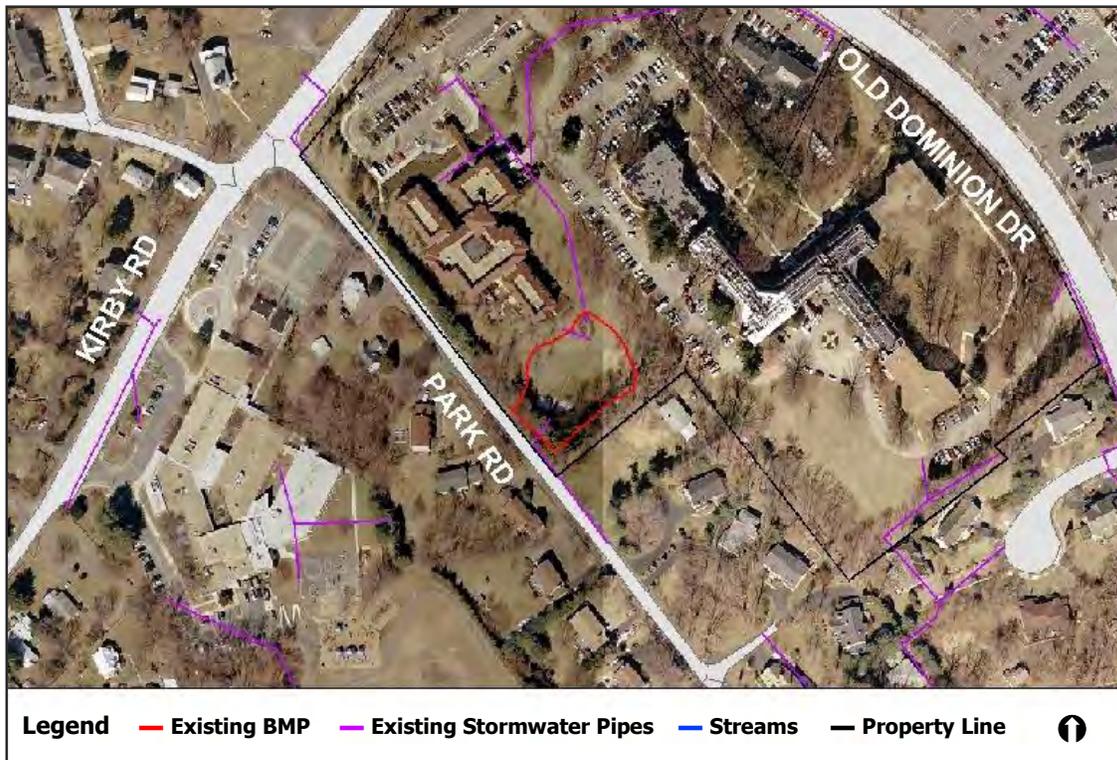
Address: 1739 Kirby Road
Location: Vinson Hall
Land Owner: Residential Development
PIN: 0313 01 0077A
County Facility ID: DP0391
Control Type: Water Quality
Drainage Area: 17.7 acres
Stream Name: Unnamed tributary to Little Pimmit Run

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

Vicinity Map

Potential Benefits: An estimated 4.9 lbs/yr of phosphorus will be removed and 0.1 acres of wetland habitat will be provided. Approximately 63 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: New LID Project PM9805 is also at this site and New LID Project PM9825 is adjacent to this project site. Coordination and sequencing of these projects should be considered. There are minimal environmental permitting requirements for this project. The facility can be accessed from Kirby Road. An easement will be required. Impacts to trees will be minimized.



Project Area Map



Site Photo: Facing south 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	1,880	CY	\$35.00	\$65,800.00
Shallow Wetland	360	SY	\$2.00	\$720.00
Erosion and Sediment Control	1	LS	\$3,000.00	\$3,000.00
Landscaping	1	LS	\$2,000.00	\$2,000.00
		Base Construction Cost		\$82,520.00
		Mobilization (5%)		\$4,126.00
		Subtotal 1		\$86,646.00
		Contingency (25%)		\$21,661.50
		Subtotal 2		\$108,307.50
		Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)		\$48,738.38
		Estimated Project Cost		\$160,000.00

Project: PM9116 BMP Retrofit Project



Vicinity Map

Address: 1473 Hampton Ridge Drive
Location: Hamptons of McLean
Land Owner: Hamptons of McLean HOA
 and
 McLean Mews HOA
PIN: 0302 43 B3 and 0302 43 E
County Facility ID: 0096DP
Control Type: Water Quantity
Drainage Area: 5.0 acres
Stream Name: Unnamed tributary to Saucy Branch

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 3.4 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: This facility is upstream of Stream Restoration Project PM9209. Coordination and sequencing of these projects should be considered. There are minimal environmental permitting requirements for this project. The facility can be accessed from Hampton Ridge Drive. An easement will not be required. Impacts to trees will be minimized.



Legend — Existing BMP — Existing Stormwater Pipes — Streams — Property Line ⓘ

Project Area Map



Site Photo: Facing south 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	60	CY	\$35.00	\$2,100.00
Shallow Wetland	200	SY	\$2.00	\$400.00
Erosion and Sediment Control	1	LS	\$3,000.00	\$3,000.00
Landscaping	1	LS	\$2,000.00	\$2,000.00
			Base Construction Cost	\$13,500.00
			Mobilization (5%)	\$675.00
			Subtotal 1	\$14,175.00
			Contingency (25%)	\$3,543.75
			Subtotal 2	\$17,718.75
			Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)	\$7,973.44
			Estimated Project Cost	\$30,000.00

Project: PM9120 New BMP Project



Vicinity Map

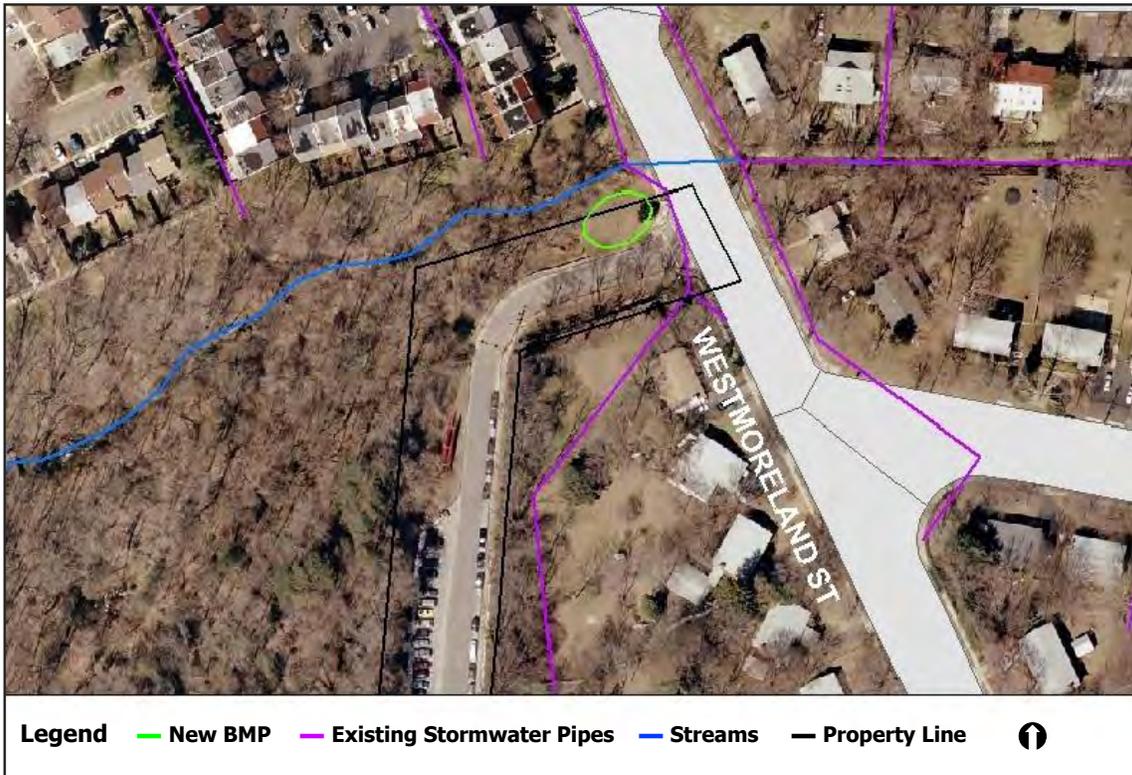
Address: 1633 Davidson Road
Location: McLean High School
Land Owner: Fairfax County Public Schools and McLean Park Manor HOA
PIN: 0304 01 0019 and 0304 01 A1
Drainage Area: 3.1 acres
Stream Name: Saucy Branch

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 2.9 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: New LID Project PM9821 is also at the high school and Stream Restoration Project PM9209 is adjacent to the project site. Coordination and sequencing of these projects should be considered. This project site is in the Chesapeake Bay Resource Protection Area which has special permitting requirements. The site can be accessed from Westmoreland Street. An easement will be required for a portion of the site. 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	\$2,000.00	\$2,000.00
Clear and Grub	0.25	AC	\$5,000.00	\$1,250.00
Grading and Excavation	460	CY	\$35.00	\$16,100.00
Erosion and Sediment Control	1	LS	\$6,000.00	\$6,000.00
Landscaping	1	LS	\$6,000.00	\$6,000.00
			Base Construction Cost	\$46,350.00
			Mobilization (5%)	\$2,317.50
			Subtotal 1	\$48,667.50
			Contingency (25%)	\$12,166.88
			Subtotal 2	\$60,834.38
			Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)	\$27,375.47
			Estimated Project Cost	\$90,000.00

Project: PM9133 BMP Retrofit Project



Vicinity Map

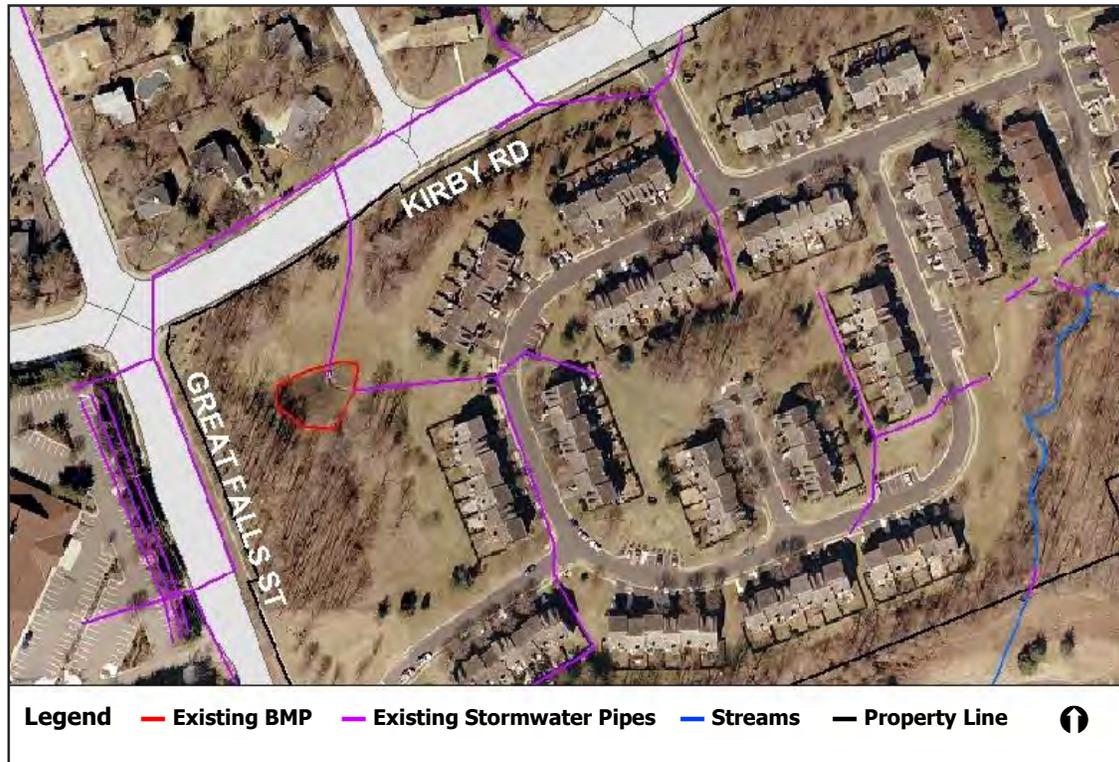
Address: Opposite 2072 Kirby Road
Location: McLean Province Townhomes
Land Owner: McLean Province HOA
PIN: 0402 42 B
County Facility ID: 0506DP
Control Type: Water Quality
Drainage Area: 6.2 acres
Stream Name: Burke's Spring Branch

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 1.3 lbs/yr of phosphorus will be removed and some wetland habitat will be provided.

Approximately 58 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 project is adjacent to the new LID Project PM9873 and upstream of Buffer Restoration Project PM9317 and Stream Restoration Project PM9225. Coordination and sequencing of these projects should be considered. There are minimal environmental permitting requirements for this project. The facility can be accessed from Kirby Road and Great Falls Street. 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	\$11,000.00	\$11,000.00
Grading and Excavation	440	CY	\$35.00	\$15,400.00
Shallow Wetland	170	SY	\$2.00	\$340.00
Erosion and Sediment Control	1	LS	\$3,000.00	\$3,000.00
Landscaping	1	LS	\$2,000.00	\$2,000.00
			Base Construction Cost	\$31,740.00
			Mobilization (5%)	\$1,587.00
			Subtotal 1	\$33,327.00
			Contingency (25%)	\$8,331.75
			Subtotal 2	\$41,658.75
			Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)	\$18,746.44
			Estimated Project Cost	\$70,000.00

Project: PM9134 BMP Retrofit Project



Vicinity Map

Address: 2100 Westmoreland Street
Location: Temple Rodef Shalom
Land Owner: Private Organization
PIN: 0402 01 0019
County Facility ID: None
Control Type: Water Quality
Drainage Area: 6.1 acres
Stream Name: Burke's Spring Branch

Description: The basin outlet structure will be evaluated to determine the best options for retrofitting to allow it to function as a dry detention basin. 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 1.2 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: New LID Project PM9830 and Infrastructure Improvement Project PM9464 are also at this site. Coordination and sequencing of these projects should be considered. There are minimal environmental permitting requirements for this project. The facility can be accessed from Westmoreland Street. An easement will be required. Impacts to trees will be minimized.



Project Area Map



Site Photo: Looking east at the synagogue.

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP Retrofit and Incidentals	1	LS	\$11,000.00	\$11,000.00
Grading and Excavation	380	CY	\$35.00	\$13,300.00
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	\$29,600.00
			Mobilization (5%)	\$1,480.00
			Subtotal 1	\$31,080.00
			Contingency (25%)	\$7,770.00
			Subtotal 2	\$38,850.00
			Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)	\$17,482.50
			Estimated Project Cost	\$60,000.00

Project: PM9136 BMP Retrofit Project



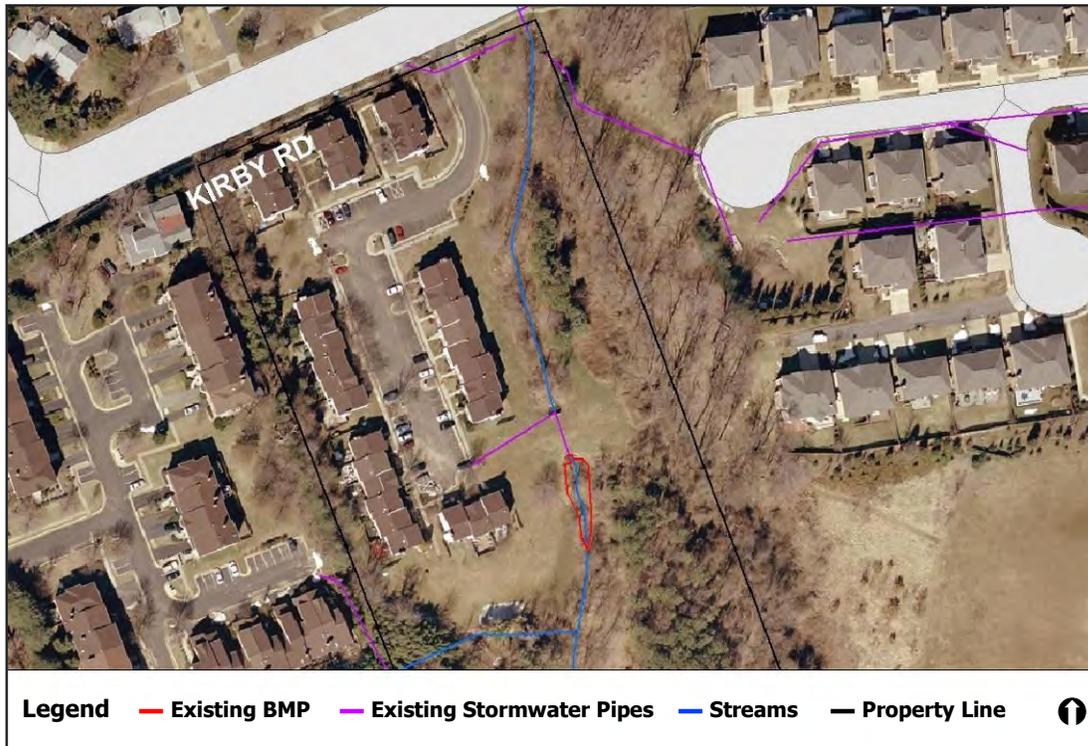
Vicinity Map

Address: 2035 Brooks Square Place
Location: Brooks Square Townhomes
Land Owner: Brooks Square HOA
PIN: 0402 40 A
County Facility ID: 0203DP
Control Type: Water Quantity
Drainage Area: 5.0 acres
Stream Name: Burke's Spring Branch

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 3.4 lbs/yr of phosphorus will be removed and some wetland habitat will be provided. Approximately 18 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 in the Chesapeake Bay Resource Protection Area which has special permitting requirements. The facility can be accessed from Brooks Square Place. An easement will not be required. Impacts to trees will be minimized.



Project Area Map



Site Photo: Facing south towards pond.

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: PM9140 BMP Retrofit Project



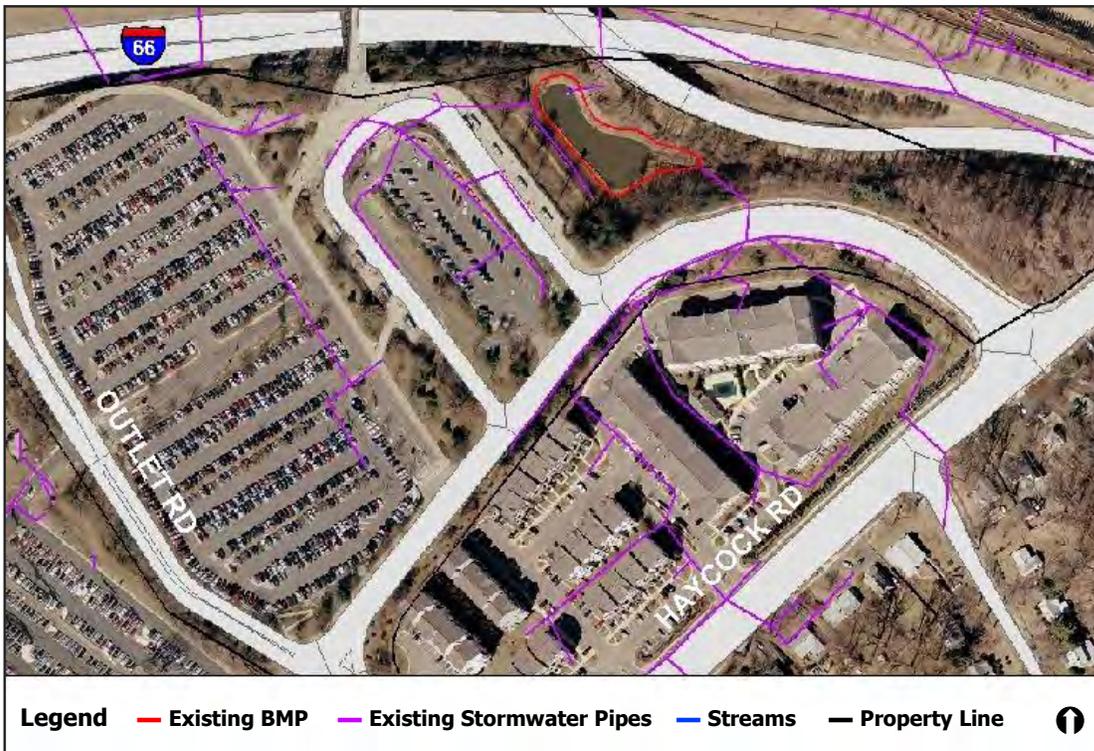
Vicinity Map

Address: 7040 Haycock Road
Location: West Falls Church Metro Station
Land Owner: Washington Metropolitan Area Transit Authority
PIN: 0403 01 0083 and 0404 01 0013
County Facility ID: DP0503
Control Type: Water Quality
Drainage Area: 21.2 acres
Stream Name: Unnamed tributary to Bridge Branch

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 5.9 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: New LID Project PM9841 is also at the metro station and New LID Project PM9839 is upstream of this site. Coordination and sequencing of these projects should be considered. There are minimal environmental permitting requirements for this project. The facility can be accessed from West Falls Church Metro Station parking lot. An easement will be required. Impacts to trees will be minimized.



Project Area Map



Site Photo: Facing north 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	1460	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: PM9142 BMP Retrofit Project



Vicinity Map

Address: 7048 Haycock Road
Location: Northern Virginia Center
Land Owner: City of Falls Church
PIN: 0403 01 0092A
County Facility ID: DP0460
Control Type: Water Quantity
Drainage Area: 4.3 acres
Stream Name: Unnamed tributary to Bridge Branch

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 2.9 lbs/yr of phosphorus will be removed and some wetland habitat will be provided. Approximately 92 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 project is adjacent to New LID Project PM9841. Coordination and sequencing of these projects should be considered. There are minimal environmental permitting requirements for this project. The facility can be accessed from the parking lot of Northern Virginia Center. An easement will be required. Impacts to trees will be minimized.



Project Area Map



Site Photo: Facing southwest 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	480	CY	\$35.00	\$16,800.00
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	\$28,160.00
			Mobilization (5%)	\$1408.00
			Subtotal 1	\$29,568.00
			Contingency (25%)	\$7,392.00
			Subtotal 2	\$36,960.00
			Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)	\$16,632.00
			Estimated Project Cost	\$60,000.00

Project: PM9144 New BMP Project



Vicinity Map

Address: 1840 Olney Road
Location: Olney Park
Land Owner: Fairfax County Park Authority
PIN: 0401 01 0004A
Drainage Area: 2.8 acres
Stream Name: Pimmit 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 1.4 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 PM9232 and Buffer Restoration Project PM9328 are adjacent to 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 Olney Road. An easement will not be required. The BMP design should minimize tree removal.



Project Area Map

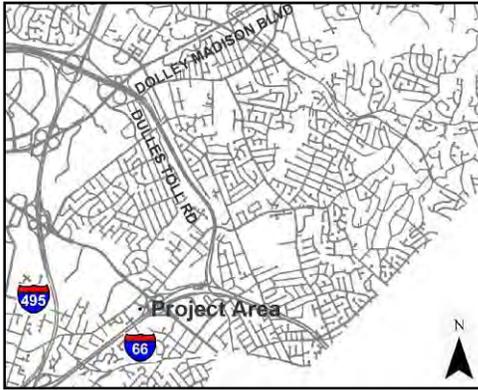


Site Photo: Looking northwest from the stream

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	190	CY	\$35.00	\$6,650.00
Erosion and Sediment Control	1	LS	\$6,000.00	\$6,000.00
Landscaping	1	LS	\$6,000.00	\$6,000.00
			Base Construction Cost	\$35,650.00
			Mobilization (5%)	\$1,782.50
			Subtotal 1	\$37,432.50
			Contingency (25%)	\$9,358.13
			Subtotal 2	\$46,790.63
			Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)	\$21,055.78
			Estimated Project Cost	\$70,000.00

Project: PM9148 BMP Retrofit Project



Vicinity Map

Address: 2225 McLean Park Road
Location: Churchill Square Townhomes
Land Owner: Churchill Square HOA
PIN: 0403 16 A1
County Facility ID: 0081DP
Control Type: Water Quantity
Drainage Area: 8.3 acres
Stream Name: Unnamed Tributary to Pimmit 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 1.7 lbs/yr of phosphorus will be removed and some wetland habitat will be provided. Approximately 21 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 McLean Park Road. An easement will not be required. Impacts to trees will be minimized.



Project Area Map



Site Photo: Facing east towards the dry detention pond

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP Retrofit and Incidentals	1	LS	\$11,000.00	\$11,000.00
Grading and Excavation	110	CY	\$35.00	\$7,350.00
Shallow Wetland	40	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	\$23,510.00
			Mobilization (5%)	\$1,175.50
			Subtotal 1	\$24,685.50
			Contingency (25%)	\$6,171.38
			Subtotal 2	\$30,856.88
			Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)	\$13,885.59
			Estimated Project Cost	\$50,000.00

Project: PM9149 BMP Retrofit Project



Vicinity Map

Address: 2251 Pimmit Drive
Location: Fairfax Towers Apartments
Land Owner: Residential Development
PIN: 0403 01 0004
County Facility ID: DP0117
Control Type: Water Quantity
Drainage Area: 18.4 acres
Stream Name: Pimmit Run

Description: The existing dry detention pond off Leesburg Pike 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 12.4 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 PM9232 is 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 Leesburg Pike. 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	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	\$23,510.00
			Mobilization (5%)	\$1,175.50
			Subtotal 1	\$24,685.50
			Contingency (25%)	\$6,171.38
			Subtotal 2	\$30,856.88
			Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)	\$13,885.59
			Estimated Project Cost	\$50,000.00

Project: PM9153 BMP Retrofit Project



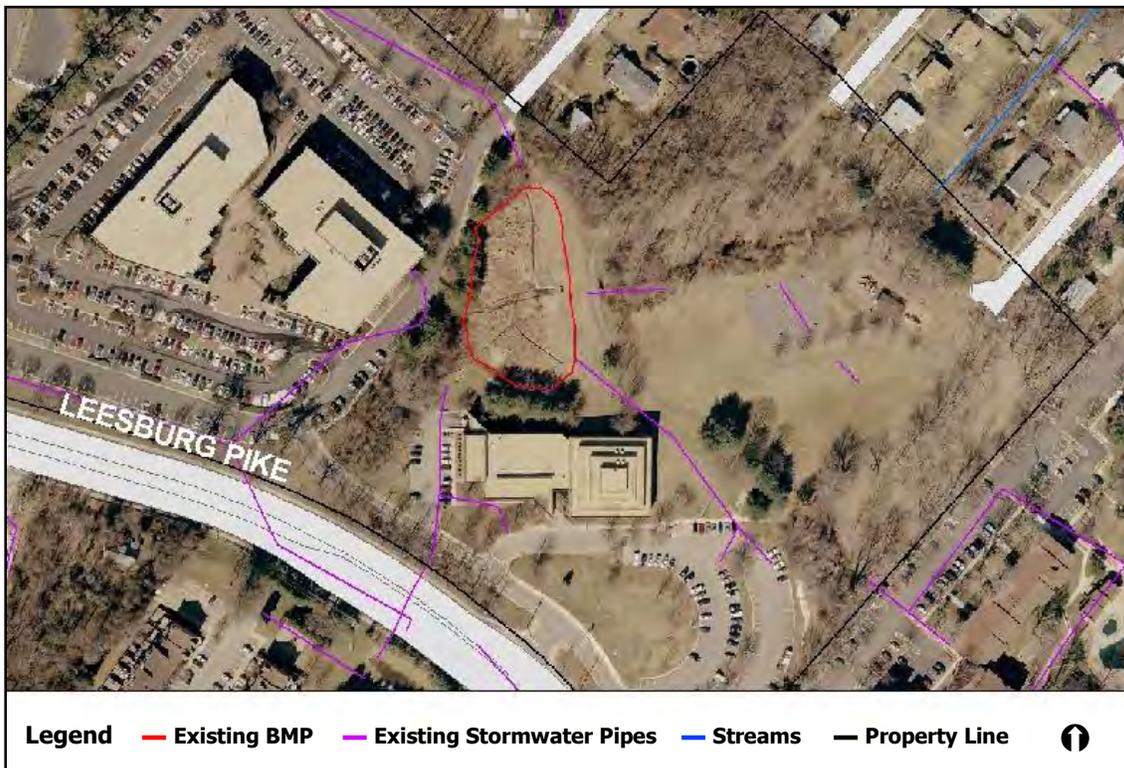
Vicinity Map

Address: 7550 Leesburg Pike
Location: Tysons Pimmit Regional Library
Land Owner: Fairfax County Park Authority,
 Fairfax County Board of Supervisors
 and Private Development
PIN: 0401 01 0037, 0037A, and 0039
County Facility ID: 0292DP
Control Type: Water Quantity
Drainage Area: 17.5 acres
Stream Name: Unnamed tributary to Pimmit 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 8.8 lbs/yr of phosphorus will be removed and 0.18 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: This project is upstream of Neighborhood Stormwater Improvement Area PM9845 and Stream Restoration Project PM9232. Coordination and sequencing of projects should be considered. A portion of this facility site is located in the Chesapeake Bay Resource Protection Area which has special permitting requirements. The facility can be accessed from Leesburg Pike. 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	\$11,000.00	\$11,000.00
Grading and Excavation	2290	CY	\$35.00	\$80,150.00
Shallow Wetland	860	SY	\$2.00	\$1,720.00
Erosion and Sediment Control	1	LS	\$3,000.00	\$3,000.00
Landscaping	1	LS	\$2,000.00	\$2,000.00
			Base Construction Cost	\$97,870.00
			Mobilization (5%)	\$4,893.50
			Subtotal 1	\$102,763.50
			Contingency (25%)	\$25,690.88
			Subtotal 2	\$128,454.38
			Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)	\$57,804.47
			Estimated Project Cost	\$190,000.00

Project: PM9154 BMP Retrofit Project



Vicinity Map

Address: 2100 Dominion Heights Court
Location: Marshall Heights Townhomes
Land Owner: Marshall Heights HOA
PIN: 0401 31 C
County Facility ID: 0549DP
Control Type: Water Quantity
Drainage Area: 4.8 acres
Stream Name: Unnamed tributary to Pimmit 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 1.0 lbs/yr of phosphorus will be removed and some wetland habitat will be provided. Approximately 43 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 project is adjacent to BMP Retrofit Project PM9153. Coordination and sequencing of these projects should be considered. There are minimal environmental permitting requirements for this project. The facility can be accessed from Leesburg Pike. An easement will not be required. Impacts to trees will be minimized.



Project Area Map



Site Photo: Facing southwest from Leesburg Pike

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Structural BMP Retrofit and Incidentals	1	LS	\$6,000.00	\$6,000.00
Grading and Excavation	250	CY	\$35.00	\$8,750.00
Shallow Wetland	100	SY	\$2.00	\$200.00
Erosion and Sediment Control	1	LS	\$3,000.00	\$3,000.00
Landscaping	1	LS	\$2,000.00	\$2,000.00
		Base Construction Cost		\$19,950.00
		Mobilization (5%)		\$997.50
		Subtotal 1		\$20,947.50
		Contingency (25%)		\$5,236.88
		Subtotal 2		\$26,184.38
		Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)		\$11,782.97
		Estimated Project Cost		\$40,000.00

Project: PM9155 New BMP Project



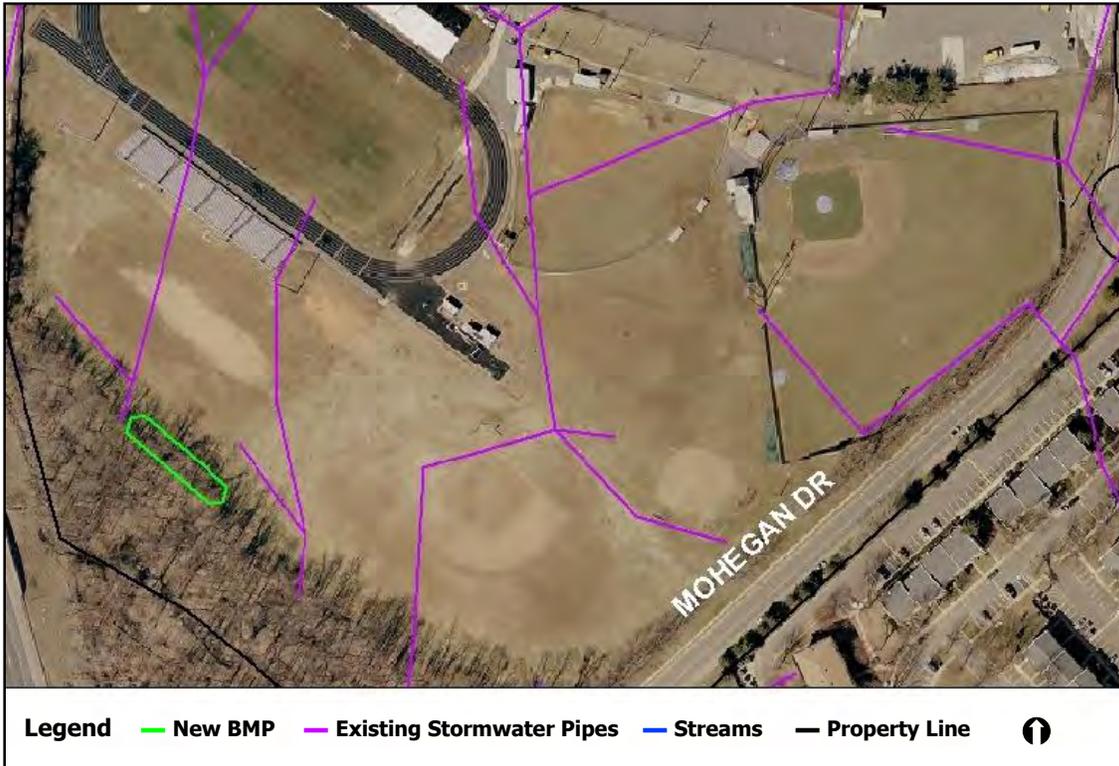
Vicinity Map

Address: 7731 Leesburg Pike
Location: George C. Marshall High School
Land Owner: Fairfax County Public Schools
PIN: 0392 01 0048
Drainage Area: 1.1 acres
Stream Name: Unnamed tributary to Pimmit 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 1.0 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: New LID Project PM9856 is also at the high school and this project is upstream of Stream Restoration Project PM9232. Coordination and sequencing of these projects should be considered. A portion of this project site is in the Chesapeake Bay Resource Protection Area which has special permitting requirements. The site can be accessed from George C Marshall Drive. 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	\$2,000.00	\$2,000.00
Grading and Excavation	170	CY	\$35.00	\$5,950.00
Erosion and Sediment Control	1	LS	\$6,000.00	\$6,000.00
Landscaping	1	LS	\$6,000.00	\$6,000.00
			Base Construction Cost	\$34,950.00
			Mobilization (5%)	\$1,747.50
			Subtotal 1	\$36,697.50
			Contingency (25%)	\$9,174.38
			Subtotal 2	\$45,871.88
			Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)	\$20,642.34
			Estimated Project Cost	\$70,000.00

Project: PM9158 BMP Retrofit Project



Vicinity Map

Address: 2230 George C Marshall Drive
Location: The Renaissance Apartments
Land Owner: Residential Development
PIN: 0394 01 0178A
County Facility ID: None
Control Type: Water Quality
Drainage Area: 7.9 acres
Stream Name: Unnamed tributary to Pimmit Run

Description: 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 1.6 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: New LID Project PM9859 is also at this apartment complex and Stream Restoration Project PM9232 is downstream of this facility. Coordination and sequencing of these projects should be considered. A portion of this facility is located in the Chesapeake Bay Resource Protection Area which has special permitting requirements. The facility can be accessed from George C Marshall Drive. An easement will be required. Impacts to trees will be minimized.



Project Area Map



Site Photo: Facing north towards 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	1020	CY	\$35.00	\$35,700.00
Shallow Wetland	380	SY	\$2.00	\$760.00
Erosion and Sediment Control	1	LS	\$3,000.00	\$3,000.00
Landscaping	1	LS	\$2,000.00	\$2,000.00
			Base Construction Cost	\$52,460.00
			Mobilization (5%)	\$2,623.00
			Subtotal 1	\$55,083.00
			Contingency (25%)	\$13,770.75
			Subtotal 2	\$68,853.75
			Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)	\$30,984.19
			Estimated Project Cost	\$100,000.00

Project: PM9160 BMP Retrofit Project



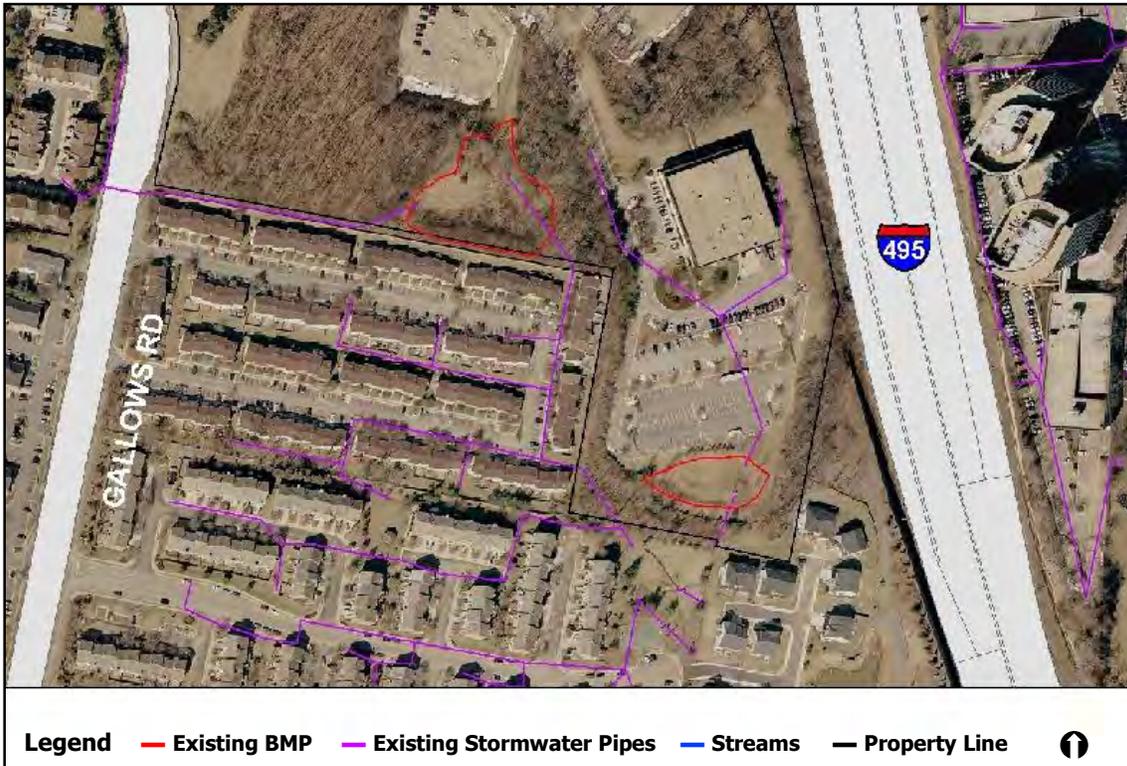
Vicinity Map

Address: 7990 Science Application Court
Location: Tysons Corner
Land Owner: Commercial Development
PIN: 0392 01 0013
County Facility ID: DP0487
Control Type: Water Quantity
Drainage Area: 8.3 acres
Stream Name: Unnamed tributary to Pimmit Run

Description: The southern most dry detention pond on the site 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 7.7 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 the peak flow and help reduce erosion in the downstream channel.

Project Design Considerations: New LID Project PM9862 is also in this development and this facility is adjacent to BMP Retrofit Project PM9161. Coordination and sequencing of these projects should be considered. There are minimal environmental permitting requirements for this project. The facility can be accessed from Boeing Court. 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	1160	CY	\$35.00	\$40,600.00
Shallow Wetland	440	SY	\$2.00	\$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	\$57,480.00
			Mobilization (5%)	\$2,874.00
			Subtotal 1	\$60,354.00
			Contingency (25%)	\$15,088.50
			Subtotal 2	\$75,442.50
			Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)	\$33,949.13
			Estimated Project Cost	\$110,000.00

Project: PM9161 BMP Retrofit Project



Vicinity Map

Address: 2117 Madron Lane
Location: Courthouse Station Townhomes
Land Owner: Courthouse Station HOA
PIN: 0392 36 A1
County Facility ID: 0764DP
Control Type: Water Quality
Drainage Area: 16.2 acres
Stream Name: Unnamed tributary to Pimmit 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 3.3 lbs/yr of phosphorus will be removed and some wetland habitat will be provided.

Approximately 74 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 BMP Retrofit Project PM9160. Coordination and sequencing of these projects should be considered. There are minimal environmental permitting requirements for this project. The facility can be accessed from Madron Lane. An easement will not be required. Impacts to trees will be minimized.



Project Area Map



Site Photo: Facing northwest towards 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	520	CY	\$35.00	\$18,200.00
Shallow Wetland	200	SY	\$2.00	\$400.00
Erosion and Sediment Control	1	LS	\$3,000.00	\$3,000.00
Landscaping	1	LS	\$2,000.00	\$2,000.00
			Base Construction Cost	\$34,600.00
			Mobilization (5%)	\$1,730.00
			Subtotal 1	\$36,330.00
			Contingency (25%)	\$9,082.50
			Subtotal 2	\$45,412.50
			Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)	\$20,435.63
			Estimated Project Cost	\$70,000.00

Project: PM9175 BMP Retrofit Project



Vicinity Map

Address: 1619 Linway Park Drive
Location: Linway Park of McLean Neighborhood
Land Owner: Linway Park of McLean HOA
PIN: 0313 39 C
County Facility ID: 0320DP
Control Type: Water Quality
Drainage Area: 2.0 acres
Stream Name: Bryan Branch

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 0.3 lbs/yr of phosphorus will be removed and some wetland habitat will be provided. Approximately 98 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 PM9209 and downstream of New LID Project PM9872. Coordination and sequencing of these projects should be considered. There are minimal environmental permitting requirements for this project. The facility can be accessed from Linway Park Drive. 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	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	\$15,650.00
			Mobilization (5%)	\$782.50
			Subtotal 1	\$16,432.50
			Contingency (25%)	\$4,108.13
			Subtotal 2	\$20,540.63
			Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)	\$9,243.28
			Estimated Project Cost	\$30,000.00

Project: PM9232 Stream Restoration Project



Vicinity Map

Location:	Various Locations
Land Owner:	VA Department of Transportation, Fairfax County Park Authority, and Private Residential
Tax Map:	40-1, 40-2, and 40-3
Potential Length:	12,500 linear feet
Stream Name:	Pimmit Run and unnamed tributaries to Pimmit Run

Description: Evaluate portions of Pimmit Run along Upper Pimmit Run Watershed including the tributaries to determine where stream restoration is necessary. The stream locations to be assessed are located between Leonard Road and Pimmit Drive and between Leesburg Pike and Great Falls Street.

Proposed activities include adding riparian vegetation planting and channel bed and bank reconfiguration.

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

Project Design Considerations: Almost the entire project length is in a floodplain and the entire project length is in the Chesapeake Bay Resource Protection Area which have special permitting requirements. The 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
Reconstruct New Pattern and Profile	12,000	LF	\$250.00	\$3,000,000.00
First 500 Linear Feet	500	LF	\$450.00	\$225,000.00
			Base Construction Cost	\$3,225,000.00
			Mobilization (5%)	\$161,250.00
			Subtotal 1	\$3,386,250.00
			Contingency (25%)	\$846,562.50
			Subtotal 2	\$4,232,812.50
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				\$1,904,765.63
			Estimated Project Cost	\$6,140,000.00

Project: PM9301 Buffer Restoration Project



Vicinity Map

Location:	Various Locations
Land Owner:	VA Department of Transportation, Private Residential, and Fairfax County Public Schools
Tax Map:	31-2, 31-3, 31-4, 41-1 and 41-2
Potential Length:	5,000 linear feet
Stream Name:	Little Pimmit Run and unnamed tributary to Little Pimmit Run

Description: Evaluate portions of Little Pimmit Run and one of its tributaries to determine where buffer restoration is necessary. The stream locations to be assessed are located near Solitaire Lane, near Rhode Island Avenue and

at the downstream end of Little Pimmit Run. Proposed activities include adding riparian vegetation planting.

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

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



Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Buffer Restoration	5,000	LF	\$25.00	\$125,000.00
			Base Construction Cost	\$125,000.00
			Mobilization (5%)	\$6,250.00
			Subtotal 1	\$131,250.00
			Contingency (25%)	\$32,812.50
			Subtotal 2	\$164,062.50
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				\$73,828.13
			Estimated Project Cost	\$240,000.00

Project: PM9311 Buffer Restoration Project



Vicinity Map

Location:	Various Locations
Land Owner:	Private Residential, VA Department of Transportation, Private Organization, Fairfax County Public Schools, and Fairfax County Park Authority
Tax Map:	30-2, 30-4, 31-1, and 31-2
Potential Length:	7,000 linear feet
Stream Name:	Salona Branch and unnamed tributaries to Pimmit Run

Description: Evaluate portions of Salona Branch and unnamed tributaries to Pimmit Run to determine where buffer restoration is necessary. The stream locations to be

assessed are located 1,400 feet near Ranleigh Road, 1,900 feet near Langley Place, 1,800 feet near Ballantrae Lane, 1,000 feet near Darnall Drive and 900 feet near Wrightson Drive. Proposed activities include adding riparian vegetation planting.

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

Project Design Considerations: Almost the entire project length is the Chesapeake Bay Resource Protection Area and portions of the project length are in floodplains which both have special permitting requirements. The 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	7,000	LF	\$25.00	\$175,000.00
			Base Construction Cost	\$175,000.00
			Mobilization (5%)	\$8,750.00
			Subtotal 1	\$183,750.00
			Contingency (25%)	\$45,937.50
			Subtotal 2	\$229,687.50
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				\$103,359.38
			Estimated Project Cost	\$340,000.00

Project: PM9328 Buffer Restoration Project



Vicinity Map

Location:	Various Locations
Land Owner:	VA Department of Transportation, Fairfax County Park Authority, Fairfax County Water Authority, Private Residential, and Commonwealth of Virginia
Tax Map:	30-3, 40.-1, and 40-2
Potential Length:	3,000 linear feet
Stream Name:	Unnamed tributaries to Pimmit Run

Description: Evaluate portions of unnamed tributaries to Pimmit Run to determine where buffer restoration is necessary. The stream locations to be assessed are located 1,100 feet in Pimmit View Park, 1,400 feet near Olney Road, and 500 feet near Idylwood Road. Proposed activities include adding riparian vegetation planting.

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

Project Design Considerations: Portions of this project are in the Chesapeake Bay Resource Protection Area and a floodplain which have special permitting requirements. The 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	3,000	LF	\$25.00	\$75,000.00
			Base Construction Cost	\$75,000.00
			Mobilization (5%)	\$3,750.00
			Subtotal 1	\$78,750.00
			Contingency (25%)	\$19,687.50
			Subtotal 2	\$98,437.50
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				\$44,296.88
			Estimated Project Cost	\$150,000.00

Project: PM9379 Buffer Restoration Project



Vicinity Map

Location: Fort Marcy Park
Land Owner: National Park Service and Chain
Tax Map: Bridge Forest HOA
Potential Length: 2,300 linear feet
Stream Name: Pimmit Run and Strohman's Branch

Description: Evaluate the buffer vegetation along 1,200 feet of Strohman's Branch and along 1,100 feet of Lower Pimmit Run, both near Rosamora Court, to determine if buffer restoration work is necessary.

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

Project Design Considerations: A portion of the project is in a floodplain and the entire project is in the Chesapeake Bay Resource Protection Area. Both of these areas have special permitting requirements. The project may require some clearing of trees and may have impacts to jurisdictional wetlands. An easement will be required.

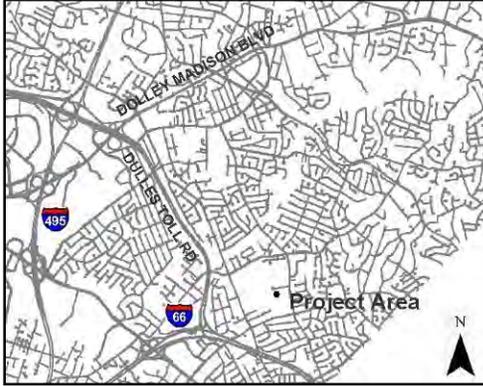


Project Area Map

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Buffer Restoration	2,300	LF	\$25.00	\$55,000.00
			Base Construction Cost	\$55,000.00
			Mobilization (5%)	\$2,750.00
			Subtotal 1	\$57,750.00
			Contingency (25%)	\$14,437.50
			Subtotal 2	\$72,187.50
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				\$32,484.38
			Estimated Project Cost	\$110,000.00

Project: PM9464 Infrastructure Improvement Project



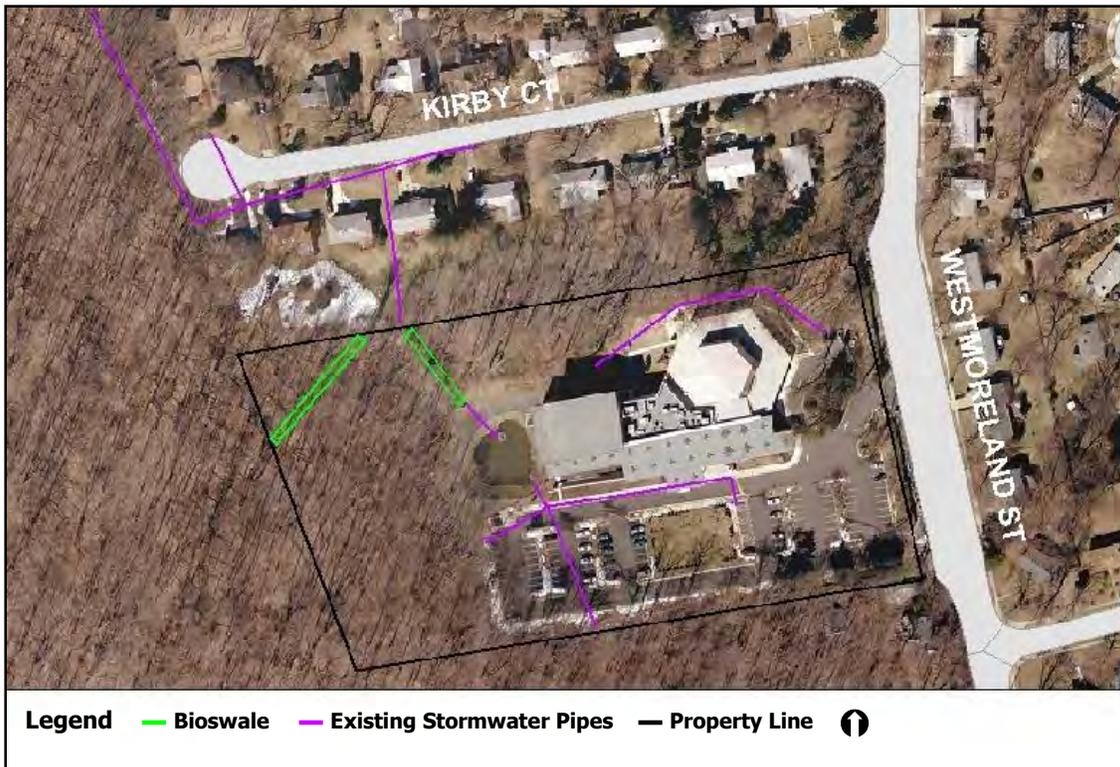
Vicinity Map

Address: 2100 Westmoreland Street
Location: Temple Rodef Shalom
Land Owner: Private Organization
PIN: 0402 01 0019
Stream Name: Burke's Spring Branch

Description: Re-grade the ditch downstream of the dry detention basin at Temple Rodef Shalom as well as the ditch to the west of the detention basin. Replace the ditches with bioswales.

Potential Benefits: The velocity of the flows will be decreased and the peak flows will be reduced. These improvements will help reduce flooding of the homes along Kirby Court, immediately downstream of the temple.

Project Design Considerations: BMP Retrofit Project PM9134 and New LID Project PM9830 are also at the synagogue. There are minimal environmental permitting requirements for this project. The facility can be accessed from Westmoreland Street. An easement will be required. There are no significant construction issues found on the site. Impacts to trees will be minimized.



Project Area Map



Site Photo: Looking northwest at the outfall from BMP Retrofit Project PM9134.

Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Bioretention	310	SY	\$250.00	\$77,500.00
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