## Project: PM9805 New LID Project



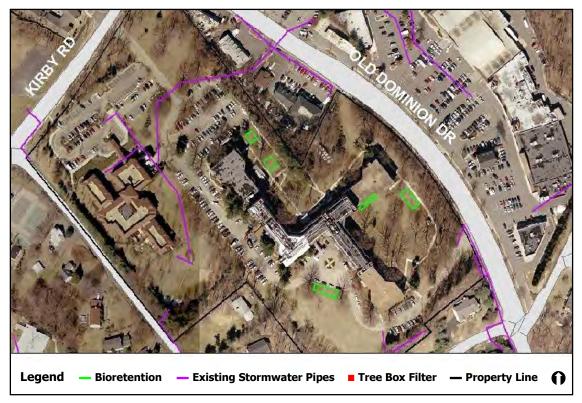
Address:	1739 Kirby Road
Location:	Vinson Hall
Land Owner:	Residential Development
PIN:	0313 01 0083
Drainage Area:	4.4 acres
Stream Name:	Unnamed tributary to Little Pimmit
	Run

**Description:** Construct bioretention areas in the grass areas around the buildings and the parking lots.

Vicinity Map

**Potential Benefits:** An estimated 4.3 lbs/yr of phosphorus will be removed. This project will also provide stormwater runoff flow reduction for small storm events.

**Project Design Considerations:** BMP Retrofit Project PM9106 is also at this site and New LID Project PM9825 is adjacent to this facility. 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 Kirby Road. An easement will 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: Facing southwest from Old Dominion Road

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ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Bioretention	480	SY	\$250.00	\$120,000.00
Erosion and Sediment Control	1	LS	\$3,000.00	\$3,000.00
		Base (	Construction Cost	\$123,000.00
			Mobilization (5%)	\$6,150.00
			Subtotal 1	\$129,150.00
		C	ontingency (25%)	\$32,287.50
			Subtotal 2	\$161,437.50
Engineering Design, Surveys, Land	Acquisition, Utility	Relocations, a	nd Permits (45%)	\$72,646.88
		Estima	ted Project Cost	\$240,000.00

#### **Project: PM9814 Neighborhood Stormwater Improvement Area**



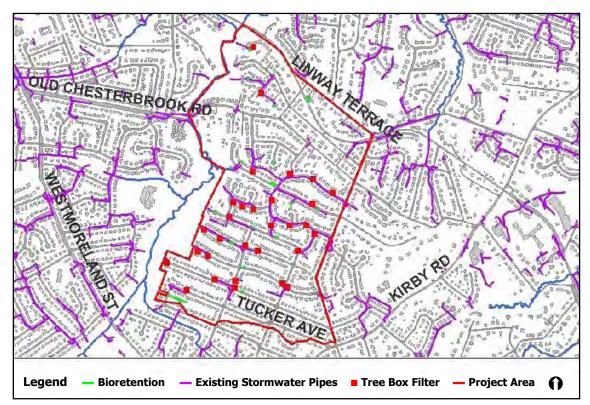
Location:	El Nido, Chesterbrook Garden and
	Grass Ridge Neighborhoods
Land Owner:	Private Residential and VA
	Department of Transportation
Tax Map:	30-4, 31-3, 40-2, and 41-2
Drainage Area:	15.8 acres
Stream Name:	Pimmit Run

**Description:** None of these neighborhoods have existing stormwater controls. Add bioretention areas in the grass right of way areas and replace thirty curb drop inlets with tree box filters.

Vicinity Map

Potential Benefits: An estimated 14.7 lbs/yr of phosphorus will be removed. This project will also provide stormwater runoff flow reduction for small storm events.

Project Design Considerations: Portions of these neighborhoods are in a floodplain and the Chesapeake Bay Resource Protection Area which have 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 Grass Ridge Neighborhood

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Tree Box Filters	30	EA	\$5,000.00	\$150,000.00
Bioretention	860	SY	\$250.00	\$215,000.00
Erosion and Sediment Control	1	LS	\$3,000.00	\$3,000.00
		Base (	Construction Cost	\$368,000.00
			Mobilization (5%)	\$18,400.00
			Subtotal 1	\$386,400.00
		C	ontingency (25%)	\$96,600.00
			Subtotal 2	\$483,000.00
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)				\$217,350.00
		Estima	ted Project Cost	\$710,000.00

# Project: PM9819 Neighborhood Stormwater Improvement Area



Location:	South Ridge and Devon Park
	Neighborhoods
Land Owner:	Private Residential and VA
	Department of Transportation
Тах Мар:	30-3, 30-4, and 40-2
Drainage Area:	7.7 acres
Stream Name:	Pimmit Run

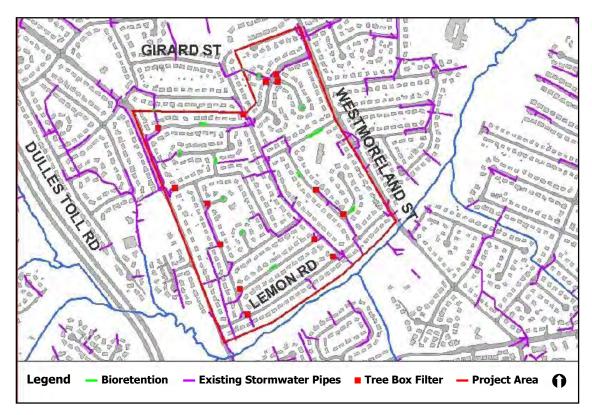
**Description:** Neither of these neighborhoods has existing stormwater controls. Add bioretention areas in the grass right of way areas and replace fourteen curb drop inlets with tree box filters.

Vicinity Map

**Potential Benefits:** An estimated 7.2 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 PM9225 and Buffer Restoration Project PM9317 are adjacent to this project. Coordination and sequencing of these projects should be considered. Portions of these neighborhoods are in a floodplain and the Chesapeake Bay Resource Protection Area which have 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 Devon Park Neighborhood

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Tree Box Filters	14	EA	\$5,000.00	\$70,000.00
Bioretention	440	SY	\$250.00	\$110,000.00
Erosion and Sediment Control	1	LS	\$3,000.00	\$3,000.00
		Base (	Construction Cost	\$183,000.00
			Mobilization (5%)	\$9,150.00
			Subtotal 1	\$192,150.00
		C	ontingency (25%)	\$48,037.50
			Subtotal 2	\$240,187.50
Engineering Design, Surveys, L	and Acquisition, Utility	Relocations, a	nd Permits (45%)	\$108,084.38
		Estima	ted Project Cost	\$350,000.00

# Project: PM9821 New LID Project



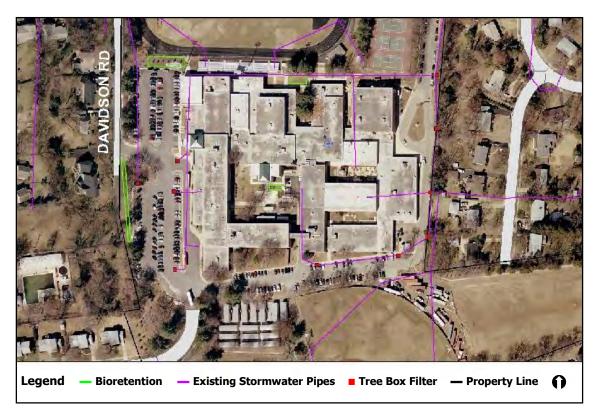
Vicinity Map

Address:	1633 Davidson Road
Location:	McLean High School
Land Owner:	Fairfax County Public Schools
PIN:	0304 01 0019
Drainage Area:	8.2 acres
Stream Name:	Saucy Branch

**Description:** The school does not have existing stormwater controls. Construct bioretention areas and a bioswale in the grass areas around the buildings and the parking lots. Replace ten curb drop inlets with tree box filters.

**Potential Benefits:** An estimated 8.0 lbs/yr of phosphorus will be removed. This project will also provide stormwater runoff flow reduction for small storm events.

**Project Design Considerations:** New BMP Project PM9120 is also at the high school and Stream Restoration Project PM9209 is downstream of the project 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 Davidson 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 at the south side of the school

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Tree Box Filters	10	EA	\$5,000.00	\$50,000.00
Bioretention	620	SY	\$250.00	\$155,000.00
Erosion and Sediment Control	1	LS	\$3,000.00	\$3,000.00
		Base C	Construction Cost	\$208,000.00
		I	Mobilization (5%)	\$10,400.00
			Subtotal 1	\$218,400.00
		Co	ontingency (25%)	\$54,600.00
			Subtotal 2	\$273,000.00
Engineering Design, Surveys, La	and Acquisition, Utility I	Relocations, ar	nd Permits (45%)	\$122,850.00
		Estimat	ted Project Cost	\$400,000.00

#### Project: PM9822 New LID Project



Address:	1659 Chain Bridge Road
Location:	Lewinsville Park
Land Owner:	Fairfax County Park Authority
PIN:	0303 01 0038
Drainage Area:	12.9 acres
Stream Name:	Saucy Branch

**Description:** The park does not have existing stormwater controls. Construct bioswales in the grass areas around the parking lot and athletic fields.

Vicinity Map

**Potential Benefits:** An estimated 2.7 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 Chain Bridge Road. An easement will not be required. There are no significant construction issues found on this site. Impacts to trees will be minimized.



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



Site Photo: Looking east at the soccer fields

#### Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Bioretention	240	SY	\$250.00	\$60,000.00
Erosion and Sediment Control	1	LS	\$3,000.00	\$3,000.00
		Base C	Construction Cost	\$63,000.00
		l	Mobilization (5%)	\$3,150.00
			Subtotal 1	\$66,150.00
		Co	ontingency (25%)	\$16,537.50
			Subtotal 2	\$82,687.50
Engineering Design, Surveys, Lan	d Acquisition, Utility	Relocations, a	nd Permits (45%)	\$37,209.38
		Estima	ted Project Cost	\$120,000.00

## Project: PM9823 New LID Project



Address:6630 Brawner StreetLocation:Franklin Sherman Elementary SchoolLand Owner:Fairfax County Public SchoolsPIN:0302 01 0049Drainage Area:2.5 acresStream Name:Unnamed tributary to Saucy Branch

**Description:** The school does not have existing stormwater controls. Construct bioretention areas and bioswales in the grass areas and around the yard inlets.

vicinity wap

**Potential Benefits:** An estimated 2.5 lbs/yr of phosphorus will be removed. This project will also provide stormwater runoff flow reduction for small storm events.

**Project Design Considerations:** New LID Project PM9877 is upstream of this project 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 Brawner Street. An easement will not be required. There are no significant construction issues found 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 the school

#### Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Bioretention	280	SY	\$250.00	\$70,000.00
Erosion and Sediment Control	1	LS	\$3,000.00	\$3,000.00
		Base (	Construction Cost	\$73,000.00
			Mobilization (5%)	\$3,650.00
			Subtotal 1	\$76,650.00
		Co	ontingency (25%)	\$19,162.50
			Subtotal 2	\$95,812.50
Engineering Design, Surveys, La	nd Acquisition, Utility	Relocations, a	nd Permits (45%)	\$43,115.63
		Estima	ted Project Cost	\$140,000.00

## Project: PM9824 New LID Project



Address:1717 Melbourne DriveLocation:Kent Gardens Elementary SchoolLand Owner:Fairfax County Public SchoolsPIN:0304 01 0027ADrainage Area:4.1 acresStream Name:Pimmit Run

**Description:** The school does not have existing stormwater controls. Construct bioretention areas and a bioswale in the grass areas around the school.

Vicinity Map

**Potential Benefits:** An estimated 4.0 lbs/yr of phosphorus will be removed. This project will also provide stormwater runoff flow reduction for small storm events.

**Project Design Considerations:** A portion of the project site is in the Chesapeake Bay Resource Protection Area which has special permitting requirements. Installation of LID measures in this area should be avoided. The project site can be accessed from Melbourne Drive. An easement will not be required. There are no significant construction issues found on this site. Impacts to trees will be minimized.



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

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Bioretention	480	SY	\$250.00	\$120,000.00
Erosion and Sediment Control	1	LS	\$3,000.00	\$3,000.00
		Base (	Construction Cost	\$123,000.00
			Mobilization (5%)	\$6,150.00
			Subtotal 1	\$129,150.00
		Co	ontingency (25%)	\$32,287.50
			Subtotal 2	\$161,437.50
Engineering Design, Surveys, La	and Acquisition, Utility	Relocations, a	nd Permits (45%)	\$72,646.88
		Estima	ted Project Cost	\$240,000.00

# Project: PM9825 New LID Project



Vicinity Map

Address:	6224 Old Dominion Drive	
Location:	Chesterbrook Shopping Center	
Land Owner:	Commercial Development	
PIN:	0313 01 0113	
Drainage Area:	3.6 acres	
Stream Name:	Unnamed tributary to Little Pimmit	
	Run	

**Description:** The shopping center does not have existing stormwater controls. Construct bioretention areas in the grass areas and replace eight curb drop inlets with tree box filters.

**Potential Benefits:** An estimated 3.5 lbs/yr of phosphorus will be removed. This project will also provide stormwater runoff flow reduction for small storm events.

**Project Design Considerations:** New LID Project PM9805 is adjacent to this project. Coordination and sequencing of these projects should be considered. A portion of the project site is in the Chesapeake Bay Resource Protection Area which has special permitting requirements. Installation of LID measures in this area should be avoided. The project site can be accessed from Old Dominion Drive. An easement will not be required. There are no significant construction issues found on this site. Impacts to trees will be minimized.



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

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Tree Box Filters	8	EA	\$5,000.00	\$40,000.00
Bioretention	190	SY	\$250.00	\$47,500.00
Erosion and Sediment Control	1	LS	\$3,000.00	\$3,000.00
		Base (	Construction Cost	\$90,500.00
			Mobilization (5%)	\$4,525.00
			Subtotal 1	\$95,025.00
		Co	ontingency (25%)	\$23,756.25
			Subtotal 2	\$118,781.25
Engineering Design, Surveys, La	and Acquisition, Utility	Relocations, a	nd Permits (45%)	\$53,451.56
		Estima	ted Project Cost	\$180,000.00

## Project: PM9829 New LID Project



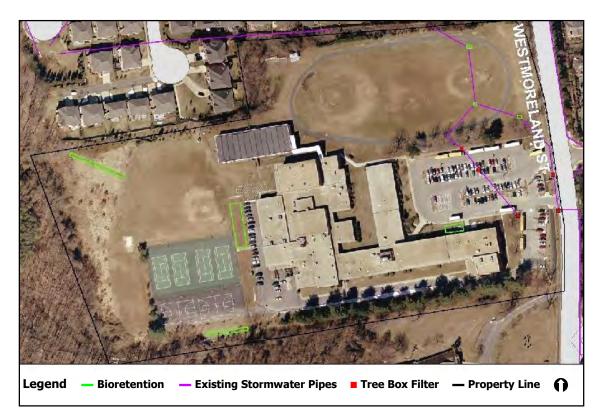
Vicinity Map

Address:	2000 Westmoreland Street
Location:	Longfellow Middle School
Land Owner:	Fairfax County Public Schools
PIN:	0402 01 0027A
Drainage Area:	7.2 acres
Stream Name:	Burke's Spring Branch

**Description:** The school does not have existing stormwater controls. Construct bioretention areas in the grass areas around the school and yard inlets and replace five curb drop inlets with tree box filters.

**Potential Benefits:** An estimated 6.7 lbs/yr of phosphorus will be removed. This project will also provide stormwater runoff flow reduction for small storm events.

**Project Design Considerations:** New LID Project PM9874 is adjacent to this project site, as well as Stream Restoration Project PM9225. 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 Westmoreland Street. An easement will not be required. There are no significant construction issues found on this site. Impacts to trees will be minimized.



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

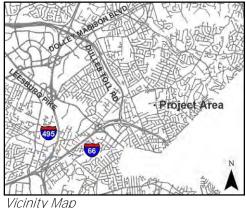


Site Photo: Looking south towards the school from the parking lot

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ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Tree Box Filters	5	EA	\$5,000.00	\$25,000.00
Bioretention	620	SY	\$250.00	\$155,000.00
Erosion and Sediment Control	1	LS	\$3,000.00	\$3,000.00
	Base Construction Cost			
		l	Mobilization (5%)	\$9,150.00
			Subtotal 1	\$192,150.00
		Co	ontingency (25%)	\$48,037.50
			Subtotal 2	\$240,187.50
Engineering Design, Surveys, La	and Acquisition, Utility	Relocations, a	nd Permits (45%)	\$108,084.38
		Estima	ted Project Cost	\$350,000.00

# Project: PM9830 New LID Project



Address:2100 Westmoreland StreetLocation:Temple Rodef ShalomLand Owner:Private OrganizationPIN:0402 01 0019Drainage Area:3.0 acresStream Name:Burke's Spring Branch

**Description:** Construct bioretention strips in the grass areas around the temple and replace five curb drop inlets with tree box filters.

vicinity wap

**Potential Benefits:** An estimated 2.6 lbs/yr of phosphorus will be removed. This project will also provide stormwater runoff flow reduction for small storm events.

**Project Design Considerations:** BMP Retrofit Project PM9134 and Infrastructure Improvement Project PM9464 are also at the temple and New LID Project PM9831 is just upstream 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 Westmoreland Street. An easement will be required. There are no significant construction issues found on this site. Impacts to trees will be minimized.



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



Site Photo: Looking east towards the parking lot and synagogue.

octor

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Tree Box Filters	5	EA	\$5,000.00	\$25,000.00
Bioretention	170	SY	\$250.00	\$42,500.00
Erosion and Sediment Control	1	LS	\$3,000.00	\$3,000.00
		Base C	Construction Cost	\$70,500.00
		I	Mobilization (5%)	\$3,525.00
			Subtotal 1	\$74,025.00
		Co	ontingency (25%)	\$18,506.25
			Subtotal 2	\$92,531.25
Engineering Design, Surveys, La	and Acquisition, Utility I	Relocations, ar	nd Permits (45%)	\$41,639.06
		Estimat	ted Project Cost	\$140,000.00

## Project: PM9831 New LID Project



Vicinity Map

Address:	6616 Haycock Road
Location:	Haycock Elementary School
Land Owner:	Fairfax County Public Schools
PIN:	0402 01 0017A
Drainage Area:	3.0 acres
Stream Name:	Burke's Spring Branch

**Description:** The school does not have existing stormwater controls. Construct bioretention areas and a bioswale in the grass areas around the school and replace two curb drop inlets with tree box filters.

**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:** BMP Retrofit Project PM9134, Infrastructure Improvement Project PM9464, and New LID Project PM9830 are just 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 Haycock Road. An easement will not be required. There are no significant construction issues found 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 playground

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Tree Box Filters	2	EA	\$5,000.00	\$10,000.00
Bioretention	280	SY	\$250.00	\$70,000.00
Erosion and Sediment Control	1	LS	\$3,000.00	\$3,000.00
		Base C	Construction Cost	\$83,000.00
		I	Mobilization (5%)	\$4,150.00
			Subtotal 1	\$87,150.00
		Co	ontingency (25%)	\$21,787.50
			Subtotal 2	\$108,937.50
Engineering Design, Surveys, La	and Acquisition, Utility I	Relocations, ar	nd Permits (45%)	\$49,021.88
		Estimat	ted Project Cost	\$160,000.00

## Project: PM9839 New LID Project



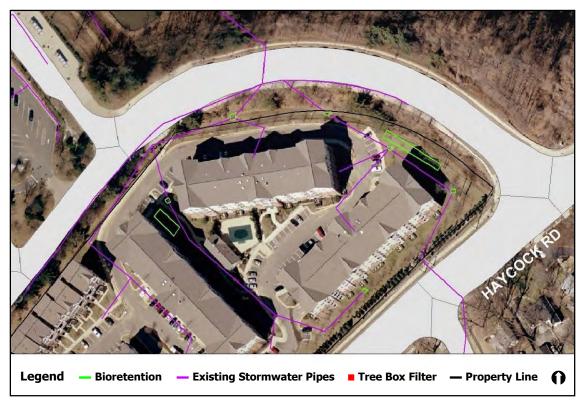
Address:7011 Falls Reach DriveLocation:Pavilion Condominium ComplexLand Owner:Residential DevelopmentPIN:0404 42020113Drainage Area:2.0 acresStream Name:Unnamed tributary to Bridge Branch

**Description:** The site does not have existing stormwater controls. Construct bioretention areas in the grass areas around the condos and around yard inlets.

Vicinity Map

**Potential Benefits:** An estimated 2.0 lbs/yr of phosphorus will be removed. This project will also provide stormwater runoff flow reduction for small storm events.

**Project Design Considerations:** BMP Retrofit Project PM9140 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 Haycock Road. An easement will be required. There are no significant construction issues found on this site. Impacts to trees will be minimized.



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



Site Photo: Looking south towards one of the parking lots

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Bioretention	230	SY	\$250.00	\$57,500.00
Erosion and Sediment Control	1	LS	\$3,000.00	\$3,000.00
		Base (	Construction Cost	\$60,500.00
			Mobilization (5%)	\$3,025.00
			Subtotal 1	\$63,525.00
		C	ontingency (25%)	\$15,881.25
			Subtotal 2	\$79,406.25
Engineering Design, Surveys, Land	Acquisition, Utility	Relocations, a	nd Permits (45%)	\$35,732.81
		Estima	ted Project Cost	\$120,000.00

## Project: PM9841 New LID Project



Address:	7048 Haycock Road
Location:	West Falls Church Metro Station
Land Owner:	Washington Metropolitan Area
	Transit Authority
PIN:	0403 01 0084
Drainage Area:	8.6 acres
Stream Name:	Unnamed tributary to Bridge Branch

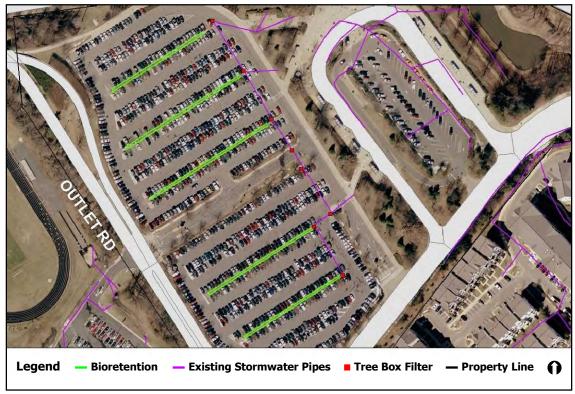
**Description:** The site does not have existing stormwater controls. Construct bioretention strips in the grass areas in the parking lot and replace eight curb drop inlets with tree box filters.

Vicinity Map

**Potential Benefits:** An estimated 8.4 lbs/yr of phosphorus will be removed. This project will also provide stormwater

runoff flow reduction for small storm events.

**Project Design Considerations:** BMP Retrofit Project PM9140 is also at the metro station. 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 Haycock Road. An easement will not be required. There are no significant construction issues found on this site. Impacts to trees will be minimized.



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



Site Photo: Looking northwest at the Kiss and Ride parking lot

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Tree Box Filters	8	EA	\$5,000.00	\$40,000.00
Bioretention	760	SY	\$250.00	\$190,000.00
Erosion and Sediment Control	1	LS	\$3,000.00	\$3,000.00
Base Construction Cost				\$233,000.00
		I	Mobilization (5%)	\$11,650.00
			Subtotal 1	\$244,650.00
		Co	ontingency (25%)	\$61,162.50
			Subtotal 2	\$305,812.50
Engineering Design, Surveys, L	and Acquisition, Utility I	Relocations, ar	nd Permits (45%)	\$137,615.63
		Estimat	ted Project Cost	\$450.000.00

## Project: PM9843 New LID Project



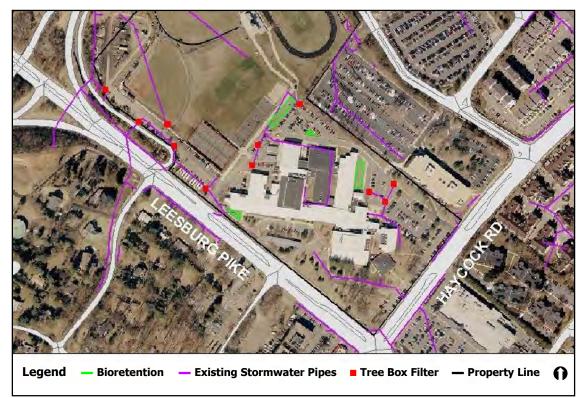
Address:7124 Leesburg PikeLocation:George Mason Middle High SchoolLand Owner:Falls Church School BoardPIN:0403 01 0094Drainage Area:12.0 acresStream Name:Unnamed tributary to Bridge Branch

**Description:** The school does not have existing stormwater controls. Construct bioretention areas in the grass areas around the school and replace eleven curb drop inlets with tree box filters.

Vicinity Map

**Potential Benefits:** An estimated 10.6 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. The project site can be accessed from Leesburg Pike. An easement will not be required. There are no significant construction issues found on this site. Impacts to trees will be minimized.



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



Site Photo: Looking southwest at the school from the rear parking area

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Tree Box Filters	11	EA	\$5,000.00	\$55,000.00
Bioretention	900	SY	\$250.00	\$225,000.00
Erosion and Sediment Control	1	LS	\$3,000.00	\$3,000.00
		Base (	Construction Cost	\$283,000.00
			Mobilization (5%)	\$14,150.00
			Subtotal 1	\$297,150.00
		Co	ontingency (25%)	\$74,287.50
			Subtotal 2	\$371,437.50
Engineering Design, Surveys, La	and Acquisition, Utility	Relocations, a	nd Permits (45%)	\$167,146.88
		Estima	ted Project Cost	\$540,000.00

# Project: PM9845 Neighborhood Stormwater Improvement Area



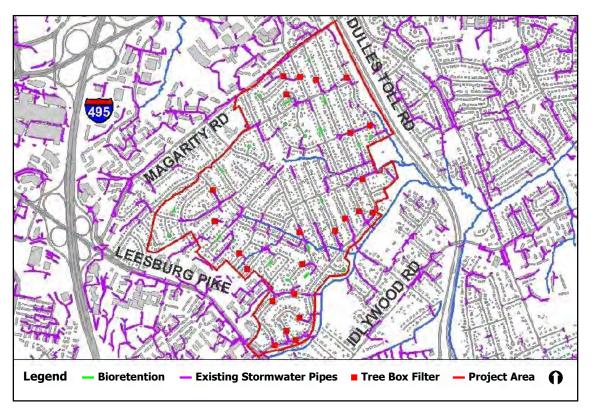
Location:	Pimmit Hills and Olney Park
	Neighborhoods
Land Owner:	Private Residential and VA
	Department of Transportation
Тах Мар:	30-3, 39-2, 40-1, and 40-3
Drainage Area:	13.8 acres
Stream Name:	Pimmit Run

**Description:** Neither of these neighborhoods has existing stormwater controls. Add bioretention areas in the grass right of way areas and replace twenty-four curb drop inlets with tree box filters.

Vicinity Map

Potential Benefits: An estimated 12.8 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 PM9232 and Buffer Restoration Project PM9328 are also in these neighborhoods. Coordination and sequencing of these projects should be considered. Portions of these neighborhoods are in floodplains and the Chesapeake Bay Resource Protection Area which have 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 Pimmit Hills Neighborhood

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Tree Box Filters	24	EA	\$5,000.00	\$120,000.00
Bioretention	810	SY	\$250.00	\$202,500.00
Erosion and Sediment Control	1	LS	\$3,000.00	\$3,000.00
		Base (	Construction Cost	\$325,500.00
			Mobilization (5%)	\$16,275.00
			Subtotal 1	\$341,775.00
		C	ontingency (25%)	\$85,443.75
			Subtotal 2	\$427,218.75
Engineering Design, Surveys, L	and Acquisition, Utility	Relocations, a	nd Permits (45%)	\$192,248.44
		Estima	ted Project Cost	\$620,000.00

# Project: PM9850 New LID Project



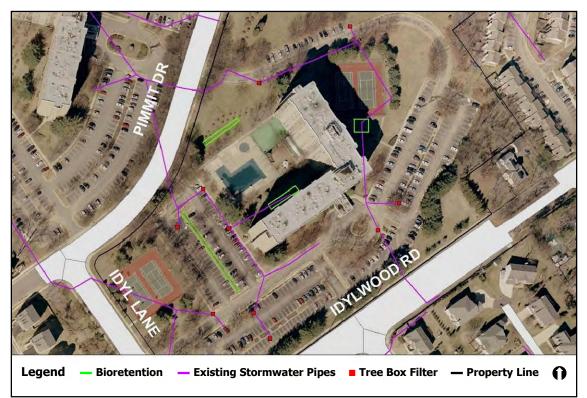
Address:	2311 Pimmit Drive
Location:	Idylwood Towers Condominiums
Land Owner:	Residential Development
PIN:	0403 27010101
Drainage Area:	6.9 acres
Stream Name:	Unnamed tributary to Pimmit Run

**Description:** Construct bioretention areas and a bioswale in the grass areas around the condos and replace ten curb drop inlets with tree box filters.

Vicinity Map

**Potential Benefits:** An estimated 5.8 lbs/yr of phosphorus will be removed. This project will also provide stormwater runoff flow reduction for small storm events.

**Project Design Considerations:** New LID Project PM9851 is adjacent to this project. 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 Pimmit Drive. An easement will be required. There are no significant construction issues found on this site. Impacts to trees will be minimized.



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



Site Photo: Looking northeast from the rear parking lot

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Tree Box Filters	10	EA	\$5,000.00	\$50,000.00
Bioretention	400	SY	\$250.00	\$100,000.00
Erosion and Sediment Control	1	LS	\$3,000.00	\$3,000.00
		Base C	Construction Cost	\$153,000.00
		I	Mobilization (5%)	\$7,650.00
			Subtotal 1	\$160,650.00
		Co	ontingency (25%)	\$40,162.50
			Subtotal 2	\$200,812.50
Engineering Design, Surveys, La	and Acquisition, Utility I	Relocations, ar	nd Permits (45%)	\$90,365.63
		Estimat	ted Project Cost	\$300,000.00

# Project: PM9852 New LID Project



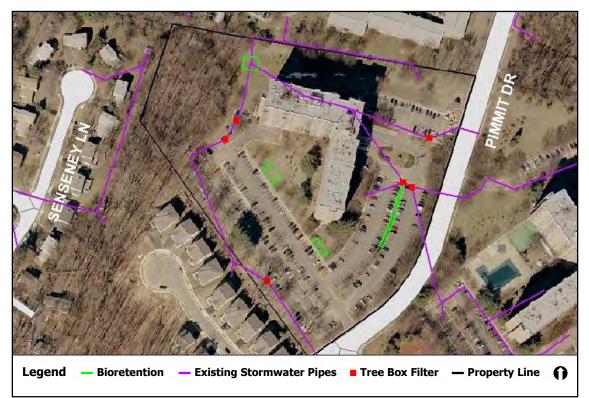
Address:2300 Pimmit DriveLocation:Idylwood Towers CondominiumsLand Owner:Residential DevelopmentPIN:0403 27020101Drainage Area:5.1 acresStream Name:Unnamed tributary to Pimmit Run

**Description:** Construct bioretention areas and bioswales in the grass areas around the condos and replace six curb drop inlets with tree box filters.

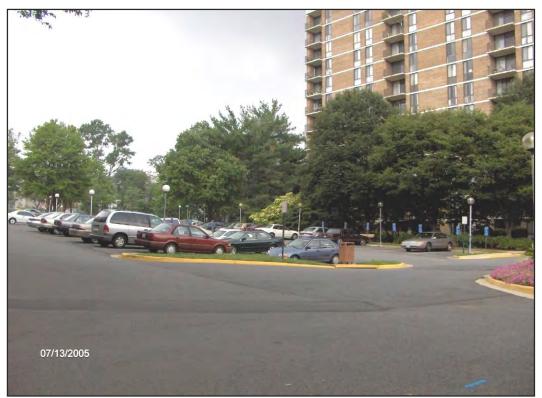
Vicinity Map

**Potential Benefits:** An estimated 4.5 lbs/yr of phosphorus will be removed. This project will also provide stormwater runoff flow reduction for small storm events.

**Project Design Considerations:** New LID Project PM9851 is adjacent to this project. 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 Pimmit Drive. An easement will be required. There are no significant construction issues found on this site. Impacts to trees will be minimized.



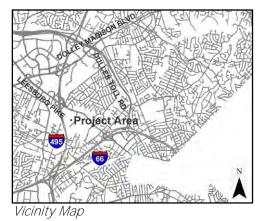
Project Area Map: Conceptual plan showing potential locations of LID measures



Site Photo: Looking west from the side parking lot

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Tree Box Filters	6	EA	\$5,000.00	\$30,000.00
Bioretention	350	SY	\$250.00	\$87,500.00
Erosion and Sediment Control	1	LS	\$3,000.00	\$3,000.00
		Base (	Construction Cost	\$120,500.00
			Mobilization (5%)	\$6,025.00
			Subtotal 1	\$126,525.00
		Co	ontingency (25%)	\$31,631.25
			Subtotal 2	\$158,156.25
Engineering Design, Surveys, La	and Acquisition, Utility	Relocations, a	nd Permits (45%)	\$71,170.31
		Estima	ted Project Cost	\$230,000.00

# Project: PM9856 New LID Project

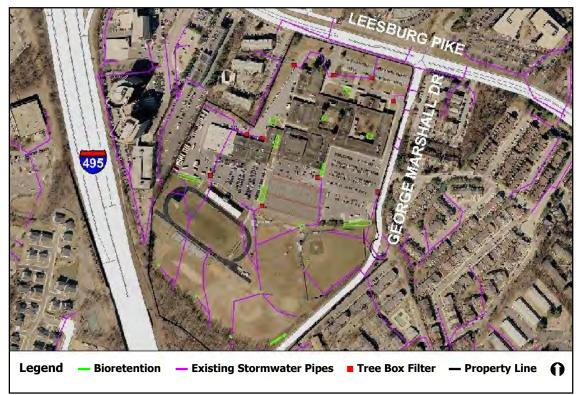


Address:7731 Leesburg PikeLocation:George C Marshall High SchoolLand Owner:Fairfax County Public SchoolsPIN:0392 01 0048Drainage Area:16.5 acresStream Name:Unnamed tributary to Pimmit Run

**Description:** The school does not have existing stormwater controls. Construct bioretention areas in the grass areas around the school and yard inlets and replace ten curb drop inlets with tree box filters.

**Potential Benefits:** An estimated 16.2 lbs/yr of phosphorus will be removed. This project will also provide stormwater runoff flow reduction for small storm events.

**Project Design Considerations:** New BMP Project PM9155 is also at the school. Coordination and sequencing of these projects should be considered. Portions of this project site are in the Chesapeake Bay Resource Protection Area which has special permitting requirements. Installation of LID measures in these areas should be avoided. The project site can be accessed from Leesburg Pike. An easement will not be required. There are no significant construction issues found on this site. Impacts to trees will be minimized.



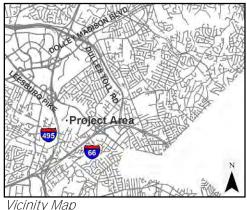
Project Area Map: Conceptual plan showing potential locations of LID measures



Site Photo: Looking southwest from the front parking lot

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Tree Box Filters	10	EA	\$5,000.00	\$50,000.00
Bioretention	1530	SY	\$250.00	\$382,500.00
Erosion and Sediment Control	1	LS	\$3,000.00	\$3,000.00
		Base (	Construction Cost	\$435,500.00
Mobilization (5%)			\$21,775.00	
			Subtotal 1	\$457,275.00
		Co	ontingency (25%)	\$114,318.75
			Subtotal 2	\$571,593.75
Engineering Design, Surveys, La	and Acquisition, Utility I	Relocations, a	nd Permits (45%)	\$257,217.19
		Estima	ted Project Cost	\$830,000.00

## Project: PM9857 New LID Project

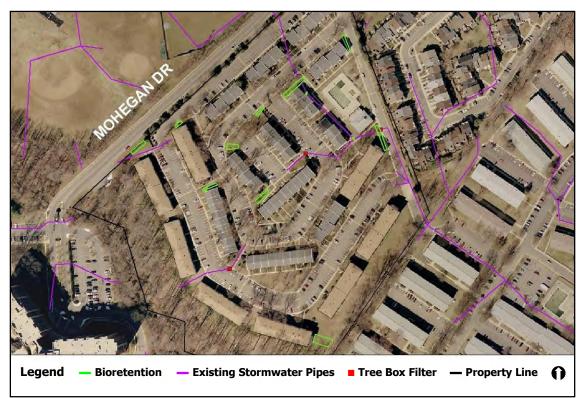


Address: 2250 Mohegan Drive Location: Tysons Glen Apartments Land Owner: **Residential Development** Tax Map: 39-2 and 39-4 **Drainage Area:** 7.2 acres Stream Name: Unnamed tributary to Pimmit Run

Description: The site does not have existing stormwater controls. Construct bioretention areas in the grass areas around the site and replace three curb drop inlets with tree box filters.

Potential Benefits: An estimated 6.7 lbs/yr of phosphorus will be removed. This project will also provide stormwater runoff flow reduction for small storm events.

**Project Design Considerations:** Portions of this project site are in the Chesapeake Bay Resource Protection Area which has special permitting requirements. Installation of LID measures in these areas should be avoided. The project site can be accessed from Mohegan Drive. An easement will be required. There are no significant construction issues found on this site. Impacts to trees will be minimized.



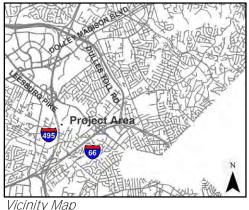
Project Area Map: Conceptual plan showing potential locations of LID measures



Site Photo: Looking northeast from the rear parking lot in the complex

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Tree Box Filters	3	EA	\$5,000.00	\$15,000.00
Bioretention	670	SY	\$250.00	\$167,500.00
Erosion and Sediment Control	1	LS	\$3,000.00	\$3,000.00
		Base (	Construction Cost	\$185,500.00
			Mobilization (5%)	\$9,275.00
			Subtotal 1	\$194,775.00
		Co	ontingency (25%)	\$48,693.75
			Subtotal 2	\$243,468.75
Engineering Design, Surveys, La	and Acquisition, Utility	Relocations, a	nd Permits (45%)	\$109,560.94
		Estima	ted Project Cost	\$360,000.00

## Project: PM9859 New LID Project



Address:2230 George C Marshall DriveLocation:The Renaissance ApartmentsLand Owner:Residential DevelopmentPIN:0394 01 0178ADrainage Area:6.2 acresStream Name:Unnamed tributary to Pimmit Run

**Description:** Construct bioretention areas and a bioswale in the grass areas around the apartments and replace eight curb drop inlets with tree box filters.

**Potential Benefits:** An estimated 6.1 lbs/yr of phosphorus

will be removed. This project will also provide stormwater runoff flow reduction for small storm events.

**Project Design Considerations:** BMP Retrofit Project PM9158 is also at this apartment complex. Coordination and sequencing of these projects should be considered. Portions of this project site are in the Chesapeake Bay Resource Protection Area which has special permitting requirements. Installation of LID measures in these areas should be avoided. The project site can be accessed from George C Marshall Drive. An easement will be required. There are no significant construction issues found on this site. Impacts to trees will be minimized.



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



*Site Photo:* Looking west towards the apartments

#### Costs:

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Tree Box Filters	8	EA	\$5,000.00	\$40,000.00
Bioretention	460	SY	\$250.00	\$115,000.00
Erosion and Sediment Control	1	LS	\$3,000.00	\$3,000.00
		Base C	Construction Cost	\$158,000.00
		I	Mobilization (5%)	\$7,900.00
			Subtotal 1	\$165,900.00
		Co	ontingency (25%)	\$41,475.00
			Subtotal 2	\$207,375.00
Engineering Design, Surveys, Lan	d Acquisition, Utility	Relocations, ar	nd Permits (45%)	\$93,318.75
		Estimat	ted Project Cost	\$310,000.00

## Project: PM9862 New LID Project

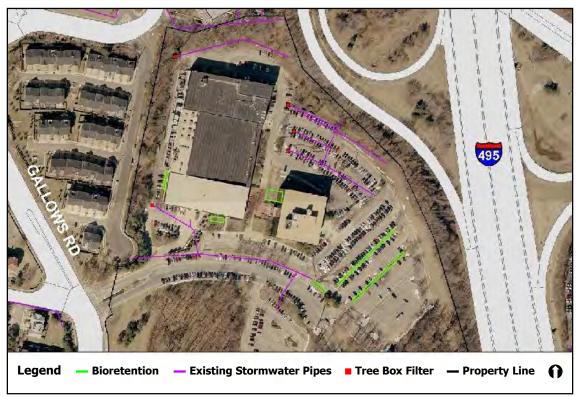


Address:	7990 Science Application Court
Location:	Tysons Corner
Land Owner:	Commercial Development
PIN:	0392 01 0013
Drainage Area:	6.8 acres
Stream Name:	Unnamed tributary to Pimmit Run

**Description:** Construct bioretention areas and a bioswale in the grass areas around the site and replace four curb drop inlets with tree box filters.

**Potential Benefits:** An estimated 6.7 lbs/yr of phosphorus will be removed. This project will also provide stormwater runoff flow reduction for small storm events.

**Project Design Considerations:** BMP Retrofit Project PM9160 is also in this development. 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 Boeing Court. An easement will be required. There are no significant construction issues found 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 office buildings

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Tree Box Filters	4	EA	\$5,000.00	\$20,000.00
Bioretention	670	SY	\$250.00	\$167,500.00
Erosion and Sediment Control	1	LS	\$3,000.00	\$3,000.00
		Base (	Construction Cost	\$190,500.00
			Mobilization (5%)	\$9,525.00
			Subtotal 1	\$200,025.00
		Co	ontingency (25%)	\$50,006.25
			Subtotal 2	\$250,031.25
Engineering Design, Surveys, La	nd Acquisition, Utility	Relocations, a	nd Permits (45%)	\$112,514.06
		Estima	ted Project Cost	\$370,000.00

## Project: PM9867 New LID Project

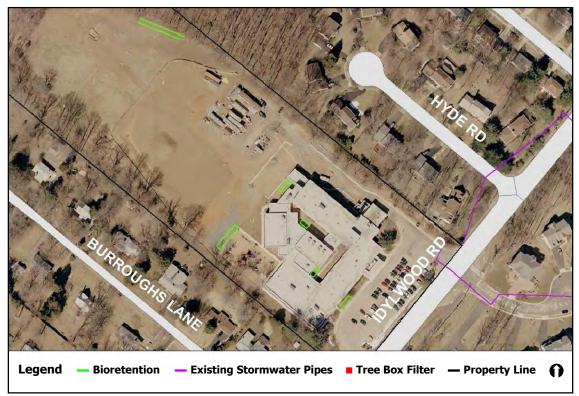


Address:7230 Idylwood RoadLocation:Lemon Road SchoolLand Owner:Fairfax County Public SchoolsPIN:0401 01 0031Drainage Area:3.0 acresStream Name:Pimmit Run

**Description:** The school does not have existing stormwater controls. Construct bioretention areas and a bioswale in the grass areas around the school.

**Potential Benefits:** An estimated 2.8 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 PM9232 is adjacent to this project site. Coordination and sequencing of these projects should be considered. Portions of this site are in the Chesapeake Bay Resource Protection Area which has special permitting requirements. Installation of LID measures in these areas should be avoided. The project site can be accessed from Idylwood Road. An easement will not be required. There are no significant construction issues found on this site. Impacts to trees will be minimized.



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

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
		Co	ontingency (25%)	\$21,131.25
			Subtotal 2	\$105,656.25
Engineering Design, Surveys, La	and Acquisition, Utility	Relocations, a	nd Permits (45%)	\$47,545.31
		Estima	ted Project Cost	\$160,000.00

## Project: PM9871 New LID Project



Address:2328 North Oak StreetLocation:Mount Daniel Elementary SchoolLand Owner:Falls Church School BoardPIN:0404 01 0022Drainage Area:2.3 acresStream Name:Unnamed tributary to Bridge<br/>Branch

**Description:** The school does not have existing stormwater controls. Construct a bioretention area and a bioswale in the grass areas around the school.

Vicinity Map

**Potential Benefits:** An estimated 2.3 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 North Oak Street. An easement will not be required. There are no significant construction issues found on this site. Impacts to trees will be minimized.



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

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Bioretention	250	SY	\$250.00	\$62,500.00
Erosion and Sediment Control	1	LS	\$3,000.00	\$3,000.00
		Base (	Construction Cost	\$65,500.00
			Mobilization (5%)	\$3,275.00
			Subtotal 1	\$68,775.00
		Co	ontingency (25%)	\$17,193.75
			Subtotal 2	\$85,968.75
Engineering Design, Surveys, La	and Acquisition, Utility	Relocations, a	nd Permits (45%)	\$38,685.94
		Estima	ted Project Cost	\$130,000.00

## Project: PM9872 New LID Project



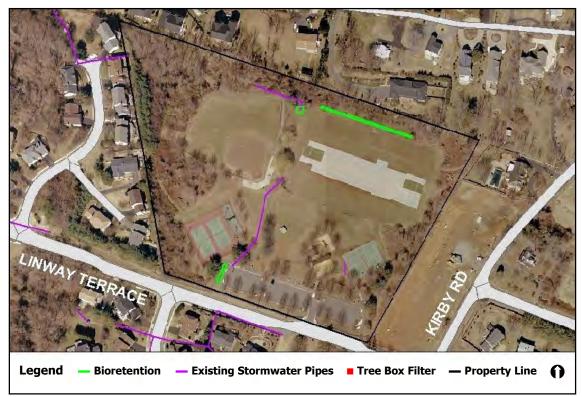
Vicinity Map

Address:	6246 Linway Terrace
Location:	Linway Terrace Park
Land Owner:	Fairfax County Park Authority
PIN:	0313 01 0152A
Drainage Area:	18.5 acres
Stream Name:	Bryan Branch

**Description:** The park site does not have existing stormwater controls. Construct bioretention areas around the park and convert the existing grass swale adjacent to the soccer field into a bioswale.

**Potential Benefits:** An estimated 3.4 lbs/yr of phosphorus will be removed. This project will also provide stormwater runoff flow reduction for small storm events.

**Project Design Considerations:** This project is adjacent to BMP Retrofit Project PM9175 and Stream Restoration Project PM9209. 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 Linway Terrace. An easement will not be required. There are no significant construction issues found on this site. Impacts to trees will be minimized.



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

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Bioretention	270	SY	\$250.00	\$67,500.00
Erosion and Sediment Control	1	LS	\$3,000.00	\$3,000.00
		Base (	Construction Cost	\$70,500.00
		l	Mobilization (5%)	\$3,525.00
			Subtotal 1	\$74,025.00
		Co	ontingency (25%)	\$18,506.25
			Subtotal 2	\$92,531.25
Engineering Design, Surveys, L	and Acquisition, Utility	Relocations, a	nd Permits (45%)	\$41,639.06
		Estima	ted Project Cost	\$140,000.00

## Project: PM9873 New LID Project



Address:	2034 Great Falls Street
Location:	Church of Jesus Christ of Latter Day
	Saints
Land Owner:	Private Organization
PIN:	0402 01 0007A and 0008
Drainage Area:	3.5 acres
Stream Name:	Unnamed tributary to Pimmit Run

**Description:** The church site has an existing dry detention pond that provides water quantity control. Construct bioretention areas around the church and parking lots and replace four curb drop inlets with tree box filters.

Vicinity Map

**Potential Benefits:** An estimated 3.4 lbs/yr of phosphorus will be removed. This project will also provide stormwater

runoff flow reduction for small storm events.

**Project Design Considerations:** This project is adjacent to BMP Retrofit Project PM9133 and upstream of Stream Restoration Project PM9225. 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 Idylwood Road. An easement will not be required. There are no significant construction issues found on this site. Impacts to trees will be minimized.



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

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Tree Box Filters	4	EA	\$5,000.00	\$20,000.00
Bioretention	290	SY	\$250.00	\$72,500.00
Erosion and Sediment Control	1	LS	\$3,000.00	\$3,000.00
		Base (	Construction Cost	\$95,500.00
		l	Mobilization (5%)	\$4,775.00
			Subtotal 1	\$100,275.00
		Co	ontingency (25%)	\$25,068.75
			Subtotal 2	\$125,343.75
Engineering Design, Surveys, L	and Acquisition, Utility	Relocations, a	nd Permits (45%)	\$56,404.69
		Estima	ted Project Cost	\$190,000.00

## Project: PM9874 New LID Project



Address:2036 Westmoreland StreetLocation:Chesterbrook Presbyterian ChurchLand Owner:Private OrganizationPIN:0402 01 0026ADrainage Area:1.3 acresStream Name:Burke's Spring Branch

**Description:** The church does not have existing stormwater controls. Construct bioretention areas in the parking lot of the church.

Vicinity Map

**Potential Benefits:** An estimated 1.1 lbs/yr of phosphorus will be removed. This project will also provide stormwater runoff flow reduction for small storm events.

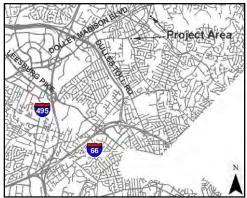
**Project Design Considerations:** This project is adjacent to New LID Project PM9829. Coordination and sequencing of these projects should be considered. There are minimal environmental permitting requirements for this project. The project site can be accessed from Westmoreland Street. An easement will be required. There are no significant construction issues found on this site. Impacts to trees will be minimized.



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

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Bioretention	110	SY	\$250.00	\$27,500.00
Erosion and Sediment Control	1	LS	\$3,000.00	\$3,000.00
		Base (	Construction Cost	\$30,500.00
			Mobilization (5%)	\$1,525.00
			Subtotal 1	\$32,025.00
Contingency (25%)			\$8,006.25	
			Subtotal 2	\$40,031.25
Engineering Design, Surveys, La	and Acquisition, Utility I	Relocations, a	nd Permits (45%)	\$18,014.06
		Estima	ted Project Cost	\$60,000.00

## Project: PM9877 New LID Project



Vicinity Map

Address:		1367 and 1545 Chain Bridge Road
Location:	:	McLean Baptist Church and
2		Redeemer Lutheran Church
Land Ow	ner:	Private Organizations
PIN:		0302 13 0011, 0012, 0013 and
		0304 01 0012
Drainage	Area:	1.9 acres and 4.8 acres
Stream N	lame:	Unnamed tributaries to Saucy
		Branch

**Description:** Neither of the churches has existing stormwater controls. Construct bioretention areas in the grass areas around both churches.

**Potential Benefits:** An estimated 1.9 lbs/yr and 2.3 lbs/yr of phosphorus will be removed from each site. These projects will also provide stormwater runoff flow reduction for small storm events.

**Project Design Considerations:** There are minimal environmental permitting requirements for both of these projects. The project sites can be accessed from Chain Bridge Road. An easement will be required. There are no significant construction issues found on these sites. Impacts to trees will be minimized.



Project Area Map: Conceptual plan of 1367 Chain Bridge Road showing potential locations of LID measures



*Project Area Map: Conceptual plan of 1545 Chain Bridge Road showing potential locations of LID measures* 

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Bioretention	440	SY	\$250.00	\$110,000.00
Erosion and Sediment Control	1	LS	\$6,000.00	\$6,000.00
		Base Construction Cost		\$116,000.00
	\$5,800.00			
Subtotal 1				\$121,800.00
	\$30,450.00			
Subtotal 2				\$152,250.00
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)			\$68,512.50	
		Estima	ted Project Cost	\$230,000.00

# Project: PM9978 Neighborhood Stormwater Improvement Area



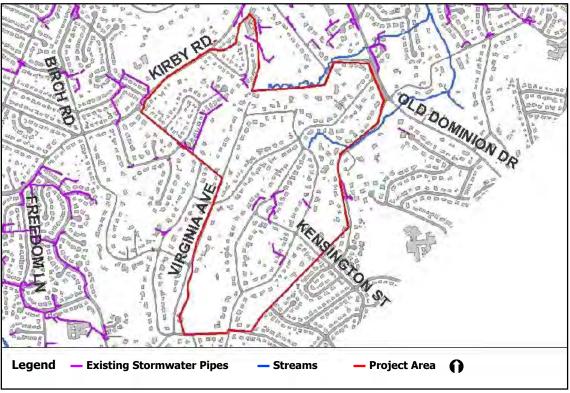
Vicinity Map

Location:	Franklin Park and Chesterbrook		
	Neighborhoods		
Land Owner:	Private Residential and VA		
	Department of Transportation		
Tax Map:	31-3 and 41-1		
Stream Name:	Unnamed tributaries to Little		
	Pimmit Run		

**Description:** These neighborhoods have had a variety of drainage problems over the years ranging from stream erosion to house flooding. This project will study the existing storm drain system to determine flooding causes. The project will also identify locations where improvements are needed and construct the recommended improvements.

**Potential Benefits:** This project will help to reduce stream erosion as well as yard, road, and house flooding.

**Project Design Considerations:** Stream Restoration Project PM9203 and Buffer Restoration Project PM9301 are also in the project area. Coordination and sequencing of the projects should be considered. Portions of the neighborhood are in floodplains and the Chesapeake Bay Resource Protection Area which have special permitting requirements. Easements may be required.



Project Area Map

ITEM	QUANTITY	UNITS	UNIT COST	TOTAL
Storm Drain Study	1	LS	\$100,000.00	\$100,000.00
New Storm Pipe	1	LS	\$50,000.00	\$50,000.00
Landscaping	1	LS	\$6,000.00	\$6,000.00
New pavement	1,500	SY	\$45.00	\$67,500.00
Remove Pavement	1,500	SY	\$8.00	\$12,000.00
		Base Construction Cost		\$235,500.00
Mobilization (5%) Subtotal 1				\$11,775.00
				\$247,275.00
Contingency (25%)				\$61,819.00
			Subtotal 2	\$309,094.00
Engineering Design, Surveys, Land Acquisition, Utility Relocations, and Permits (45%)			\$139,092.00	
		Estima	ated Project Cost	\$450,000.00