

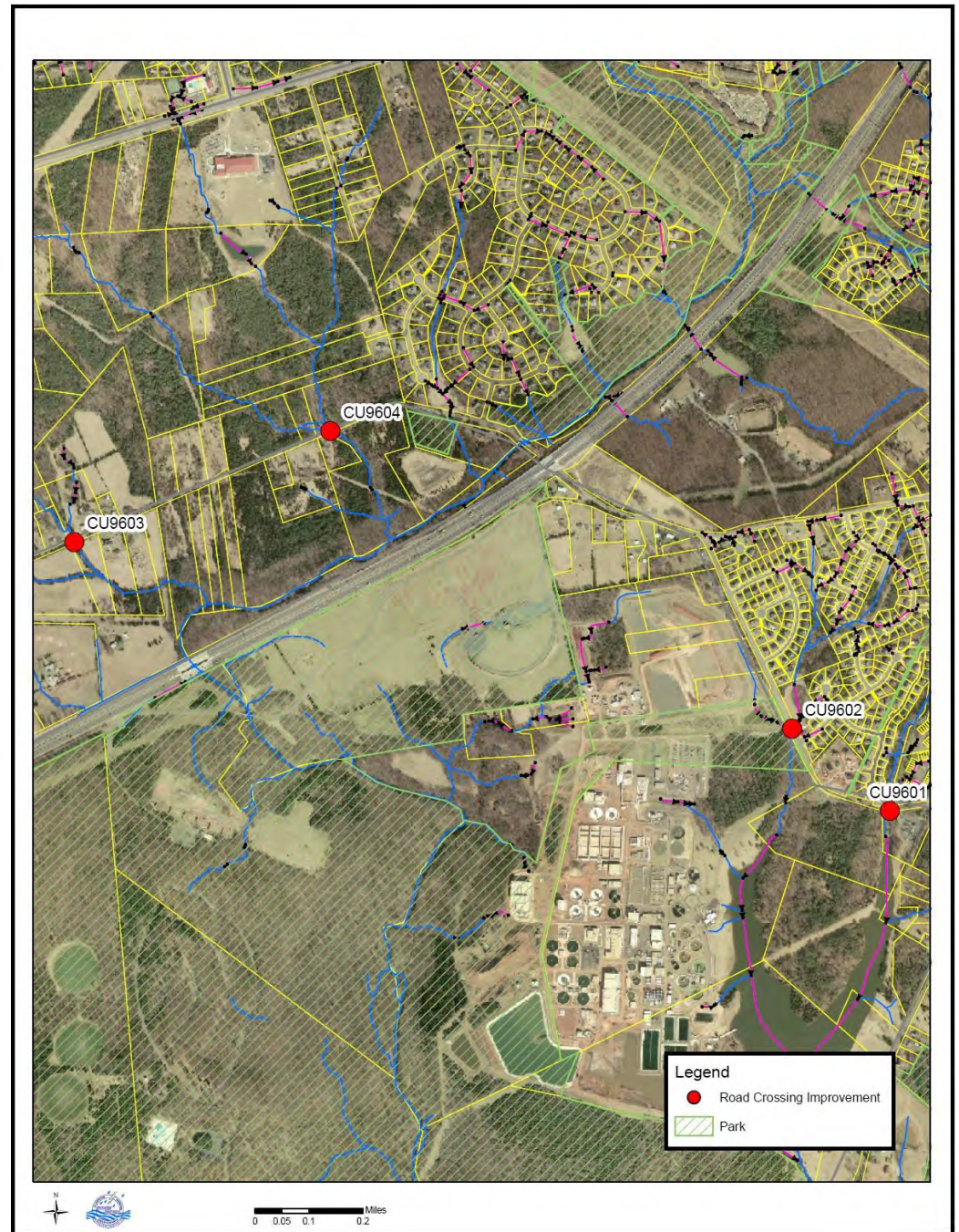
Fact Sheets

Projects CU9601 through CU9613

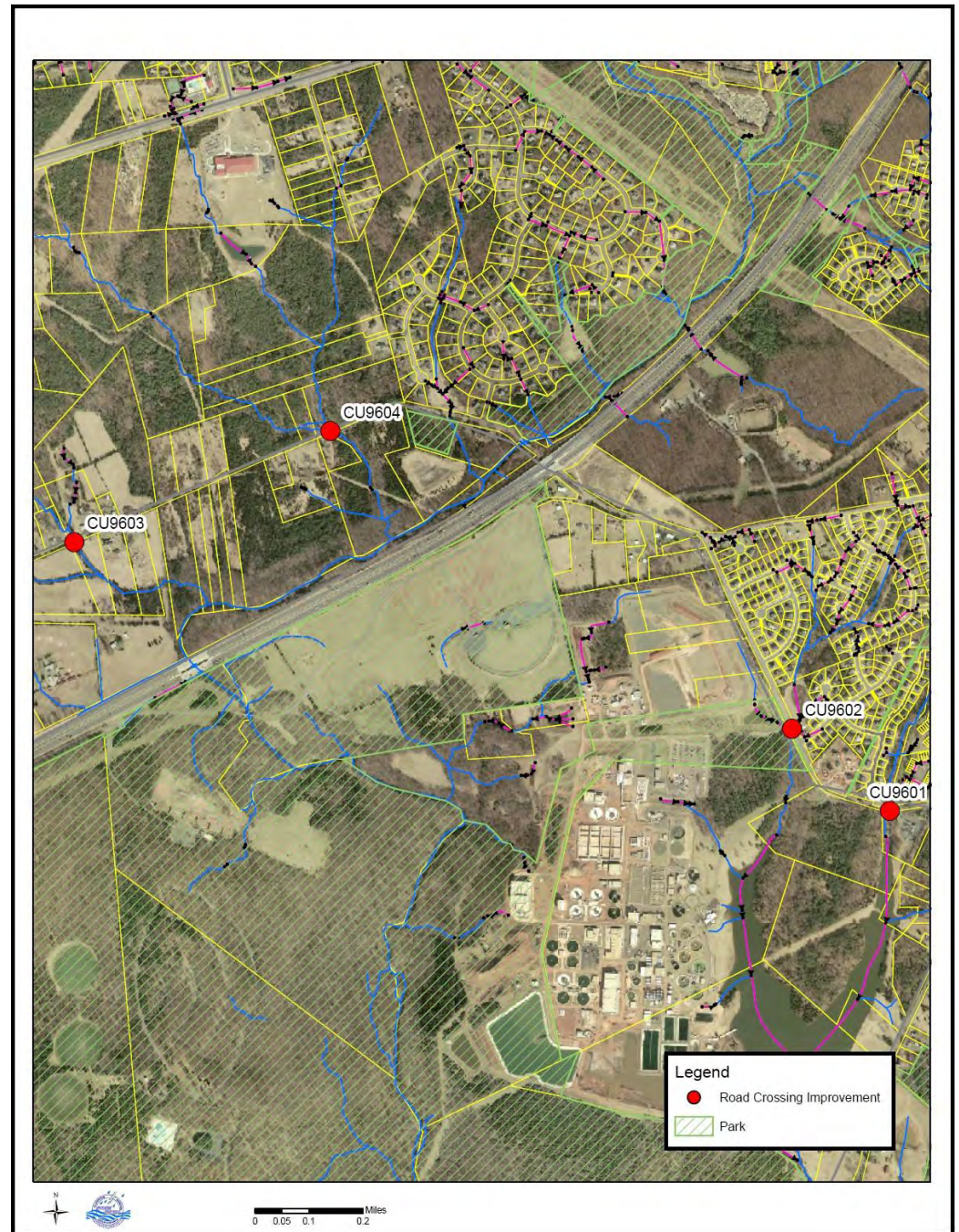
Cub Run Watershed Road Crossing Improvement Projects

Projects CU9601 through CU9613

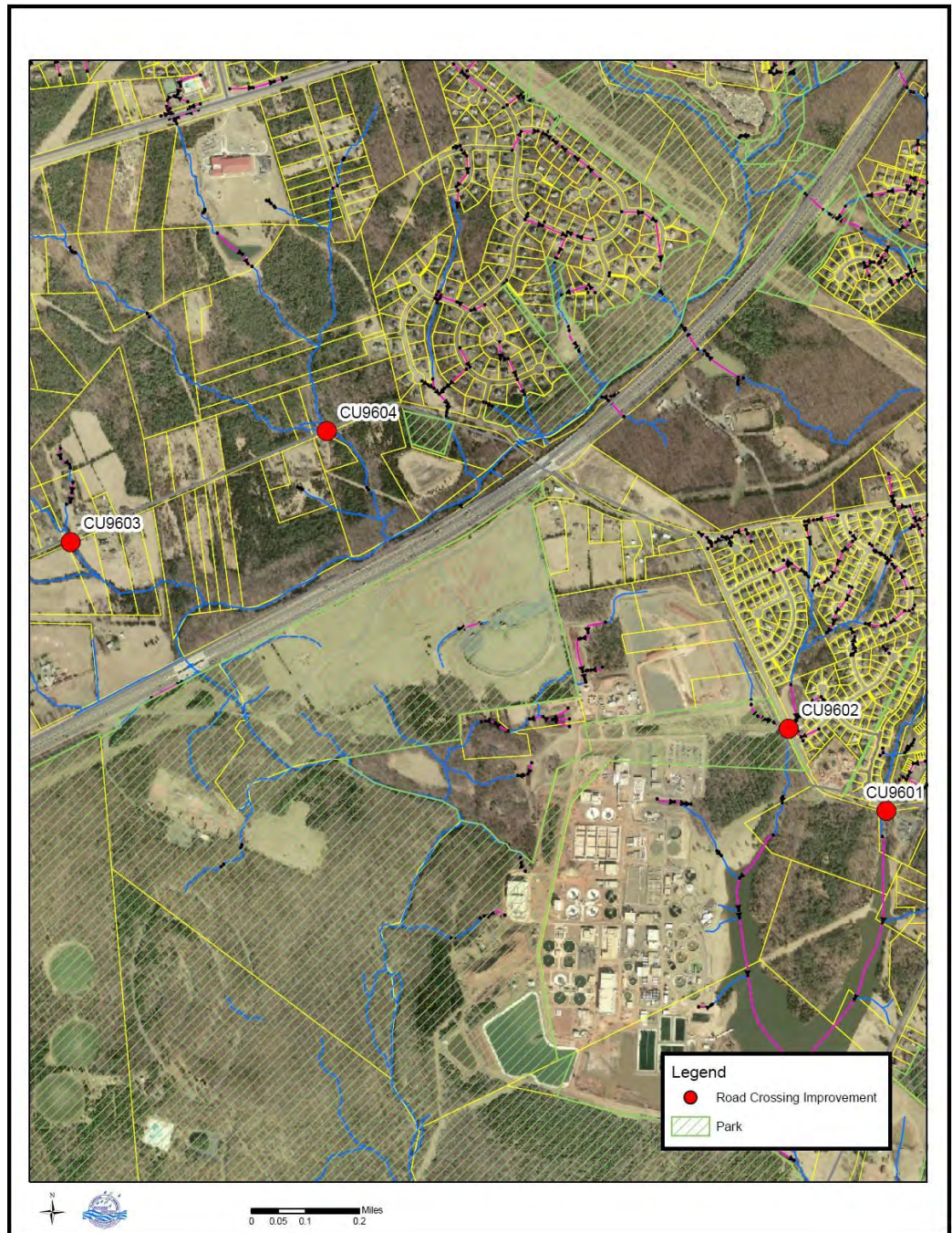
Project ID:	CU9601
Project Type:	Road Crossing Improvement
Location:	Compton Road at unnamed tributary near UOSA advanced wastewater treatment plant Bull Run East subwatershed
Description:	Raise road and replace existing culvert with a larger culvert to address roadway flooding and impact of road on the stream. Project will not be implemented using Fairfax County stormwater funds. The roads are maintained by the Virginia Department of Transportation and these improvements will be implemented during roadway improvement projects.



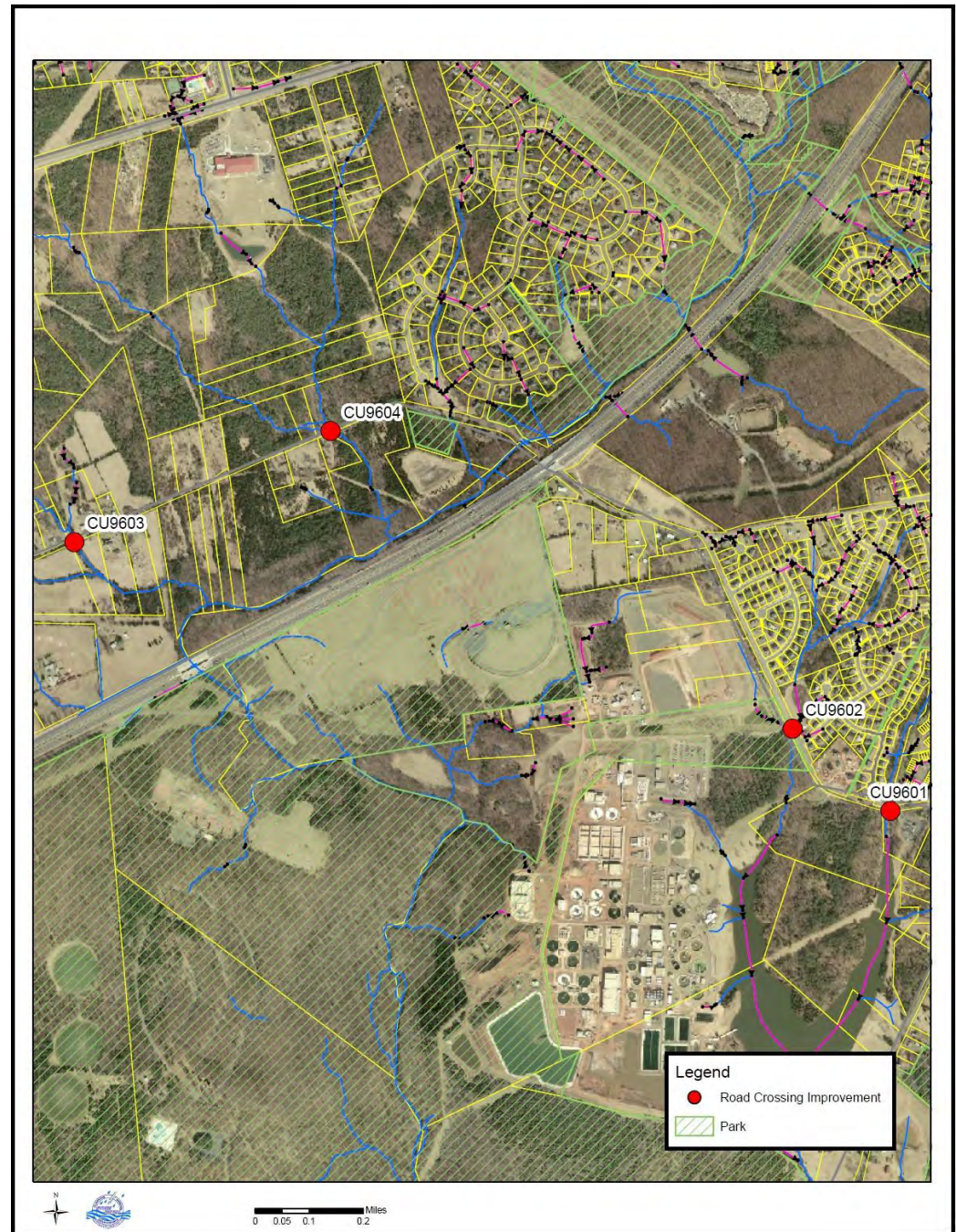
Project ID:	CU9602
Project Type:	Road Crossing Improvement
Location:	Compton Road at unnamed tributary near Confederate Ridge Lane within Bull Run East subwatershed
Description:	Raise road and replace existing culvert with a larger culvert to address roadway flooding and impact of road on the stream. Project will not be implemented using Fairfax County stormwater funds. The roads are maintained by the Virginia Department of Transportation and these improvements will be implemented during roadway improvement projects.



Project ID:	CU9603
Project Type:	Road Crossing Improvement
Location:	Compton Road at unnamed tributary west of Bull Run Post Office Road within Lower Cub Run subwatershed
Description:	Raise road and replace existing culvert with a larger culvert to address roadway flooding and impact of road on the stream. Project will not be implemented using Fairfax County stormwater funds. The roads are maintained by the Virginia Department of Transportation and these improvements will be implemented during roadway improvement projects.



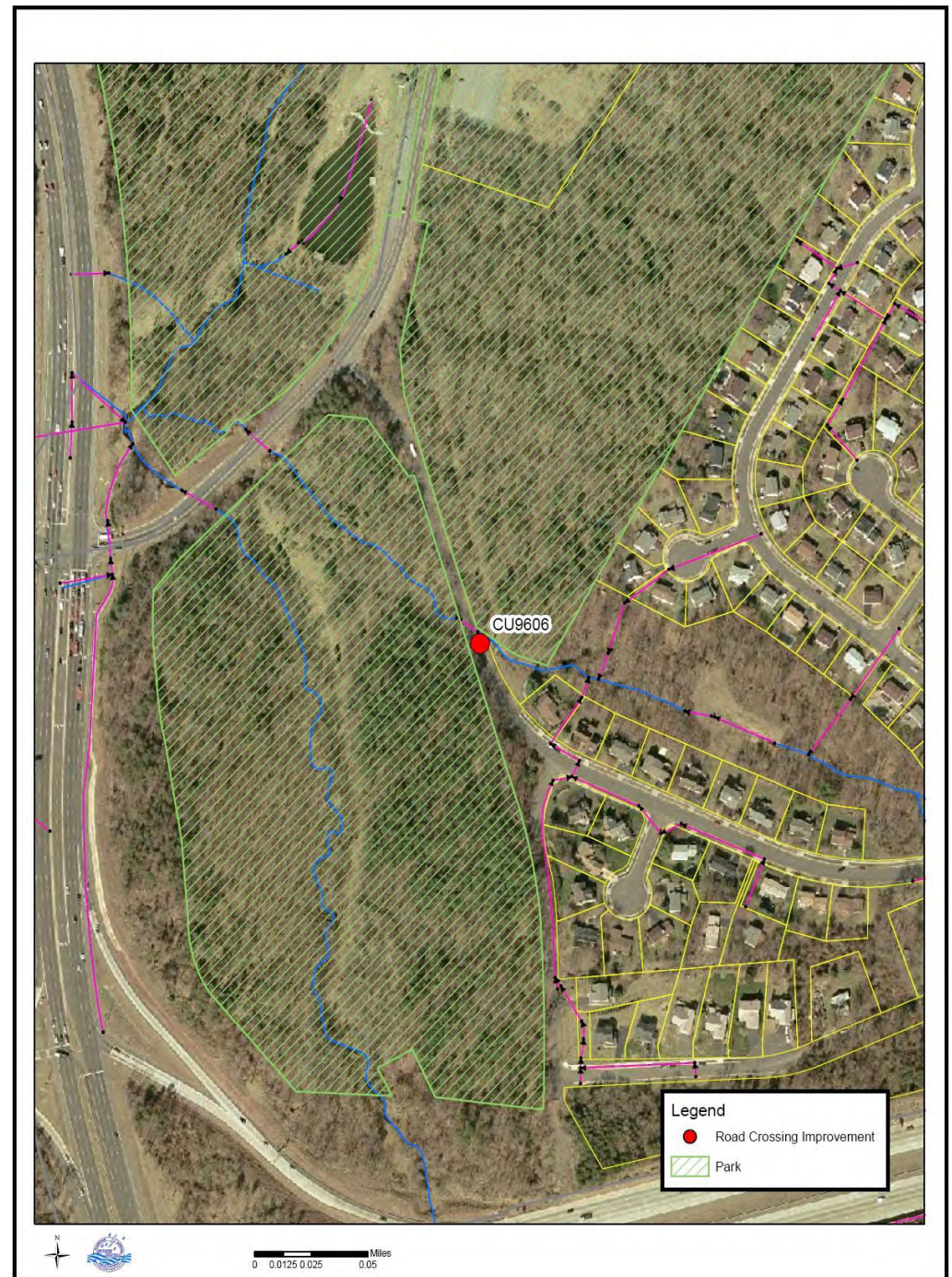
Project ID:	CU9604
Project Type:	Road Crossing Improvement
Location:	Compton Road at unnamed tributary west of Route 66 within Lower Cub Run subwatershed
Description:	Raise road and replace existing culvert with a larger culvert to address roadway flooding and impact of road on the stream. Project will not be implemented using Fairfax County stormwater funds. The roads are maintained by the Virginia Department of Transportation and these improvements will be implemented during roadway improvement projects.



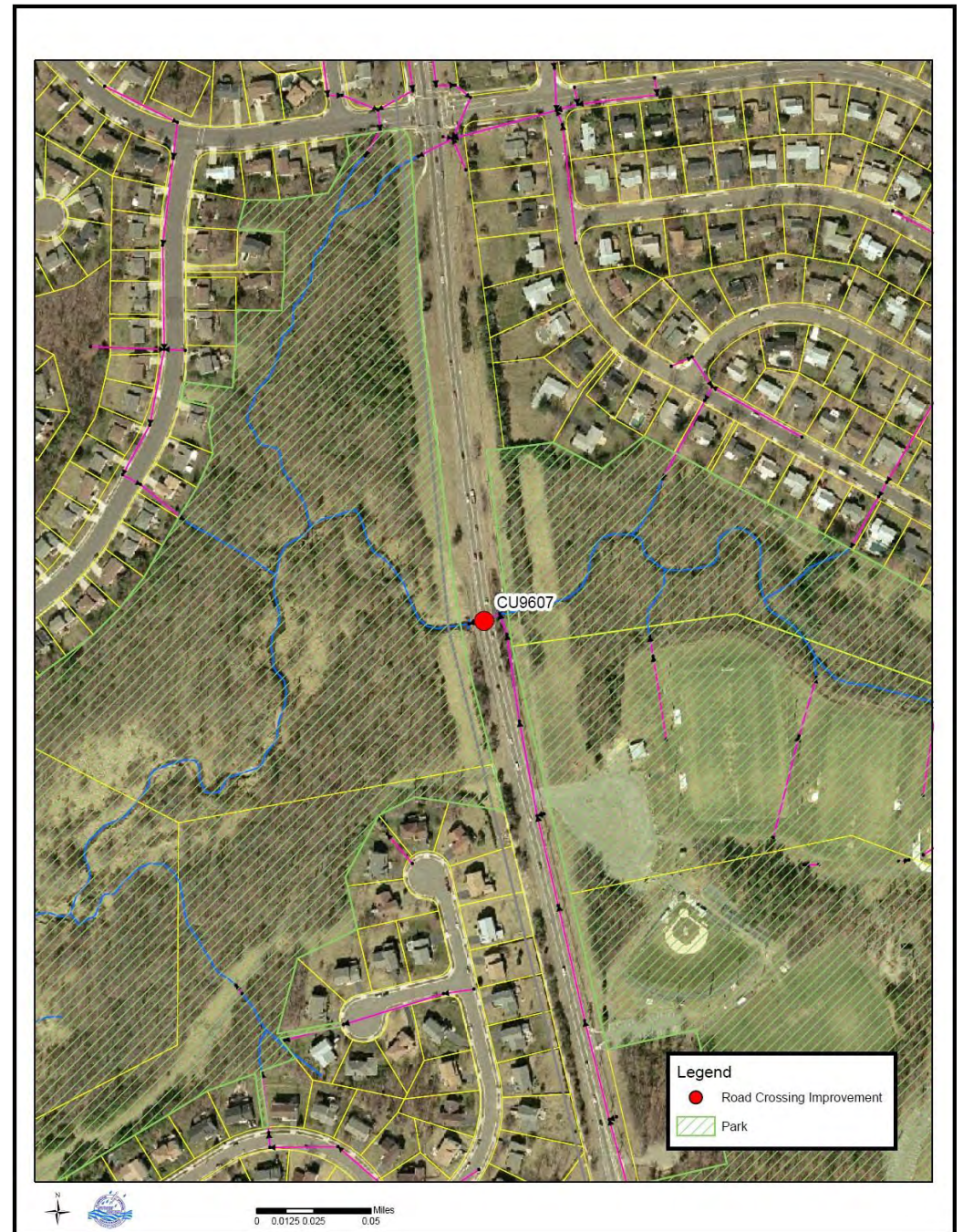
Project ID:	CU9605
Project Type:	Road Crossing Improvement
Location:	Awbrey Patent Drive at Big Rocky Run within Big Rocky Run subwatershed
Description:	Raise roadway elevation and add additional culvert(s) to address roadway flooding. Project will not be implemented using Fairfax County stormwater funds. The roads are maintained by the Virginia Department of Transportation and these improvements will be implemented during roadway improvement projects.



Project ID:	CU9606
Project Type:	Road Crossing Improvement
Location:	Heron Drive at unnamed tributary between Cabells Mill Drive and Walney Road within Big Rocky Run subwatershed
Description:	Replace existing culvert with a larger culvert or multiple culverts to address roadway flooding and impact of road on the stream. Project will not be implemented using Fairfax County stormwater funds. The roads are maintained by the Virginia Department of Transportation and these improvements will be implemented during roadway improvement projects.



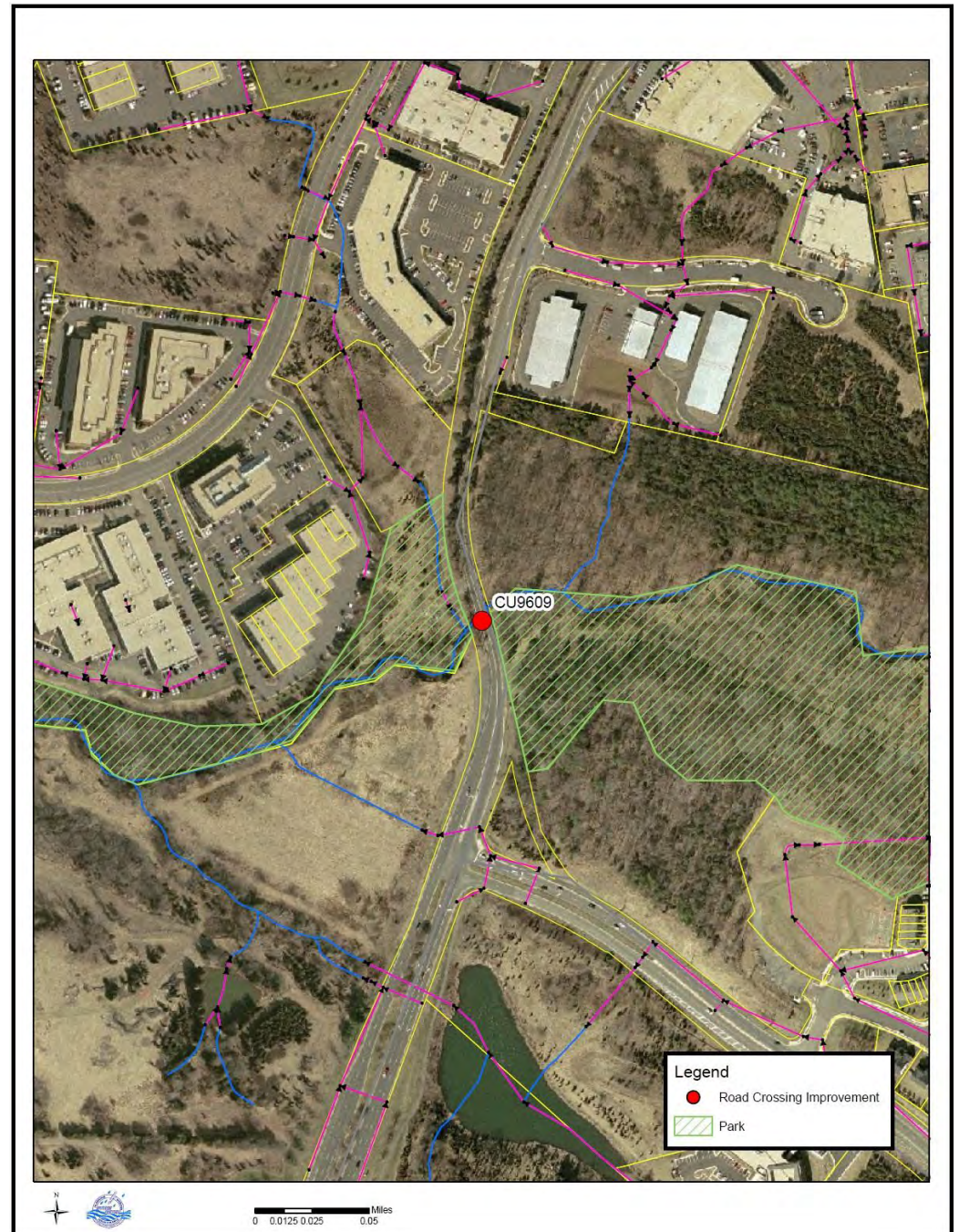
Project ID:	CU9607
Project Type:	Road Crossing Improvement
Location:	Big Rocky Run at Stringfellow Road within Big Rocky Run subwatershed
Description:	Replace existing culvert with larger culvert, multiple culverts or bridge to address flooding. Project will not be implemented using Fairfax County stormwater funds. The roads are maintained by the Virginia Department of Transportation and these improvements will be implemented during roadway improvement projects.



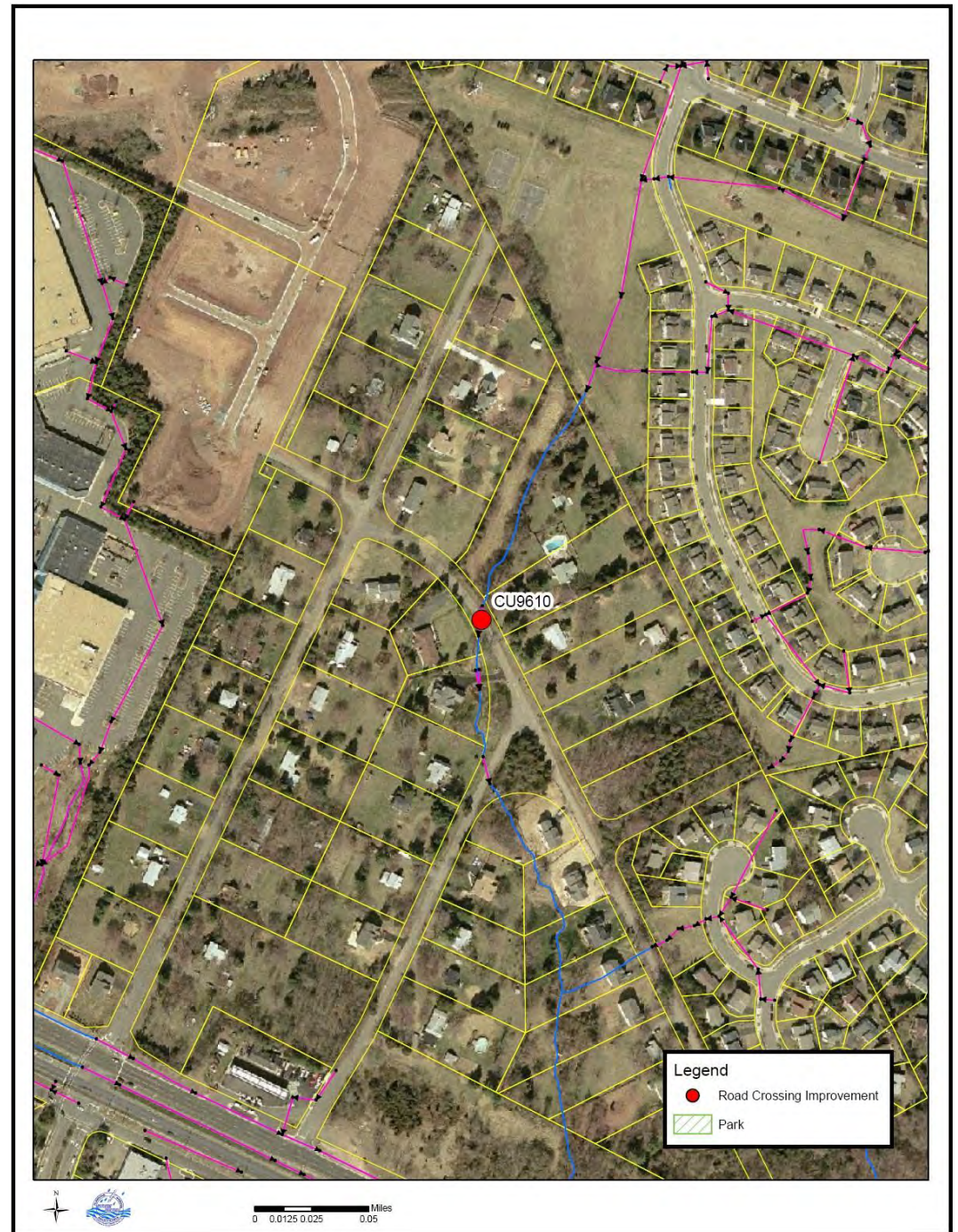
Project ID:	CU9608
Project Type:	Road Crossing Improvement
Location:	Dorforth Drive at unnamed tributary within Big Rocky Run subwatershed
Description:	This crossing is no longer an active right of way. The culvert and berm will be removed to eliminate impacts on the stream and restore natural flood plain.



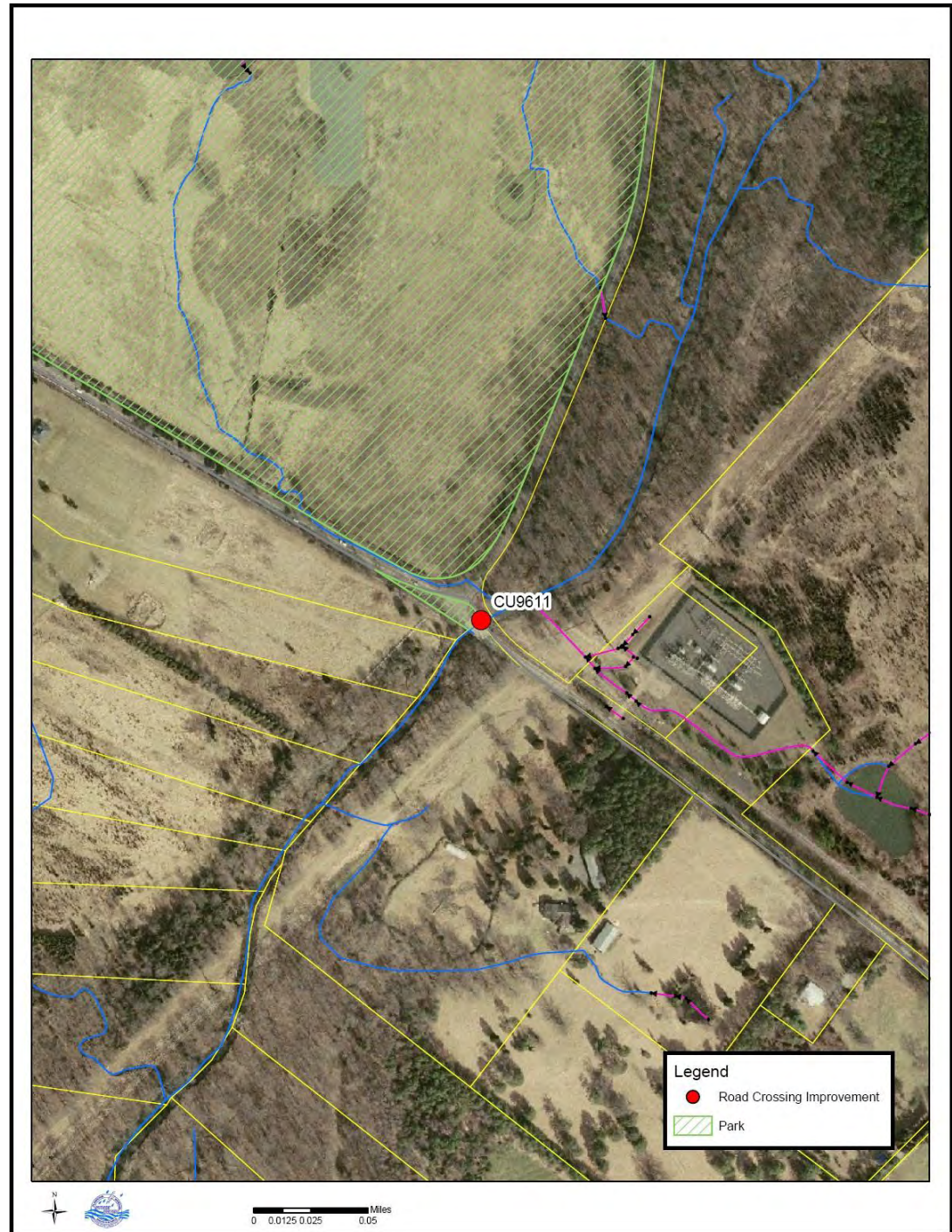
Project ID:	CU9609
Project Type:	Road Crossing Improvement
Location:	Flatlick Branch at Walney Road
Description:	Raise road and replace existing culvert with larger culvert, multiple culverts or a bridge to address roadway flooding and impacts of crossing on the stream. Project will not be implemented using Fairfax County stormwater funds. The roads are maintained by the Virginia Department of Transportation and these improvements will be implemented during roadway improvement projects.



Project ID:	CU9610
Project Type:	Road Crossing Improvement
Location:	Birch Drive at unnamed tributary to Flatlick Branch
Description:	Replace existing culvert with larger culvert or multiple culverts to address roadway flooding. Project will not be implemented using Fairfax County stormwater funds. The roads are maintained by the Virginia Department of Transportation and these improvements will be implemented during roadway improvement projects.



Project ID:	CU9611
Project Type:	Road Crossing Improvement
Location:	Cub Rub at Braddock Road and Old Lee Road within Upper Cub Run subwatershed.
Description:	Raise roadway elevation and replace existing bridge with larger bridge or multiple box culverts to address roadway flooding. Project will not be implemented using Fairfax County stormwater funds. The roads are maintained by the Virginia Department of Transportation and these improvements will be implemented during roadway improvement projects.



Project ID:	CU9612
Project Type:	Road Crossing Improvement
Location:	Pleasant Valley Road at unnamed tributary near Blue Spring Drive within the Upper Cub Run subwatershed
Description:	Raise roadway elevation and replace existing culvert with larger culvert or multiple culverts to address roadway flooding. Project will not be implemented using Fairfax County stormwater funds. The roads are maintained by the Virginia Department of Transportation and these improvements will be implemented during roadway improvement projects.



Project ID:	CU9613
Project Type:	Road Crossing Improvement
Location:	Cain Branch at Lees Corner Road within Cain Branch subwatershed
Description:	Raise roadway elevation and replace existing culvert/bridge with larger culvert or bridge or multiple culverts. Project will not be implemented using Fairfax County stormwater funds. The roads are maintained by the Virginia Department of Transportation and these improvements will be implemented during roadway improvement projects.



Fact Sheets

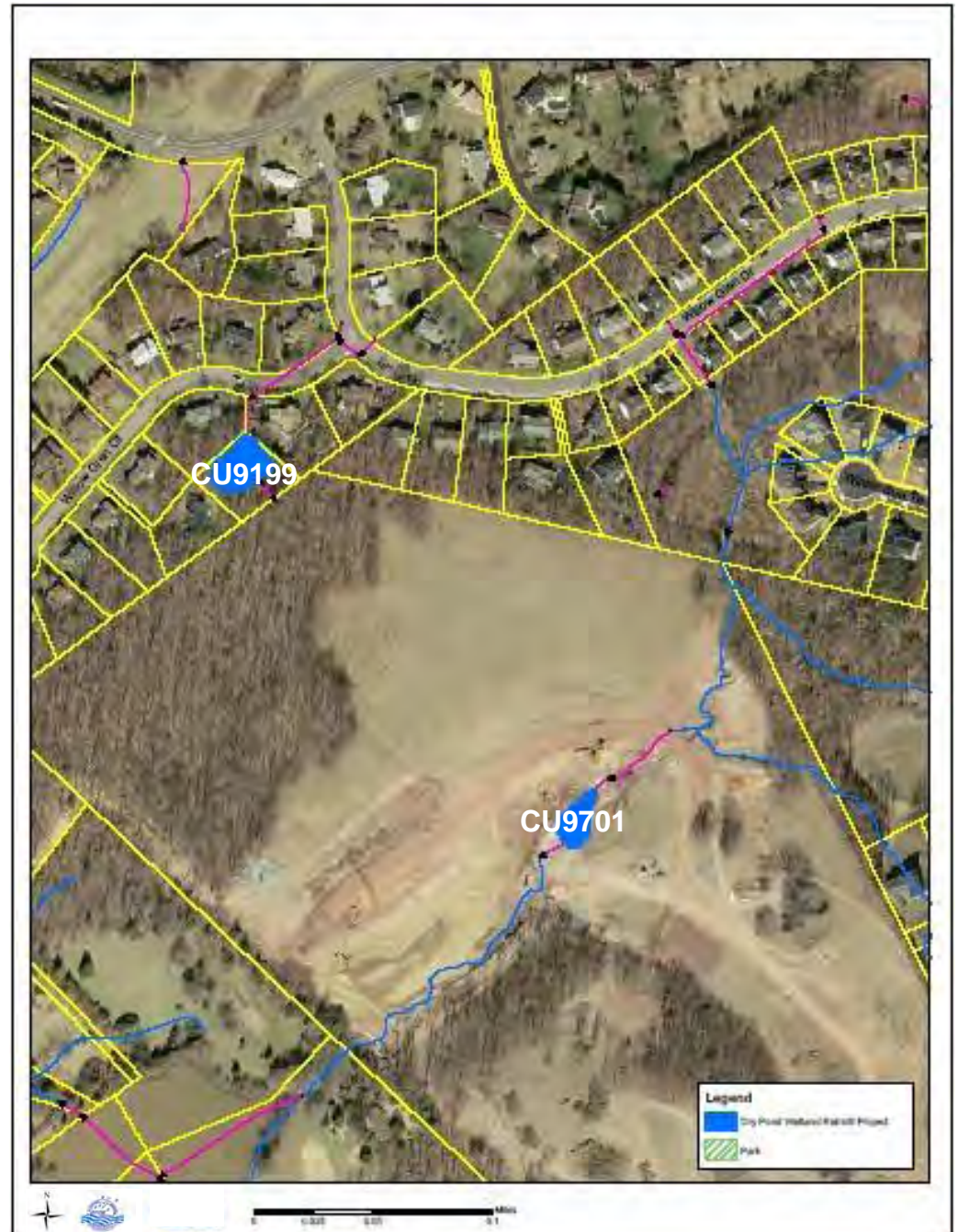
Projects CU9701 through CU9722

Cub Run Watershed Dry Pond Retrofit Projects (Part 2)

Projects CU9701 through CU9722. The remaining dry pond retrofit projects are included as projects CU9101 through CU9199. This includes all dry pond retrofit projects including those with a low priority.

Project ID:	CU9701
Project Type:	Dry Pond Retrofit
Location:	Rose Grove Drive (New Pond) PIN - 0354 01 0001 Oak Hill Reserve Flatlick Branch
Description:	Modify existing dry pond to improve nutrient removal by adding wetland features. Evaluate and modify outlet structure if appropriate. Evaluate and implement options to provide enhanced peak flow control. Public/Private maintenance Unknown

Project Cost Estimate				
Item	Qty	Units	Unit Cost	Total Cost
Dry Pond Retrofit	1	Pond		\$103,524
Base Construction Cost				\$103,524
Mobilization (5%)				\$5,176
Subtotal 1				\$108,700
Contingency (25%)				\$27,175
Subtotal 2				\$135,875
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$61,144
Total				\$197,019
Estimated Project Cost				\$198,000



Project ID:	CU9702
Project Type:	Dry Pond Retrofit
Location:	Autumn Crest Drive and Pond Mist Way PIN - 0354 21 F Oakton Ridge Flatlick Branch
Description:	Modify existing dry pond to improve nutrient removal by adding wetland features. Evaluate and modify outlet structure if appropriate. Evaluate and implement options to provide enhanced peak flow control. Public maintenance

Project Cost Estimate				
Item	Qty	Units	Unit Cost	Total Cost
Dry Pond Retrofit	1	Pond		\$43,629
Base Construction Cost				\$43,629
Mobilization (5%)				\$2,181
Subtotal 1				\$45,810
Contingency (25%)				\$11,453
Subtotal 2				\$57,263
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$25,768
Total				\$83,031
Estimated Project Cost				\$84,000



Project ID:	CU9703
Project Type:	Dry Pond Retrofit
Location:	Oxon Road & Oakton Chase Way PIN - 0354 18 A Oakton Chase Flatlick Branch
Description:	Modify existing dry pond to improve nutrient removal by adding wetland features. Evaluate and modify outlet structure if appropriate. Evaluate and implement options to provide enhanced peak flow control. Public maintenance

Project Cost Estimate				
Item	Qty	Units	Unit Cost	Total Cost
Dry Pond Retrofit	1	Pond		\$82,446
Base Construction Cost				\$82,446
Mobilization (5%)				\$4,122
Subtotal 1				\$86,568
Contingency (25%)				\$21,642
Subtotal 2				\$108,210
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$48,695
Total				\$156,905
Estimated Project Cost				\$157,000



Project ID:	CU9704
Project Type:	Dry Pond Retrofit
Location:	Camberley Forest Drive & Wilbury Road PIN - 0354 14 Y Camberley West Flatlick Branch
Description:	Modify existing dry pond to improve nutrient removal by adding wetland features. Evaluate and modify outlet structure if appropriate. Evaluate and implement options to provide enhanced peak flow control. Public maintenance

Project Cost Estimate				
Item	Qty	Units	Unit Cost	Total Cost
Dry Pond Retrofit	1	Pond		\$63,528
Base Construction Cost				\$63,528
Mobilization (5%)				\$2,140
Subtotal 1				\$44,932
Contingency (25%)				\$11,233
Subtotal 2				\$56,165
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$25,274
Total				\$81,439
Estimated Project Cost				\$82,000



Project ID:	CU9705
Project Type:	Dry Pond Retrofit
Location:	Kentwell Circle PIN - 0531 04 0003 Virginia Run The Estates Elklick Branch
Description:	Modify existing dry pond to improve nutrient removal by adding wetland features. Evaluate and modify outlet structure if appropriate. Private maintenance

Project Cost Estimate				
Item	Qty	Units	Unit Cost	Total Cost
Dry Pond Retrofit	1	Pond		\$63,528
Base Construction Cost				\$63,528
Mobilization (5%)				\$3,176
Subtotal 1				\$66,704
Contingency (25%)				\$16,676
Subtotal 2				\$83,381
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$37,521
Total				\$120,902
Estimated Project Cost				\$121,000



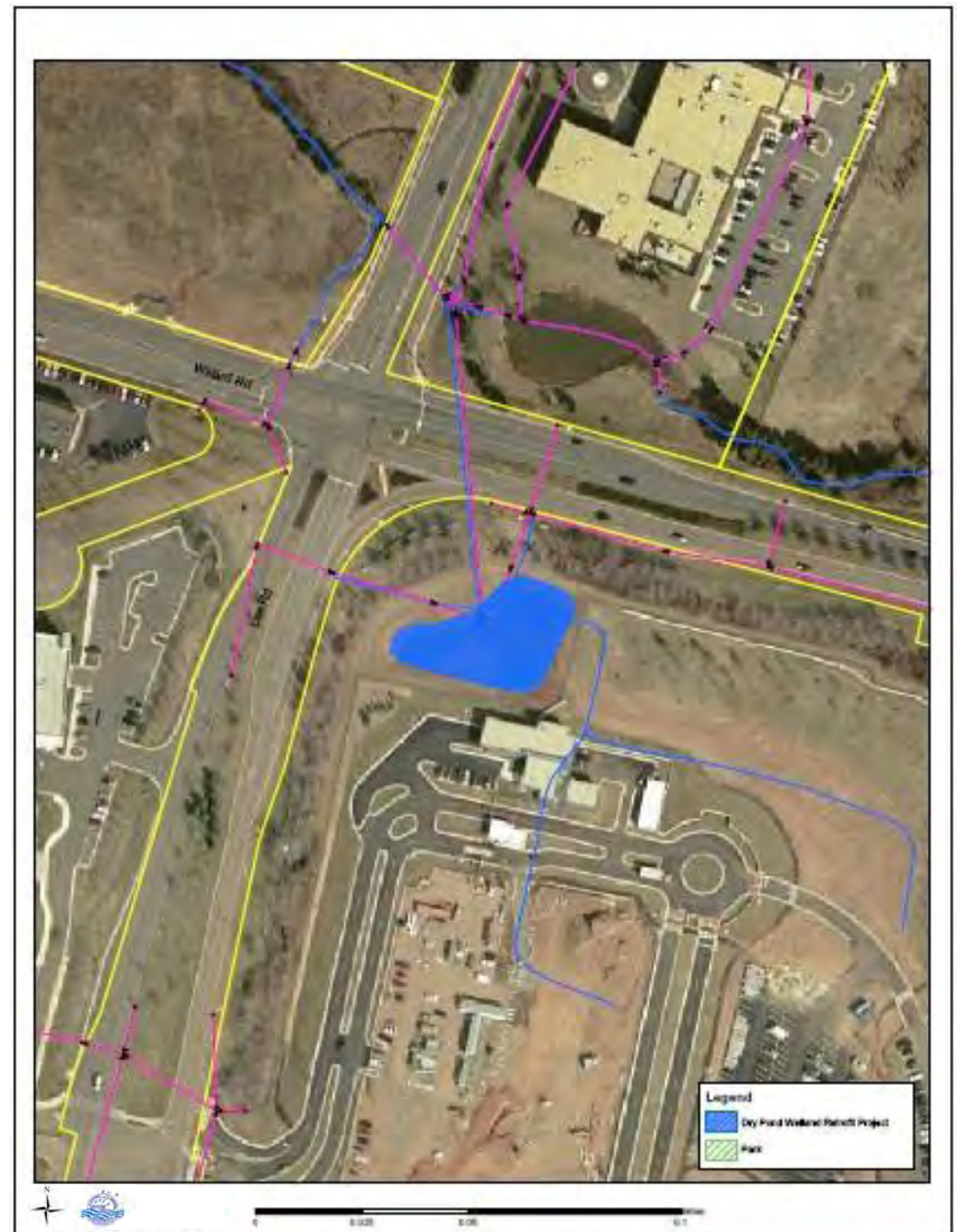
Project ID:	CU9706
Project Type:	Dry Pond Retrofit
Location:	Flint Lee Business Center, Stonecroft Road PIN - 0334 01 0011B Schneider Branch
Description:	Modify existing dry pond to improve nutrient removal by adding wetland features. Evaluate and modify outlet structure if appropriate. Private maintenance

Project Cost Estimate				
Item	Qty	Units	Unit Cost	Total Cost
Dry Pond Retrofit	1	Pond		\$41,586
Base Construction Cost				\$41,586
Mobilization (5%)				\$2,079
Subtotal 1				\$43,665
Contingency (25%)				\$10,916
Subtotal 2				\$54,582
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$24,562
Total				\$79,143
Estimated Project Cost				\$80,000



Project ID:	CU9707
Project Type:	Dry Pond Retrofit
Location:	Lee Road and Willard Road PIN - 0441 04 0041 Westfields International Center at Dulles Schneider Branch
Description:	Modify existing dry pond to improve nutrient removal by adding wetland features. Evaluate and modify outlet structure if appropriate. Private maintenance

Project Cost Estimate				
Item	Qty	Units	Unit Cost	Total Cost
Dry Pond Retrofit	1	Pond		\$40,119
Base Construction Cost				\$40,119
Mobilization (5%)				\$2,006
Subtotal 1				\$42,125
Contingency (25%)				\$10,531
Subtotal 2				\$52,656
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$23,695
Total				\$76,351
Estimated Project Cost				\$77,000



Project ID:	CU9708
Project Type:	Dry Pond Retrofit – Low Priority
Location:	Walney Road & Vernon Street P0344 06 0061 Rockland Village Schneider Branch
Description:	Modify existing dry pond to improve nutrient removal by adding wetland features. Evaluate and modify outlet structure if appropriate. Public maintenance

Project Cost Estimate				
Item	Qty	Units	Unit Cost	Total Cost
Dry Pond Retrofit	1	Pond		\$31,812
Base Construction Cost				\$31,812
Mobilization (5%)				\$1,591
Subtotal 1				\$33,403
Contingency (25%)				\$8,351
Subtotal 2				\$41,753
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$18,789
Total				\$60,542
Estimated Project Cost				\$61,000



Project ID:	CU9709
Project Type:	Dry Pond Retrofit
Location:	Sully Plaza, Route 50 and Centreville Road PIN - 0344 01 0016C Schneider Branch
Description:	Modify existing dry pond to improve nutrient removal by adding wetland features. Evaluate and modify outlet structure if appropriate. Private maintenance

Project Cost Estimate				
Item	Qty	Units	Unit Cost	Total Cost
Dry Pond Retrofit	1	Pond		\$33,207
Base Construction Cost				\$33,207
Mobilization (5%)				\$1,660
Subtotal 1				\$34,867
Contingency (25%)				\$8,717
Subtotal 2				\$43,584
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$19,613
Total				\$63,197
Estimated Project Cost				\$64,000



Project ID:	CU9710
Project Type:	Dry Pond Retrofit
Location:	Westfax Industrial Park, Route 50 and Westfax Drive PIN - 0343 01 0002A Cain Branch
Description:	Modify existing dry pond to improve nutrient removal by adding wetland features. Evaluate and modify outlet structure if appropriate. Private maintenance

Project Cost Estimate				
Item	Qty	Units	Unit Cost	Total Cost
Dry Pond Retrofit	1	Pond		\$36,276
Base Construction Cost				\$36,276
Mobilization (5%)				\$1,814
Subtotal 1				\$38,090
Contingency (25%)				\$9,522
Subtotal 2				\$47,612
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$21,426
Total				\$69,038
Estimated Project Cost				\$70,000



Project ID:	CU9711
Project Type:	Dry Pond Retrofit
Location:	Franklin Middle School, Centreville Road PIN - 0342 01 0029 Cain Branch
Description:	Modify existing dry pond to improve nutrient removal by adding wetland features. Evaluate and modify outlet structure if appropriate. Private maintenance

Project Cost Estimate				
Item	Qty	Units	Unit Cost	Total Cost
Dry Pond Retrofit	1	Pond		\$72,996
Base Construction Cost				\$72,996
Mobilization (5%)				\$3,650
Subtotal 1				\$76,646
Contingency (25%)				\$19,161
Subtotal 2				\$95,807
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$43,113
Total				\$138,921
Estimated Project Cost				\$139,000



Project ID:	CU9712
Project Type:	Dry Pond Retrofit
Location:	Centreville Road & Armfield Farm Drive PIN - 0342 01 0029 Armfield Farms Cain Branch
Description:	Modify existing dry pond to improve nutrient removal by adding wetland features. Evaluate and modify outlet structure if appropriate. Public maintenance

Project Cost Estimate				
Item	Qty	Units	Unit Cost	Total Cost
Dry Pond Retrofit	1	Pond		\$51,117
Base Construction Cost				\$51,117
Mobilization (5%)				\$2,556
Subtotal 1				\$53,673
Contingency (25%)				\$13,418
Subtotal 2				\$67,091
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$30,191
Total				\$97,282
Estimated Project Cost				\$98,000



Project ID:	CU9713
Project Type:	Dry Pond Retrofit
Location:	Lees Corner Road & Old Dairy Road PIN - 0343 01 0002A Franklin Farm Cain Branch
Description:	Modify existing dry pond to improve nutrient removal by adding wetland features. Evaluate and modify outlet structure if appropriate. Public maintenance

Project Cost Estimate				
Item	Qty	Units	Unit Cost	Total Cost
Dry Pond Retrofit	1	Pond		\$104,217
Base Construction Cost				\$104,217
Mobilization (5%)				\$5,211
Subtotal 1				\$109,428
Contingency (25%)				\$27,357
Subtotal 2				\$136,785
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$61,553
Total				\$198,338
Estimated Project Cost				\$199,000



Project ID:	CU9714
Project Type:	Dry Pond Retrofit
Location:	Franklin Farm Road and Hidden Meadow Drive PIN - 0351 04200001 Franklin Farm Cain Branch
Description:	Modify existing dry pond to improve nutrient removal by adding wetland features. Evaluate and modify outlet structure if appropriate. Private maintenance

Project Cost Estimate				
Item	Qty	Units	Unit Cost	Total Cost
Dry Pond Retrofit	1	Pond		\$30,507
Base Construction Cost				\$30,507
Mobilization (5%)				\$1,525
Subtotal 1				\$32,032
Contingency (25%)				\$8,008
Subtotal 2				\$40,040
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$18,018
Total				\$58,059
Estimated Project Cost				\$59,000



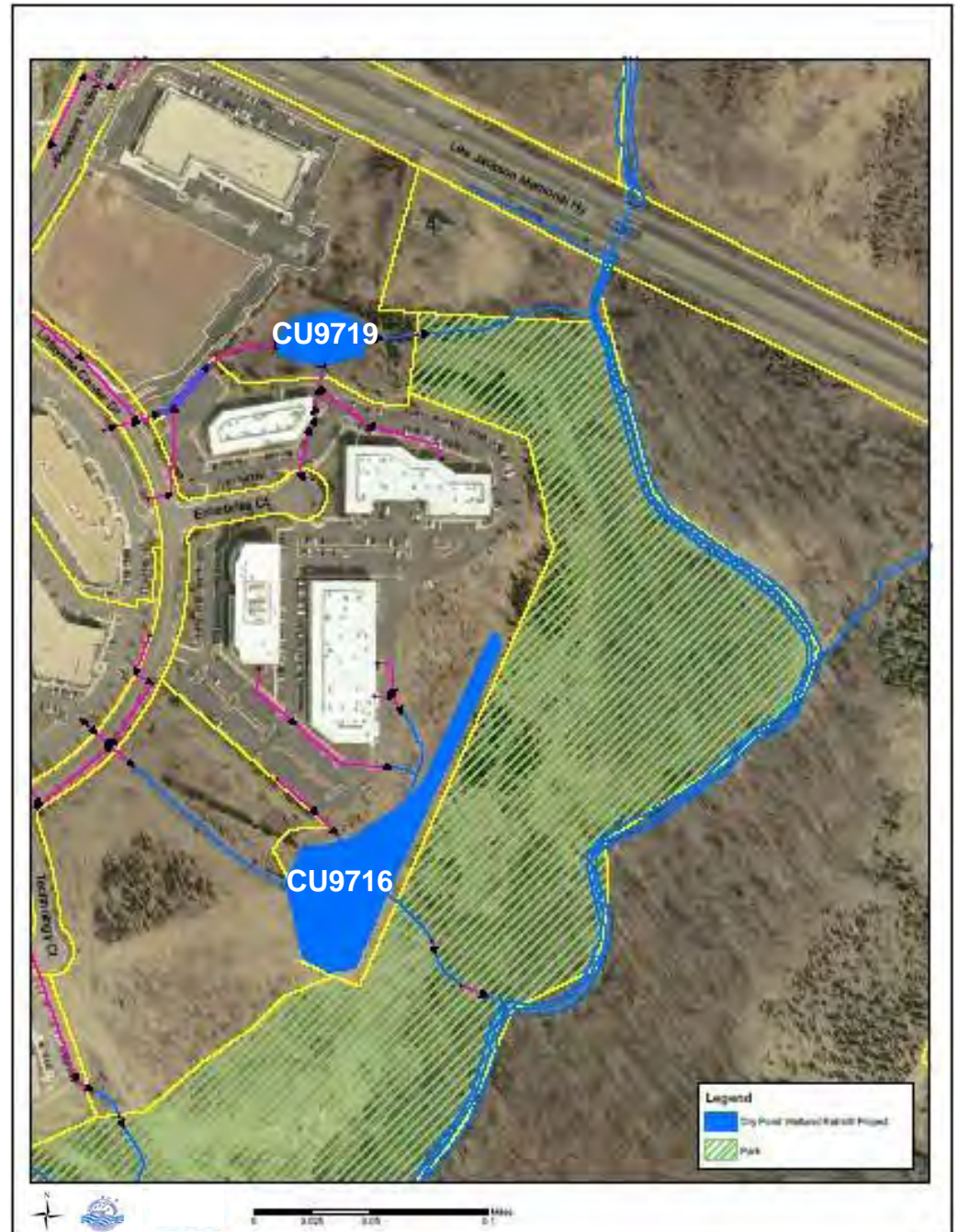
Project ID:	CU9715
Project Type:	Dry Pond Retrofit
Location:	Between Pleasant Valley Road and Silas Hutchinson Drive PIN - 0334 02 A1 Pleasant Valley Upper Cub Run
Description:	Modify existing dry pond to improve nutrient removal by adding wetland features. Evaluate and modify outlet structure if appropriate. Public maintenance

Project Cost Estimate				
Item	Qty	Units	Unit Cost	Total Cost
Dry Pond Retrofit	1	Pond		\$32,883
Base Construction Cost				\$32,883
Mobilization (5%)				\$1,644
Subtotal 1				\$34,527
Contingency (25%)				\$8,632
Subtotal 2				\$43,159
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$19,422
Total				\$62,580
Estimated Project Cost				\$63,000



Project ID:	CU9716
Project Type:	Dry Pond Retrofit
Location:	Technology Court & Lafayette Center PIN - 0332 04 0002 Lafayette Business Center Upper Cub Run
Description:	Modify existing dry pond to improve nutrient removal by adding wetland features. Evaluate and modify outlet structure if appropriate. Private maintenance

Project Cost Estimate				
Item	Qty	Units	Unit Cost	Total Cost
Dry Pond Retrofit	1	Pond		\$44,664
Base Construction Cost				\$44,664
Mobilization (5%)				\$2,233
Subtotal 1				\$46,897
Contingency (25%)				\$11,724
Subtotal 2				\$58,622
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$26,380
Total				\$85,001
Estimated Project Cost				\$86,000



Project ID:	CU9717
Project Type:	Dry Pond Retrofit
Location:	Driving Training Center, Stonecroft Boulevard PIN - 0341 01 0005 Cain Branch
Description:	Modify existing dry pond to improve nutrient removal by adding wetland features. Evaluate and modify outlet structure if appropriate. Public maintenance

Project Cost Estimate				
Item	Qty	Units	Unit Cost	Total Cost
Dry Pond Retrofit	1	Pond		\$39,570
Base Construction Cost				\$39,570
Mobilization (5%)				\$1,979
Subtotal 1				\$41,549
Contingency (25%)				\$10,387
Subtotal 2				\$51,936
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$23,371
Total				\$75,307
Estimated Project Cost				\$76,000



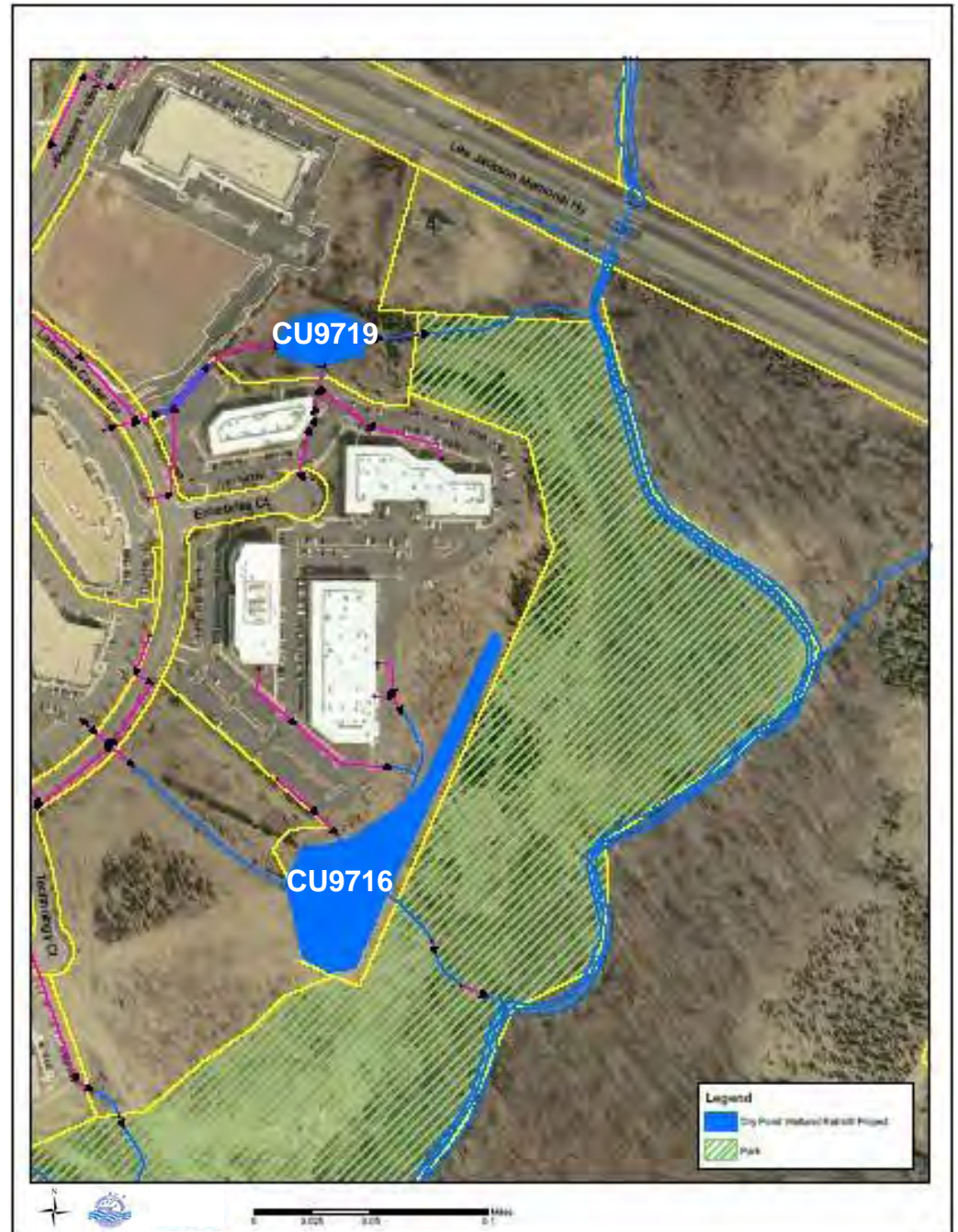
Project ID:	CU9718
Project Type:	Dry Pond Retrofit
Location:	Avion Parkway & Virginia Mallory Drive PIN - 0341 03 D2 Avion Cain Branch
Description:	Modify existing dry pond to improve nutrient removal by adding wetland features. Evaluate and modify outlet structure if appropriate. Public maintenance

Project Cost Estimate				
Item	Qty	Units	Unit Cost	Total Cost
Dry Pond Retrofit	1	Pond		\$35,025
Base Construction Cost				\$35,025
Mobilization (5%)				\$1,751
Subtotal 1				\$36,776
Contingency (25%)				\$9,194
Subtotal 2				\$45,970
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$20,687
Total				\$66,657
Estimated Project Cost				\$67,000



Project ID:	CU9719
Project Type:	Dry Pond Retrofit
Location:	Lafayette Business Center, Lafayette Center Drive PIN - 0332 04 0001 Lafayette Business Center Upper Cub Run
Description:	Modify existing dry pond to improve nutrient removal by adding wetland features. Evaluate and modify outlet structure if appropriate. Private maintenance

Project Cost Estimate				
Item	Qty	Units	Unit Cost	Total Cost
Dry Pond Retrofit	1	Pond		\$46,842
Base Construction Cost				\$46,842
Mobilization (5%)				\$2,342
Subtotal 1				\$49,184
Contingency (25%)				\$12,296
Subtotal 2				\$61,480
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$27,666
Total				\$89,146
Estimated Project Cost				\$90,000



Project ID:	CU9720
Project Type:	Dry Pond Retrofit
Location:	Stonecroft Boulevard. & Thompson Road PIN - 0341 01 0005 Near Driving Training Center Dead Run
Description:	Modify existing dry pond to improve nutrient removal by adding wetland features. Evaluate and modify outlet structure if appropriate. Public maintenance

Project Cost Estimate				
Item	Qty	Units	Unit Cost	Total Cost
Dry Pond Retrofit	1	Pond		\$37,293
Base Construction Cost				\$37,293
Mobilization (5%)				\$1,865
Subtotal 1				\$39,158
Contingency (25%)				\$9,789
Subtotal 2				\$48,947
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$22,026
Total				\$70,973
Estimated Project Cost				\$71,000



Project ID:	CU9721
Project Type:	Dry Pond Retrofit
Location:	Dulles International Centre, Eds Drive PIN - 0244 03 B Dulles International Centre Dead Run
Description:	Modify existing dry pond to improve nutrient removal by adding wetland features. Evaluate and modify outlet structure if appropriate. Private maintenance

Project Cost Estimate				
Item	Qty	Units	Unit Cost	Total Cost
Dry Pond Retrofit	1	Pond		\$75,345
Base Construction Cost				\$75,345
Mobilization (5%)				\$3,767
Subtotal 1				\$79,112
Contingency (25%)				\$19,778
Subtotal 2				\$98,890
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$44,501
Total				\$143,391
Estimated Project Cost				\$144,000



Project ID:	CU9722
Project Type:	Dry Pond Retrofit
Location:	Dulles Gateway Center Renaissance Park, Park Center Road PIN - 0242 01 0022E Dead Run
Description:	Modify existing dry pond to improve nutrient removal by adding wetland features. Evaluate and modify outlet structure if appropriate. Private maintenance

Project Cost Estimate				
Item	Qty	Units	Unit Cost	Total Cost
Dry Pond Retrofit	1	Pond		\$33,045
Base Construction Cost				\$33,045
Mobilization (5%)				\$1,652
Subtotal 1				\$34,697
Contingency (25%)				\$8,674
Subtotal 2				\$43,372
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$19,517
Total				\$62,889
Estimated Project Cost				\$63,000



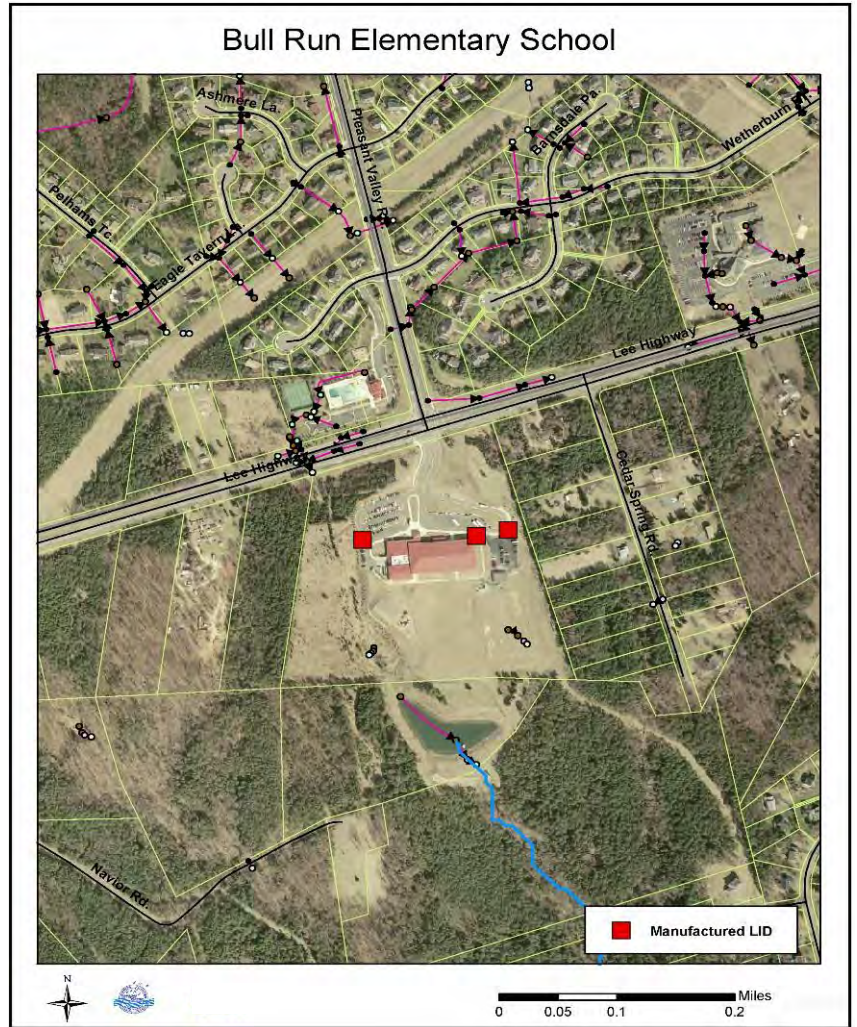
Fact Sheets

Projects CU9801 through CU9825

Cub Run Watershed LID Retrofit Projects at Public Facilities

Projects CU9801 through CU9825

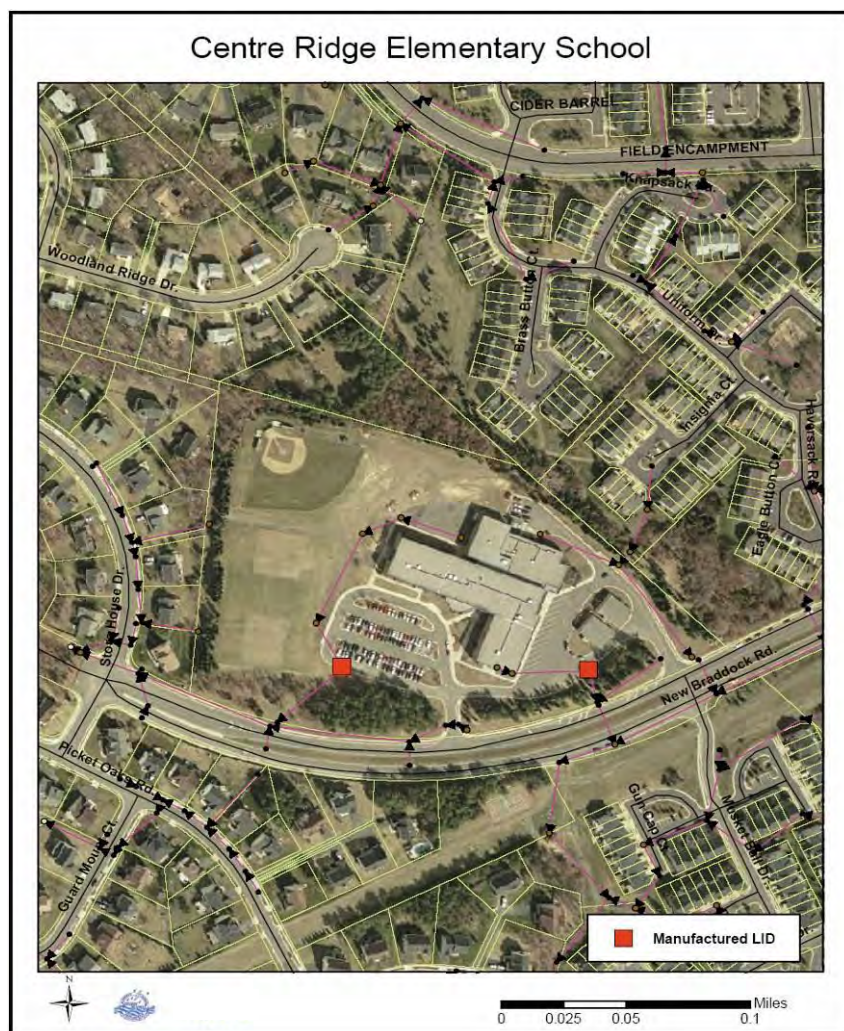
Project ID:	CU9801
Project Type:	LID Projects at Public Facility
Location:	Bull Run Elementary School. Route 29 and Pleasant Valley Road. Middle Cub Run Watershed.
Description:	Implement LID project at Bull Run Elementary School. Conceptual plan consists of three manufactured bioretention units at three locations. Area served = 1.4 acres



The number and types of bioretention units included in the conceptual design form the basis for the construction cost estimate included in the plan. The sites will be evaluated for alternative onsite LID options such as conventional bioretention rain gardens, porous pavement, drainage swales, etc at the time that preliminary design evaluations are performed.

Project Cost Estimate				
Item	Quantity	Unit	Unit Cost	Total Cost
Manufactured Bioretention Units	3			\$63,450
Base Construction Cost				\$63,450
Mobilization (5%)				\$3,173
Subtotal 1				\$66,623
Contingency (25%)				\$16,656
Subtotal 2				\$83,279
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$37,476
Total				\$120,755
Estimated Project Cost				\$121,000

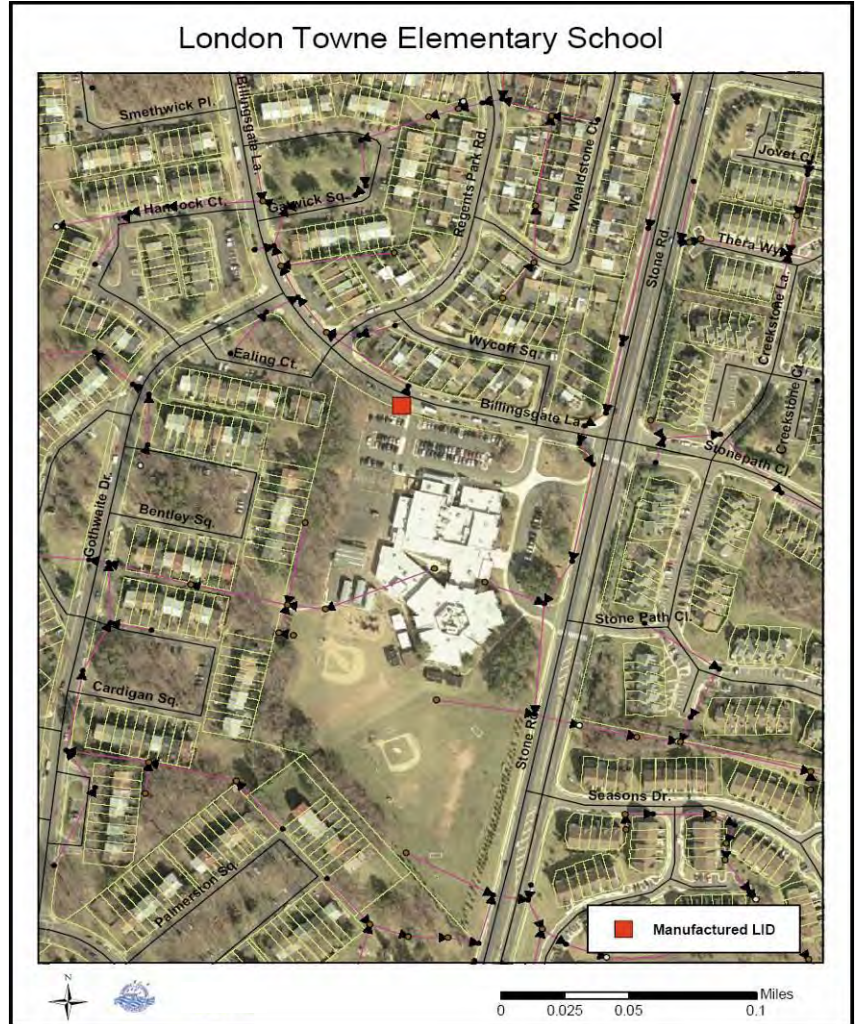
Project ID:	CU9802
Project Type:	LID Projects at Public Facility
Location:	Centre Ridge Elementary School. New Braddock Road and Store House Drive. Lower Cub Run Watershed.
Description:	Implement LID project at Centre Ridge Elementary School. Conceptual plan consists of four manufactured bioretention units at two locations. Area served = 1.4 acres



The number and types of bioretention units included in the conceptual design form the basis for the construction cost estimate included in the plan. The sites will be evaluated for alternative onsite LID options such as conventional bioretention rain gardens, porous pavement, drainage swales, etc at the time that preliminary design evaluations are performed.

Project Cost Estimate				
Item	Quantity	Unit	Unit Cost	Total Cost
Manufactured Bioretention Units	4			\$68,400
Base Construction Cost				\$68,400
Mobilization (5%)				\$3,420
Subtotal 1				\$71,820
Contingency (25%)				\$17,955
Subtotal 2				\$89,775
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$40,399
Total				\$130,174
Estimated Project Cost				\$131,000

Project ID:	CU9803
Project Type:	LID Projects at Public Facility
Location:	London Towne Elementary School. Stone Road and Billingsgate Lane. Middle Cub Run Watershed.
Description:	Implement LID project at London Towne Elementary School. Conceptual plan consists of two manufactured bioretention units at one location. Area served = 0.7 acres



The number and types of bioretention units included in the conceptual design form the basis for the construction cost estimate included in the plan. The sites will be evaluated for alternative onsite LID options such as conventional bioretention rain gardens, porous pavement, drainage swales, etc at the time that preliminary design evaluations are performed.

Project Cost Estimate				
Item	Quantity	Unit	Unit Cost	Total Cost
Manufactured Bioretention Units	2			\$34,200
Base Construction Cost				\$34,200
Mobilization (5%)				\$1,710
Subtotal 1				\$35,910
Contingency (25%)				\$8,978
Subtotal 2				\$44,888
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$20,200
Total				\$65,088
Estimated Project Cost				\$66,000

Project ID:	CU9804
Project Type:	LID Projects at Public Facility
Location:	Centreville Library. Machen Road and Saint Germain Drive. Big Rocky Run watershed.
Description:	Implement LID project at Centreville Library. Conceptual plan consists of four manufactured bioretention units at two locations. Area served = 1.6 acres



The number and types of bioretention units included in the conceptual design form the basis for the construction cost estimate included in the plan. The sites will be evaluated for alternative onsite LID options such as conventional bioretention rain gardens, porous pavement, drainage swales, etc at the time that preliminary design evaluations are performed.

Project Cost Estimate				
Item	Quantity	Unit	Unit Cost	Total Cost
Manufactured Bioretention Units	4			\$76,200
Base Construction Cost				\$76,200
Mobilization (5%)				\$3,810
Subtotal 1				\$80,010
Contingency (25%)				\$20,003
Subtotal 2				\$100,013
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$45,006
Total				\$145,019
Estimated Project Cost				\$146,000

Project ID:	CU9805
Project Type:	LID Projects at Public Facility
Location:	Ellanor C Lawrence Park playing fields parking lot Route 28. Big Rocky Run watershed.
Description:	Implement LID project at Ellanor C. Lawrence Park playing fields parking lot. Conceptual plan consists of 6 manufactured bioretention units at two locations. Area served = 2.7 acres



The number and types of bioretention units included in the conceptual design form the basis for the construction cost estimate included in the plan. The sites will be evaluated for alternative onsite LID options such as conventional bioretention rain gardens, porous pavement, drainage swales, etc at the time that preliminary design evaluations are performed.

Project Cost Estimate				
Item	Quantity	Unit	Unit Cost	Total Cost
Manufactured Bioretention Units	6			\$122,550
Base Construction Cost				\$122,550
Mobilization (5%)				\$6,128
Subtotal 1				\$128,678
Contingency (25%)				\$32,170
Subtotal 2				\$160,848
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$72,382
Total				\$233,230
Estimated Project Cost				\$234,000

Project ID:	CU9806
Project Type:	LID Projects at Public Facility.
Location:	Cabells Mill Parking Area. (Ellanor C Lawrence Park). Walney Road north of Cabell's Mill Drive. Big Rocky Run watershed.
Description:	Retrofit existing bioretention area which receives drainage from residential area and improve general drainage



The number and types of bioretention units included in the conceptual design form the basis for the construction cost estimate included in the plan. The sites will be evaluated for alternative onsite LID options such as conventional bioretention rain gardens, porous pavement, drainage swales, etc at the time that preliminary design evaluations are performed.

Project Cost Estimate				
Item	Quantity	Unit	Unit Cost	Total Cost
Retrofit existing bioretention facility				\$37,500
Base Construction Cost				\$37,500
Mobilization (5%)				\$1,875
Subtotal 1				\$39,375
Contingency (25%)				\$9,844
Subtotal 2				\$49,219
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$22,149
Total				\$71,368
Estimated Project Cost				\$72,000

Project ID:	CU9807
Project Type:	LID Projects at Public Facility
Location:	Stringfellow Road Commuter Lot. Stringfellow Road near Route 66. Big Rocky Run watershed.
Description:	Implement LID project at Stringfellow Road commuter lot. Conceptual plan consists of six manufactured bioretention units at two locations. Area served = 2.9 acres



The number and types of bioretention units included in the conceptual design form the basis for the construction cost estimate included in the plan. The sites will be evaluated for alternative onsite LID options such as conventional bioretention rain gardens, porous pavement, drainage swales, etc at the time that preliminary design evaluations are performed.

Project Cost Estimate				
Item	Quantity	Unit	Unit Cost	Total Cost
Manufactured Bioretention Units	6			\$130,050
Base Construction Cost				\$130,050
Mobilization (5%)				\$6,503
Subtotal 1				\$136,553
Contingency (25%)				\$34,138
Subtotal 2				\$170,691
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$76,811
Total				\$247,502
Estimated Project Cost				\$248,000

Project ID:	CU9808
Project Type:	LID Projects at Public Facility
Location:	Poplar Tree Park playing field parking lot. Stringfellow Road near Northbourne Drive. Big Rocky Run watershed.
Description:	Implement LID project at Poplar Tree Park playing field parking lot. Conceptual plan consists of two manufactured bioretention units at one location. Area served = 0.9 acres



The number and types of bioretention units included in the conceptual design form the basis for the construction cost estimate included in the plan. The sites will be evaluated for alternative onsite LID options such as conventional bioretention rain gardens, porous pavement, drainage swales, etc at the time that preliminary design evaluations are performed.

Project Cost Estimate				
Item	Quantity	Unit	Unit Cost	Total Cost
Manufactured Bioretention Units	2			\$37,350
Base Construction Cost				\$37,350
Mobilization (5%)				\$1,868
Subtotal 1				\$39,218
Contingency (25%)				\$9,805
Subtotal 2				\$49,023
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$22,060
Total				\$71,083
Estimated Project Cost				\$72,000

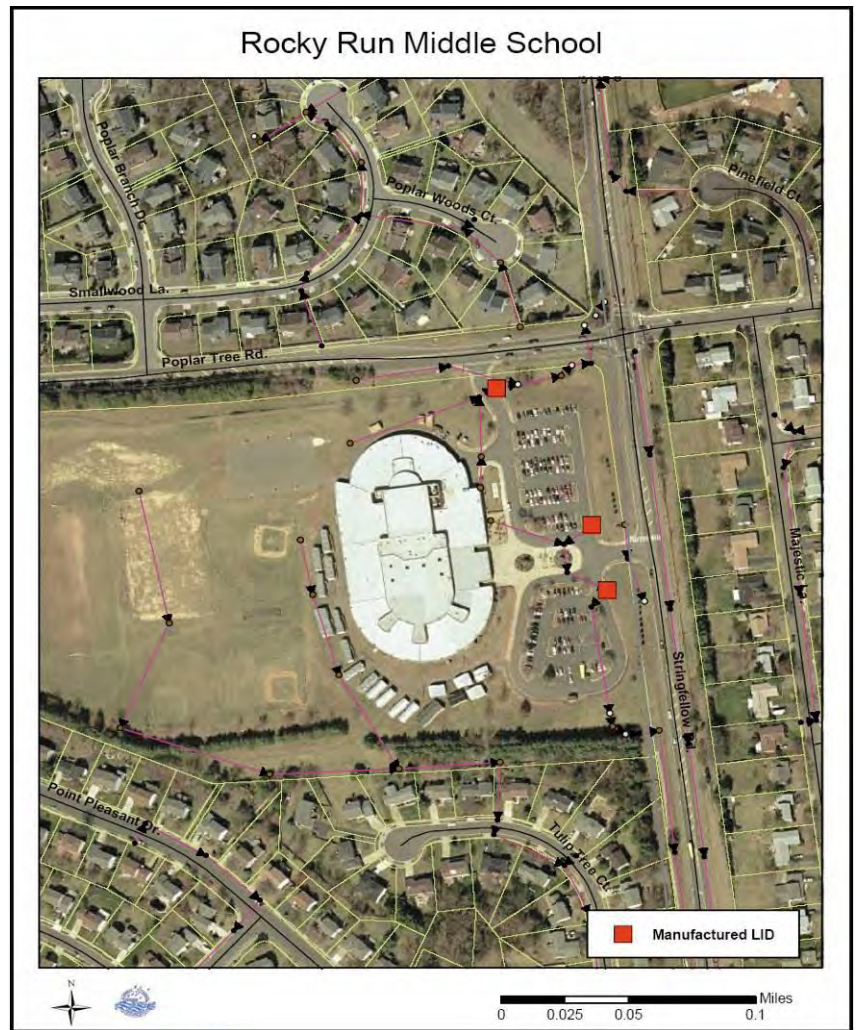
Project ID:	CU9809
Project Type:	LID Projects at Public Facility
Location:	Poplar Tree Elementary School. Melville Lane near Granite Rock Drive. Big Rocky Run watershed.
Description:	Implement LID project at Poplar Tree Elementary School. Conceptual plan consists of three manufactured bioretention units at three locations. Evaluate and retrofit stormwater outfalls from school to Big Rocky Run. Area served = 1.1 acres



The number and types of bioretention units included in the conceptual design form the basis for the construction cost estimate included in the plan. The sites will be evaluated for alternative onsite LID options such as conventional bioretention rain gardens, porous pavement, drainage swales, etc at the time that preliminary design evaluations are performed.

Project Cost Estimate				
Item	Quantity	Unit	Unit Cost	Total Cost
Manufactured Bioretention Units	3			\$53,250
Base Construction Cost				\$53,250
Mobilization (5%)				\$2,663
Subtotal 1				\$55,913
Contingency (25%)				\$13,978
Subtotal 2				\$69,891
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$31,451
Total				\$101,342
Estimated Project Cost				\$102,000

Project ID:	CU9810
Project Type:	LID Projects at Public Facility
Location:	Rocky Run Middle School. Stringfellow Road and Poplar Tree Road. Frog Branch watershed.
Description:	Implement LID project at Rocky Run Middle School. Conceptual plan consists of five manufactured bioretention units at three locations. Area served = 1.9 acres



The number and types of bioretention units included in the conceptual design form the basis for the construction cost estimate included in the plan. The sites will be evaluated for alternative onsite LID options such as conventional bioretention rain gardens, porous pavement, drainage swales, etc at the time that preliminary design evaluations are performed.

Project Cost Estimate				
Item	Quantity	Unit	Unit Cost	Total Cost
Manufactured Bioretention Units	5			\$91,350
Base Construction Cost				\$91,350
Mobilization (5%)				\$4,568
Subtotal 1				\$95,918
Contingency (25%)				\$23,980
Subtotal 2				\$119,898
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$53,954
Total				\$173,852
Estimated Project Cost				\$174,000

Project ID:	CU9811
Project Type:	LID Projects at Public Facility
Location:	Greenbriar East Elementary School. Point Pleasant Drive near Middle Ridge Drive. Big Rocky Run watershed.
Description:	Implement LID project Greenbriar East Elementary School. Conceptual plan consists of one manufactured bioretention unit at one location. Area served = 0.5 acres



The number and types of bioretention units included in the conceptual design form the basis for the construction cost estimate included in the plan. The sites will be evaluated for alternative onsite LID options such as conventional bioretention rain gardens, porous pavement, drainage swales, etc at the time that preliminary design evaluations are performed.

Project Cost Estimate				
Item	Quantity	Unit	Unit Cost	Total Cost
Manufactured Bioretention Units	1			\$22,200
Base Construction Cost				\$22,200
Mobilization (5%)				\$1,110
Subtotal 1				\$23,310
Contingency (25%)				\$5,828
Subtotal 2				\$29,138
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$13,112
Total				\$42,250
Estimated Project Cost				\$43,000

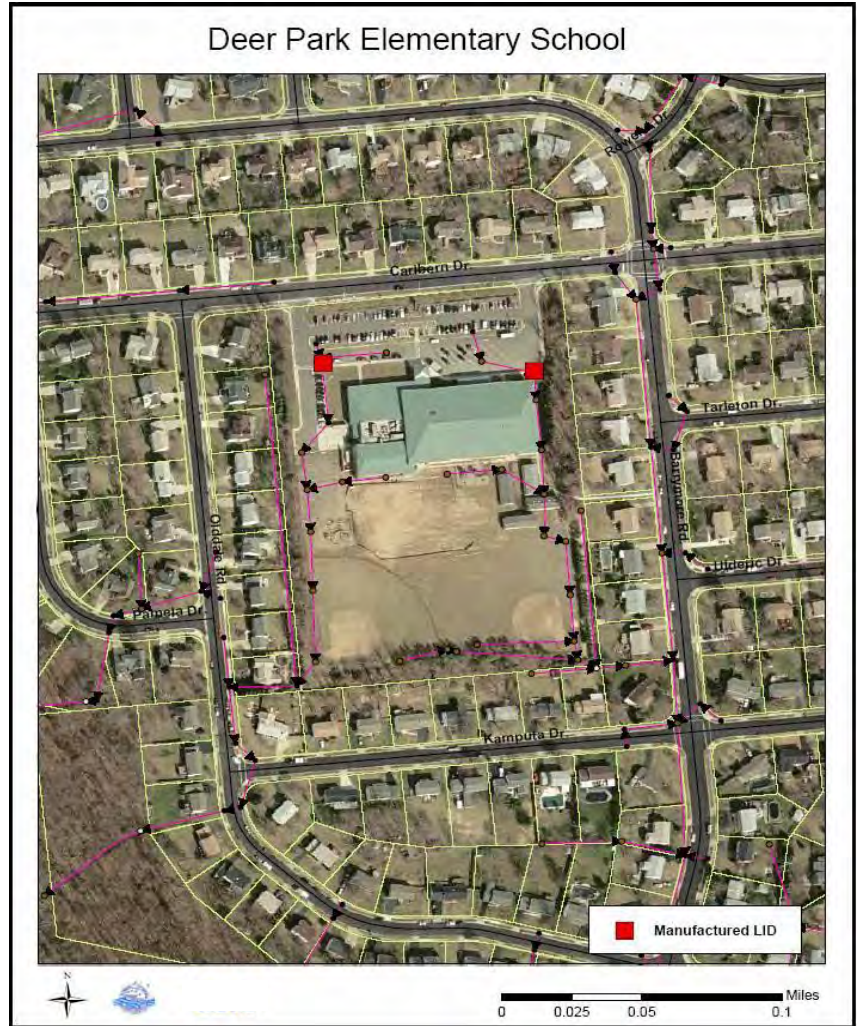
Project ID:	CU9812
Project Type:	LID Projects at Public Facility
Location:	Stone Middle School. Braddock Road and Sully Park Drive. Round Lick Branch.
Description:	Implement LID project at Stone Middle School. Conceptual plan consists of three manufactured bioretention units at two locations. Area served = 1.6 acres



The number and types of bioretention units included in the conceptual design form the basis for the construction cost estimate included in the plan. The sites will be evaluated for alternative onsite LID options such as conventional bioretention rain gardens, porous pavement, drainage swales, etc at the time that preliminary design evaluations are performed.

Project Cost Estimate				
Item	Quantity	Unit	Unit Cost	Total Cost
Manufactured Bioretention Units	3			\$66,600
			Base Construction Cost	\$66,600
			Mobilization (5%)	\$3,330
			Subtotal 1	\$69,930
			Contingency (25%)	\$17,483
			Subtotal 2	\$87,413
			Engineering design, surveys, land acquisition, utility locations, and permits (45%)	\$39,336
			Total	\$126,749
			Estimated Project Cost	\$127,000

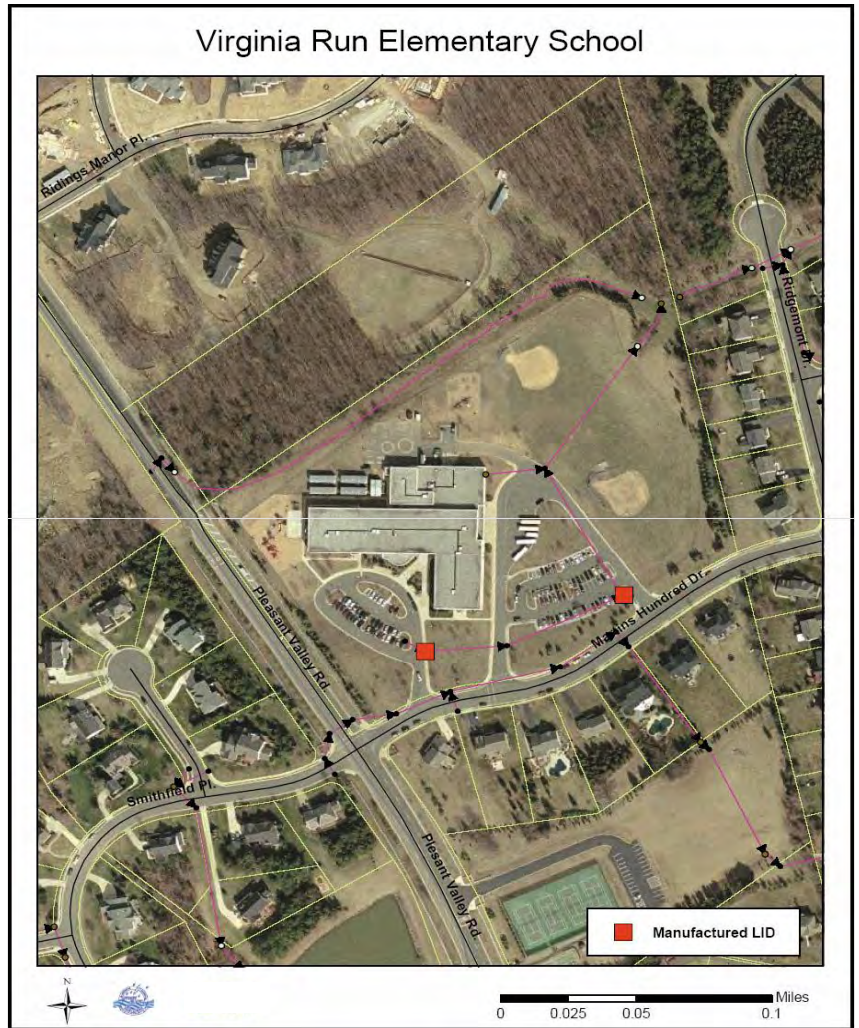
Project ID:	CU9813
Project Type:	LID Projects at Public Facility
Location:	Deer Park Elementary School. Carlbern Drive at Barrymore Road. Middle Cub Run watershed.
Description:	Implement LID project at Deer Park Elementary School. Conceptual plan consists of four manufactured bioretention units at two locations. Area served = 1.8 acres



The number and types of bioretention units included in the conceptual design form the basis for the construction cost estimate included in the plan. The sites will be evaluated for alternative onsite LID options such as conventional bioretention rain gardens, porous pavement, drainage swales, etc at the time that preliminary design evaluations are performed.

Project Cost Estimate				
Item	Quantity	Unit	Unit Cost	Total Cost
Manufactured Bioretention Units	4			\$79,350
Base Construction Cost				\$79,350
Mobilization (5%)				\$3,968
Subtotal 1				\$83,318
Contingency (25%)				\$20,830
Subtotal 2				\$104,148
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$46,867
Total				\$151,015
Estimated Project Cost				\$152,000

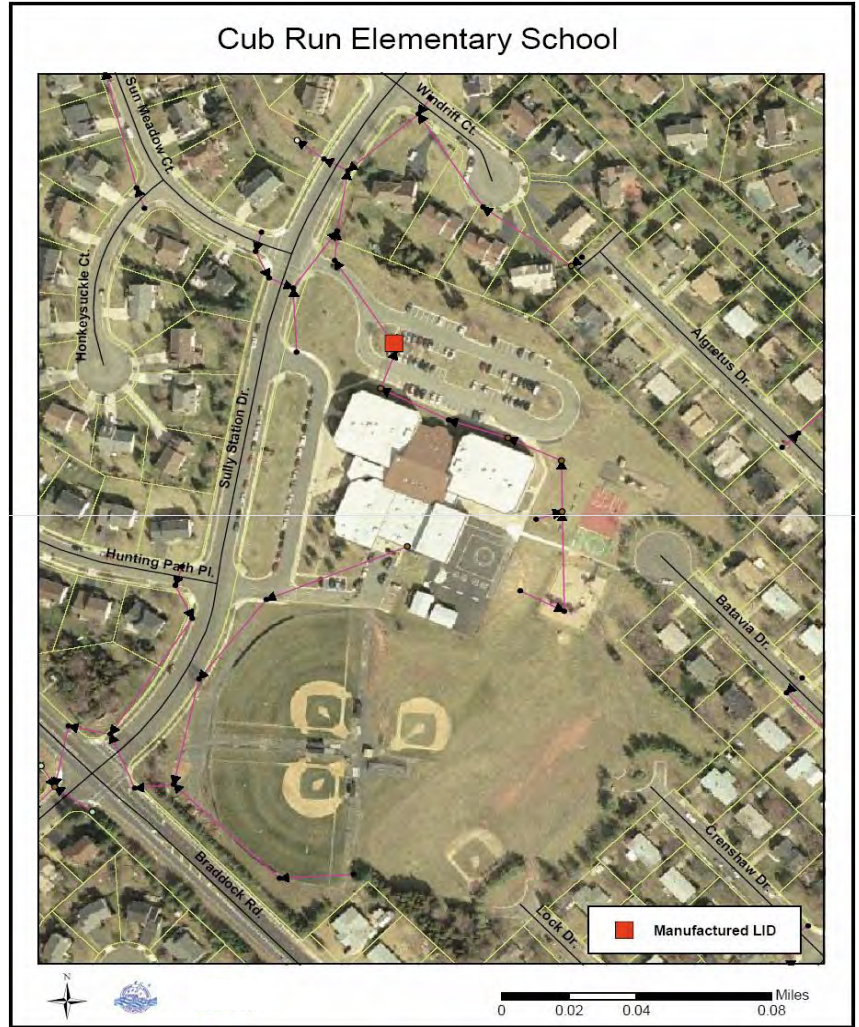
Project ID:	CU9814
Project Type:	LID Projects at Public Facility
Location:	Virginia Run Elementary School. Pleasant Valley Road and Martins Hundred Drive. Middle Cub Run watershed.
Description:	Implement LID project at Virginia Run Elementary School. Conceptual plan consists of two manufactured bioretention units at two locations. Area served = 1.0 acres



The number and types of bioretention units included in the conceptual design form the basis for the construction cost estimate included in the plan. The sites will be evaluated for alternative onsite LID options such as conventional bioretention rain gardens, porous pavement, drainage swales, etc at the time that preliminary design evaluations are performed.

Project Cost Estimate				
Item	Quantity	Unit	Unit Cost	Total Cost
Manufactured Bioretention Units	2			\$44,400
Base Construction Cost				\$44,400
Mobilization (5%)				\$2,220
Subtotal 1				\$46,620
Contingency (25%)				\$11,665
Subtotal 2				\$58,275
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$26,224
Total				\$84,499
Estimated Project Cost				\$85,000

Project ID:	CU9815
Project Type:	LID Projects at Public Facility
Location:	Cub Run Elementary School. Braddock Road and Sully Station Drive. Flatlick Branch watershed.
Description:	Implement LID project at Cub Run Elementary School. Conceptual plan consists of two manufactured bioretention units at one location. Area served = 1.0 acres



The number and types of bioretention units included in the conceptual design form the basis for the construction cost estimate included in the plan. The sites will be evaluated for alternative onsite LID options such as conventional bioretention rain gardens, porous pavement, drainage swales, etc at the time that preliminary design evaluations are performed.

Project Cost Estimate				
Item	Quantity	Unit	Unit Cost	Total Cost
Manufactured Bioretention Units	2			\$41,250
			Base Construction Cost	\$41,250
			Mobilization (5%)	\$2,063
			Subtotal 1	\$43,313
			Contingency (25%)	\$10,828
			Subtotal 2	\$54,141
			Engineering design, surveys, land acquisition, utility locations, and permits (45%)	\$24,363
			Total	\$78,504
			Estimated Project Cost	\$79,000

Project ID:	CU9816
Project Type:	LID Projects at Public Facility
Location:	Sully District Supervisor's Office. Stonecroft Boulevard west of Westfields Boulevard. Flatlick Branch watershed.
Description:	Implement LID project at Sully District Supervisor's Office. Conceptual plan consists of one manufactured bioretention unit at one location. Area served = 0.5 acres



The number and types of bioretention units included in the conceptual design form the basis for the construction cost estimate included in the plan. The sites will be evaluated for alternative onsite LID options such as conventional bioretention rain gardens, porous pavement, drainage swales, etc at the time that preliminary design evaluations are performed.

Project Cost Estimate				
Item	Quantity	Unit	Unit Cost	Total Cost
Manufactured Bioretention Units	1			\$22,200
Base Construction Cost				\$22,200
Mobilization (5%)				\$1,110
Subtotal 1				\$23,310
Contingency (25%)				\$5,828
Subtotal 2				\$29,138
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$13,112
Total				\$42,250
Estimated Project Cost				\$43,000

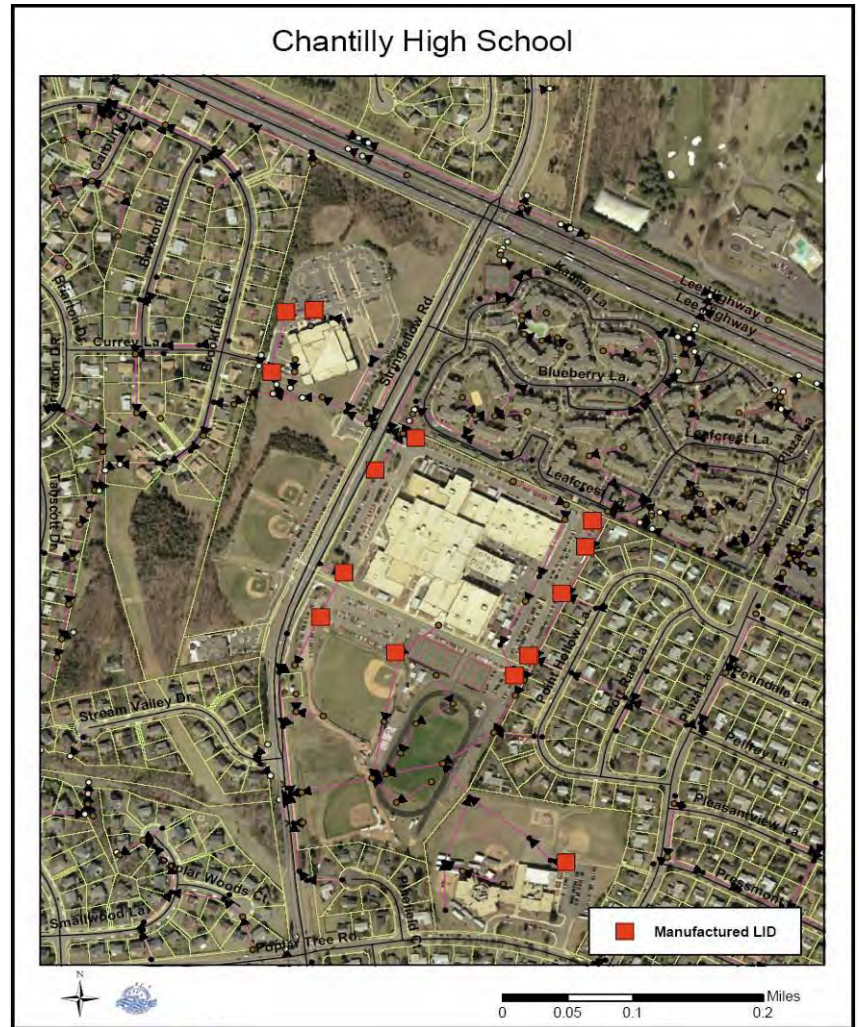
Project ID:	CU9817
Project Type:	LID Projects at Public Facility
Location:	Chantilly Library. Stringfellow Road south of Route 50. Frog Branch watershed.
Description:	Implement LID project at Chantilly Library. Conceptual plan consists of five manufactured bioretention units at three locations. Area served = 2.0 acres



The number and types of bioretention units included in the conceptual design form the basis for the construction cost estimate included in the plan. The sites will be evaluated for alternative onsite LID options such as conventional bioretention rain gardens, porous pavement, drainage swales, etc at the time that preliminary design evaluations are performed.

Project Cost Estimate				
Item	Quantity	Unit	Unit Cost	Total Cost
Manufactured Bioretention Units	5			\$92,850
			Base Construction Cost	\$92,850
			Mobilization (5%)	\$4,643
			Subtotal 1	\$97,493
			Contingency (25%)	\$24,373
			Subtotal 2	\$121,866
			Engineering design, surveys, land acquisition, utility locations, and permits (45%)	\$54,840
			Total	\$176,706
			Estimated Project Cost	\$177,000

Project ID:	CU9818
Project Type:	LID Projects at Public Facility
Location:	Chantilly High School. Stringfellow Road south of Route 50. Frog Branch watershed.
Description:	Implement LID project at Chantilly High School. Conceptual plan consists of sixteen manufactured bioretention units at ten locations. Area served = 6.4 acres



The number and types of bioretention units included in the conceptual design form the basis for the construction cost estimate included in the plan. The sites will be evaluated for alternative onsite LID options such as conventional bioretention rain gardens, porous pavement, drainage swales, etc at the time that preliminary design evaluations are performed.

Project Cost Estimate				
Item	Quantity	Unit	Unit Cost	Total Cost
Manufactured Bioretention Units	16			\$303,000
			Base Construction Cost	\$303,000
			Mobilization (5%)	\$15,150
			Subtotal 1	\$318,150
			Contingency (25%)	\$79,538
			Subtotal 2	\$397,688
			Engineering design, surveys, land acquisition, utility locations, and permits (45%)	\$178,960
			Total	\$576,648
			Estimated Project Cost	\$577,000

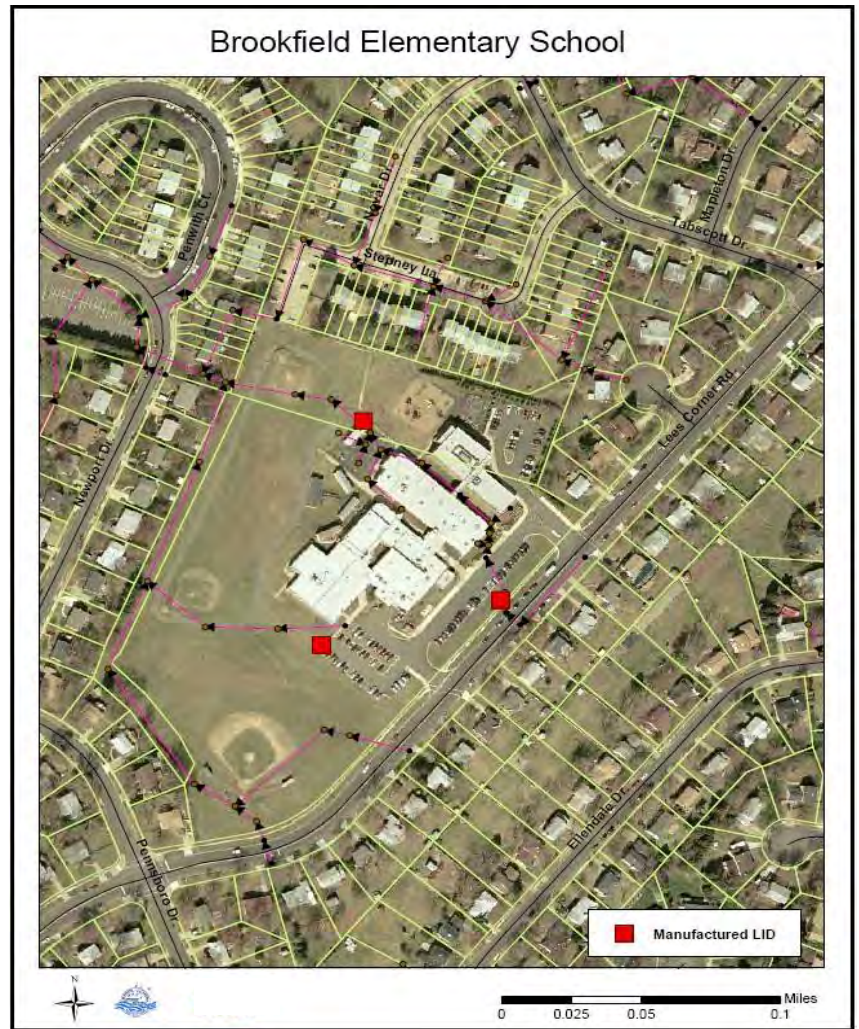
Project ID:	CU9819
Project Type:	LID Projects at Public Facility
Location:	Greenbriar West Elementary School. Poplar Tree Road near Plaza Lane. Frog Branch watershed.
Description:	Implement LID project at Greenbriar West Elementary School. Conceptual plan consists of two manufactured bioretention units at one location. Area served = 0.7 acres



The number and types of bioretention units included in the conceptual design form the basis for the construction cost estimate included in the plan. The sites will be evaluated for alternative onsite LID options such as conventional bioretention rain gardens, porous pavement, drainage swales, etc at the time that preliminary design evaluations are performed.

Project Cost Estimate				
Item	Quantity	Unit	Unit Cost	Total Cost
Manufactured Bioretention Units	2			\$33,750
Base Construction Cost				\$33,750
Mobilization (5%)				\$1,688
Subtotal 1				\$35,438
Contingency (25%)				\$8,860
Subtotal 2				\$44,298
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$19,934
Total				\$64,232
Estimated Project Cost				\$65,000

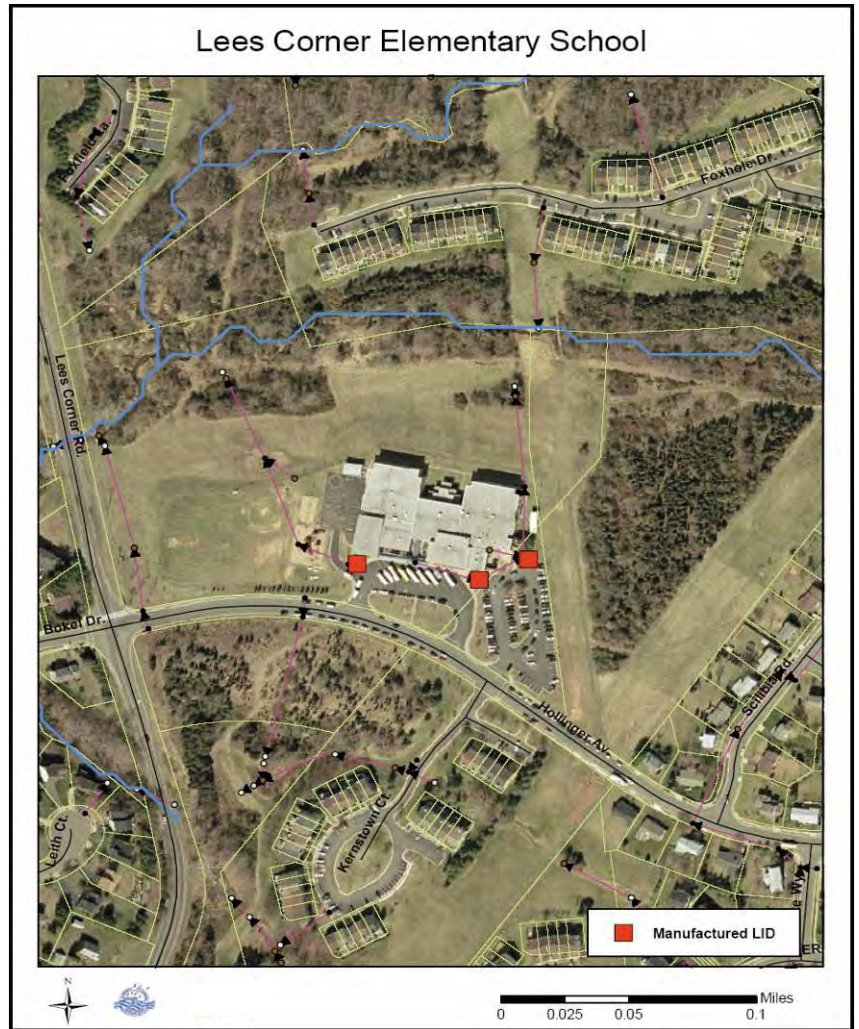
Project ID:	CU9820
Project Type:	LID Projects at Public Facility
Location:	Brookfield Elementary School. Lees Corner Road south of Tabscott Drive. Frog Branch and Flatlick Branch watersheds.
Description:	Implement LID project at Brookfield Elementary School. Conceptual plan consists of four manufactured bioretention units at three locations. Area served = 1.7 acres



The number and types of bioretention units included in the conceptual design form the basis for the construction cost estimate included in the plan. The sites will be evaluated for alternative onsite LID options such as conventional bioretention rain gardens, porous pavement, drainage swales, etc at the time that preliminary design evaluations are performed.

Project Cost Estimate				
Item	Quantity	Unit	Unit Cost	Total Cost
Manufactured Bioretention Units	4			\$78,600
Base Construction Cost				\$78,600
Mobilization (5%)				\$3,930
Subtotal 1				\$82,520
Contingency (25%)				\$20,633
Subtotal 2				\$103,163
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$46,423
Total				\$149,586
Estimated Project Cost				\$150,000

Project ID:	CU9821
Project Type:	LID Projects at Public Facility
Location:	Lees Corner Elementary School. Hollinger Avenue east of Lees Corner Road. Oxlick Branch.
Description:	Implement LID project at Lees Corner Elementary School. Conceptual plan consists of three manufactured bioretention units at three locations. Area served = 1.1 acres



The number and types of bioretention units included in the conceptual design form the basis for the construction cost estimate included in the plan. The sites will be evaluated for alternative onsite LID options such as conventional bioretention rain gardens, porous pavement, drainage swales, etc at the time that preliminary design evaluations are performed.

Project Cost Estimate				
Item	Quantity	Unit	Unit Cost	Total Cost
Manufactured Bioretention Units	3			\$52,800
Base Construction Cost				\$52,800
Mobilization (5%)				\$2,640
Subtotal 1				\$55,440
Contingency (25%)				\$13,860
Subtotal 2				\$69,300
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$31,185
Total				\$100,485
Estimated Project Cost				\$101,000

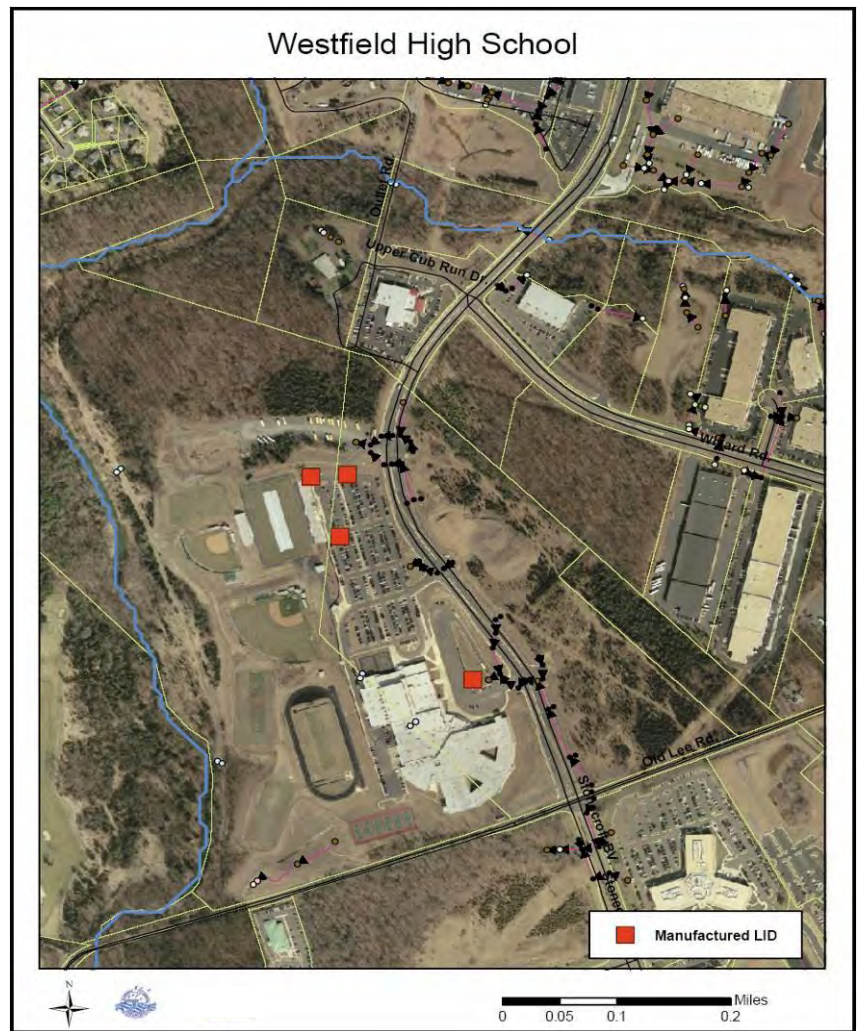
Project ID:	CU9822
Project Type:	LID Projects at Public Facility
Location:	Navy Elementary School. West Ox Road and Ox Trail. Oxlick Branch.
Description:	Implement LID project at Navy Elementary School. Conceptual plan consists of two manufactured bioretention units at two locations. Area served = 0.6 acres



The number and types of bioretention units included in the conceptual design form the basis for the construction cost estimate included in the plan. The sites will be evaluated for alternative onsite LID options such as conventional bioretention rain gardens, porous pavement, drainage swales, etc at the time that preliminary design evaluations are performed.

Project Cost Estimate				
Item	Quantity	Unit	Unit Cost	Total Cost
Manufactured Bioretention Units	2			\$30,300
Base Construction Cost				\$30,300
Mobilization (5%)				\$1,515
Subtotal 1				\$31,815
Contingency (25%)				\$7,954
Subtotal 2				\$39,769
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$17,896
Total				\$57,665
Estimated Project Cost				\$58,000

Project ID:	CU9823
Project Type:	LID Projects at Public Facility
Location:	Westfield High School, Stonecroft Boulevard and Old Lee Road. Upper Cub Run watershed.
Description:	Implement LID project at Westfield High School. Conceptual plan consists of four manufactured bioretention units at four locations. Area served = 1.5 acres



The number and types of bioretention units included in the conceptual design form the basis for the construction cost estimate included in the plan. The sites will be evaluated for alternative onsite LID options such as conventional bioretention rain gardens, porous pavement, drainage swales, etc at the time that preliminary design evaluations are performed.

Project Cost Estimate				
Item	Quantity	Unit	Unit Cost	Total Cost
Manufactured Bioretention Units	4			\$67,950
Base Construction Cost				\$67,950
Mobilization (5%)				\$3,398
Subtotal 1				\$71,348
Contingency (25%)				\$17,837
Subtotal 2				\$89,185
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$40,133
Total				\$129,318
Estimated Project Cost				\$130,000

Project ID:	CU9824
Project Type:	LID Projects at Public Facility
Location:	Cub Run Recreation Center, Stonecroft Boulevard. Upper Cub Run watershed.
Description:	Implement LID project at Cub Run Recreation Center. Conceptual plan consists of three manufactured bioretention units at one location. Area served = 1.5 acres

PHOTO NOT AVAILABLE

The facility was constructed after the date of the aerial photography used for this project

The number and types of bioretention units included in the conceptual design form the basis for the construction cost estimate included in the plan. The sites will be evaluated for alternative onsite LID options such as conventional bioretention rain gardens, porous pavement, drainage swales, etc at the time that preliminary design evaluations are performed.

Project Cost Estimate				
Item	Quantity	Unit	Unit Cost	Total Cost
Manufactured Bioretention Units	3			\$66,600
Base Construction Cost				\$66,600
Mobilization (5%)				\$3,330
Subtotal 1				\$69,930
Contingency (25%)				\$17,483
Subtotal 2				\$87,413
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$39,336
Total				\$126,749
Estimated Project Cost				\$127,000

Project ID:	CU9825
Project Type:	LID Projects at Public Facility
Location:	Franklin Middle School. Centreville Road and Lees Corner Road. Cain Branch Watershed.
Description:	Implement LID project at Franklin Middle School. Conceptual plan consists of one manufactured bioretention unit at one location. Area served = 0.6 acres



The number and types of bioretention units included in the conceptual design form the basis for the construction cost estimate included in the plan. The sites will be evaluated for alternative onsite LID options such as conventional bioretention rain gardens, porous pavement, drainage swales, etc at the time that preliminary design evaluations are performed.

Project Cost Estimate				
Item	Quantity	Unit	Unit Cost	Total Cost
Manufactured Bioretention Units	1			\$22,200
			Base Construction Cost	\$22,200
			Mobilization (5%)	\$1,110
			Subtotal 1	\$23,310
			Contingency (25%)	\$5,828
			Subtotal 2	\$29,138
			Engineering design, surveys, land acquisition, utility locations, and permits (45%)	\$13,112
			Total	\$42,250
			Estimated Project Cost	\$43,000

Fact Sheets

Projects CU9901 through CU9909

Cub Run Watershed Dump Site Removal Projects

Projects CU9901 through CU9909

Project ID:	CU9901
Project Type:	Dump Site Removal Project
Location:	Left bank flood plain, Lower Cub Run, Bull Run Regional Park near UOSA Advanced Wastewater Treatment Plant,
Description:	55-gallon drums (empty), above ground tank. Impact score of 5. (CUCU004.M001)
Estimated Project Cost:	\$5,000



Project ID:	CU9902
Project Type:	Dump Site Removal Project
Location:	Left Bank flood plain, Lower Cub Run, Bull Run Regional Park near UOSA Advanced Wastewater Treatment Plant.
Description:	Appliances, trash, tires and miscellaneous debris. Impact score of 10. (CUCU004.M002)
Estimated Project Cost:	\$5,000



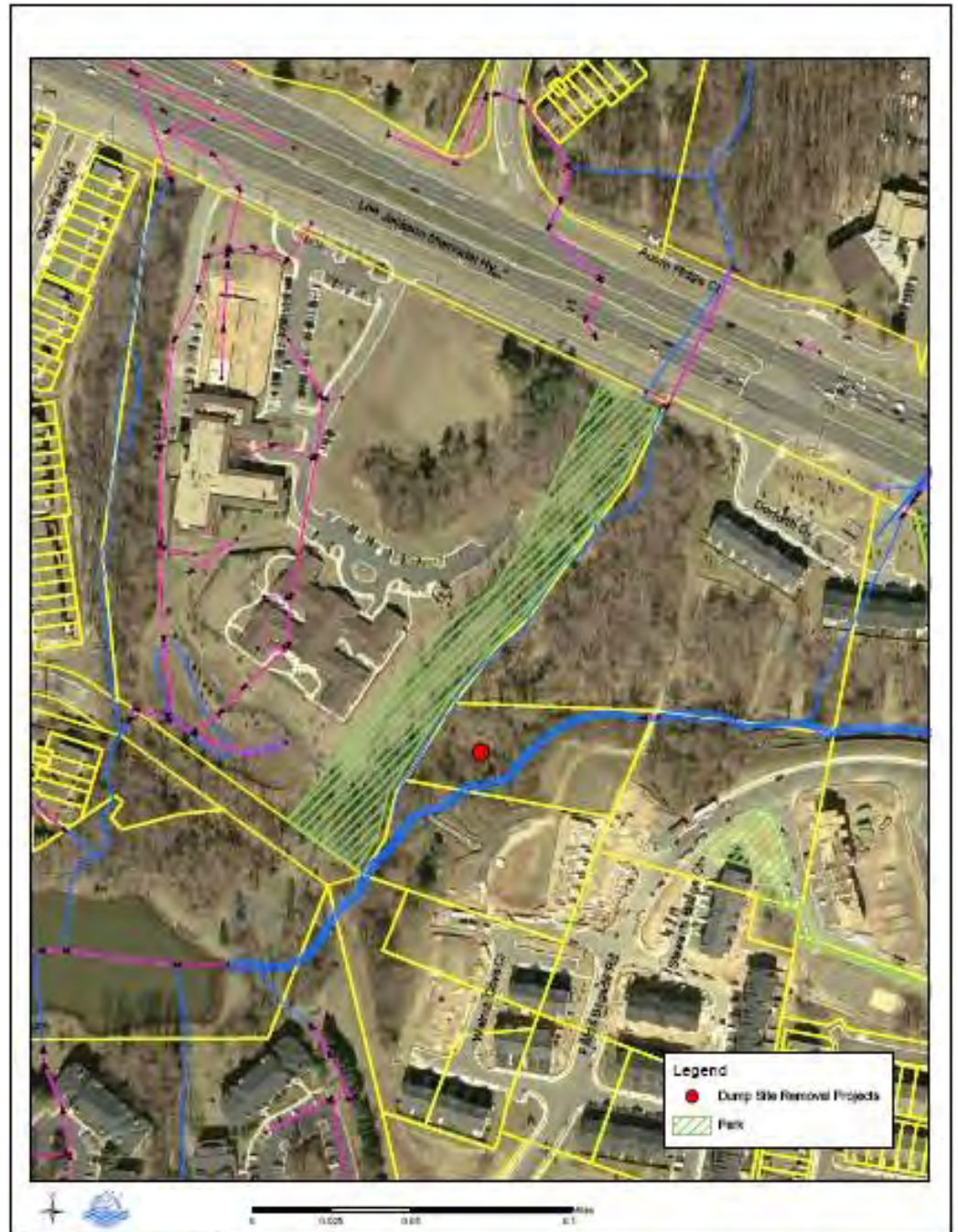
Project ID:	CU9903
Project Type:	Dump Site Removal Project
Location:	Left Bank instream, Tributary to Lower Cub Run downstream from Compton Road and upstream from Cub Run
Description:	55-Gallon Drums (closed). Impact score of 8. (CUCU014.M001) -Private Property
Estimated Project Cost:	\$5,000



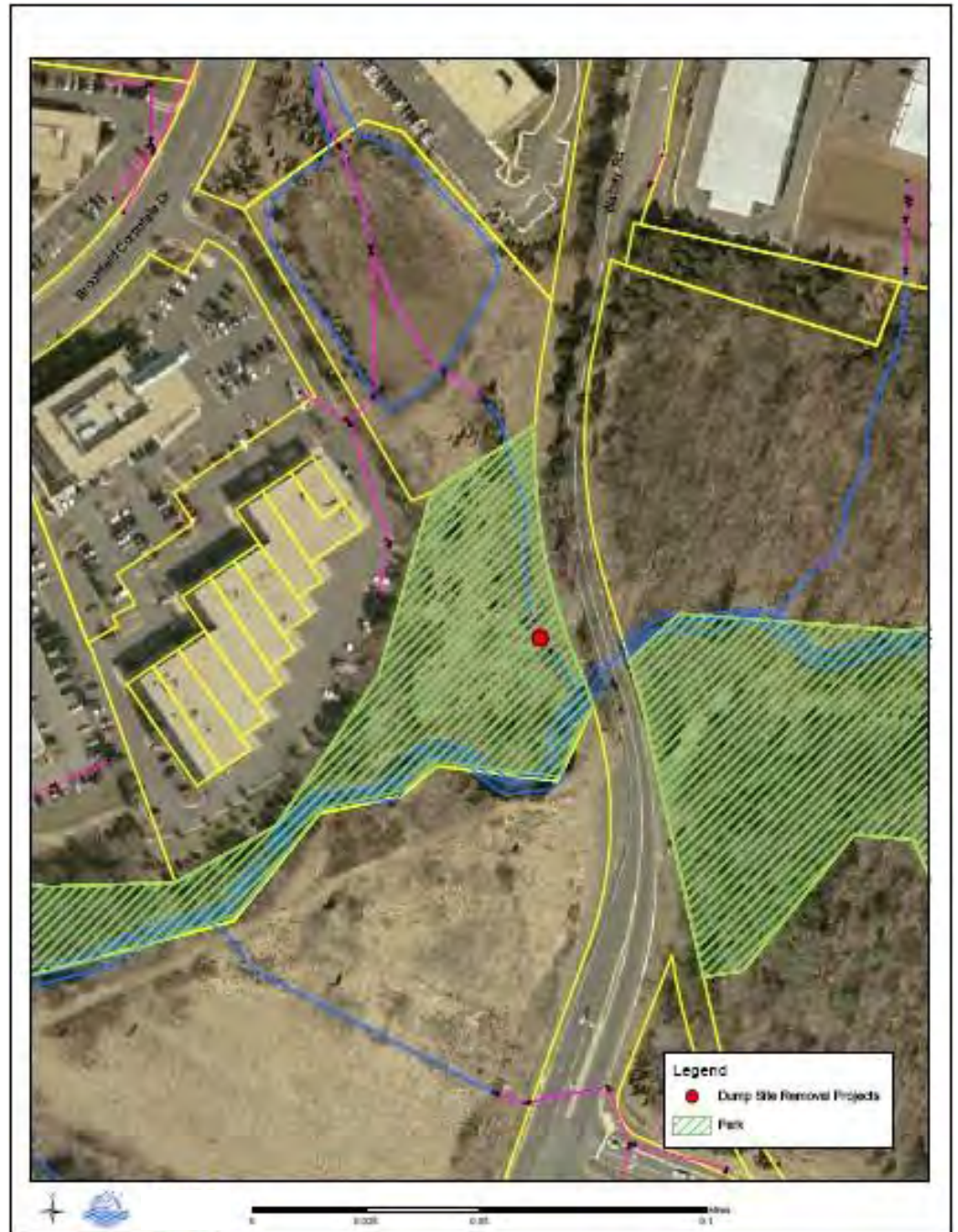
Project ID:	CU9904
Project Type:	Dump Site Removal Project
Location:	Left Bank flood plain, Big Rocky Run downstream from Braddock Road
Description:	55-Gallon Drums (closed). Impact score of 8. (CUCU014.M001) -Private Property
Estimated Project Cost:	\$5,000



Project ID:	CU9905
Project Type:	Dump Site Removal Project
Location:	Left bank flood plain, Big Rocky Run downstream from Route 50
Description:	Trash and car. Impact score of 5. (CUBR089.M001)
Estimated Project Cost:	\$5,000



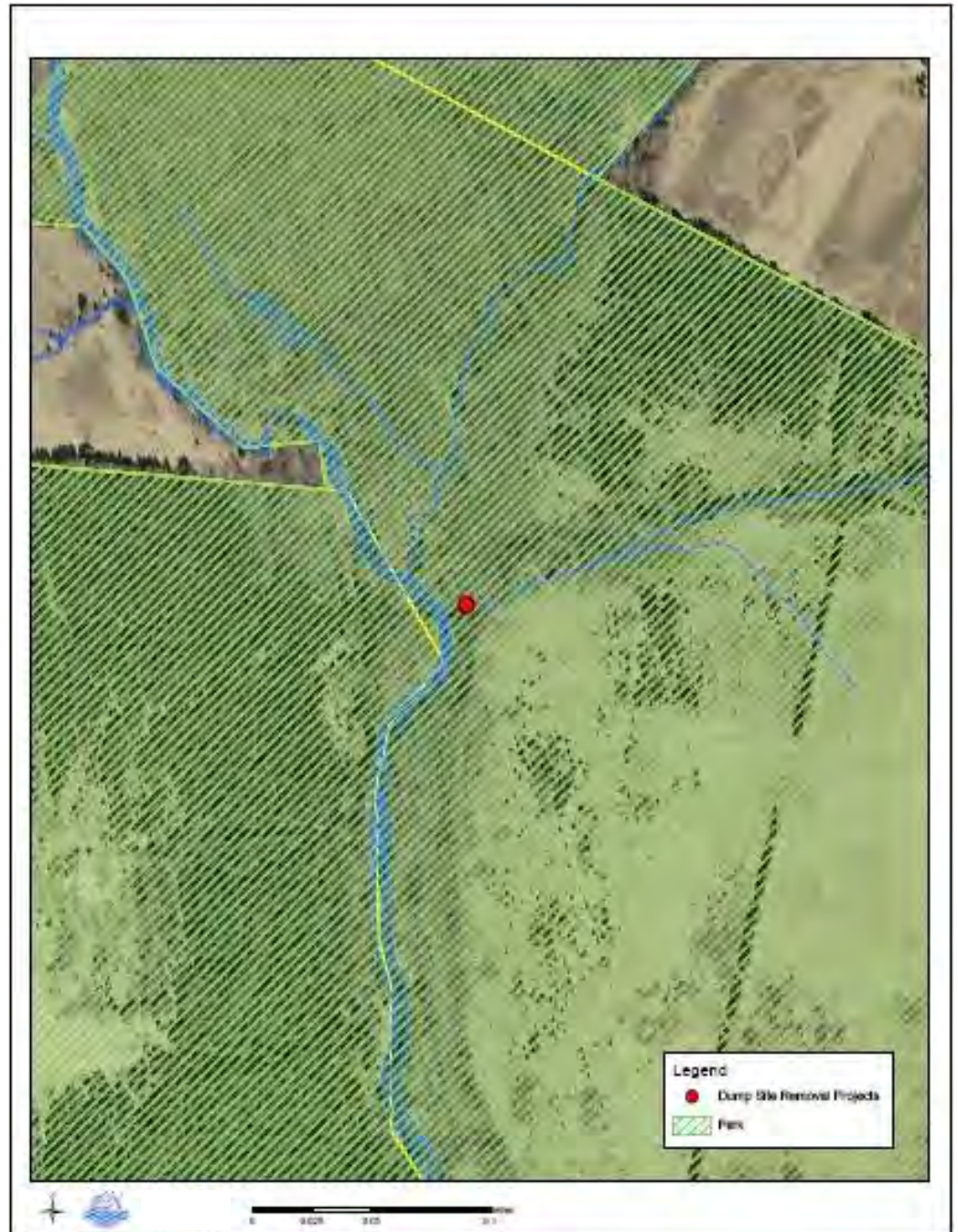
Project ID:	CU9906
Project Type:	Dump Site Removal Project
Location:	Both banks flood plain, Flatlick Branch at Walney Road
Description:	Construction Debris. Impact score of 4. (CUFL102.M001)
Estimated Project Cost:	\$5,000



Project ID:	CU9907
Project Type:	Dump Site Removal Project
Location:	Both banks instream, Frog Branch near Stringfellow Road south of Stream Valley Drive.
Description:	Cast iron pipes in stream at utility crossing. Impact score of 4. (CUFR002.M002)
Estimated Project Cost:	\$5,000



Project ID:	CU9908
Project Type:	Dump Site Removal Project
Location:	Both banks instream. Ellick Run within FCPA Parkland. Downstream from Braddock Road
Description:	Appliances. Impact score of 3. (CUER009.M001)
Estimated Project Cost:	\$5,000



Project ID:	CU9909
Project Type:	Dump Site Removal Project
Location:	Left Bank, Cub Run and Schneider Branch off Stonecroft Boulevard.
Description:	Clean up existing debris and eliminate future dumping at the site of the old Upper Cub Run Wastewater Treatment Plant
Estimated Project Cost:	\$5,000



Fact Sheets

Projects CU9910 through CU9915

Cub Run Watershed Other Projects

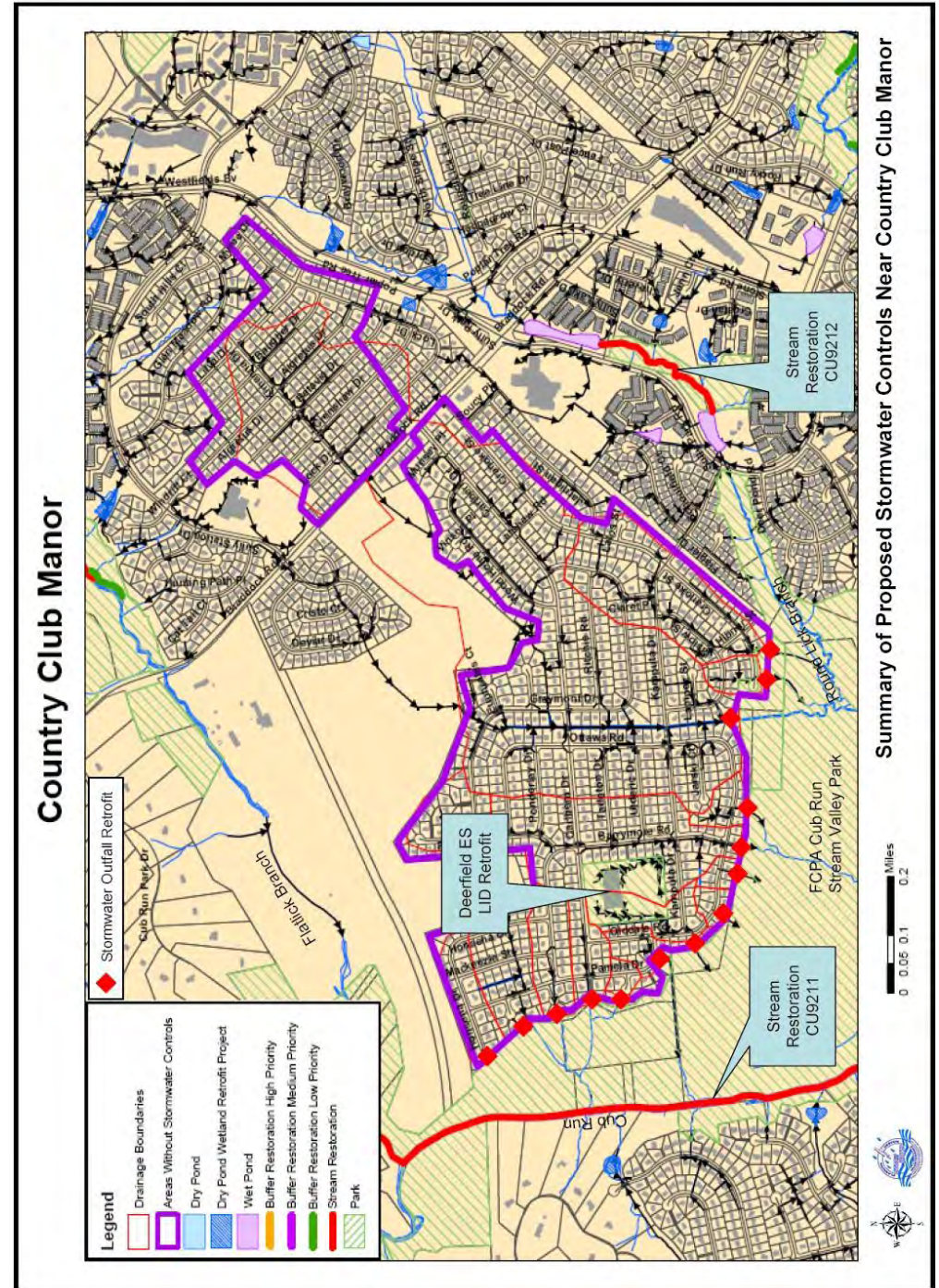
Neighborhoods without Stormwater Controls
Upland Drainage Improvement Projects
Wetland and Riparian Restoration Projects

Projects CU9910 through CU9915

Project ID:	CU9910
Project Type:	Neighborhoods Without Stormwater Controls
Location:	Country Club Manor
Description:	Implement stream outfall improvement projects, promote LID and perform other structural projects to control runoff from this neighborhood without stormwater controls.

Project Cost Estimate *				
Item	Qty	Units	Unit Cost	Total Cost
Public Outreach				\$46,400
Outfall Retrofit	14	Each	\$20,000	\$280,000
Base Construction Cost				\$326,400
Mobilization (5%)				\$16,320
Subtotal 1				\$342,720
Contingency (25%)				\$85,680
Subtotal 2				\$428,400
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$192,780
Total				\$621,180
Estimated Project Cost				\$622,000

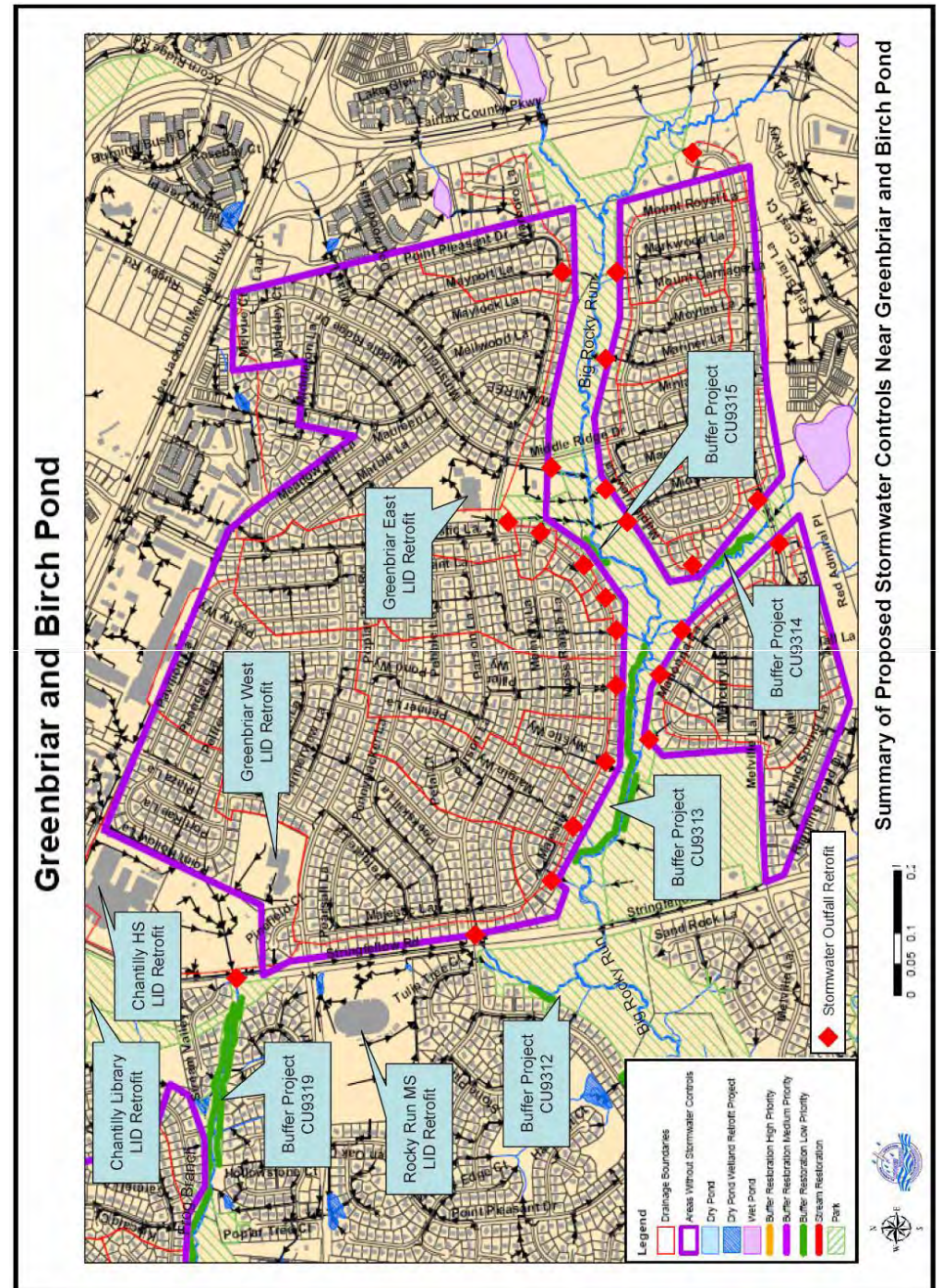
* - Cost for public outreach for LID and outfall retrofit projects. Costs for other structural projects are documented separately.



Project ID:	CU9911
Project Type:	Neighborhoods Without Stormwater Controls
Location:	Greenbriar and Birch Pond
Description:	Implement stream outfall improvement projects, promote LID and perform other structural projects to control runoff from this neighborhood without stormwater controls.

Project Cost Estimate *				
Item	Qty	Units	Unit Cost	Total Cost
Public Outreach				\$57,300
Outfall Retrofits	14	Each	\$20,000	\$280,000
Base Construction Cost				\$337,300
Mobilization (5%)				\$16,865
Subtotal 1				\$354,165
Contingency (25%)				\$88,541
Subtotal 2				\$442,706
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$199,218
Total				\$641,924
Estimated Project Cost				\$642,000

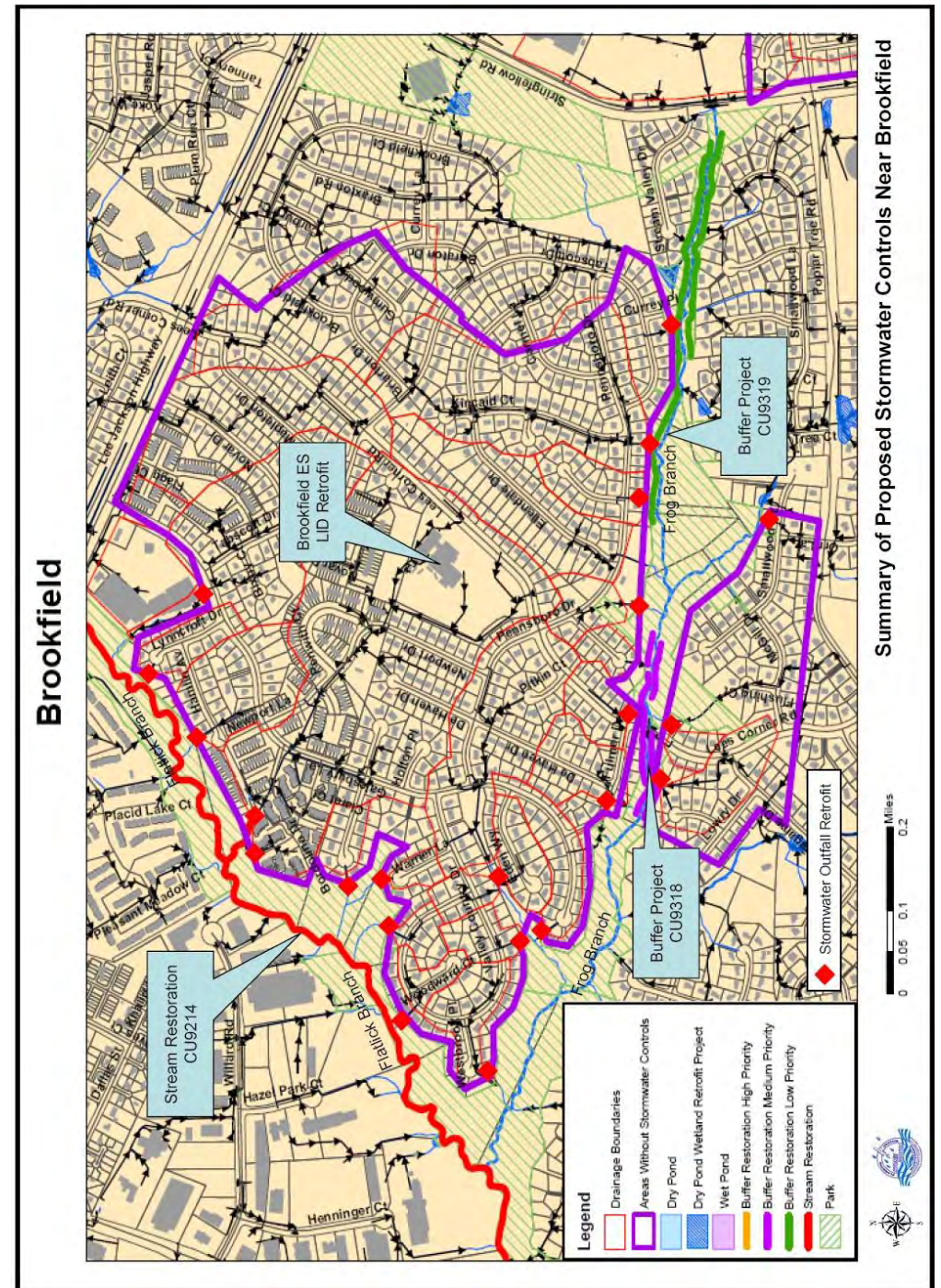
* - Cost for public outreach for LID and outfall retrofit projects. Costs for other structural projects are documented separately.



Project ID:	CU9912
Project Type:	Neighborhood Without Stormwater Controls
Location:	Brookfield
Description:	Implement stream outfall improvement projects, promote LID and perform other structural projects to control runoff from this neighborhood without stormwater controls.

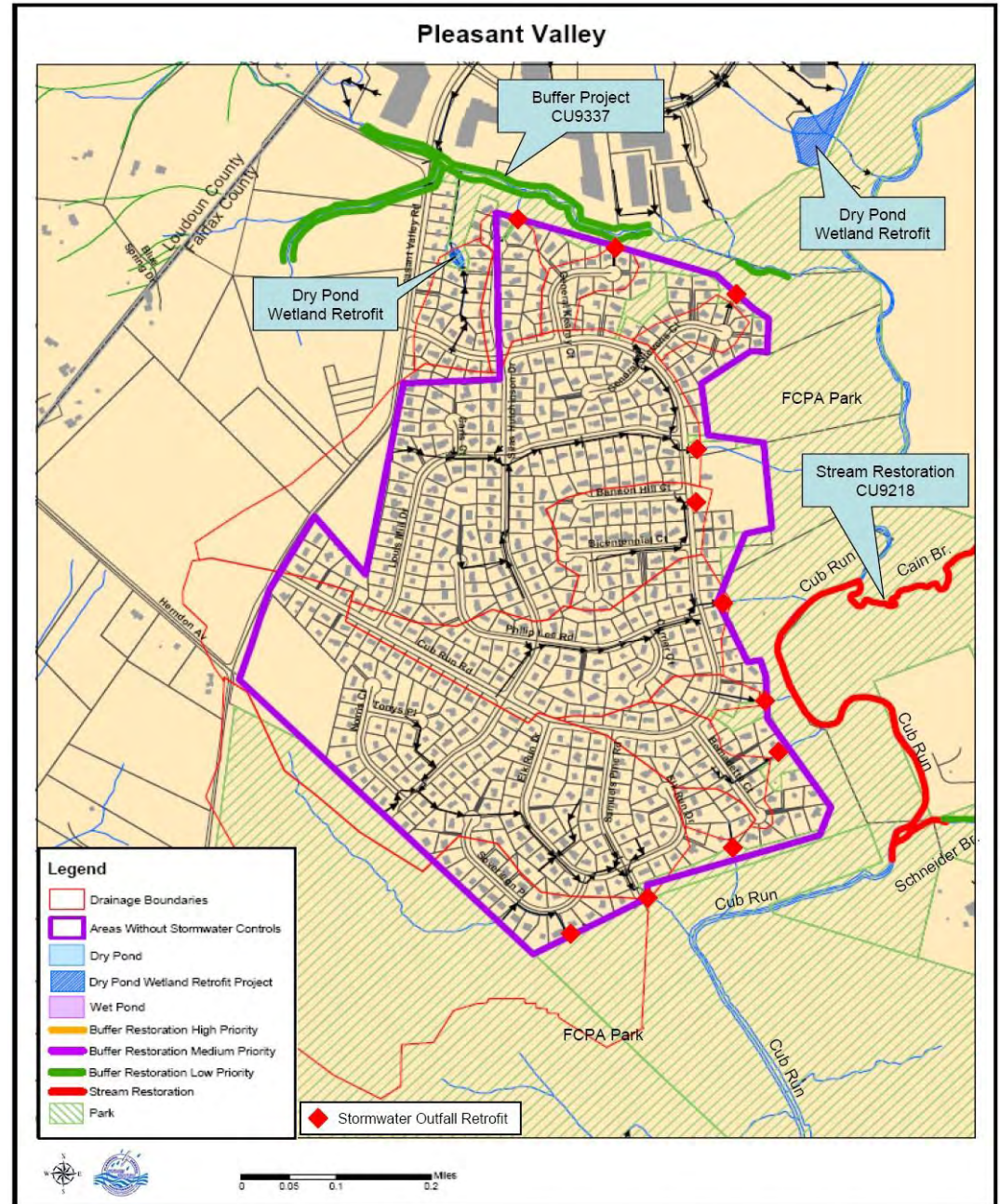
Project Cost Estimate *				
Item	Qty	Units	Unit Cost	Total Cost
Public Outreach				\$45,200
Outfall Retrofit	22	Each	\$20,000	\$440,000
Base Construction Cost				\$485,200
Mobilization (5%)				\$24,260
Subtotal 1				\$509,460
Contingency (25%)				\$127,365
Subtotal 2				\$636,825
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$286,571
Total				\$923,396
Estimated Project Cost				\$924,000

* - Cost for public outreach for LID and outfall retrofit projects. Costs for other structural projects are documented separately.



Project ID:	CU9913
Project Type:	Neighborhoods Without Stormwater Controls
Location:	Pleasant Valley
Description:	Implement stream outfall improvement projects, promote LID and perform other structural projects to control runoff from this neighborhood without stormwater controls.

Project Cost Estimate *				
Item	Qty	Units	Unit Cost	Total Cost
Public Outreach				\$39,600
Outfall Retrofit	11	Each	\$20,000	\$220,000
Base Construction Cost				\$259,600
Mobilization (5%)				\$12,980
Subtotal 1				\$272,580
Contingency (25%)				\$65,145
Subtotal 2				\$340,725
Engineering design, surveys, land acquisition, utility locations, and permits (45%)				\$153,326
Total				\$494,051
Estimated Project Cost				\$495,000



* - Cost for public outreach for LID and outfall retrofit projects. Costs for other structural projects are documented separately.

Summary of Proposed Stormwater Controls Near Pleasant Valley

Project ID:	CU9914
Project Type:	Upland Drainage Retrofit Projects
Location:	Headwater areas of watershed focused on Cain Branch upstream from Route 28, Flatlick Branch upstream from Route 50, and Big Rocky Run upstream from Route 50.
Description:	General funds for currently unidentified stormwater improvement projects in upland areas to address flooding and stream erosion issues. Projects will be performed in combination with other projects or on an as-needed basis when projects are identified through the public outreach program.
Estimated Project Cost:	\$600,000 for each 5-year plan increment for a total cost of \$3,000,000

Project ID:	CU9915
Project Type:	Riparian Wetland Study
Location:	Throughout watershed
Description:	Perform study to identify riparian wetland areas and evaluate for restoration need and potential.
Estimated Project Cost:	\$100,000