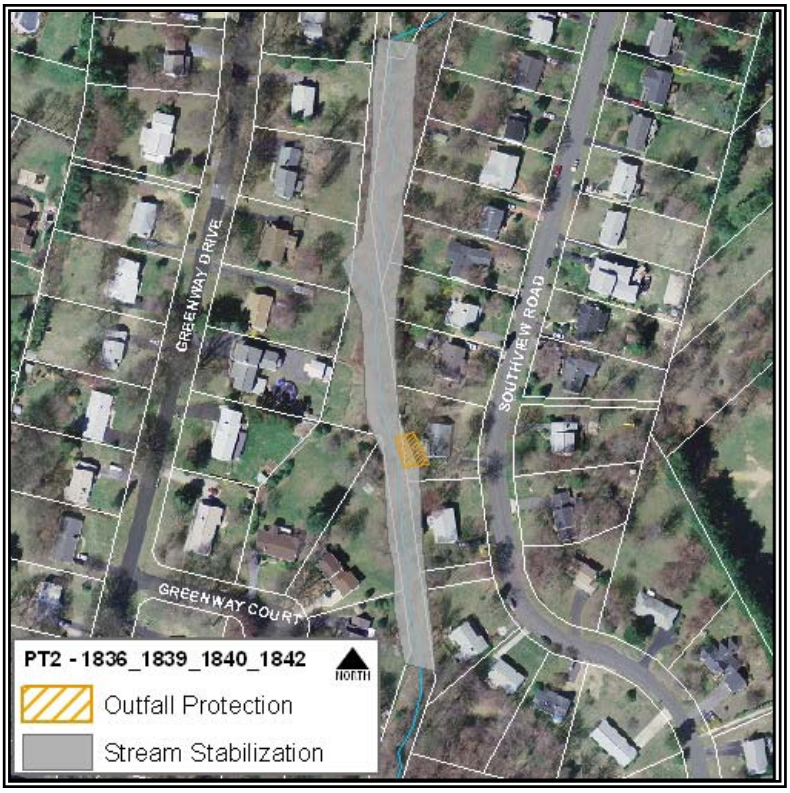
Proposed Project

Project Number: 1836_1839_1840_1842
Subwatershed: Plumtree 2

Project Type: Stream Restoration
Project Size: Approx.1000 linear feet

Project Location: Between Greenway Drive and Southview Road.



Project Description: This project would entail regrading and stabilizing the stream banks in localized areas containing actively eroding undercut banks. This project would also involve stabilizing the two outfalls located on the left bank (facing downstream) in order to prevent headcutting of the outfall channels. The riparian buffer would also be widened in localized areas to improve stream stability.

Project Benefits:

Stabilization	The stream banks will be stabilized to reduce scour and prevent further widening of the channel.
Water Quality	Implementation of this project will provide a reduction in sediment supply and the associated water quality benefits.
Education	The project could provide educational benefits due to the proximity of the project to adjacent residential areas.

Project Constraints:

Environmental	Stream/wetland permitting may be necessary and stream closure periods may affect timing of work. No major environmental constraints are anticipated with this project.
Property Ownership	The project is located on the Brinkleigh natural resource open space region. Private properties that may be impacted by this project include; 2917-2926 Greenway Court and 2902 to 2918 Southview Road.
Facility Access	Access to this site is obtained from residential properties located on Greenway Drive and Southview Road.
Design / Construction	No major design or construction constraints are present.

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Cost Detail:

ITEM	QTY	UNITS	UNIT COST	TOTAL
Stream Restoration				
Stream restoration/stabilization[1]	1,000	LF	$495.00	$495,000
Buffer enhancement		LF	$30.00	$0
Outfall stabilization/protection[2]		LF	$100.00	$0
			Direct Construction Subtotal	$495,000
Indirect Costs				
E/SC, MOT, MOS (included above)				$0
Construction Stakeout (2%)	1	LS	$9,900.00	$9,900
			Base Construction Cost	$504,900
			Mobilization (10% of Directs or $1,000)	$49,500
			Subtotal	$554,400
			Contingency (30%)	$166,320
			Construction Subtotal	$720,720
			Envt'l Studies / Permitting (5% of Construction or $5,000)	$36,036
			Engineering and Surveys	$171,000
			Post-Construction Monitoring ($40 / LF or $4,000)	$40,000
			Total Capital Cost	**$967,756**
Operations and Maintenance Costs				
Annual Maintenance	5	Percent	$24,750	
Discount Rate	5	Percent		
Expected Life	5	Years		
			Net Present Value of Annual Costs	$107,155
			Life Cycle Cost	**$1,075,000**

[1]Cost per linear foot is based on linear regression of previous stream restoration/stabilization jobs ranging from 35 to 2215 linear feet.
[2]Outfall protection costs included in the linear foot measurement of stream restoration/stabilization, measuring 80 linear feet.