Little Pimmit Run at Chesterbrook Road

Stream Restoration Project

April 22, 2021

Department of Public Works and Environmental Services Working for You!





A Fairfax County, VA, publication April 2021

Agenda

- Vicinity Maps
- Project Goals
- Social Goals
- Program Drivers
- Environmental Benefits
- Typical Structures

- Existing Conditions
- Construction Examples
- Completed Work
- Design
- Next Steps
- Contact Information



Vicinity Map (Big Picture)





Vicinity Map (Phase 1)





Δ

Vicinity Map (Phase 2)





5

Project Goals

- 1. Restore up to 7,100 feet of stream channel and connecting tributaries
 - Reduce sediment transport
- 2. Protect existing infrastructure
 - Coordinate with Little Pimmit Run Sewer Realignment Project
- 3. Maintain close coordination with stakeholders





Social Goals

- 1. Maintain open dialog and share information.
- 2. Coordinate with all the stakeholders and the community.
- 3. Build partnerships with local organizations such as homeowners associations.
- 4. Design Team:
 - Fairfax County Public Works
 - Fairfax County Park Authority
 - Wetland Studies and Solutions, Inc.





Stormwater Program Drivers

- Municipal Separate Storm Sewer Permit (MS-4)
- Chesapeake Bay Total Maximum Daily Loads (TMDL)
 - Regulates amount of pollutants in waterways
- Local TMDLs
- Dam Safety Regulations
- Maintenance of Existing Facilities
- Public Safety /Emergency Response



Environmental Benefits

Improve watershed conditions and reduce downstream impacts through....

- ➤Control velocity
 - Reduce erosion
 - Protect infrastructure
 - Protect vegetation

Restore riparian corridorRestore instream habitat





Typical Structures Used – Cross Vanes





Typical Structures Used – Root Wads





Typical Structures Used – Boulder Clusters





Typical Structures Used – Boulder Clusters



Stormwater Planning Division











Stormwater Planning Division



















Construction Access Road



Stormwater Planning Division

Construction Example – Channel Grading



Stormwater Planning Division

Construction Example – Channel Grading





Before and After Examples

Flatlick Confluence



September 2015



26

Stormwater Planning Division

January 2011

After Construction

Banks Park



November 2014

September 2018



Proposed Design Alignments

<u>Alignment #1</u> – Establishes a balance between using the existing channel while increasing curves in the proposed channel.

<u>Alignment #2</u> – Adds the most curves to the proposed channel.

<u>Alignment #3</u> – Utilizes the existing channel to the greatest degree (limited sections in phase 2)

*All alignments largely utilize the existing over widened channel scar to minimize disturbance.

Brown Dashed Line = Existing Channel
Solid black line = Alignment #1
Solid blue line = Alignment #2
Solid orange line = Alignment #3





Solid blue line = Alignment #2



29

Stormwater Planning Division





Brown Dashed Line = Existing Channel

X – Impacted tree

Solid black line = Alignment #1

Solid blue line = Alignment #2





Brown Dashed Line = Existing Channel

X – Impacted tree

Three solid black lines = Alignment #1

Shaded blue area = Alignment #2













X – Impacted tree

- Brown Dashed Line = Existing Channel
 - Solid black line = Alignment #1
 - Solid blue line = Alignment #2



Schedule

- Community meeting on Pre-design/Channel alignments April 22, 2021
- Concept design submission September 2021
- Concept design community meeting November 2021
- Land Acquisition
 - Easements required prior to final design
- Construction <u>To be determined</u>
 Pending date of completed design





Contact Information



Contact Information

Design

Fred Wilkins – Project Manager 703-509-0511 Fred.Wilkins@fairfaxcounty.gov Stormwater Planning Division

703-324-5500, TTY 711 12000 Government Center Parkway Suite 449 Fairfax, Virginia 22035 www.fairfaxcounty.gov/publicworks/stormwater

To request this information in an alternate format call 703-324-5500, TTY 711



Online Resources

Stormwater Planning Division Website https://www.fairfaxcounty.gov/publicworks/stormwater/

Northern Virginia Soil and Water Conservation District http://www.fairfaxcounty.gov/nvswcd/newsletter/planning.htm

Middle Potomac Watersheds Management Plan (Includes Pimmit Run) https://www.fairfaxcounty.gov/publicworks/stormwater/middle-potomac-watersheds

Little Pimmit Run at Chesterbrook Road Stream Restoration and Stormwater Improvement Project Little Pimmit Run at Chesterbrook Road Stream Restoration (SD-000031-246) | Public Works and Environmental Services (fairfaxcounty.gov)





Questions?

