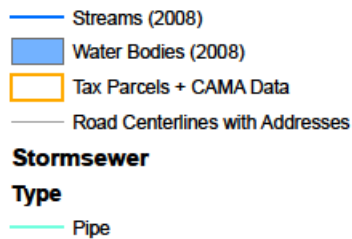


Henrico County's Municipal Separate Stormwater Sewer System (MS4) Permit requires that eight stormwater retrofit projects be completed no later than March 31, 2020. The following list summarizes and provides the current status of 11 projects that the County identified to satisfy the Permit requirement.

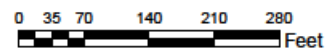
<b>Project</b>	<b>Type</b>	<b>Update</b>
Woodman Park Energy Dissipator	Sheetflow to Conserved Open Space (VA Stormwater BMP Clearinghouse, Design Spec. No. 2)	Completed 9/23/16
Hungary Creek Stream Restoration	Stream Restoration (Chesapeake Bay Expert Panel Protocols)	Completed 5/13/16
Belmont Golf Course Streambank Restoration, Phase 1	Streambank Restoration (Chesapeake Bay Expert Panel Protocols)	Completed 3/5/17
Belmont Golf Course Streambank Restoration, Phase 2	Streambank Restoration (Chesapeake Bay Expert Panel Protocols)	Completed 3/3/18
Belmont Golf Course Regenerative Stormwater Conveyance, Phase 3	Regenerative Stormwater Conveyance (Chesapeake Bay Expert Panel Protocols)	Completed 3/3/18
Dunncroft Park Stream Restoration, Phase 1	Stream Restoration (Chesapeake Bay Expert Panel Protocols)	Completed 8/4/17
Dunncroft Park Stream Restoration, Phase 2	Stream Restoration (Chesapeake Bay Expert Panel Protocols)	Completed 8/4/17
Dunncroft Park Stream Restoration, Phase 3	Stream Restoration (Chesapeake Bay Expert Panel Protocols)	Completed 8/4/17
Dunncroft Park Stream Restoration, Phase 4	Stream Restoration (Chesapeake Bay Expert Panel Protocols)	Completed 8/4/17
Energy Dissipator 1 Outfall EN 147	Sheetflow to Conserved Open Space (VA Stormwater BMP Clearinghouse, Design Spec. No. 2)	Will not construct
Regenerative Stormwater Conveyance 1 Outfall EN 220	Regenerative Stormwater Conveyance (Chesapeake Bay Expert Panel Protocols)	Will not construct

## 1. Woodman Park Energy Dissipator Project

The Woodman Park Energy Dissipator Project involves two stormsewer outfalls that currently have no water quality treatment. The project will convert the concentrated flow from these two outfall pipes to sheet flow through a wooded buffer.

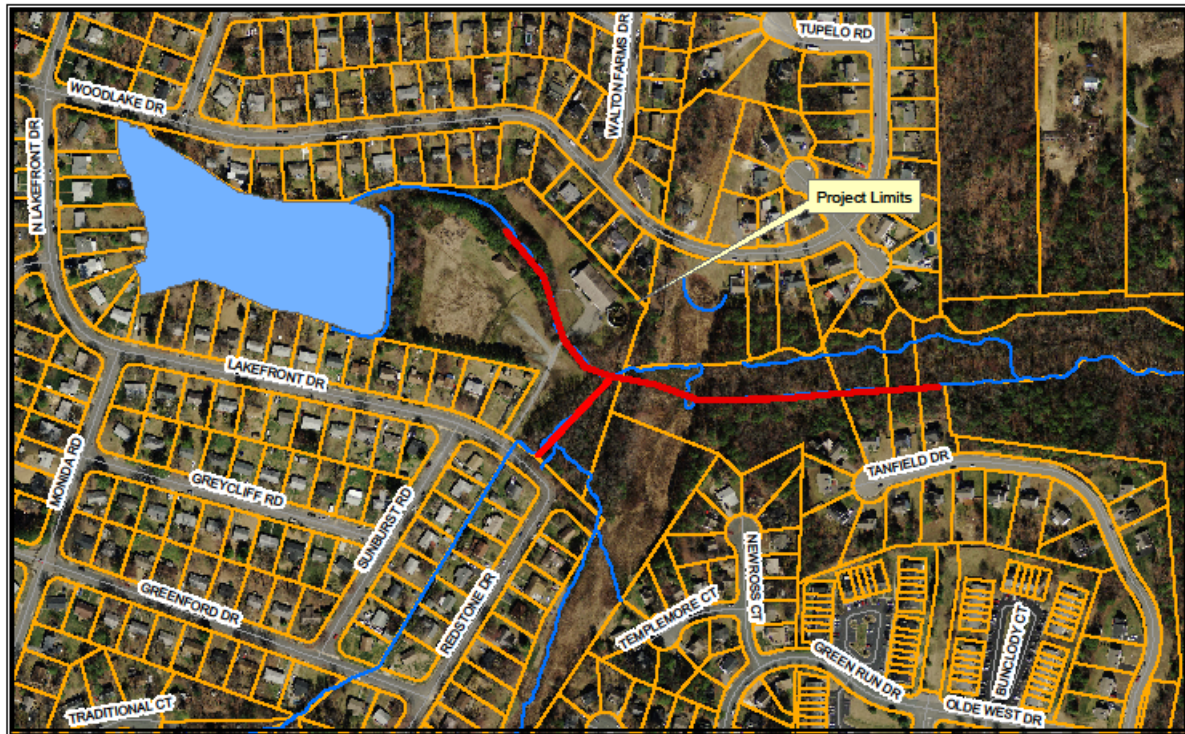


Woodman Park Energy Dissipator



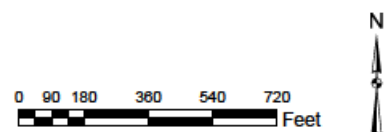
## 2. Hungary Creek Stream Restoration Project

Hungary Creek Stream Restoration Project will restore approximately 1750 feet of Hungary Creek. This project will utilize natural stream design to: 1) recreate a more natural and stable cross section and profile of this stream, 2) stabilize the severely eroding stream banks and stream bottom, and 3) reconnect the stream with its floodplain.



Hungary Creek Stream Restoration

- Streams (2008)
- Water Bodies (2008)
- Tax Parcels + CAMA Data
- Road Centerlines with Addresses



### 3. Belmont Golf Course Streambank Restoration, Phase 1

The Belmont Golf Course Streambank Stabilization, Phase 1 Project will restore a portion of Upham Brook. This project will utilize natural stream design to stabilize approximately 895 feet of severely eroding streambank.



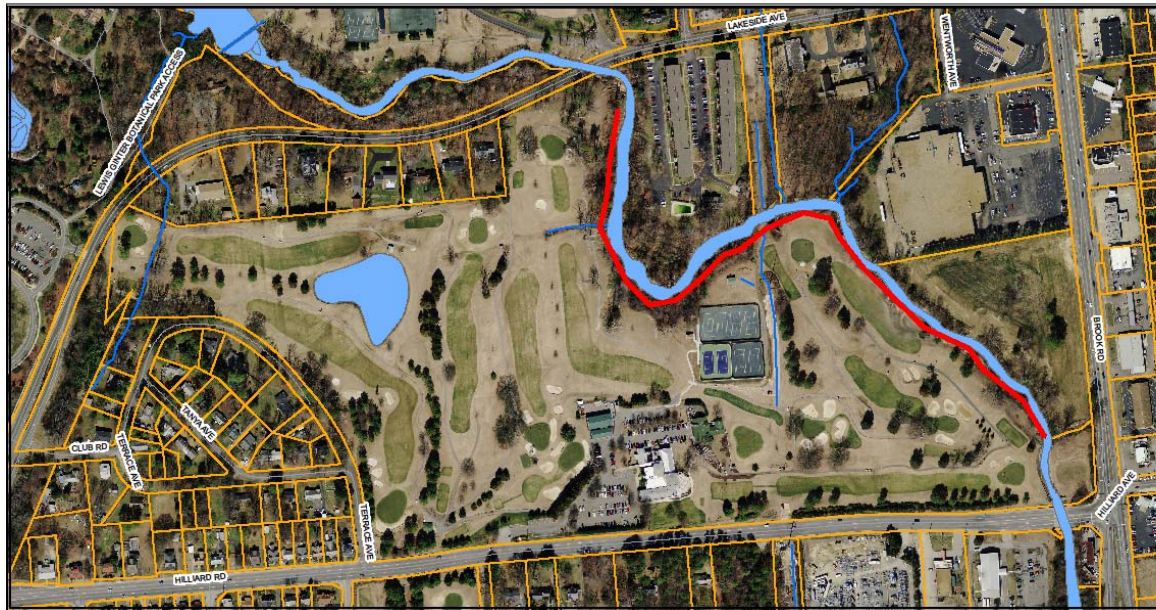
Belmont Golf Course Phase 1  
Upham Brook Streambank Restoration

— Streams (2008)  
— Water Bodies (2008)  
— Tax Parcels + CAMA Data  
— Road Centerlines with Addresses

0 95 190 380 570 760  
Feet

#### 4. Belmont Golf Course Streambank Restoration, Phase 2

The Belmont Golf Course Streambank Stabilization, Phase 2 Project will restore a portion of North Run. This project will utilize natural stream design to stabilize approximately 1050 feet of severely eroding streambank.



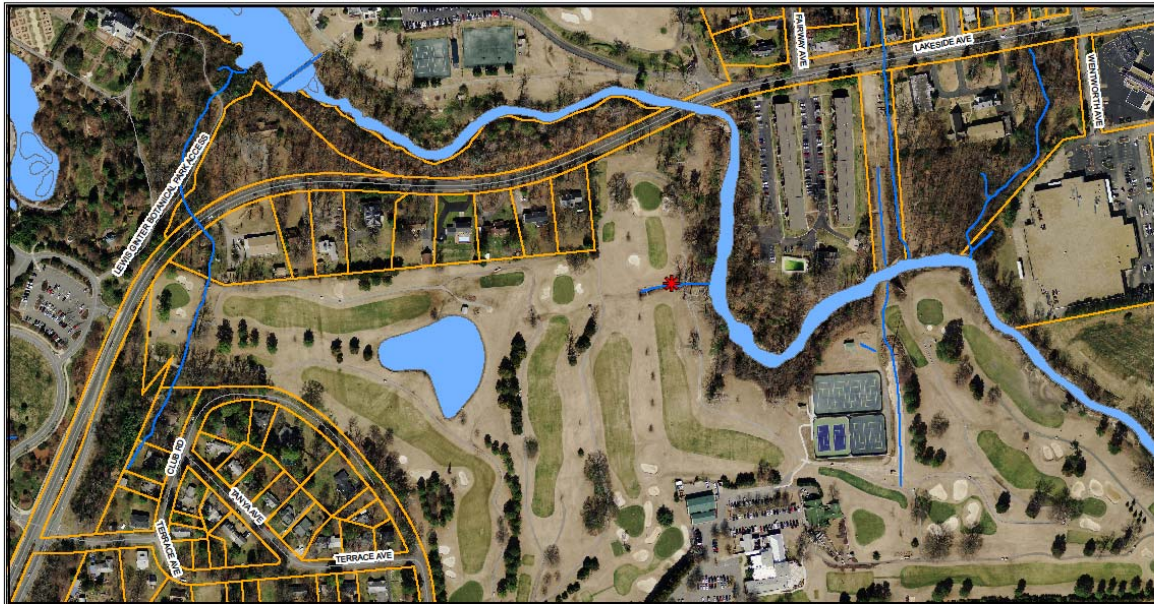
Belmont Golf Course Phase 2  
North Run Streambank Restoration

— Streams (2008)  
— Water Bodies (2008)  
— Tax Parcels + CAMA Data  
— Road Centerlines with Addresses

0 95 190 380 570 760 Feet

## 5. Belmont Golf Course Regenerative Stormwater Conveyance, Phase 3

The Belmont Golf Course Regenerative Stormwater Conveyance, Phase 3 Project will treat 38.8 acres by installing a Regenerative Stormwater Conveyance.



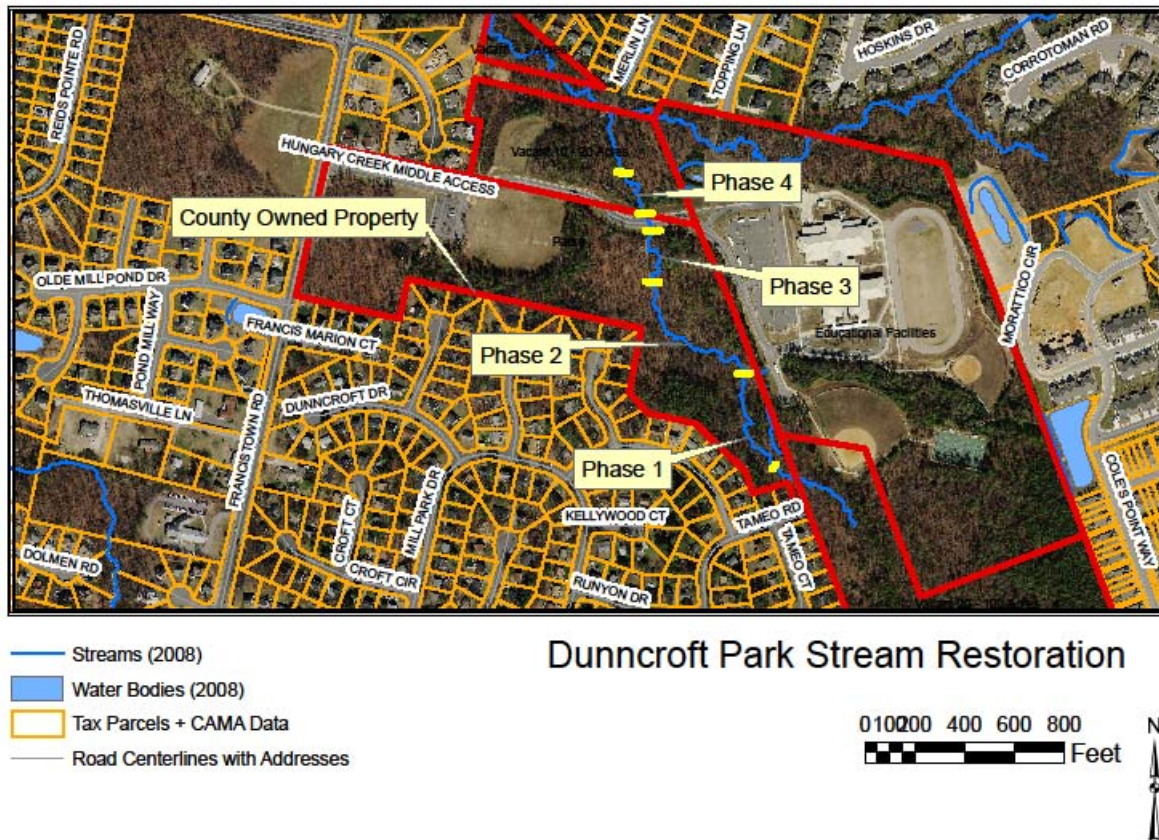
Belmont Golf Course Phase 3  
Regenerative Stormwater Conveyance

— Streams (2008)  
■ Water Bodies (2008)  
■ Tax Parcels + CAMA Data  
— Road Centerlines with Addresses

0 85 170 340 510 680  
Feet

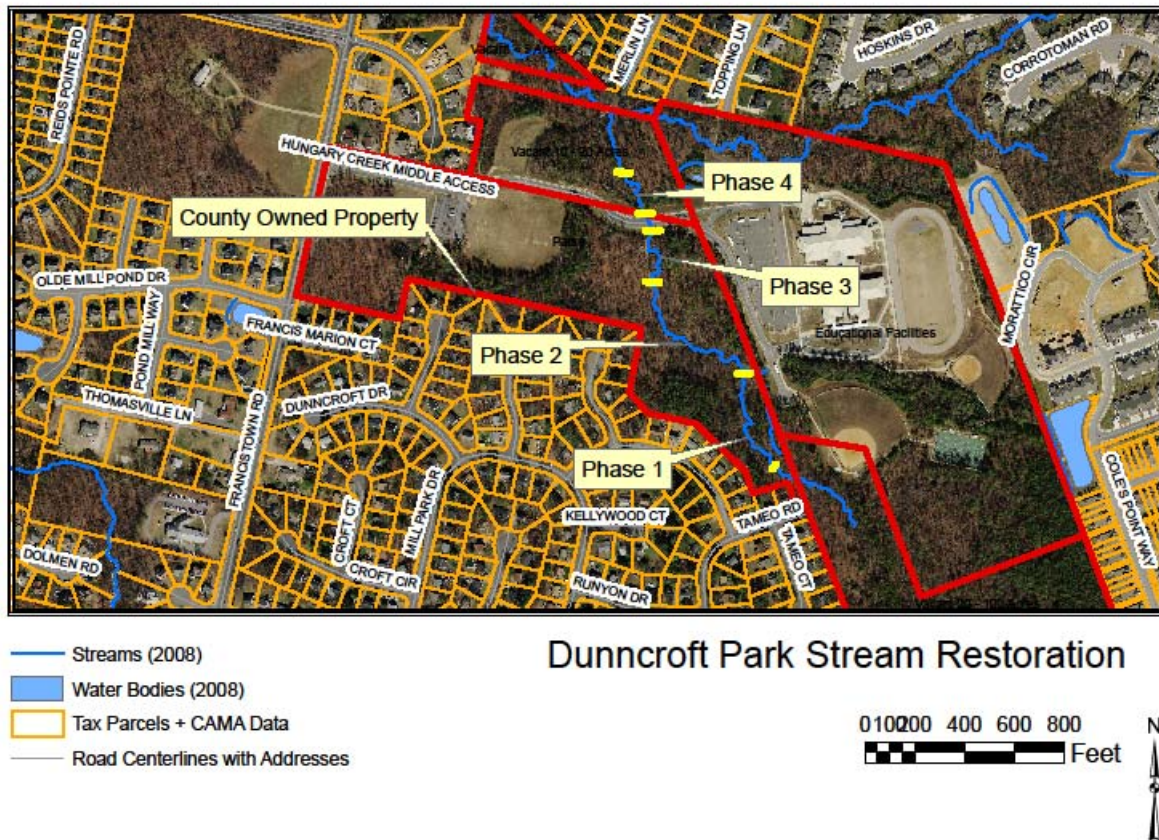
## 6. Dunncroft Park Stream Restoration, Phase 1

Dunncroft Park Stream Restoration, Phase 1 Project will restore approximately 480 feet of an unnamed tributary to Meredith Branch. This project will utilize natural stream design to: 1) recreate a more natural and stable cross section and profile of this stream, 2) stabilize the severely eroding stream banks and stream bottom, and 3) reconnect the stream with its floodplain.



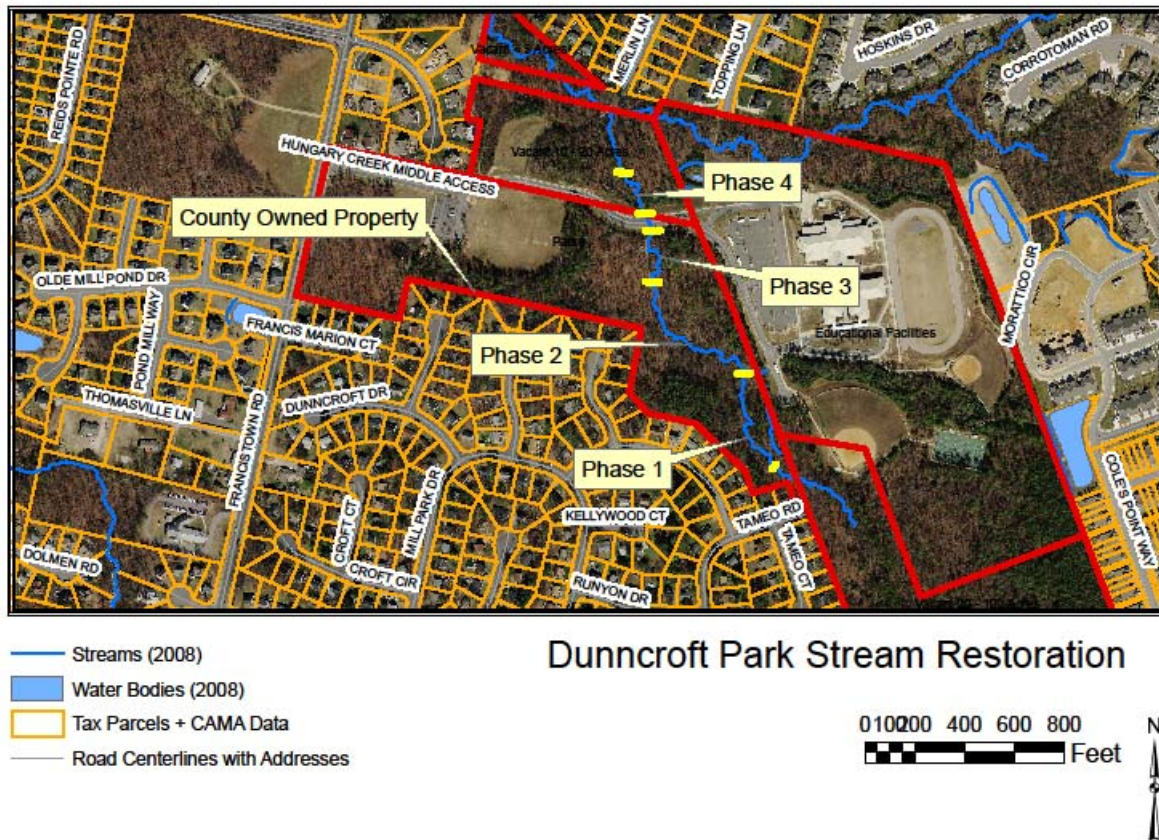
## 7. Dunncroft Park Stream Restoration, Phase 2

Dunncroft Park Stream Restoration, Phase 2 Project will restore approximately 730 feet of an unnamed tributary to Meredith Branch located. This project will utilize natural stream design to: 1) recreate a more natural and stable cross section and profile of this stream, 2) stabilize the severely eroding stream banks and stream bottom, and 3) reconnect the stream with its floodplain.



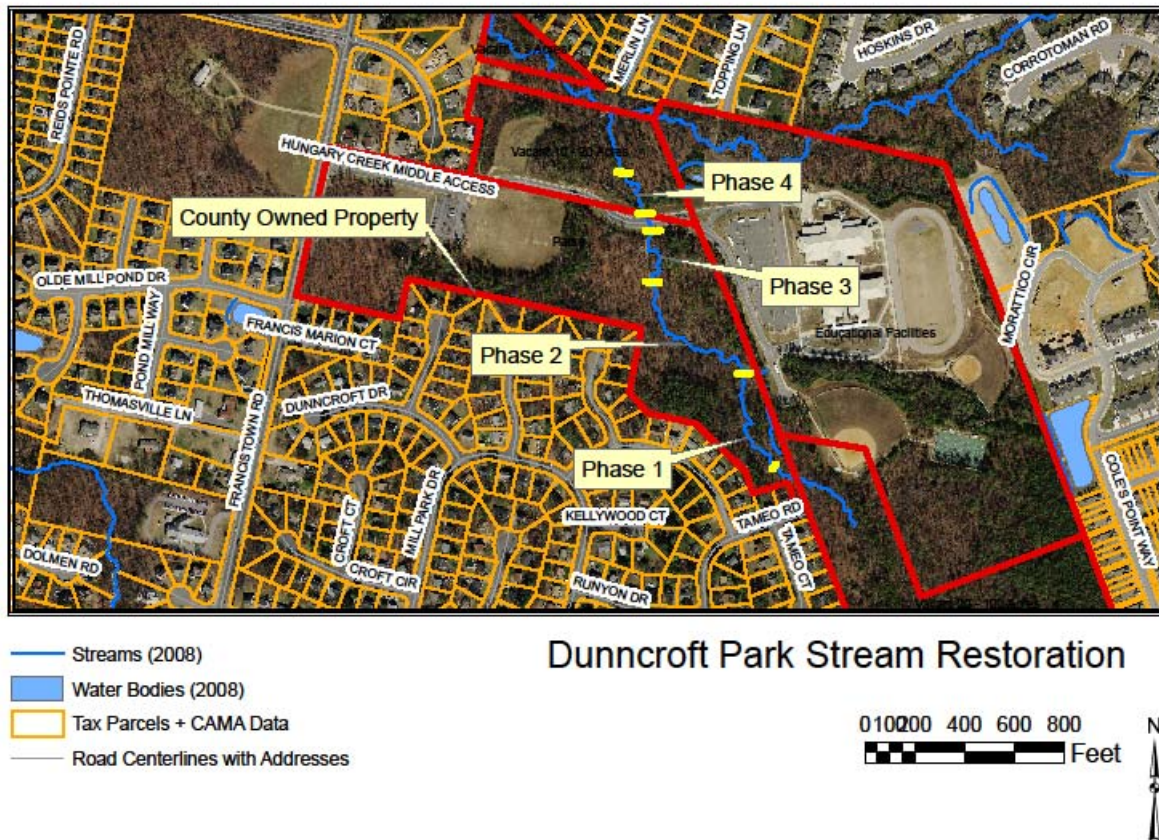
## 8. Dunncroft Park Stream Restoration, Phase 3

Dunncroft Park Stream Restoration, Phase 3 Project will restore approximately 220 feet of an unnamed tributary to Meredith Branch located. This project will utilize natural stream design to: 1) recreate a more natural and stable cross section and profile of this stream, 2) stabilize the severely eroding stream banks and stream bottom, and 3) reconnect the stream with its floodplain.



## 9. Dunncroft Park Stream Restoration, Phase 4

Dunncroft Park Stream Restoration, Phase 4 Project will restore approximately 230 feet of an unnamed tributary to Meredith Branch. This project will utilize natural stream design to: 1) recreate a more natural and stable cross section and profile of this stream, 2) stabilize the severely eroding stream banks and stream bottom, and 3) reconnect the stream with its floodplain.



## 10. Energy Dissipator 1, Outfall EN 147

The Energy Dissipator 1, Outfall EN 147 Project will treat 6.64 acres by converting the concentrated flow from the outfall pipe to sheet flow through a wooded buffer.




### Energy Dissipator

-  Energy Dissipator
-  Drainage Area 6.64 Acres
-  Tax Parcels
-  Road Centerlines with Addresses

### Energy Dissipator EN 147

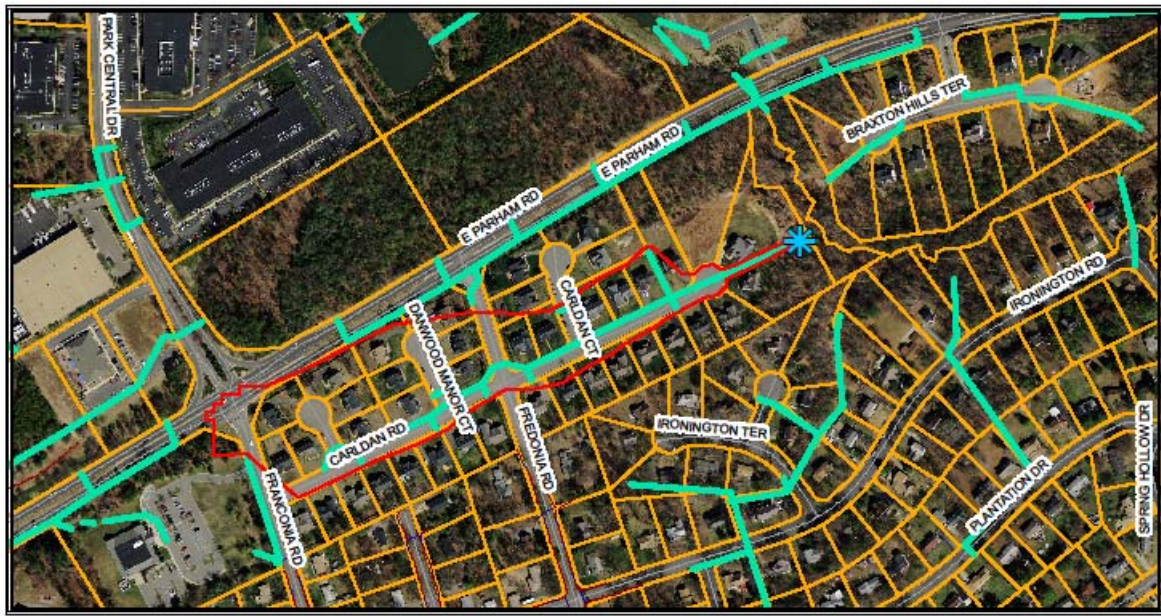
0 75 150 300 450 600

 Feet



## 11. Regenerative Stormwater Conveyance 1, Outfall EN 220

The Regenerative Stormwater Conveyance 1, Outfall EN 220 Project will treat 9.65 acres by installing a Regenerative Stormwater Conveyance.




### Regenerative Stormwater Conveyance

-  RSC
-  Drainage Area 9.66 Acres
-  Tax Parcels
-  Road Centerlines with Addresses

### Regenerative Stormwater Conveyance EN 220

0 75 150 300 450 600

 Feet

