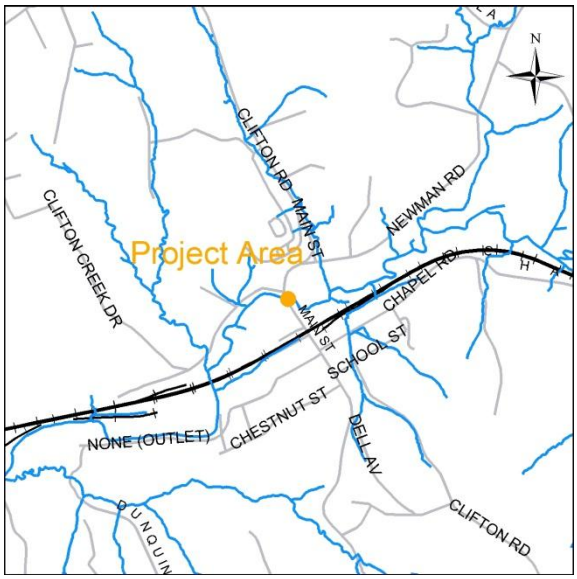
Appendix J: Road Crossing Projects

Bridge Project

Structure Location: Clifton Road #1.
Stream Name: Popes Head Creek.
Project ID PH9400 (LP-7).
Type of Structure: 40' wide bridge.



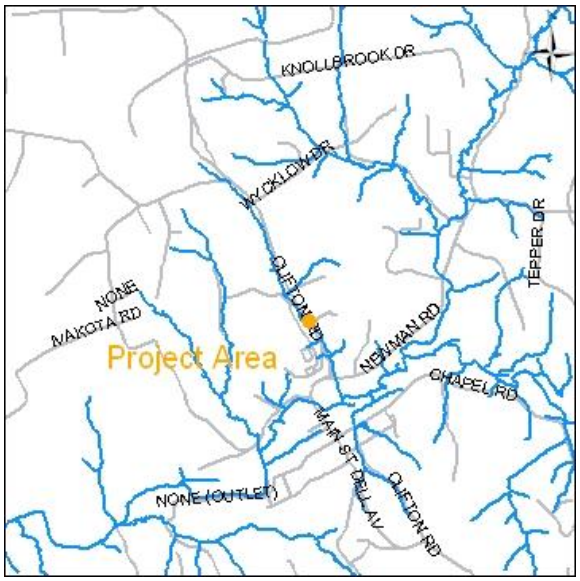
Vicinity Map.

Bridge Overview.

Overtopping Frequency: Existing 1-year.
Future 1-year.
Benefit: Reduce road flooding frequency – emergency access.
Cost: $1,850,000

Culvert Project

Structure Location: Clifton Road #2 and #3.
Stream Name: Popes Head Creek unnamed tributary.
Project ID PH9401.
Type of Structure: 30” diameter pipe and 60” diameter pipe.



Vicinity Map.

Bridge Overview.

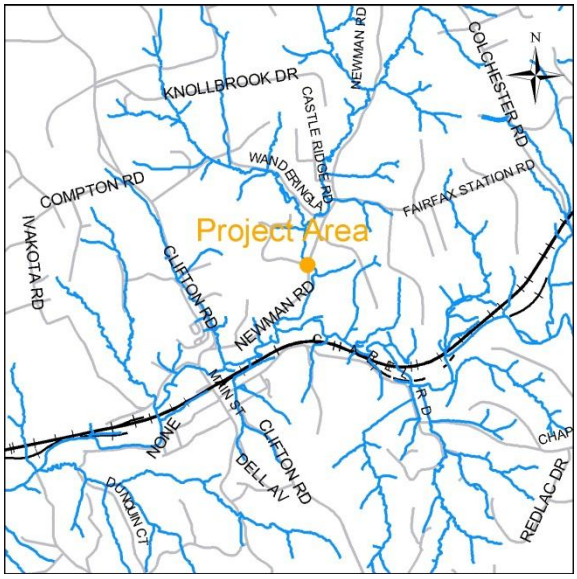
Site #2

Site #3

Proposed Project: #2: Raise road and replace with 54” pipe
#3: Add another 60” pipe
Benefit: Reduce road flooding frequency – emergency access.
Cost: $260,000

Bridge Project

Structure Location: Newman Road.
Stream Name: Castle Creek.
Project ID PH9403 (CC-RD-2)
Type of Structure: 17' wide bridge.



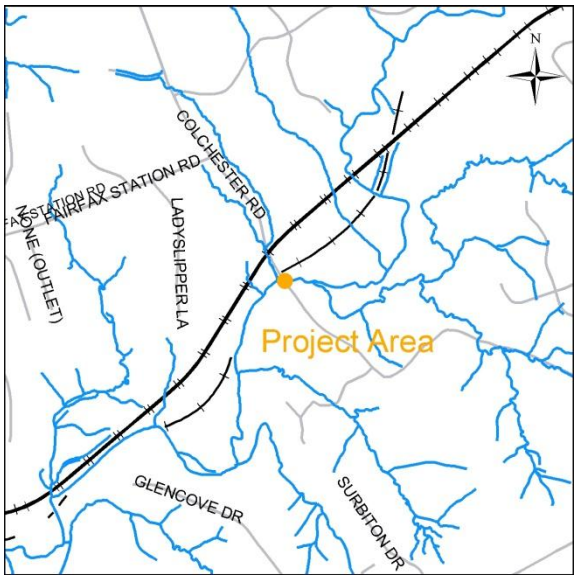
Vicinity Map.

Bridge Overview.

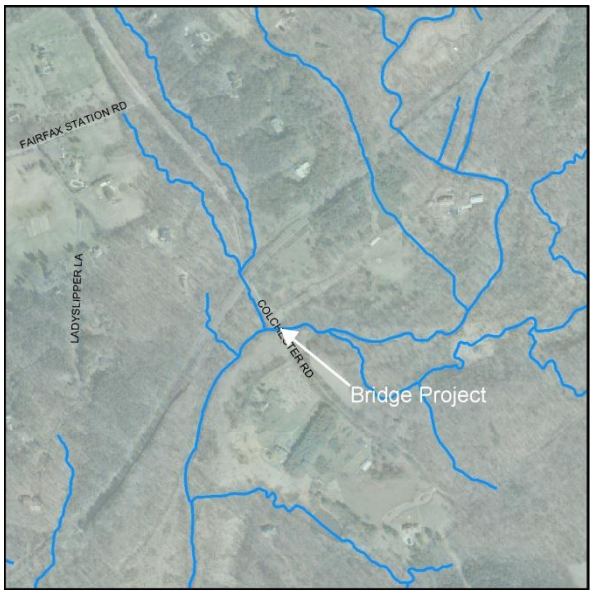
Overtopping Frequency: Existing 1-year
Future 1-year.
Proposed project: Raise road and replace structure
Benefit: Reduce road flooding frequency – emergency access.
Estimated Cost: $390,000

Bridge Project

Structure Location: Colchester Road.
Stream Name: Popes Head Creek.
Project ID PH9404 (PH3-RD-1)
Type of Structure: 15' wide bridge.



Vicinity Map.

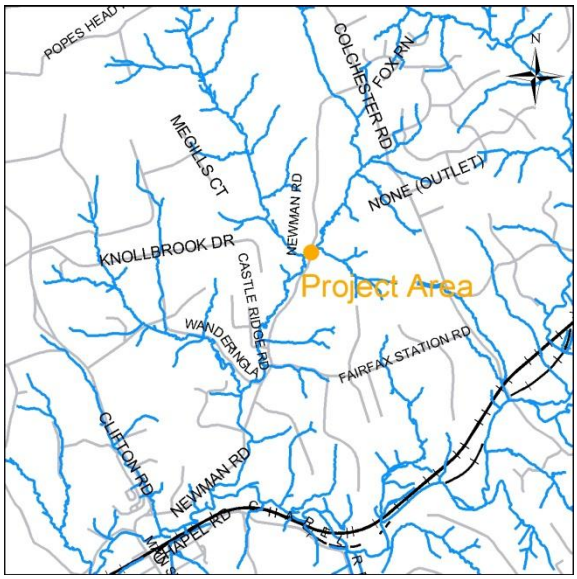


Bridge Overview.

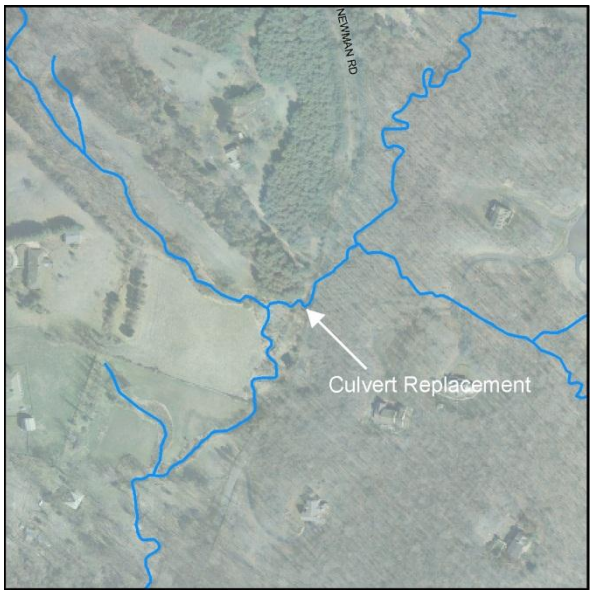
Overtopping Frequency: Existing 1-year
Future 1-year.
Proposed Project: Raise road and replace structure
Benefit: Reduce road flooding frequency – emergency access.
Estimated Cost: $1,240,000

Culvert Replacement

Structure Location: Newman Road.
Stream Name: Castle Creek Tributary 1.
Project ID PH9412 (CC-RD-3)
Type of Structure: Double - 30” corrugated metal pipe.



Vicinity Map.

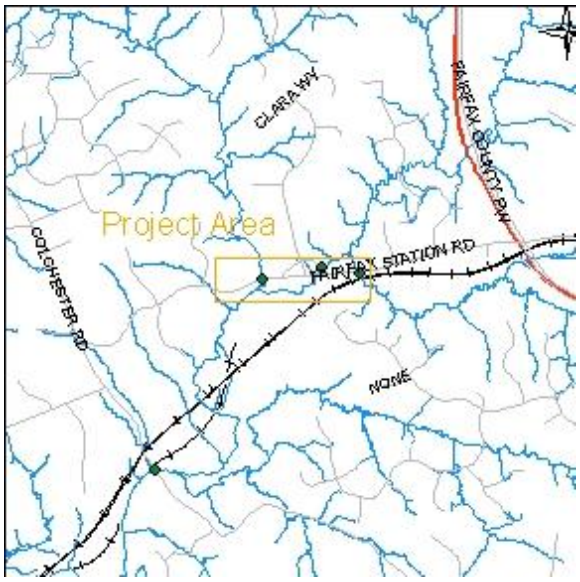


Culvert Overview.

Overtopping Frequency: Existing 5-year
Future 5-year.
Proposed Project: Raise road and replace structure
Benefit: Reduce road flooding frequency – emergency access.
Estimated Cost: $430,000.

Road Project

Structure Location: Fairfax Station Road.
Stream Name: Piney Branch, Popes Head Creek, Trib to Popes Head.
Project ID PH9414
Type of Structure: Piney Branch: Double 7' x 5' corrugated metal pipe arch; Popes Head: 30' wide bridge; Trib: 7.6' x 5.4' corrugated metal pipe arch.



Vicinity Map.

Culvert Overview.

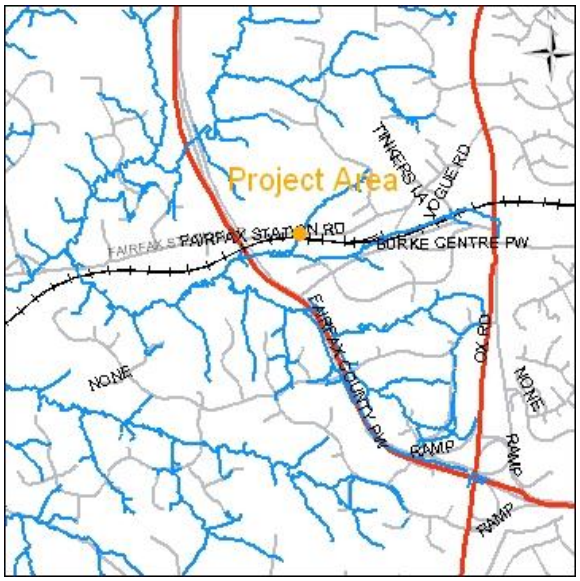
Piney Branch Crossing

Popes Head Crossing

Overtopping Frequency: Existing 1-year
Future 1-year.
Proposed Project: Raise road and replace structures
Benefit: Reduce road flooding frequency – emergency access.
Estimated Cost: $4,190,000.

Culvert Replacement

Structure Location: Fairfax Station Road.
Stream Name: Popes Head unnamed tributary.
Project ID PH9420
Type of Structure: 24” diameter pipe.



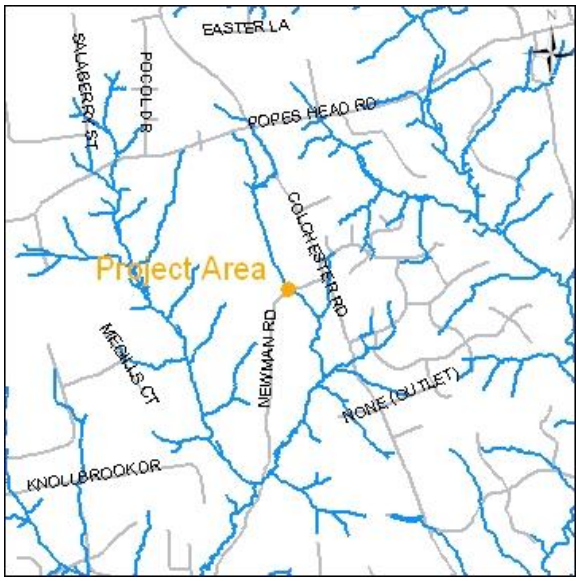
Vicinity Map.

Culvert Overview.

Proposed Project: Replace structure with 3’ x 3’ box culvert and raise the road by 2 feet for a 400 foot length
Benefit: Reduce road flooding frequency – emergency access.
Estimated Cost: $160,000.

Culvert Replacement

Structure Location: Newman Road.
Stream Name: Castle Creek unnamed tributary.
Project ID PH9435
Type of Structure: (1) 18” and (1) 24” diameter pipe



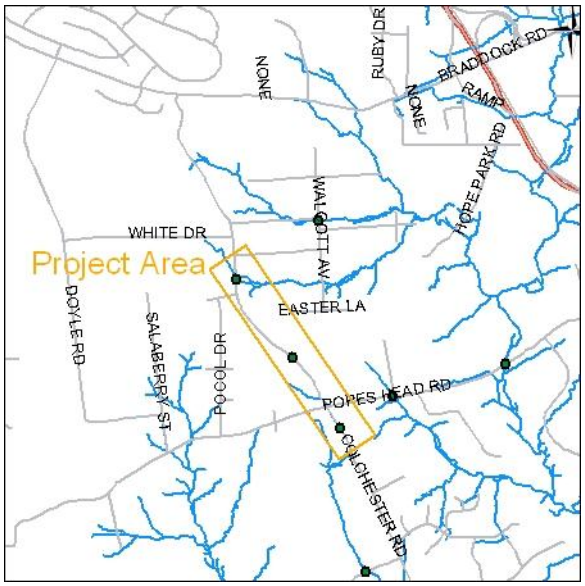
Vicinity Map.

Culvert Overview.

Proposed Project: Replace with (2) 4’x4’ box culverts and raise road 2 feet
Benefit: Reduce road flooding frequency – emergency access.
Estimated Cost: $130,000.

Drainage Improvements

Structure Location: Colchester Road.
Stream Name: Castle Creek Tributary No. 1 & Piney Branch Trib.
Project ID PH9450 (CC-RD-4, CC-RD-5, PB-RD-3)



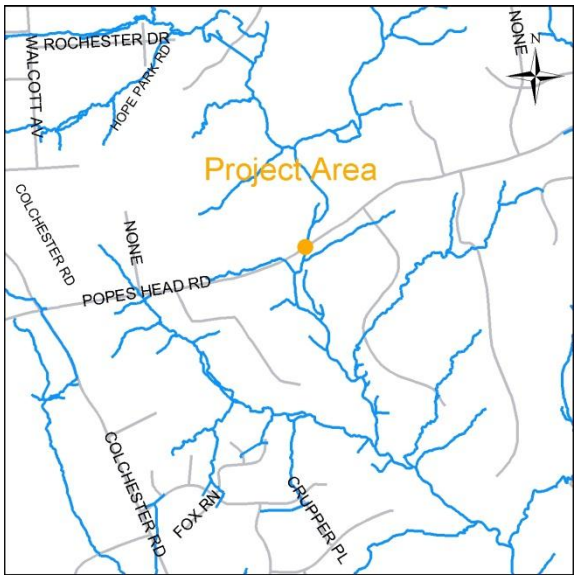
Vicinity Map

Culvert Overview

Proposed Project: Drainage improvments along Colchester Road. Increase swale depths, raise the road elevation, and install culverts to increase relief and decrease road flooding.
Benefit: Reduce road flooding identified by community
Estimated Cost: $1,020,000

Bridge Project

Structure Location: Popes Head Road.
Stream Name: Piney Branch.
Project ID PH9452 (PB-RD-2)
Type of Structure: 50' wide bridge.



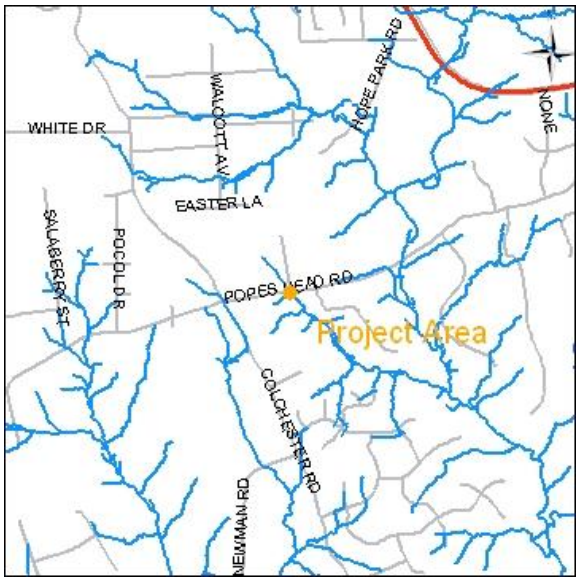
Vicinity Map.

Bridge Overview.

Overtopping Frequency: Existing 5-year
Future 5-year.
Proposed Project: Clear any sediment and debris buildup from bridge opening
Benefit: Reduce road flooding frequency – emergency access.
Estimated Cost: $10,000.

Culvert Replacement

Structure Location: Popes Head Road.
Stream Name: Piney Branch unnamed tributary.
Project ID PH9453
Type of Structure: (1) 12” pipe and (1) 18” pipe.



Vicinity Map.

Culvert Overview.

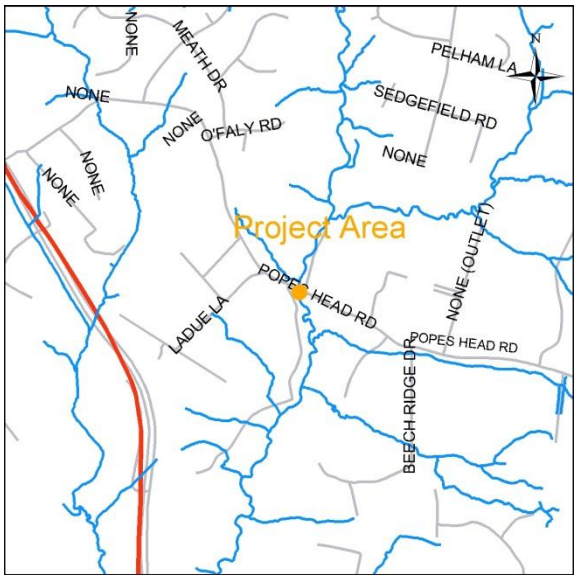
Existing Culvert

Existing Culvert

Proposed Project: Replace with (1) 48” pipe and raise road by 3.5 feet for 300 feet length
Benefit: Reduce road flooding frequency – emergency access.
Estimated Cost: $180,000.

Bridge Project

Structure Location: Popes Head Road.
Stream Name: Popes Head Creek.
Project ID PH9461 (PH2-RD-3)
Type of Structure: 25' wide bridge.



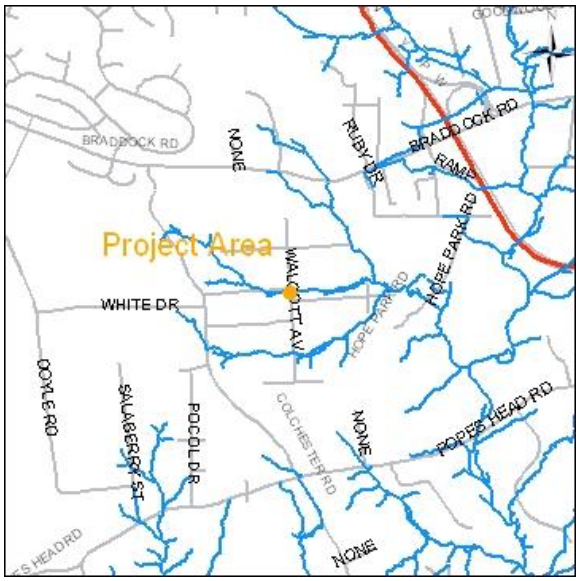
Vicinity Map.

Bridge Overview.

Overtopping Frequency: Existing 1-year
Future 1-year.
Proposed Project: Raise road and replace structure
Benefit: Reduce road flooding frequency – emergency access.
Estimated Cost: $1,050,000

Culvert Replacement

Structure Location: Walcott Avenue.
Stream Name: Piney Branch unnamed tributary.
Project ID PH9462
Type of Structure: 21” diameter corrugated metal pipe.



Vicinity Map.

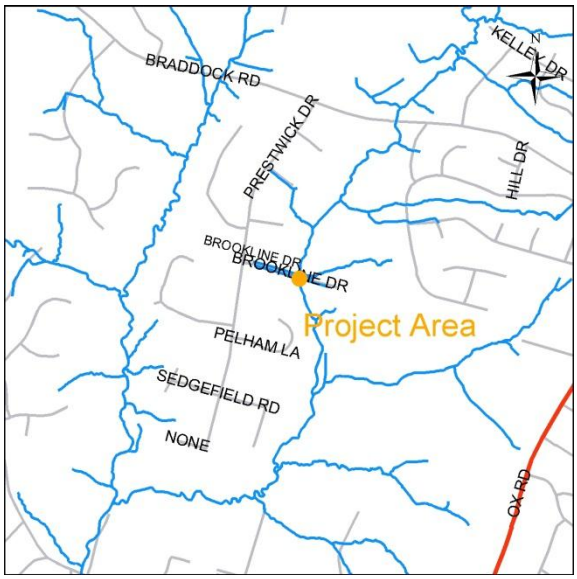
Culvert Overview.

Existing culvert

Proposed Project: Replace with a 5’x4’ box culvert and raise road 2 feet.
Benefit: Reduce road flooding frequency – emergency access.
Estimated Cost: $100,000.

Culvert Replacement

Structure Location: Brookline Drive.
Stream Name: East Fork.
Project ID PH9470 (EF-RD-2)
Type of Structure: 18' x 8' corrugated metal pipe arch.



Vicinity Map.

Culvert Overview.

Overtopping Frequency: Existing 10-year
Future 5-year.
Proposed Project: Replace structure
Benefit: Reduce road flooding frequency – emergency access.
Estimated Cost: $300,000.