

NORTH CENTRAL
RAILWAY (NCR)
TRAIL EXTENSION
FEASIBILITY STUDY





Project Background

- Torrey C. Brown Rail Trail, also known as the North Central Railroad (NCR) Trail
- Currently extends 19.7 miles from Ashland Road to PA / MD state line
- Continues North of the PA / MD state line as the York County Heritage Rail Trail extending 21 miles north to York, PA
- Existing trail is 10' wide with a stone dust surface
- Managed and maintained by the Maryland Department of Natural Resources

Project Goals

- Extend trail approximately 7 miles south from Ashland Road to Lake Roland Park.
- Create a trail that is accessible for all users.
- Improve active transportation connectivity between residential, commercial, and recreational areas.
- Minimize impacts to natural and cultural resources.
- Encourage active transportation to members of the public.

Types of Bicycle Facilities



North Central Rail (NCR) Trail

- Shared-Use Path



- Bike Lanes*



Delaware Avenue (Newark, DE)

- Two-Way Cycle Track*



Central Avenue (Baltimore, MD)

- Separated Bike Lanes*

*Bike lane and cycle track facilities would be for bicycles *only*, with pedestrians using adjacent sidewalks.

Proposed NCR Trail Extension

NCR Trail Extension Feasibility Study

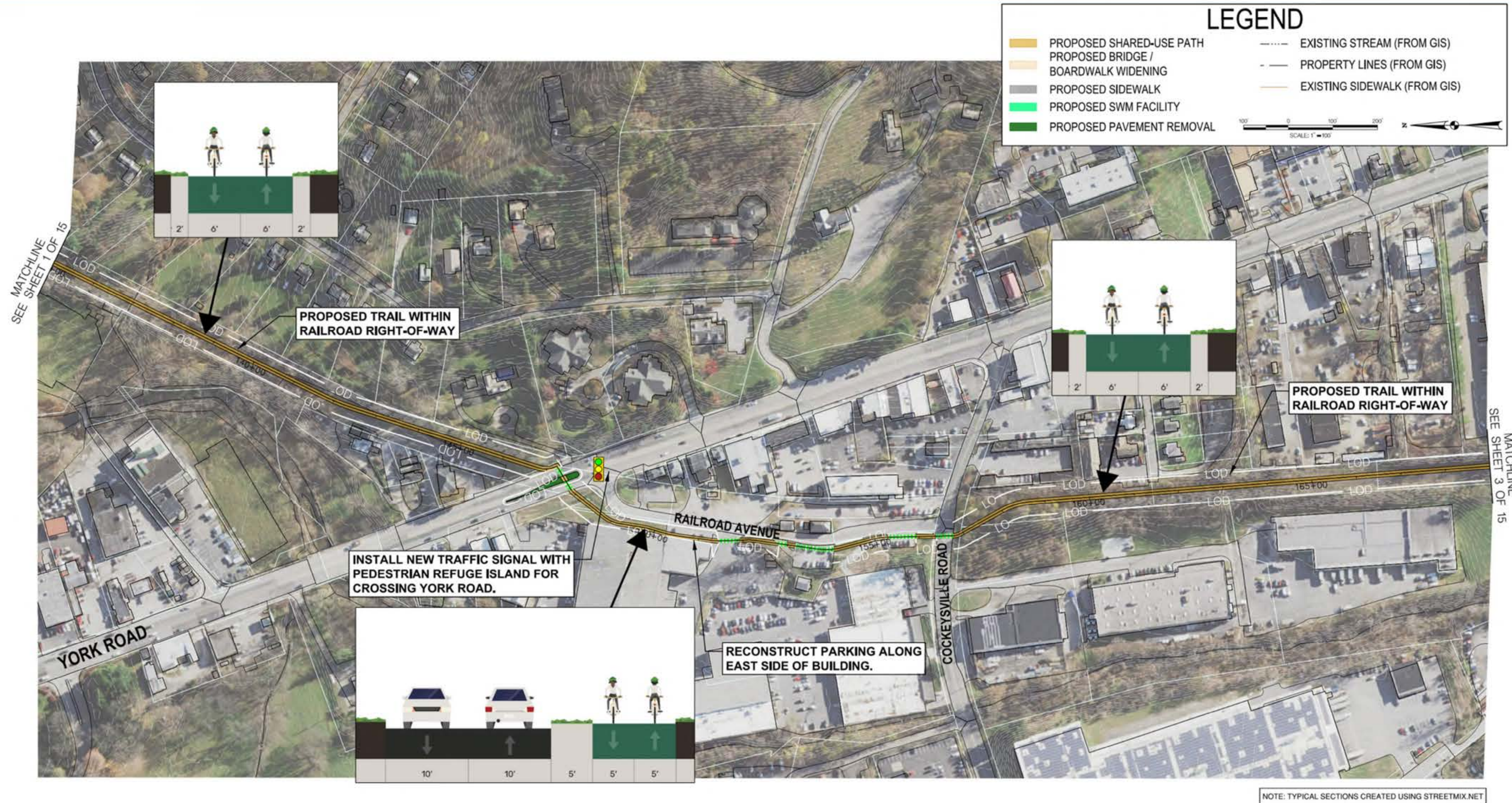


Key Map

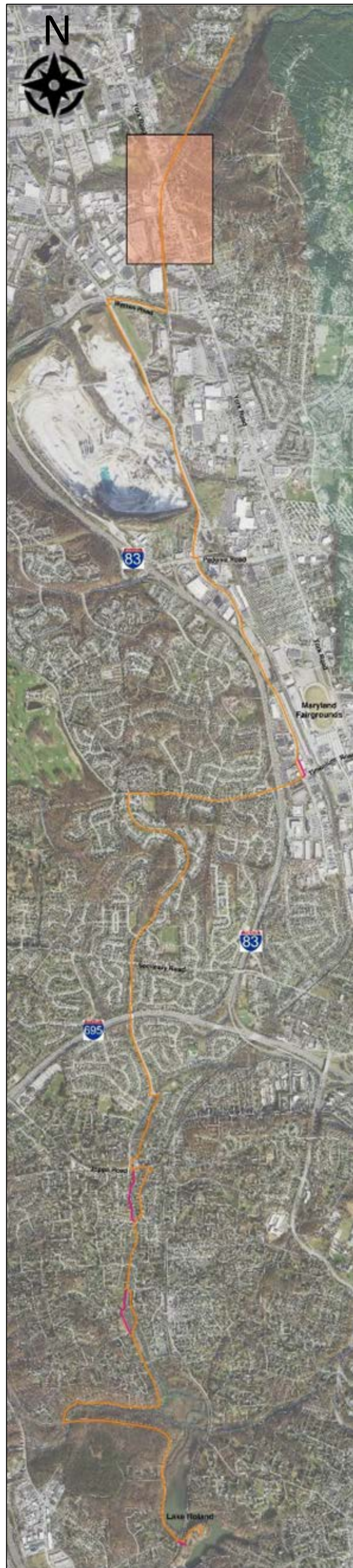


Proposed NCR Trail Extension

NCR Trail Extension Feasibility Study



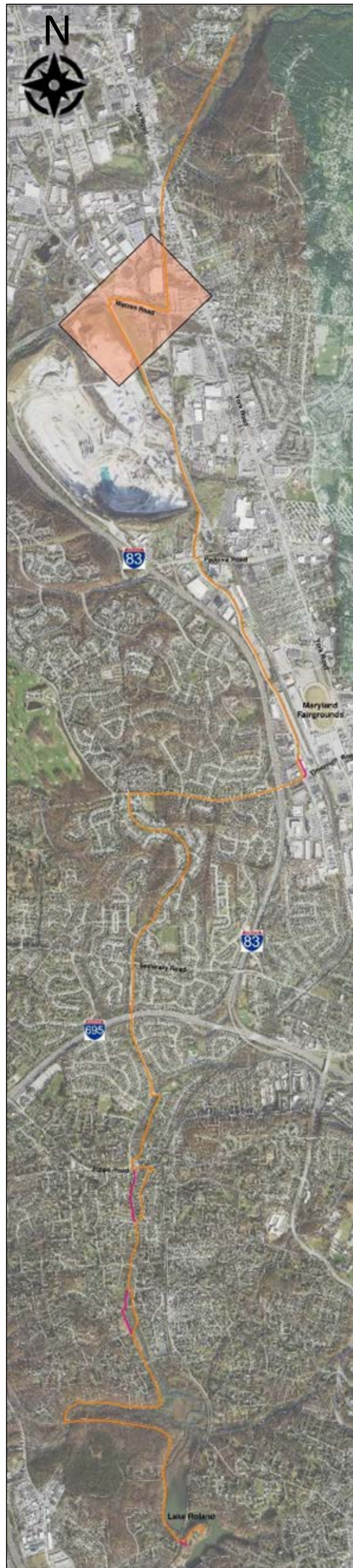
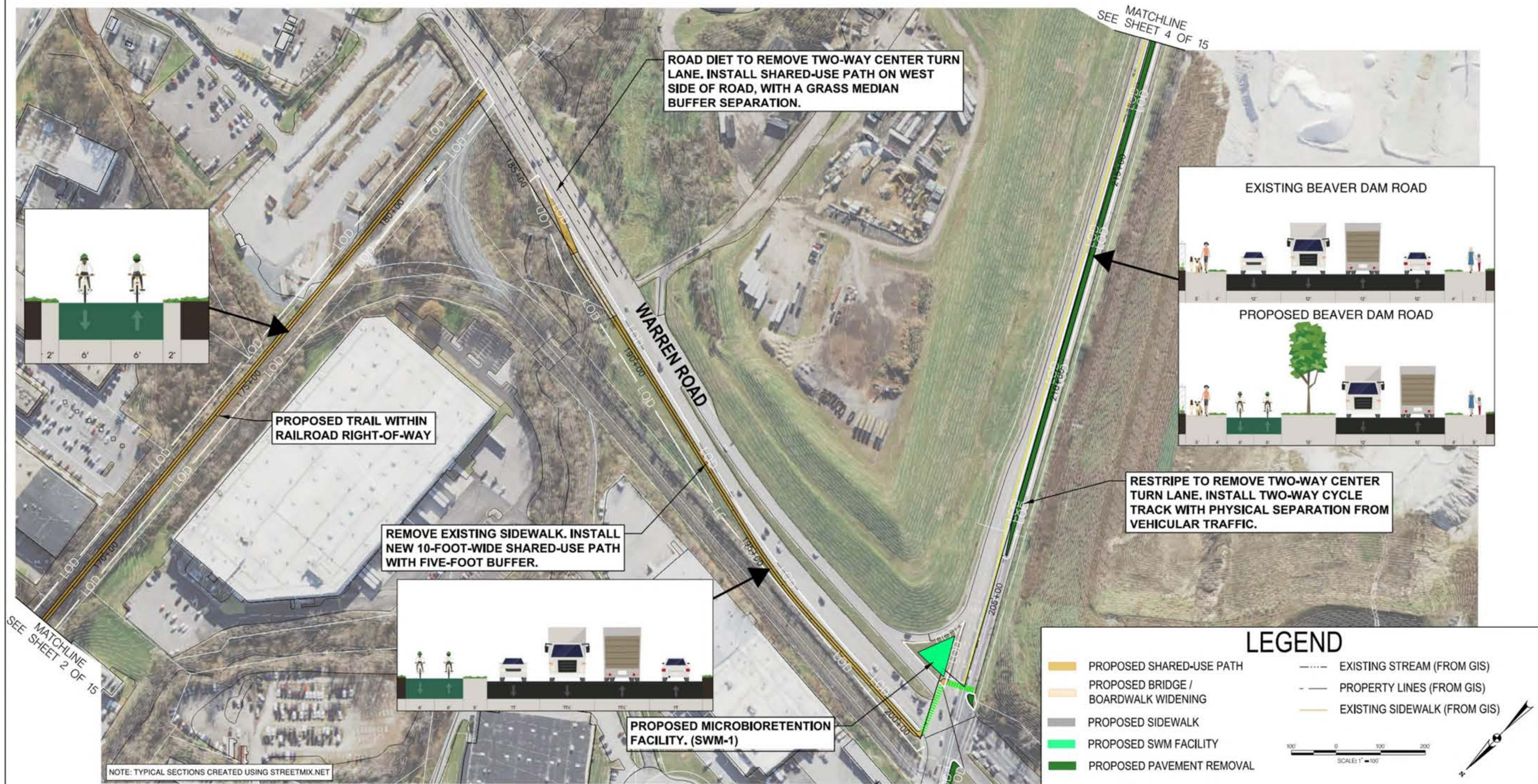
Key Map



Proposed NCR Trail Extension

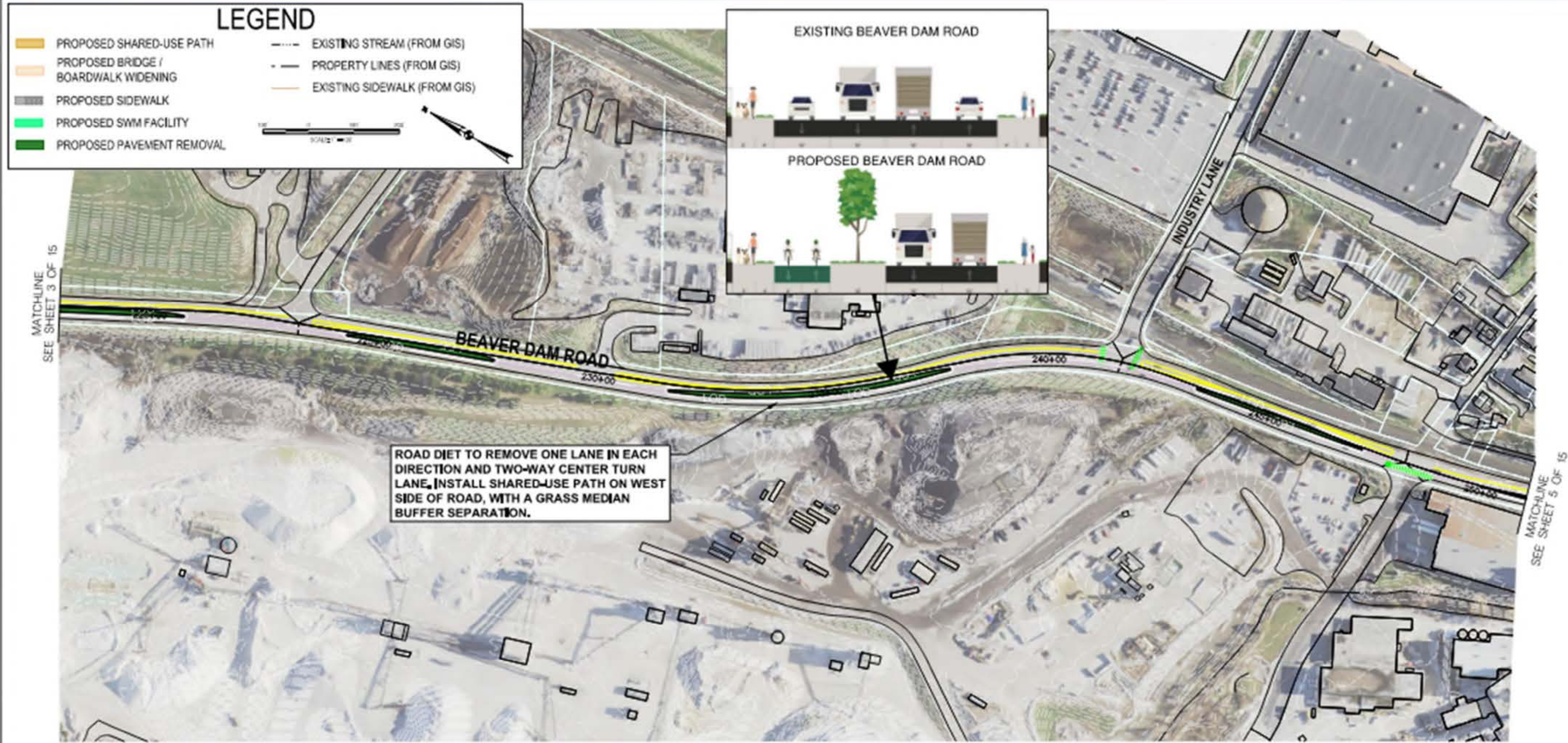
NCR Trail Extension Feasibility Study

Key Map

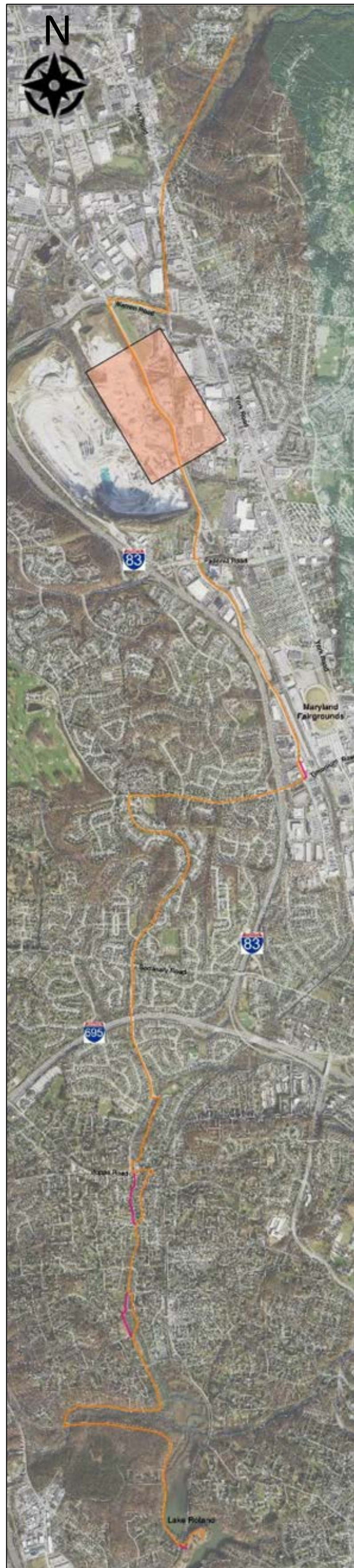


Proposed NCR Trail Extension

NCR Trail Extension Feasibility Study

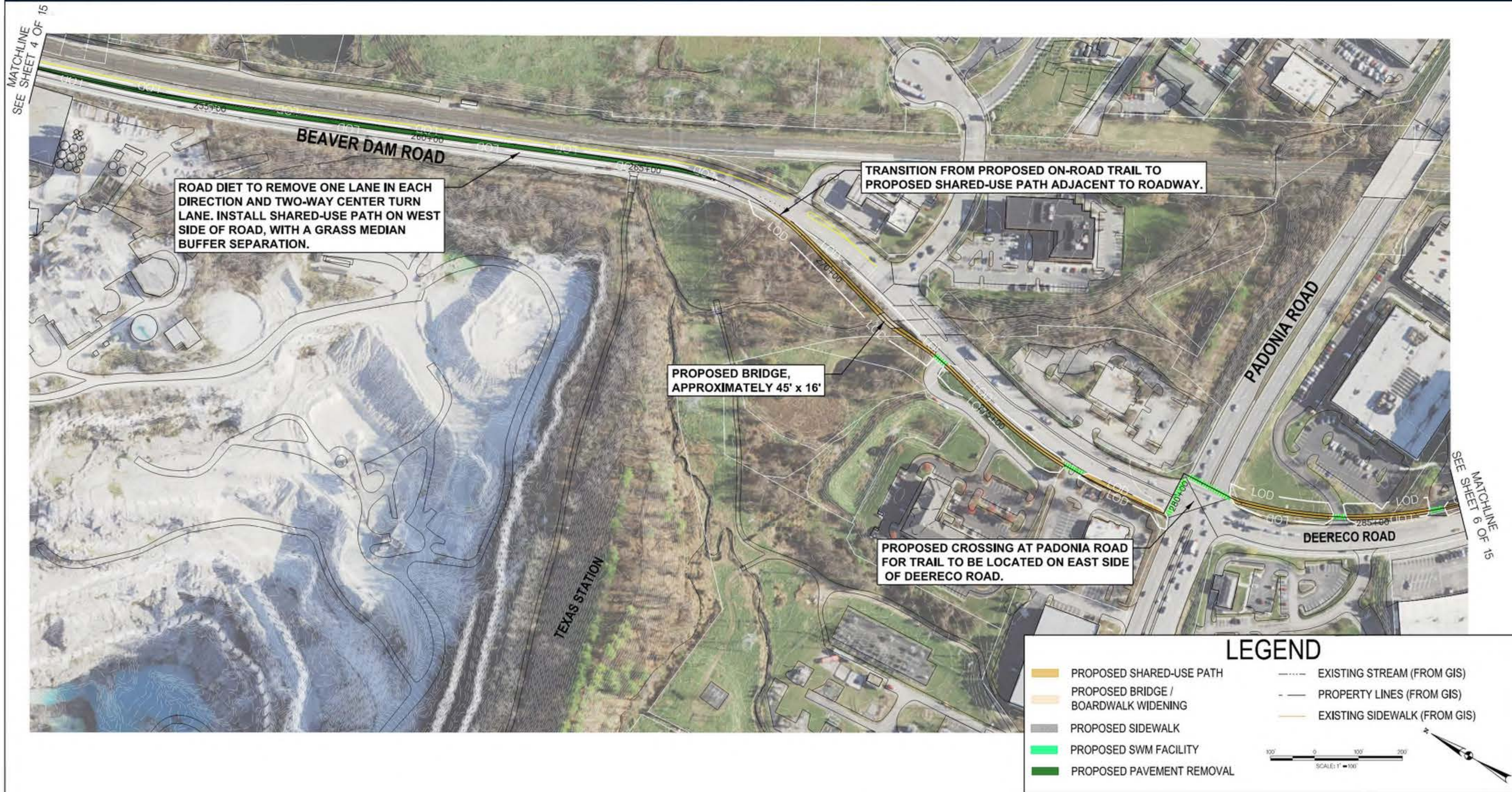


Key Map

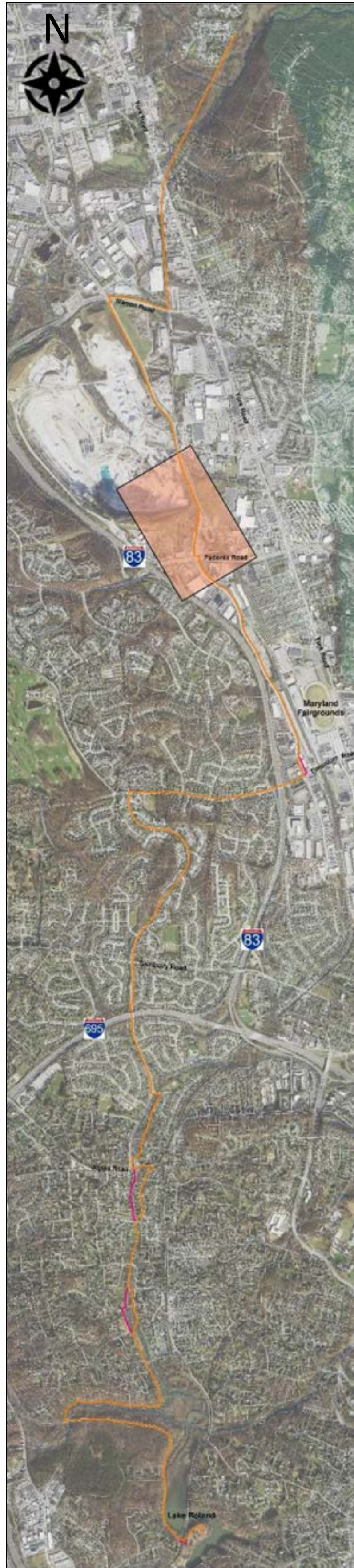


Proposed NCR Trail Extension

NCR Trail Extension Feasibility Study



Key Map



Proposed NCR Trail Extension (Greenspring Drive Option 1)

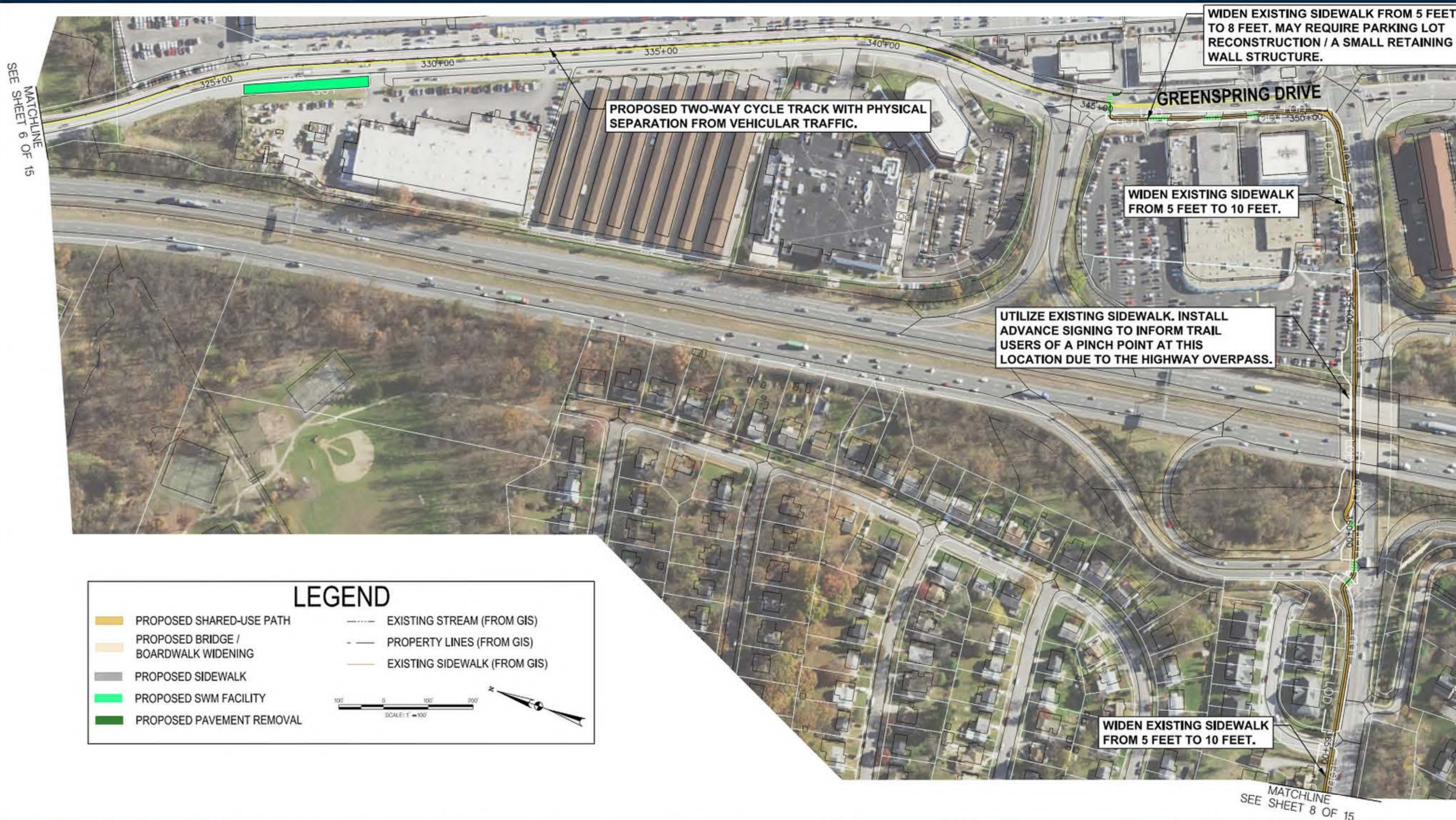
NCR Trail Extension Feasibility Study

Key Map

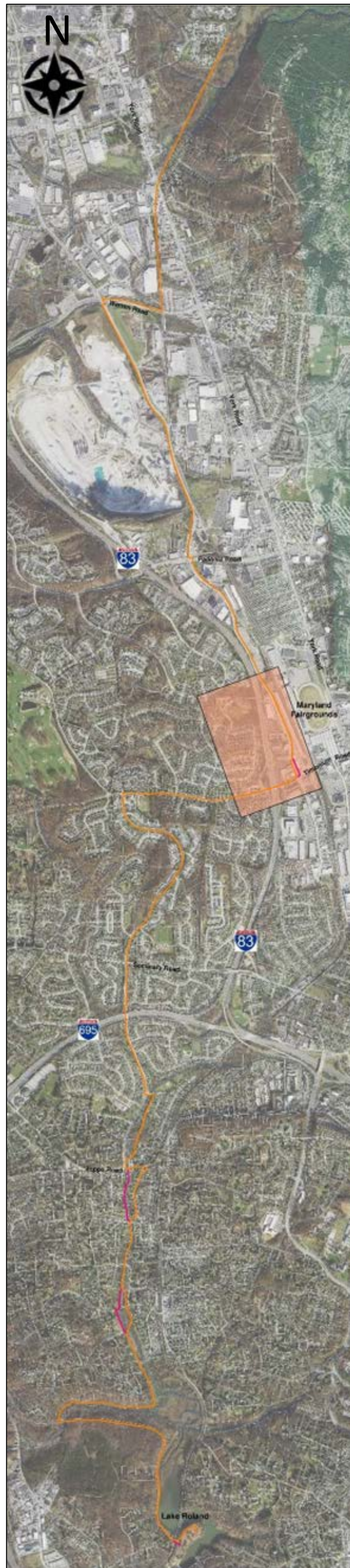


Proposed NCR Trail Extension (Greenspring Drive Option 1)

NCR Trail Extension Feasibility Study

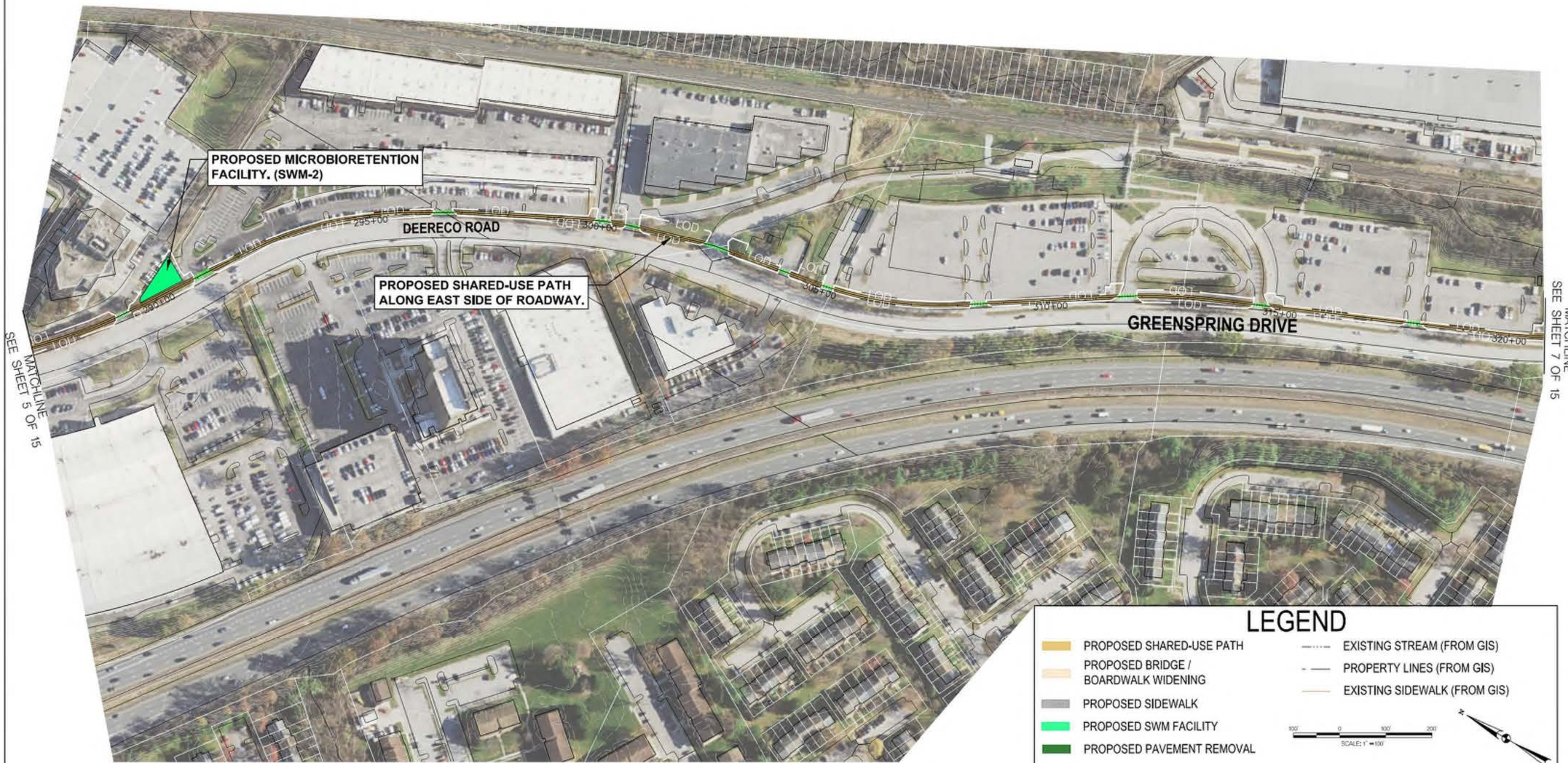


Key Map



Proposed NCR Trail Extension (Greenspring Drive Option 2)

NCR Trail Extension Feasibility Study



Key Map



Proposed NCR Trail Extension (Greenspring Drive Option 2)

NCR Trail Extension Feasibility Study



Key Map

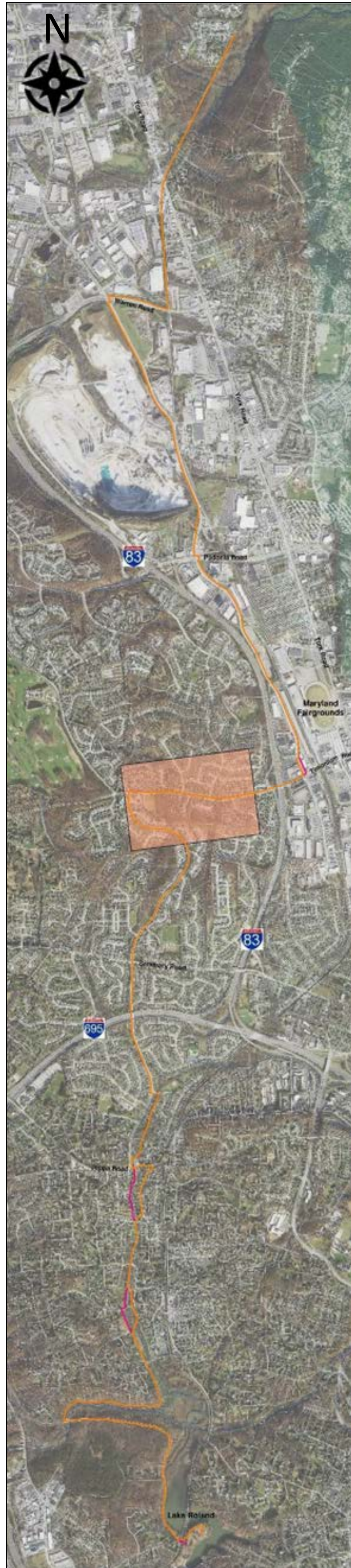


Proposed NCR Trail Extension

NCR Trail Extension Feasibility Study



Key Map



Proposed NCR Trail Extension

NCR Trail Extension Feasibility Study



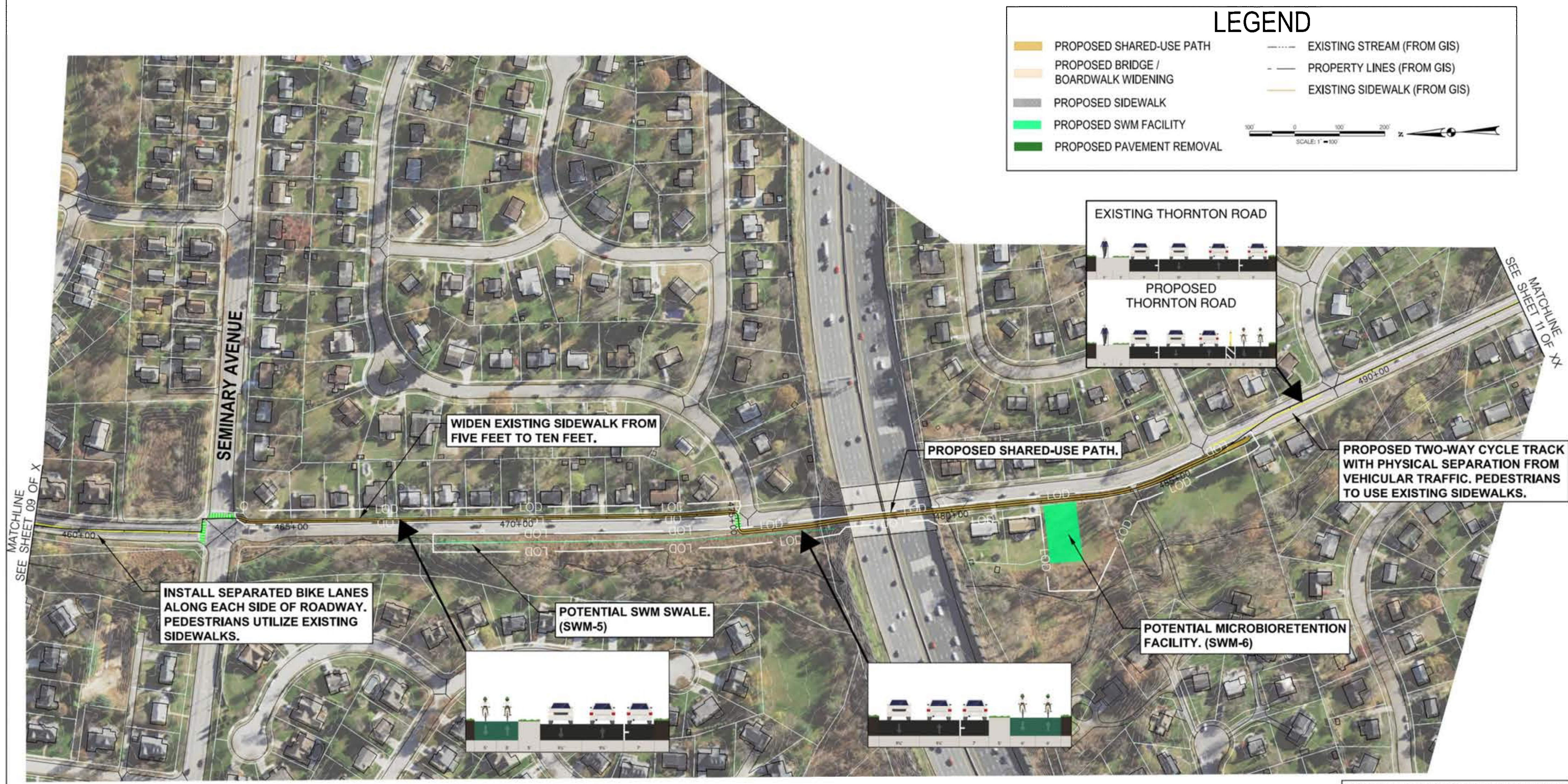
NOTE: TYPICAL SECTIONS CREATED USING STREETMIX.NET

Key Map



Proposed NCR Trail Extension

NCR Trail Extension Feasibility Study



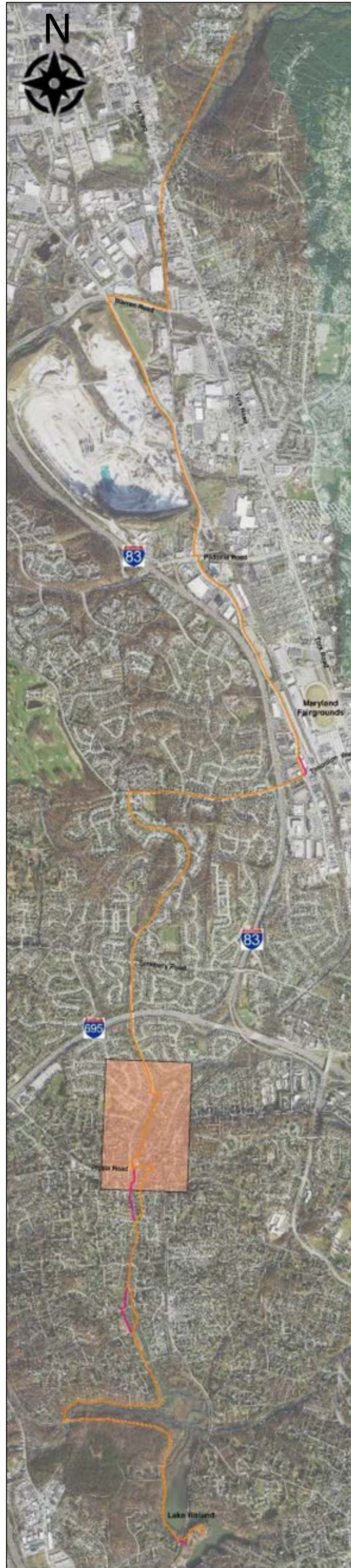
Key Map



Proposed NCR Trail Extension (Roland Run Option 1)

NCR Trail Extension Feasibility Study

Key Map



Proposed NCR Trail Extension (Roland Run Option 1)

NCR Trail Extension Feasibility Study






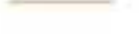


Key Map



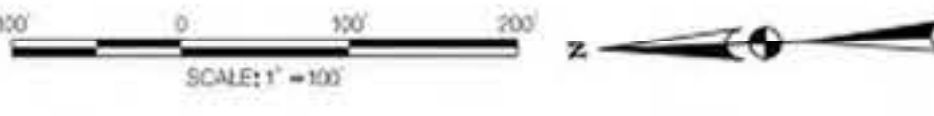
Proposed NCR Trail Extension (Roland Run Option 1)

NCR Trail Extension Feasibility Study

LEGEND

 PROPOSED SHARED-USE PATH	 EXISTING STREAM (FROM GIS)
 PROPOSED BRIDGE / BOARDWALK WIDENING	 PROPERTY LINES (FROM GIS)
 PROPOSED SIDEWALK	 EXISTING SIDEWALK (FROM GIS)
 PROPOSED SWM FACILITY	
 PROPOSED PAVEMENT REMOVAL	

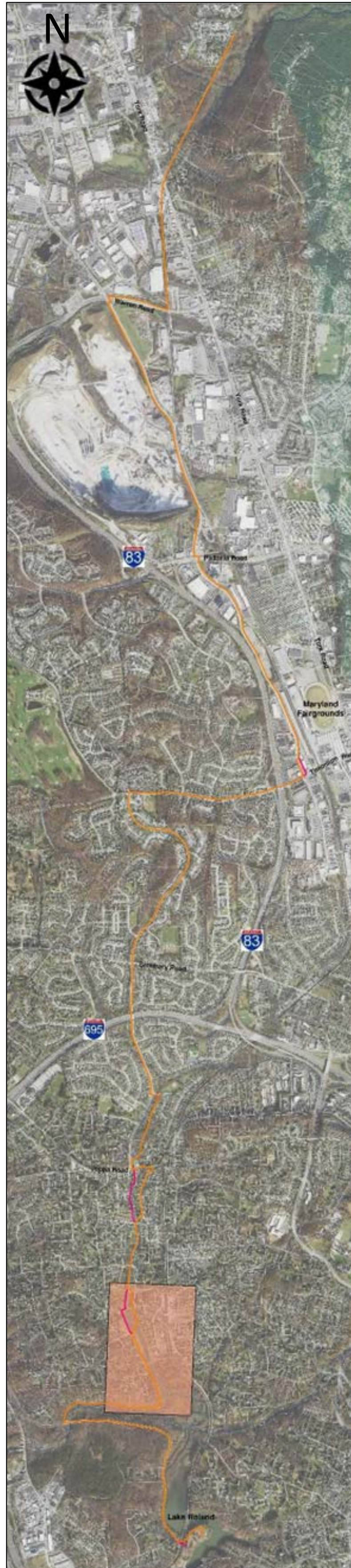
SCALE: 1" = 100'



*NOTE: PROPOSED BOARDWALK BRIDGES ARE BASED ON GIS CONTOURS. MORE DETAILED ANALYSIS IN FUTURE DESIGN MAY REDUCE BRIDGE SIZE OR ELIMINATE THE NEED FOR THE BRIDGE ALTOGETHER.



Key Map

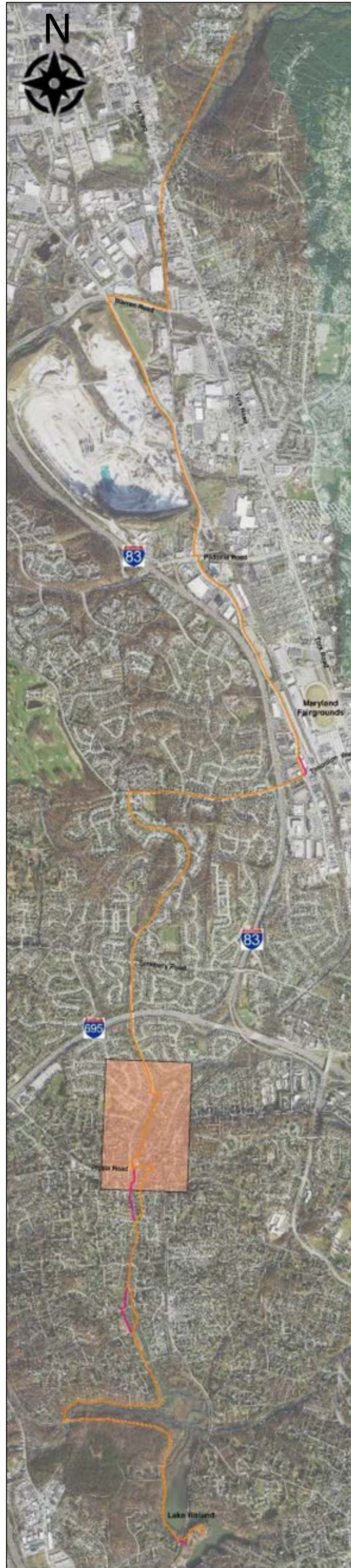


Proposed NCR Trail Extension (Roland Run Option 2)

NCR Trail Extension Feasibility Study



Key Map



Proposed NCR Trail Extension (Roland Run Option 2)

NCR Trail Extension Feasibility Study











Key Map




Proposed NCR Trail Extension (Roland Run Option 2)

NCR Trail Extension Feasibility Study

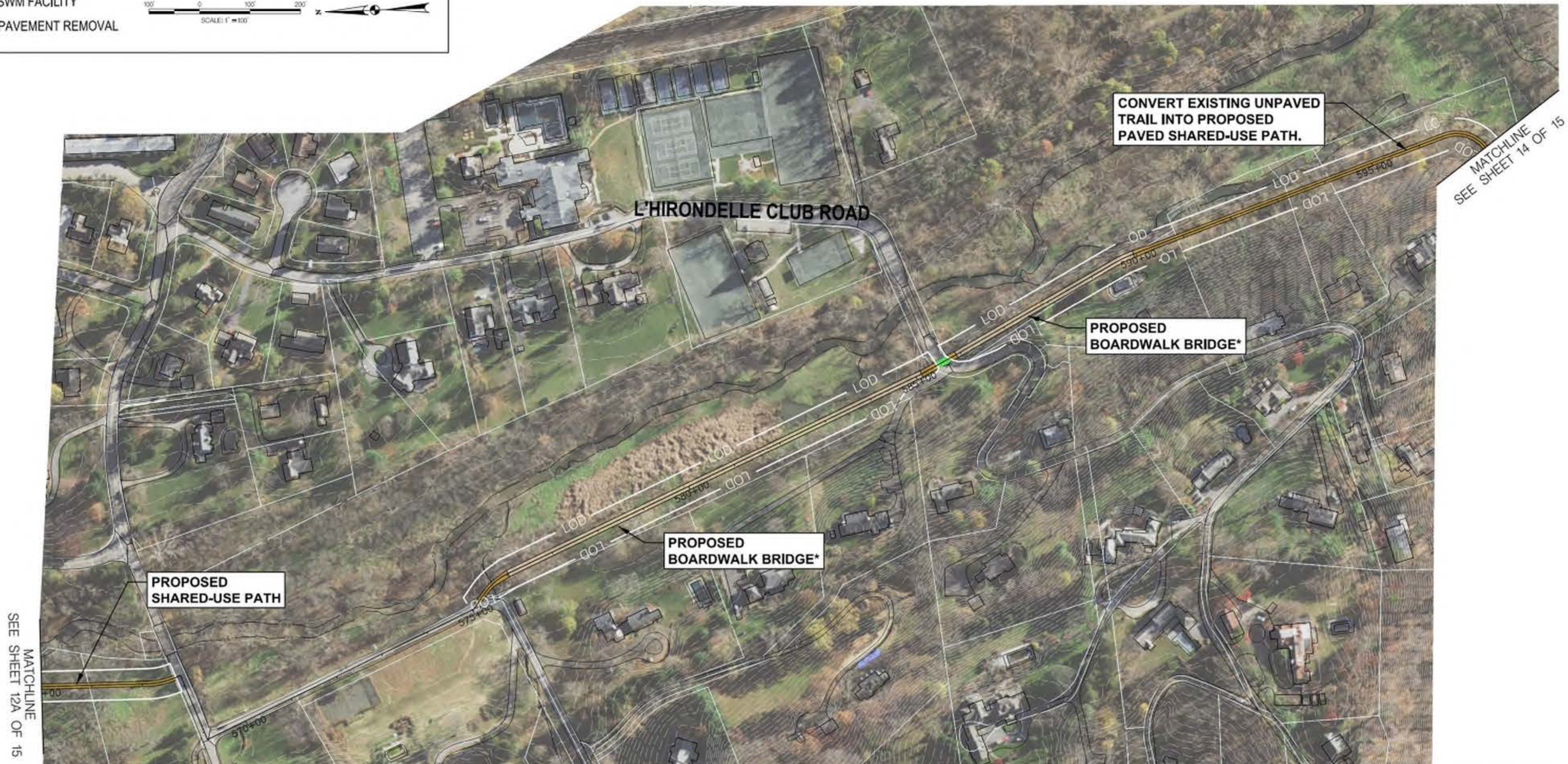
LEGEND

	PROPOSED SHARED-USE PATH		EXISTING STREAM (FROM GIS)
	PROPOSED BRIDGE / BOARDWALK WIDENING		PROPERTY LINES (FROM GIS)
	PROPOSED SIDEWALK		EXISTING SIDEWALK (FROM GIS)
	PROPOSED SWM FACILITY		
	PROPOSED PAVEMENT REMOVAL		

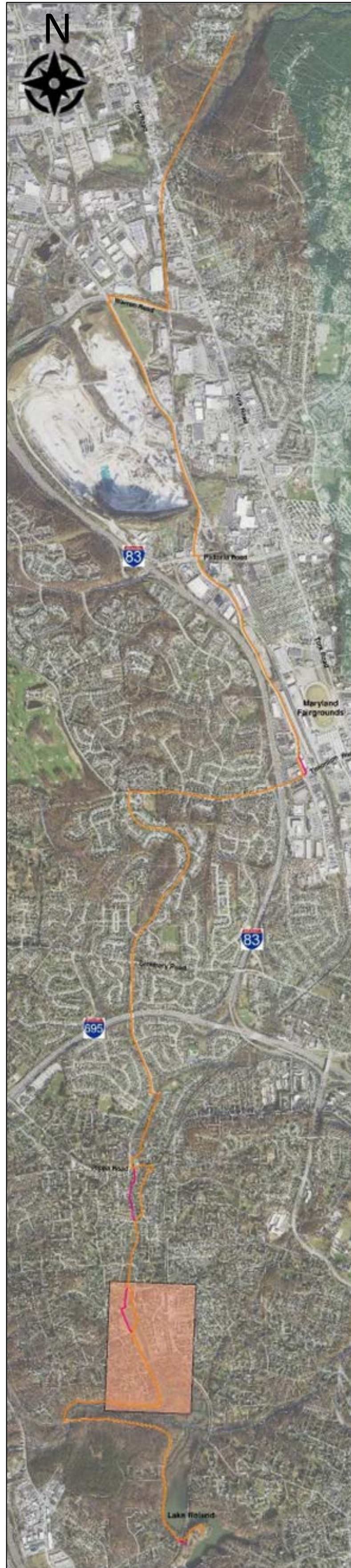
SCALE: 1" = 100'



*NOTE: PROPOSED BOARDWALK BRIDGES ARE BASED ON GIS CONTOURS. MORE DETAILED ANALYSIS IN FUTURE DESIGN MAY REDUCE BRIDGE SIZE OR ELIMINATE THE NEED FOR THE BRIDGE ALTOGETHER.



Key Map



Proposed NCR Trail Extension

NCR Trail Extension Feasibility Study



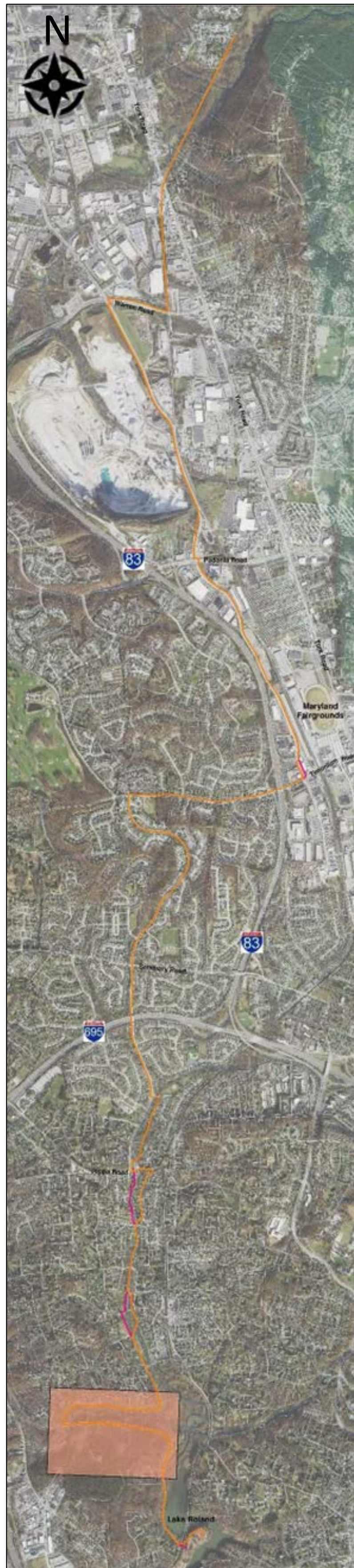
LEGEND

PROPOSED SHARED-USE PATH	EXISTING STREAM (FROM GIS)
PROPOSED BRIDGE / BOARDWALK WIDENING	PROPERTY LINES (FROM GIS)
PROPOSED SIDEWALK	EXISTING SIDEWALK (FROM GIS)
PROPOSED SWM FACILITY	
PROPOSED PAVEMENT REMOVAL	

SCALE: 1" = 100'

NOTE: TYPICAL SECTIONS CREATED USING STREETMIX.NET









Key Map



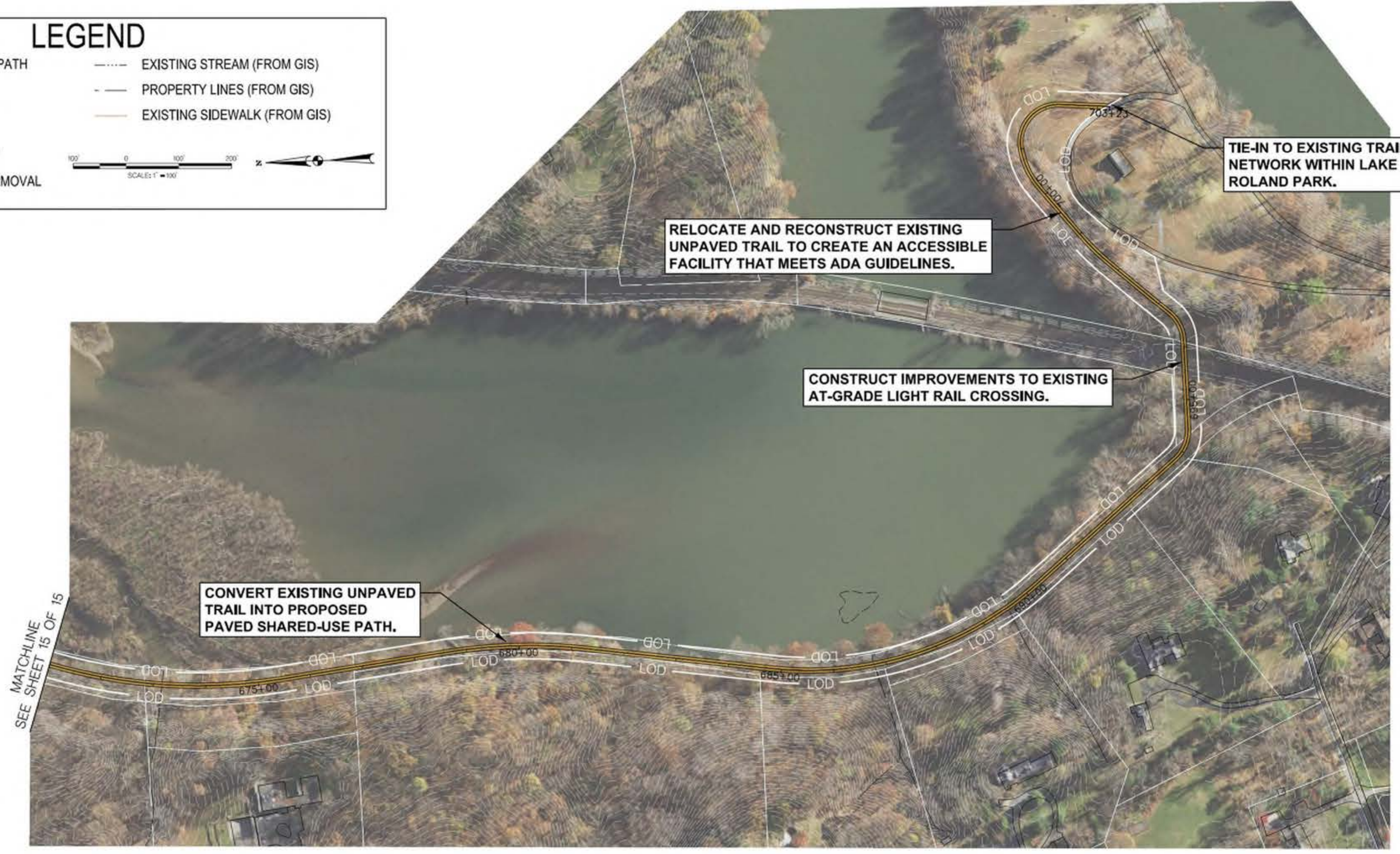

Proposed NCR Trail Extension (Lake Roland Option 1)

NCR Trail Extension Feasibility Study

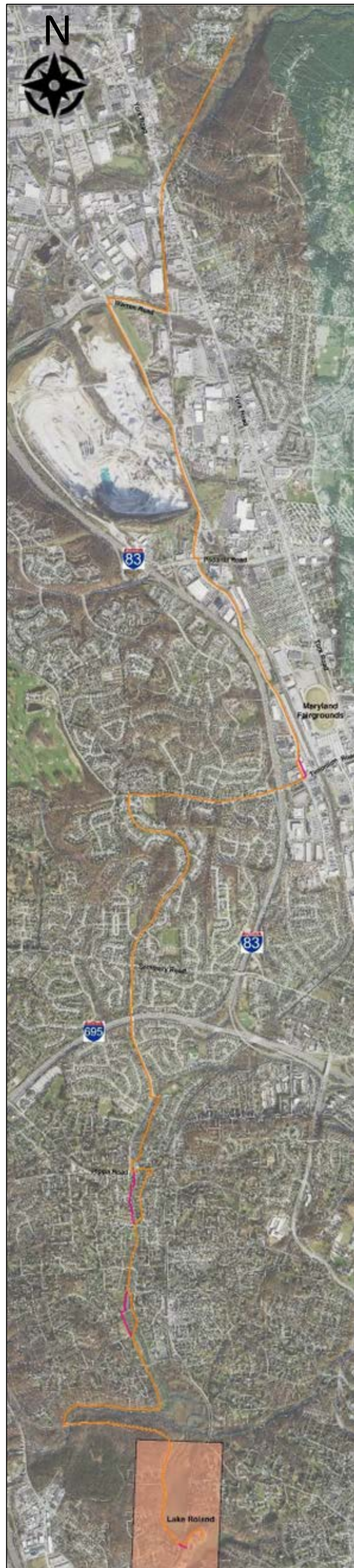
LEGEND

 PROPOSED SHARED-USE PATH	 EXISTING STREAM (FROM GIS)
 PROPOSED BRIDGE / BOARDWALK WIDENING	 PROPERTY LINES (FROM GIS)
 PROPOSED SIDEWALK	 EXISTING SIDEWALK (FROM GIS)
 PROPOSED SWM FACILITY	
 PROPOSED PAVEMENT REMOVAL	

100' 0 100' 200' SCALE: 1" = 100'











Key Map



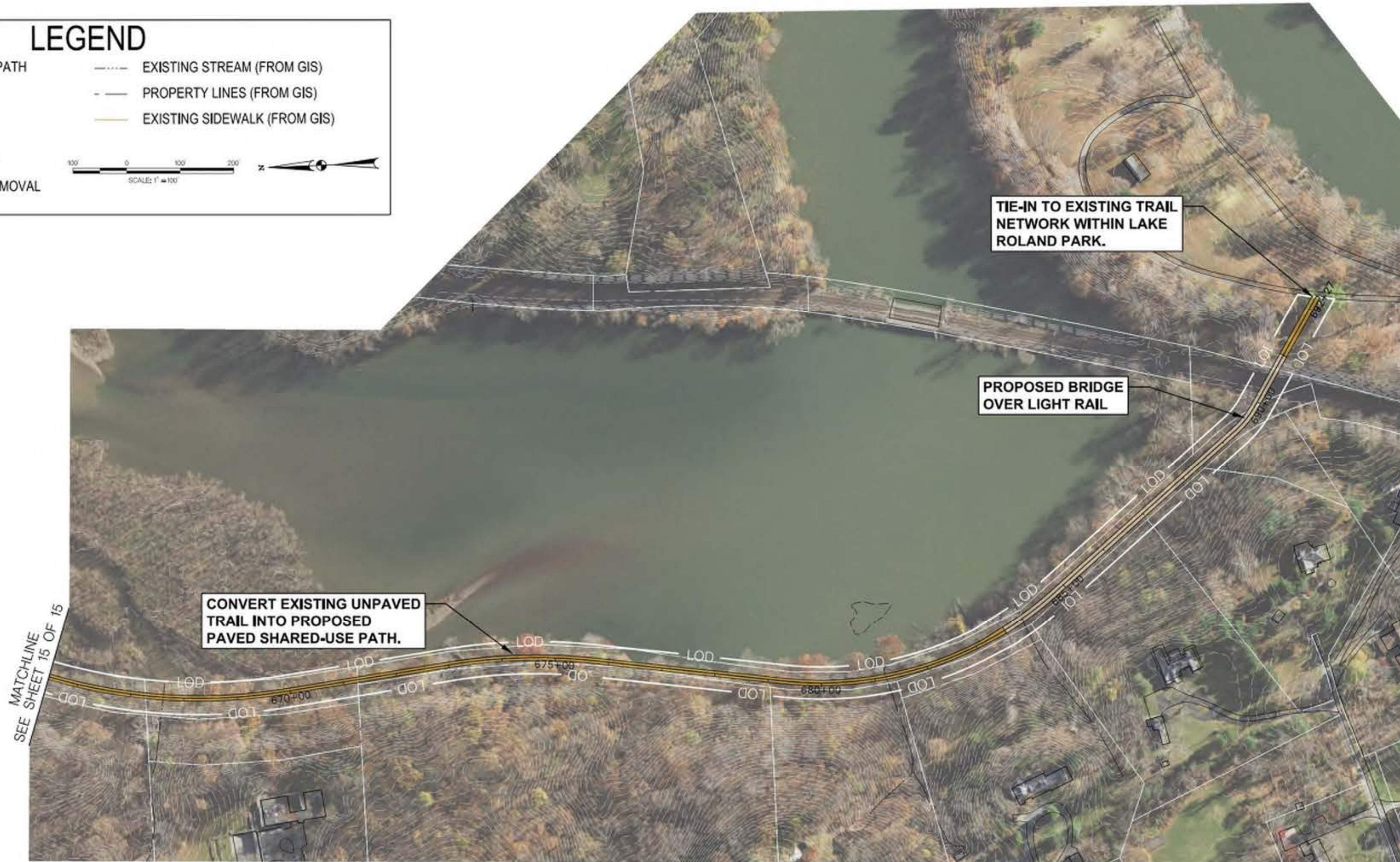

Proposed NCR Trail Extension (Lake Roland Option 2)

NCR Trail Extension Feasibility Study

LEGEND

 PROPOSED SHARED-USE PATH	 EXISTING STREAM (FROM GIS)
 PROPOSED BRIDGE / BOARDWALK WIDENING	 PROPERTY LINES (FROM GIS)
 PROPOSED SIDEWALK	 EXISTING SIDEWALK (FROM GIS)
 PROPOSED SWM FACILITY	
 PROPOSED PAVEMENT REMOVAL	

SCALE: 1" = 100'



Key Map



Alignment Options Summary

- Three areas contain sub-options:
 - Greenspring Drive (*plan sheets 6, 7*)
 - Roland Run (*plan sheets 11-13*)
 - Lake Roland (*plan sheet 15*)
- Sub-options are independent of each other and can be mixed and matched as desired.
- Overall impacts are negligible between sub-options

Sub-option	Difference between sub-options			
	Impacts		Costs	
	Option 1	Option 2	Option 1	Option 2
Greenspring Drive	=	=	=	=
Roland Run	=	=	=	=
Lake Roland	=	=	-	+

*Note: Lake Roland Option 2 will also most likely be more difficult to construct due to the proposed structure over the light rail.



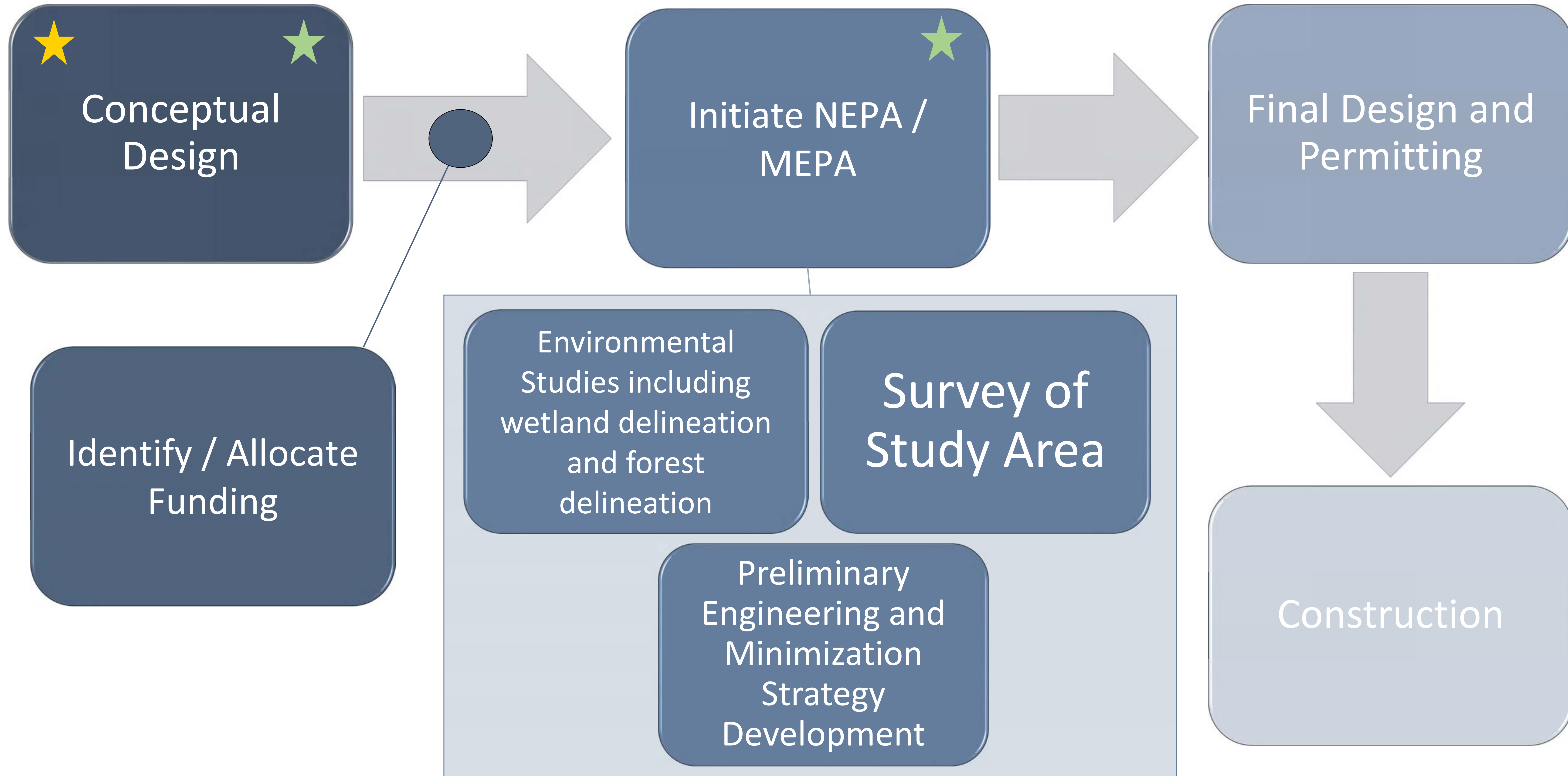
Preliminary Design Impact Comparison

ITEM	Alignment Options		
	A	B	C
	NCR Trail Extension with: Greenspring Drive Sub-option 1 Roland Run Sub-option 1 Lake Roland Sub-option 1	NCR Trail Extension with: Greenspring Drive Sub-option 2 Roland Run Sub-option 2 Lake Roland Sub-option 2	NCR Trail Extension with: Greenspring Drive Sub-option 2 Roland Run Sub-option 2 Lake Roland Sub-option 1
Right of way (acre)	11 - 12 acres	13 - 14 acres	13 – 14 acres
Forested Area (acre)	12 - 13 acres	13 - 14 acres	12 – 13 acres
Stream (LF)	1,700 – 1,900 LF	2,200 – 2,400 LF	2,200 – 2,400 LF
Wetlands (SF)	1.5 – 3 acres	1.5 – 3 acres	1.5 – 3 acres
100-Year Floodplain (acre)	6 – 7 acres	6 – 7 acres	6 – 7 acres
Road Crossings (EA)	16 crossings	16 crossings	16 crossings
Proposed Bridges (EA) (Total SF)	9 bridges 38,000 – 41,000 SF	9 bridges 47,000 – 50,000 SF*	8 bridges 37,000 – 40,000 SF
Proposed Physical Barrier (LF)	6,000 – 6,100 LF	3,100 – 3,200 LF	3,100 – 3,200 LF
COST ESTIMATE			
Cost Range (2024)	\$38-42 Million	\$40-44 Million	\$36 - \$40 Million

Next Steps

Future Design Phases

★ = Opportunity for Public Comments



NORTH CENTRAL
RAILWAY (NCR)
TRAIL EXTENSION
FEASIBILITY STUDY



Jessie Bialek

Bicycle and Pedestrian Planner
Baltimore County DPW&T Bureau of Transportation

P: 410-887-3554

JBialek@BaltimoreCountyMD.gov



NORTH CENTRAL
RAILWAY (NCR)
TRAIL EXTENSION
FEASIBILITY STUDY



Questions?

