Mouth of Monocacy Road Bridge
(P502103)

Category	Transportation	Date Last Modified	01/14/22
SubCategory	Bridges	Administering Agency	Transportation
Planning Area	Little Monacacy Basin Dickerson-Barnesville	Status	Preliminary Design Stage

EXPENDITURE SCHEDULE ($000s)

Cost Elements	Total	Thru FY21	Est FY22	Total 6 Years	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	Beyond 6 Years
Planning, Design and Supervision	770	-	-	770	-	-	-	230	540	-	-
Land	100	-	-	100	-	-	100	-	-	-	-
Construction	2,290	-	-	2,290	-	-	-	745	1,545	-	-
TOTAL EXPENDITURES	3,160	-	-	3,160	-	-	100	975	2,085	-	-

FUNDING SCHEDULE ($000s)

Funding Source	Total	Thru FY21	Est FY22	Total 6 Years	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	Beyond 6 Years
Federal Aid	2,317	-	-	2,317	-	-	-	725	1,592	-	-
G.O. Bonds	843	-	-	843	-	-	100	250	493	-	-
TOTAL FUNDING SOURCES	3,160	-	-	3,160	-	-	100	975	2,085	-	-

APPROPRIATION AND EXPENDITURE DATA ($000s)

Appropriation FY 23 Request	-	Year First Appropriation	
Appropriation FY 24 Request	-	Last FY's Cost Estimate	3,160
Cumulative Appropriation	-		
Expenditure / Encumbrances	-		
Unencumbered Balance	-		

PROJECT DESCRIPTION

This project provides for the replacement of the existing Mouth of Monocacy Road Bridge over Little Monocacy River. The existing bridge, built in 1971, is a 49-foot long single span structure with steel beams and corrugated metal deck. The existing clear roadway width is 14'-9" with one lane on the bridge carrying two-way traffic. The proposed replacement bridge includes a single span steel beam structure carrying a 14'-9" roadway. The Scope of Work is being revised to a full structure replacement rather than a superstructure replacement due to the existing abutments are not founded on rock and have experienced undermining and re-sedimentation during the life of the bridge. The proposed structure will utilize drilled shaft supported abutments behind the existing cantilever abutments to support a slightly longer streel superstructure. The project includes approach roadway work at each end of the bridge to tie-in to the existing roadway. The bridge and road will be closed to traffic during construction. Accelerated bridge construction techniques will be utilized to minimize the disruption to the traveling public and local community.

LOCATION

The project site is located approximately 0.5 mile east of Mt. Ephraim Road in Dickerson, Maryland. This bridge is along a single point of access to the community.

CAPACITY

The Average Daily Traffic (ADT) is approximately 75 and and the roadway capacity will not change as a result of this project.

ESTIMATED SCHEDULE

Design is expected to be completed in the spring of 2025. Construction is scheduled to begin in summer 2026 and complete in fall of 2026. The bridge will be closed to traffic from June 2026 to August 2026.

PROJECT JUSTIFICATION

The proposed replacement work is necessary to provide a safe roadway condition for the travelling public. Mouth of Monocacy Road Bridge M-0043 is defined as structurally deficient due to the condition of the superstructure. Recent inspections revealed that the steel beams and bearings are in poor condition. The top and bottom flange of the exterior beam have severe pitting with up to 33 percent section loss over most of the length. The bottom flanges of exterior beams have up to 66 percent section loss at both abutments up to 1'-0" from the bearing locations. The bottom flanges and the full-height of the web at each end of the interior beams have severe section loss with pitting up to 2.5" in diameter at the beam ends. The bearings have over 50 percent section loss to the bearing plates. The bridge has posted load limits of 56,000 Gross Vehicle Weight (GVW) and 66,000 Gross Combined Weight (GCW). Implementation of this project would allow the bridge to be restored to full capacity. The 1996 approved and adopted Rustic Roads Functional Master Plan designates Mouth of Monocacy Road as Exceptional Rustic Road (E-6) from Mt. Ephraim Road to the bridge over Little Monocacy River with minimum right-of-way width 80 feet.

OTHER

The design costs for this project are covered in the "Bridge Design" project (C.I.P. No. 509132).

FISCAL NOTE

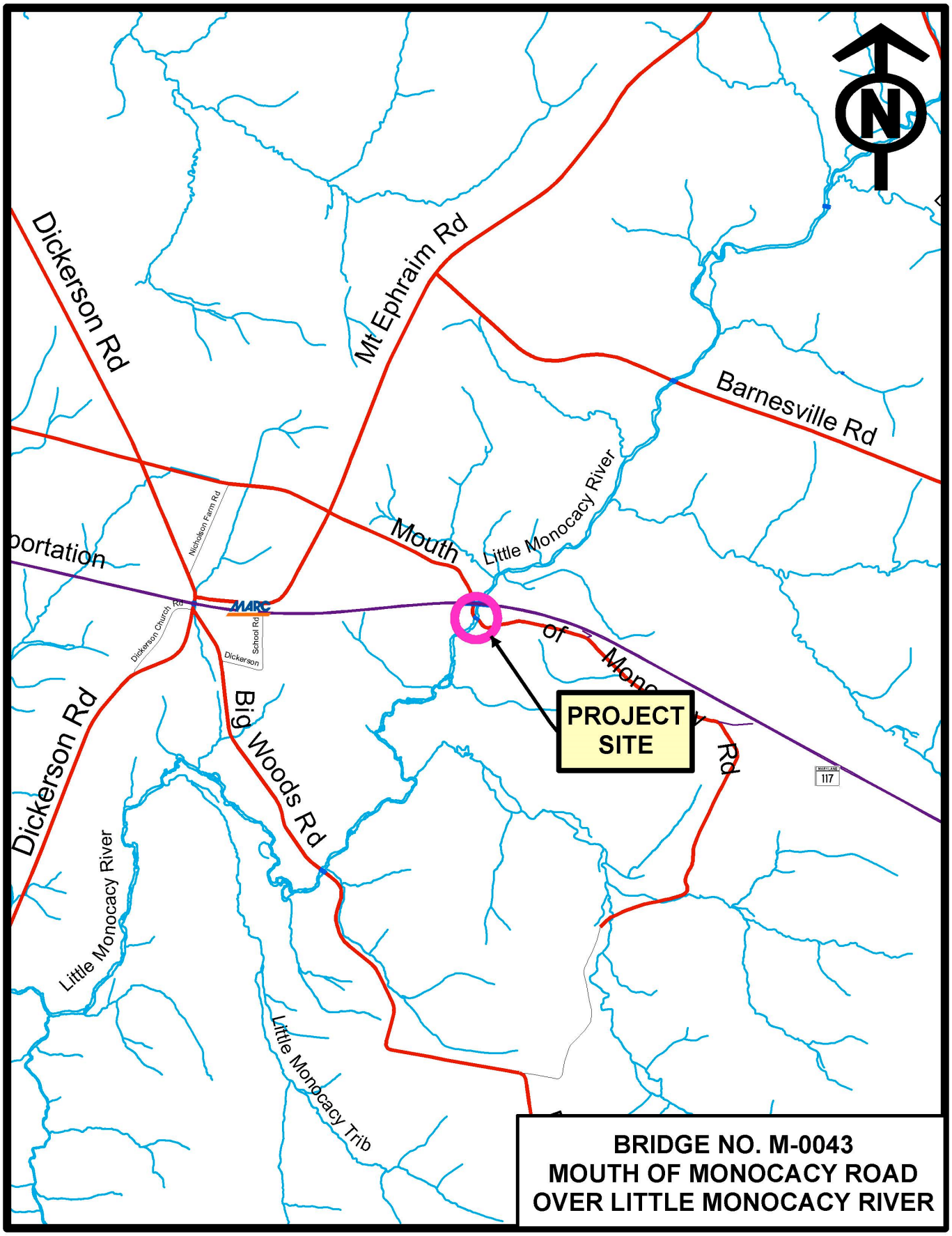
The costs of bridge construction and construction management costs for this project are eligible for up to 80 percent Federal Aid.

DISCLOSURES

A pedestrian impact analysis has been completed for this project.

COORDINATION

Federal Highway Administration - Federal Aid Bridge Replacement/ Rehabilitation Program, Maryland State Highway Administration, Maryland Department of the Environment, Maryland National Capital Park and Planning Commission, Montgomery County Department of Permitting Services, Rustic Road Advisory Committee, CSX, Utilities, and Bridge Design Project CIP 509132.


Dickerson Rd
Mt Ephraim Rd
Barnesville Rd
Mouth
Little Monocacy River
PROJECT SITE
Big Woods Rd
Dickerson Rd
Little Monocacy River
Little Monocacy Trib
Nicholson Farm Rd
Dickerson Church Rd
School Rd
Dickerson
MARC
117
BRIDGE NO. M-0043
MOUTH OF MONOCACY ROAD
OVER LITTLE MONOCACY RIVER