



Mouth of Monocacy Road Bridge

(P502103)

Category	Transportation	Date Last Modified	01/08/24
SubCategory	Bridges	Administering Agency	Transportation
Planning Area	Little Monocacy Basin Dickerson-Barnesville	Status	Preliminary Design Stage

EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY23	Est FY24	Total 6 Years	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	Beyond 6 Years
Planning, Design and Supervision	770	-	-	770	-	100	670	-	-	-	-
Land	100	-	-	100	100	-	-	-	-	-	-
Construction	2,290	-	-	2,290	-	500	1,790	-	-	-	-
TOTAL EXPENDITURES	3,160	-	-	3,160	100	600	2,460	-	-	-	-

FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY23	Est FY24	Total 6 Years	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	Beyond 6 Years
Federal Aid	2,317	-	-	2,317	-	463	1,854	-	-	-	-
G.O. Bonds	843	-	-	843	100	137	606	-	-	-	-
TOTAL FUNDING SOURCES	3,160	-	-	3,160	100	600	2,460	-	-	-	-

APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 25 Request	100	Year First Appropriation	
Appropriation FY 26 Request	3,060	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 steel superstructure. The project includes approach roadway work at each end of the bridge to tie into 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 miles 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 the roadway capacity will not change as a result of this project.

ESTIMATED SCHEDULE

The design is expected to be completed in the winter of 2025. Construction is scheduled to begin in summer of 2026 and be complete in winter of 2026. The bridge will be closed to traffic from September 2026 to December 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 of 80 feet. The bridge provides the only means of access to about ten homes.

OTHER

The design costs for this project are covered in the "Bridge Design" project (CIP 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 Transportation, Utilities, and Bridge Design Project CIP 509132.