



Zion Road Bridge No. M-0121

(P502706)

Category	Transportation	Date Last Modified	01/08/26
SubCategory	Bridges	Administering Agency	Transportation
Planning Area	Olney and Vicinity	Status	Preliminary Design Stage

EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY25	Est FY26	Total 6 Years	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	Beyond 6 Years
Planning, Design and Supervision	1,258	-	-	1,258	-	-	-	617	641	-	-
Land	80	-	-	80	-	-	80	-	-	-	-
Construction	4,734	-	-	4,734	-	-	-	2,248	2,486	-	-
TOTAL EXPENDITURES	6,072	-	-	6,072	-	-	80	2,865	3,127	-	-

FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY25	Est FY26	Total 6 Years	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	Beyond 6 Years
Federal Aid	4,471	-	-	4,471	-	-	-	2,140	2,331	-	-
G.O. Bonds	1,601	-	-	1,601	-	-	80	725	796	-	-
TOTAL FUNDING SOURCES	6,072	-	-	6,072	-	-	80	2,865	3,127	-	-

APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 27 Request	-	Year First Appropriation	
Appropriation FY 28 Request	-	Last FY's Cost Estimate	-
Cumulative Appropriation	-		
Expenditure / Encumbrances	-		
Unencumbered Balance	-		

PROJECT DESCRIPTION

This project provides for the replacement of the existing Zion Road Bridge over Hawlings River in Brookeville. The existing bridge, built in 1930, is an approximately 23' long single span structure with concrete arch and asphalt roadway. The existing clear roadway width is 11'-2" and accommodates two-way traffic on a single lane, with no sidewalks. The proposed replacement bridge will be a 35' long single-span concrete arch and will be at the same location as the existing bridge. The proposed bridge will provide a 24' roadway consisting of two 10' traffic lanes with two 2' shoulders on the bridge at the request of the Agricultural Advisory Committee and Montgomery County Farm Bureau. The project scope also includes approach roadway work at each end of the bridge to tie-in to the existing roadway. In addition, a 24" corrugated metal pipe located north of the existing bridge will be replaced. Riparian enhancement and stream restoration along the Hawlings River are also key components of the project supporting environmental sustainability. The bridge and road will be closed to traffic during construction. Accelerated bridge construction techniques will be utilized to minimize disruption to the public and local community.

LOCATION

The project site is located approximately 2.8 miles north of MD 108 in Brookeville, Maryland.

CAPACITY

The roadway Average Daily Traffic (ADT) is approximately 2,053 Vehicles and the roadway capacity will not change as a result of this project.

ESTIMATED SCHEDULE

The Bridge Design project encompasses all required design work for this project, which will be completed in FY29. Land acquisition will be in FY29. Construction is scheduled to start in FY30 and be completed in FY31.

PROJECT JUSTIFICATION

The proposed replacement work is necessary to provide a safe roadway condition for the public. Zion Road Bridge M-0121 is currently in poor condition. Recent inspections have revealed that the underside of the concrete arch is in poor condition. There is efflorescence where the spandrel walls meet the underside of the arch on the west and east ends. There are areas of rust staining on the underside of the arch, along with areas of spalling that expose reinforcing steel. There are sound concrete patches throughout the arch and one location of an unsound patch. These interim repairs were not intended to be permanent solutions but were implemented to ensure public safety until the bridge can be replaced. The bridge is currently posted with load limits of 10,000 GVW and 10,000 GCW. Additionally, the existing bridge railings do not meet current safety standards. The channel is in overall poor condition. Erosion is occurring along the existing streambanks. There is undermining of the north abutments. Stream meandering has created a scour pool up to 6.7' deep, located approximately 40' west of the bridge. Implementation of this project would allow the bridge to be restored to full capacity, significantly improving safety and functionality. The 2023 approved and adopted Rustic Roads Functional Master Plan designates Zion Road as Rustic Road (R-73) from Riggs Road to Sundown Road with a minimum right-of-way width of 70'.

FISCAL NOTE

The design costs for this project are covered in the Bridge Design project (CIP No. 509132). The costs of bridge construction and construction management 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 and 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, Agricultural Advisory Committee, Montgomery County Farm Bureau, Utilities and Bridge Design Project (CIP 509132)

