Brighton Dam Road Bridge No. M-0229

(P501907)

Category	Transportation	Date Last Modified	01/10/24
SubCategory	Bridges	Administering Agency	Transportation
Planning Area	Olney and Vicinity	Status	Final 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	1,292	313	648	331	331	-	-	-	-	-	-
Construction	2,178	-	1,154	1,024	1,024	-	-	-	-	-	-
TOTAL EXPENDITURES	3,470	313	1,802	1,355	1,355	-	-	-	-	-	-

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
G.O. Bonds	1,285	-	817	468	468	-	-	-	-	-	-
Intergovernmental	2,185	313	985	887	887	-	-	-	-	-	-
TOTAL FUNDING SOURCES	3,470	313	1,802	1,355	1,355	-	-	-	-	-	-

APPROPRIATION AND EXPENDITURE DATA ($000s)

Appropriation FY 25 Request	1,220	Year First Appropriation	FY19
Appropriation FY 26 Request	-	Last FY's Cost Estimate	2,250
Cumulative Appropriation	2,250		
Expenditure / Encumbrances	462		
Unencumbered Balance	1,788		

PROJECT DESCRIPTION

This project provides for the rehabilitation of the existing Brighton Dam Road Bridge No. M-0229 over Brighton Dam of Triadelphia Reservoir. This 602-foot long 15-span bridge, which is supported by Brighton Dam, is in need of repairs to the parapets, bridge deck joints, prestressed concrete beams, abutment backwalls, streetlights, and approach roadways and sidewalks to enhance the safety of the traveling public and the integrity of the dam. The existing storm inlets on the approach roadways at both ends of the bridge will be improved as needed. A new permanent turnaround site for fire trucks on the Howard County side will be constructed at the entrance to the existing WSSC Water maintenance yard, approximately 1,000 feet east of the bridge and next to the existing tanker fire truck water refill site. The existing diagonal crosswalk at the entrance of the Brighton Dam Azalea Garden on the Montgomery County side, approximately 320 feet west of the bridge, will be relocated to be perpendicular to Brighton Dam Road. An additional streetlight will be installed at each end of the relocated crosswalk.

LOCATION

The project site is located at the Montgomery/Howard County Line approximately 1.2 miles east of the intersection of Brighton Dam Road and New Hampshire Avenue (MD 650) in Brookeville.

CAPACITY

Upon completion, the Average Daily Traffic (ADT) on the Brighton Dam Road Bridge will remain approximately 6,000 vehicles per day.

ESTIMATED SCHEDULE

Design was completed 2023. Construction is scheduled to start in the spring of 2024 and be completed in the fall of 2024.

COST CHANGE

Cost increase is due to inflation and additional tasks including construction of a new turnaround site, relocation of the existing diagonal crosswalk and installation of additional streetlights at the relocated crosswalk.

PROJECT JUSTIFICATION

This bridge, reconstructed in 1999, requires repairs to the 1,002-foot long west parapets, 642-foot long east parapets, sixteen bridge deck joints, prestressed concrete beams, abutment backwalls, street lights, and approach roadways and sidewalks. The parapets have severe concrete spalling at many parapet joints. Prestressed concrete beams and abutment backwalls have spalling and cracking. The approach roadways and sidewalks have settlement at both ends of the bridge. The bridge deck joints have failed, allowing water and deicing chemicals to flow through the bridge deck which resulted in corrosion and deterioration to the mechanized equipment for the dam operations. Some streetlights and pole supports are damaged. The bridge rehabilitation was requested by WSSC Water to protect the newly reconstructed dam operating equipment. The improvement of storm inlets was requested by WSSC Water to minimize storm runoff entering into the bridge deck surface from the approach roadways.

OTHER

The 2005 Olney Master Plan designates Brighton Dam Road as Arterial Road (A-15) with a minimum right-of-way of 80 feet. The December 2018 Montgomery County Bicycle Master Plan recommends bikeable shoulders. The deterioration of the bridge was identified through the County's 2021 biennial inspection program. The construction management and construction costs for the new fire truck turnaround site will be shared equally by Montgomery County and Howard County, and the remaining of the project costs will be shared equally by Montgomery County, Howard County and WSSC Water. WSSC Water will grant Howard County a perpetual maintenance easement for the new turnaround site at no cost. Streetlights, crosswalks, sidewalk ramps, bikeways, and other pertinent issues are included in the design of the project to ensure pedestrian safety.

FISCAL NOTE

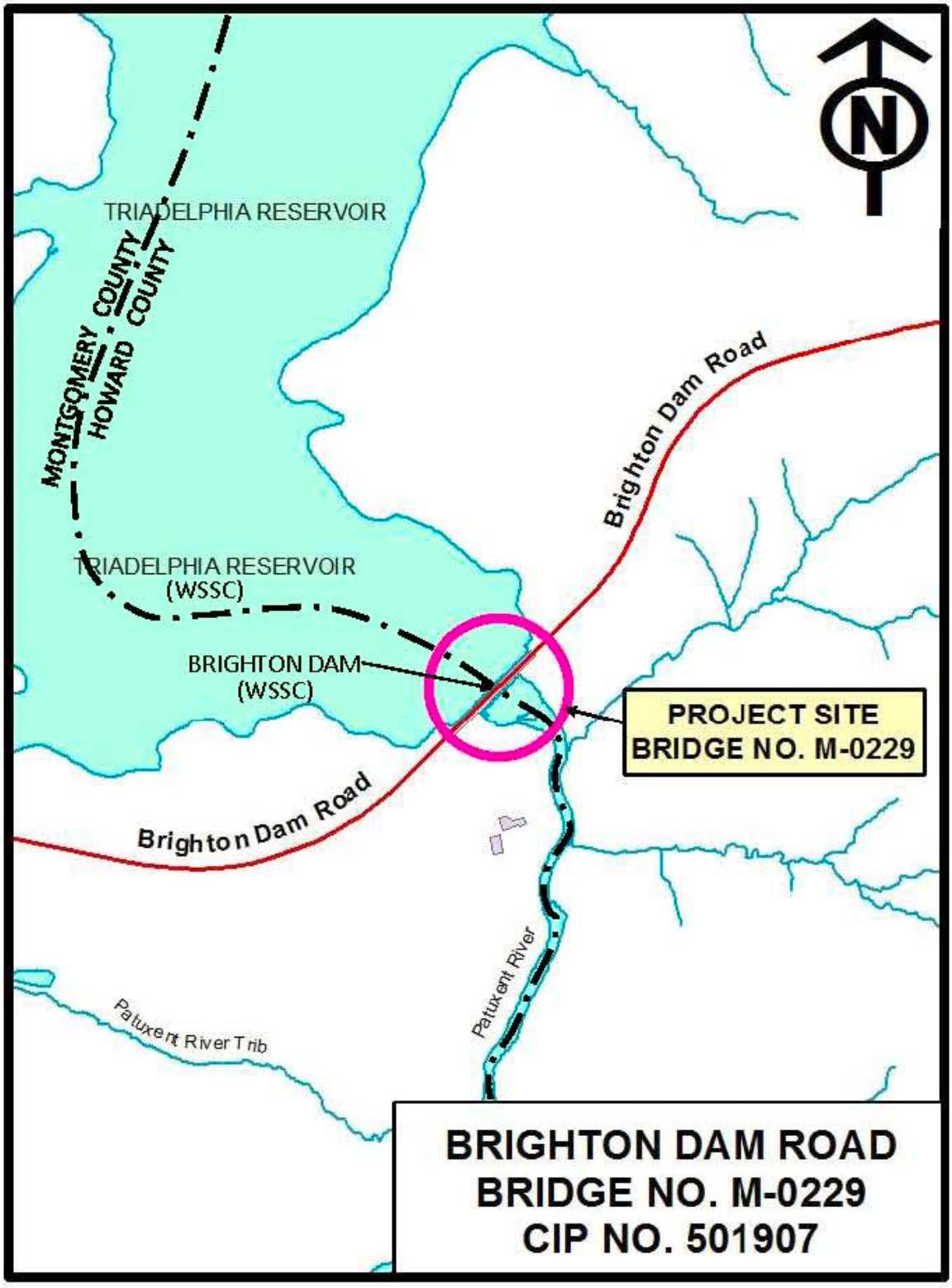
The funding shown as "Intergovernmental" is from Howard County and WSSC Water for their share of the project cost.

DISCLOSURES

A pedestrian impact analysis has been completed for this project.

COORDINATION

WSSC Water, Howard County, Maryland Department of the Environment, Maryland Department of Natural Resources, Maryland-National Capital Park and Planning Commission, Montgomery County Department of Permitting Services, Montgomery County Fire and Rescue Services, Montgomery County Police Department, Montgomery County Public Schools, Montgomery County Ride On Bus, Howard County Fire and Rescue Services, Howard County Police Department, Howard County Public Schools, Baltimore Gas and Electric Company, and U.S. Army Corps of Engineers.


TRIADELPHIA RESERVOIR
MONTGOMERY COUNTY
HOWARD COUNTY
Brighton Dam Road
TRIADELPHIA RESERVOIR
(WSSC)
BRIGHTON DAM
(WSSC)
PROJECT SITE
BRIDGE NO. M-0229
Brighton Dam Road
Patuxent River
Patuxent River Trib
BRIGHTON DAM ROAD
BRIDGE NO. M-0229
CIP NO. 501907