Whites Ferry Road Bridges No.M-0187B and M-0189B

(P501301)

Category	Transportation	Date Last Modified	05/09/18
SubCategory	Bridges	Administering Agency	Transportation
Planning Area	Poolesville and Vicinity	Status	Under Construction

EXPENDITURE SCHEDULE ($000s)

Cost Elements	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Planning, Design and Supervision	359	359	-	-	-	-	-	-	-	-	-
Land	59	59	-	-	-	-	-	-	-	-	-
Construction	2,067	2,059	8	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	2,485	2,477	8	-	-	-	-	-	-	-	-

FUNDING SCHEDULE ($000s)

Funding Source	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
G.O. Bonds	2,485	2,477	8	-	-	-	-	-	-	-	-
TOTAL FUNDING SOURCES	2,485	2,477	8	-	-	-	-	-	-	-	-

APPROPRIATION AND EXPENDITURE DATA ($000s)

Appropriation FY 19 Request	-	Year First Appropriation	FY13
Appropriation FY 20 Request	-	Last FY's Cost Estimate	2,485
Cumulative Appropriation	2,485		
Expenditure / Encumbrances	2,484		
Unencumbered Balance	1		

PROJECT DESCRIPTION

This project provides for the replacement of two existing Whites Ferry Road Bridges (No. M-0187B and No. M-0189B). Both bridges were built in 1920. Existing Bridge No. M-0187B is a 16 feet long single span structure carrying a 24 foot 4 inch clear roadway. Existing Bridge No. M-0189B is a 10 feet long single span structure carrying a 23 foot 8 inch clear roadway. The replacement bridge for M-0187B will be a single span 46 foot prestressed concrete slab beam structure with approximately 300 feet of approach roadway work. The replacement bridge for M-0189B will be a single span 24' prestressed concrete slab beam structure with approximately 530 feet of approach roadway work. The replacement bridges will provide two 11-foot travel lanes with a 4-foot wide shoulder on each side, for a total bridge width of 30 feet. This width will allow for the implementation of safe on-road bicycling, in accordance with the Master Plan. The approach roadway work is needed to tie the replaced structure to the existing roadway. The vertical profile of Bridge No. M-0187B will remain the same and the vertical profile of Bridge M-0189B will be raised by one foot at the bridge. The road will be closed and traffic will be detoured during construction. Accelerated bridge construction techniques will be utilized to minimize the disruption to the traveling public and local community. One bridge will be replaced at a time to maintain access for property owners

between the two structures. This segment of Whites Ferry Road will be closed for approximately two and a half months during construction.

LOCATION

This project provides access from Elm Street west of Wisconsin Avenue to the southern end of the Bethesda Metrorail Station. The Metrorail Red Line runs below Wisconsin Avenue through Bethesda more than 120 feet below the surface, considerably deeper than the Purple Line right-of-way. The Bethesda Metrorail station has one entrance, near East West Highway. The Metrorail station was built with accommodations for a future southern entrance. The Bethesda light rail transit (LRT) station would have platforms located just west of Wisconsin Avenue on the Georgetown Branch right-of-way. This platform allows a direct connection between LRT and Metrorail, making transfers as convenient as possible. Six station elevators would be located in the Elm Street right-of-way, which would require narrowing the street and extending the sidewalk. The station would include a new south entrance to the Metrorail station, including a new mezzanine above the Metrorail platform, similar to the existing mezzanine at the present station's north end. The mezzanine would use the existing knock-out panel in the arch of the station and the passageway that was partially excavated when the station was built in anticipation of the future construction of a south entrance.

ESTIMATED SCHEDULE

The design of the project is expected to finish in the summer of 2013. The construction is scheduled to start in spring of 2014 and be completed in 2017.

PROJECT JUSTIFICATION

The proposed replacement work is necessary to provide a safe roadway condition for the traveling public. The 2009 bridge inspection report for Bridge No. M-0187B indicates that there are concrete spalls in the soffit with exposed reinforcing and numerous hairline transverse and longitudinal cracks in the soffit. There are full-height vertical cracks and diagonal cracks in the west abutment and hairline diagonal cracks in the east abutment. The bridge is currently posted for an 8,000 lb. limit for a single-unit truck and a 16,000 lb. limit for a combination-unit truck. The 2009 bridge inspection report for Bridge No. M-0189B indicates that the concrete deck soffit exhibits 13 spalls along the east abutment and 3 spalls along the west abutment with exposed and corroded reinforcement. There are full height vertical cracks 1/2 inch wide in the west abutments. The southeast wingwall exhibits surface spalling over 60 percent of the exposed face. The bridge is currently posted for an 8,000 lb. limit for a single-unit truck and a 14,000 lb. limit for a combination-unit truck. Implementation of this project would allow the bridges to be restored to full capacity. The Rustic Road Functional Master Plan designates Whites Ferry Road as County Arterial (CA-35) with a minimum right-of-way of 80 ft. The Countywide Bikeways Functional Master Plan calls for a signed shared roadway (SR-46). A review of impacts to pedestrians, bicyclists and the requirements of the ADA (American with Disabilities Act of 1991) has been performed and addressed by this project. Streetlights, crosswalks, sidewalk ramps, bikeways and other pertinent issues will be considered in the design of the project to ensure pedestrian safety.

OTHER

The design costs for this project are covered in the Bridge Design CIP project (No. 509132). Since the existing bridges are less than 20-foot long, construction and construction management costs for this project are not eligible for Federal Aid.

FISCAL NOTE

Reflects an FY14 transfer of $255,000 from the Bridge Renovation CIP Project (No. 509753); an FY16 transfer of $218K to Bridge Design CIP project (No. 509132) and $32K to the Bridge Renovation project (No. 509753)

DISCLOSURES

A pedestrian impact analysis has been completed for this project.

COORDINATION

Maryland State Highway Administration, Maryland Department of the Environment, Maryland-National Capital Park and Planning Commission, Montgomery County Department of Permitting Services, Allegheny Power, Verizon, Comcast, Bridge Design CIP Project (No. 509132).