Cedar Lane Bridge (M0074) -- No. 501105

Category Subcategory Administering Agency Planning Area Transportation Bridges

Transportation
Bethesda-Chevy Chase

Date Last Modified

Required Adequate Public Facility Relocation Impact

January 09, 2010

None.

Preliminary Design Stage

EXPENDITURE SCHEDULE (\$000)

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Cost Element	Total	Thru FY09	Est. FY10	Total 6 Years	FY11	FY12	FY13	FY14	FY15	FY16	Beyond 6 Years
Planning, Design, and Supervision	1,012	0	0	1,012	591	421	0	0	0	0	0
Land	21	0	0	21	21	0	0	0	0	0	0
Site Improvements and Utilities	107	0	0	107	0	107	0	0	0	0	0
Construction	3,972	0	0	3,972	2,464	1,508	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	5,112	0	0	5,112	3,076	2,036	0	0	0	0	0
			FUNDING	S SCHEDL	JLE (\$000)						
Federal Aid	3,310	0	0	3,310	2,240	1,070	0	0	0	0	0
G.O. Bonds	1,802	0	0	1,802	836	966	0	0	0	0	0
Total	5,112	0	0	5,112	3,076	2,036	0	0	0	0	0
•		OPER	ATING BI	JDGET IM	PACT (\$00	00)					
Energy				6	1	1	1	1	1	1	Ì
Net Impact		_		6	1	1	1	1	1	1	

DESCRIPTION

This project provides for the rehabilitation of the existing Cedar Lane Bridge over Rock Creek. The existing bridge, built in 1959, is a four span prestressed concrete voided slab beam structure carrying a 40-foot clear roadway with a 5-foot sidewalk and 1-foot parapet on each side, for a total deck width of 52-feet. The proposed rehabilitation includes the removal and reconstruction of the concrete pier caps, abutment beam seats, and complete superstructure replacement with precast concrete to include new ornamental concrete parapets. The proposed structure will carry three traffic lanes (two northbound and one southbound), a shared use bikeway on the west side, a slightly wider sidewalks on the east side, and provide a proposed total deck width of 53.6 feet. The project includes repaining cracks and spalls in pier columns, abutment stems, and necessary modifications to wing walls for the slightly wider structure. Approach roadway work includes extending the shared use bikeway under the existing beltway bridge, improved lighting, and intersection modifications to the intersection with Beach Drive. This project also includes the construction of a temporary pedestrian bridge.

CAPACITY

Upon completion, the Average Daily Traffic (ADT) on the Cedar Lane Bridge will remain at 14,500 vehicles per day.

ESTIMATED SCHEDULE

Design to be completed Fall 2010. Construction estimated to take 6 months with construction of the temporary pedestrian bridge prior to road closure. Road closure construction estimated to take 3 months in summer of 2011.

JUSTIFICATION

The 2007 bridge inspection and 2008 concrete core tests revealed that the concrete voided slab beams and concrete piers are in poor condition and require reconstruction. This bridge is considered structurally deficient and functionally obsolete. The proposed rehabilitation work is necessary to provide a safe roadway condition for the traveling public and prolong the service life of the structure. This project also includes the construction of a proposed shared use bikeway on the bridge during construction. This project is supported by the Master Plan of Bikeways within Montgomery County which calls for a Shared Use Path Class I Bikeway SP-4 connecting the Rock Creek Trail at Beach Drive to the NIH/Medical Center Metrorail station as well as the North Bethesda Trail a Wisconsin Avenue (MD 355). Cedar Lane will be closed to vehicular traffic during the reconstruction of the bridge. Full roadway closure will allow the bridge to be reconstructed faster and for a lesser cost than allowing traffic to remain on the existing bridge during construction. The construction contract will have incentive and disincentive clauses to assure that the roadway is reopened as quickly as possible. The rehabilitation of this bridge is proposed to be completed before additional traffic is added to Cedar Lane due to BRAC opening in September 2011. Cedar Lane is classified as Arterial Road A-67 in the Bethesda-Chevy Chase Master Plan. A review of impacts to pedestrians, bicyclists, and the requirements of the ADA (Americans with Disabilities Act of 1991) is being performed and addressed by this project. Traffic signals, streetlights, crosswalks, bus stops, sidewalk ramps, bikeways, and other pertinent issues are being considered in the design of the project to ensure pedestrian safety. A traffic study has been completed to determine that full roadway closure is feasible during reconstruction of this bridge.

OTHER

The project scope and schedule are new for FY11. The design costs for this project are covered in the "Facility Planning: Bridges" project (C.I.P. No. 509132). Constructions costs are based on preliminary design.

FISCAL NOTE

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

APPROPRIATION AND			COORDINATION	MAP
EXPENDITURE DATA			Federal Highway Administration – Federal Aid	
Date First Appropriation	FY11	(\$000)	Bridge Replacement/Rehabilitation Program Maryland State Highway Administration	
First Cost Estimate Current Scope	FY11	5,112	Maryland State Highway Administration Maryland Department of the Environment Maryland-National Capital Park and Planning	
Last FY's Cost Estimate		0	Commission	
Appropriation Request	FY11	5,112	Montgomery County Department of Permitting Services	
Appropriation Request Est.	FY12	0	Utilities	
Supplemental Appropriation Requ	Jest	0	Facility Planning: Bridges	See Map on Next Page
Transfer		0	BRAC	
Cumulative Appropriation		0		
Expenditures / Encumbrances		0		
Unencumbered Balance		0		
Partial Closeout Thru	FY08	0		
New Partial Closeout	FY09	0		
Total Partial Closeout		0		

Cedar Lane Bridge (M0074) -- No. 501105 (continued)

OTHER DISCLOSURES
- A pedestrian impact analysis has been completed for this project.

