

Whites Ferry Road Bridges No.M-0187B and M-0189B -- No. 501301

Category
Subcategory
Administering Agency
Planning Area

Transportation
Bridges
Transportation
Poolesville

Date Last Modified
Required Adequate Public Facility
Relocation Impact
Status

May 01, 2012
No
None.
Final Design Stage

EXPENDITURE SCHEDULE (\$000)

| Cost Element | Total | Thru FY11 | Est. FY12 | Total 6 Years | FY13 | FY14 | FY15 | FY16 | FY17 | FY18 | Beyond 6 Years |
|-----------------------------------|--------------|--------------|--------------|------------------|------------|--------------|----------|----------|----------|----------|-------------------|
| Planning, Design, and Supervision | 448 | 0 | 0 | 448 | 125 | 323 | 0 | 0 | 0 | 0 | 0 |
| Land | 84 | 0 | 0 | 84 | 84 | 0 | 0 | 0 | 0 | 0 | 0 |
| Site Improvements and Utilities | 55 | 0 | 0 | 55 | 0 | 55 | 0 | 0 | 0 | 0 | 0 |
| Construction | 1,893 | 0 | 0 | 1,893 | 661 | 1,232 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 2,480 | 0 | 0 | 2,480 | 870 | 1,610 | 0 | 0 | 0 | 0 | 0 |

FUNDING SCHEDULE (\$000)

| | | | | | | | | | | | |
|--------------|--------------|----------|----------|--------------|------------|--------------|----------|----------|----------|----------|----------|
| G.O. Bonds | 2,480 | 0 | 0 | 2,480 | 870 | 1,610 | 0 | 0 | 0 | 0 | 0 |
| Total | 2,480 | 0 | 0 | 2,480 | 870 | 1,610 | 0 | 0 | 0 | 0 | 0 |

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' 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.

ESTIMATED SCHEDULE

The design of the project is expected to finish in the spring of 2012. The construction is scheduled to start in spring of 2013 and be completed in summer of 2013.

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" project (C.I.P. 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.

OTHER DISCLOSURES

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

APPROPRIATION AND EXPENDITURE DATA

| | | |
|------------------------------------|------|---------|
| Date First Appropriation | FY13 | (\$000) |
| First Cost Estimate | FY13 | 2,480 |
| Current Scope | | |
| Last FY's Cost Estimate | | 0 |
| Appropriation Request | FY13 | 2,480 |
| Appropriation Request Est. | FY14 | 0 |
| Supplemental Appropriation Request | | 0 |
| Transfer | | 0 |
| Cumulative Appropriation | | 0 |
| Expenditures / Encumbrances | | 0 |
| Unencumbered Balance | | 0 |
| Partial Closeout Thru | FY10 | 0 |
| New Partial Closeout | FY11 | 0 |
| Total Partial Closeout | | 0 |

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
Facility Planning: Bridges

MAP

See Map on Next Page

