# East Gude Drive Westbound Bridge No. M-131-4 (P500901)

Category
Sub Category
Administering Agency
Planning Area

Transportation Bridges

Transportation (AAGE30) Shady Grove Vicinity Date Last Modified

5/3/13 Yes

Required Adequate Public Facility

Relocation Impact

None
Status

Unde

Under Construction

|                                  | Total | Thru<br>FY12 | Rem<br>FY12 | Total<br>6 Years | FY 13 | FY 14 | FY 15 | FY 16 | FY 17 | FY 18 | Beyond 6<br>Yrs |
|----------------------------------|-------|--------------|-------------|------------------|-------|-------|-------|-------|-------|-------|-----------------|
| EXPENDITURE SCHEDULE (\$000s)    |       |              |             |                  |       |       |       |       |       |       |                 |
| Planning, Design and Supervision | 937   | 343          | 594         | 0                | 0     | 0     | 0     | 0     | 0     | 0     | 0               |
| Land                             | 0     | 0            | 0           | 0                | 0     | 0     | 0     | 0     | 0     | 0     | 0               |
| Site Improvements and Utilities  | 110   | 36           | 74          | 0                | 0     | 0     | 0     | 0     | 0     | 0     | 0               |
| Construction                     | 1,936 | 1,821        | 115         | 0                | 0     | 0     | 0     | 0     | 0     | 0     | 0               |
| Other                            | 0     | 0            | 0           | 0                | 0     | 0     | 0     | 0     | 0     | 0     | 0               |
| Total                            | 2,983 | 2,200        | 783         | 0                | 0     | 0     | 0     | 0     | 0     | 0     | 0               |
| FUNDING SCHEDULE (\$000s)        |       |              |             |                  |       |       |       |       |       |       |                 |
| Federal Aid                      | 1,826 | 1,043        | 783         | 0                | 0     | 0     | 0     | 0     | 0     | 0     | 0               |
| G.O. Bonds                       | 1,157 | 1,157        | 0           | 0                | 0     | 0     | 0     | 0     | 0     | 0     | 0               |
| Total                            | 2,983 | 2.200        | 783         | 0                | 0     | 0     | 0     | 0     | 0     | 0     | 0               |

## **APPROPRIATION AND EXPENDITURE DATA (000s)**

| Appropriation Request              | FY 14 | 0     |
|------------------------------------|-------|-------|
| Supplemental Appropriation Request | 0     |       |
| Transfer                           | 0     |       |
| Cumulative Appropriation           |       | 2,983 |
| Expenditure / Encumbrances         | 2,707 |       |
| Unencumbered Balance               | 276   |       |

| Date First Appropriation | FY 09 |       |
|--------------------------|-------|-------|
| First Cost Estimate      |       |       |
| Current Scope            | FY 11 | 2,983 |
| Last FY's Cost Estimate  | 1     | 2,983 |

### Description

This project provides for the rehabilitation of the existing East Gude Drive westbound bridge over CSX Railroad and Washington Metropolitan Area Transit Authority (WMATA) Metro Rail. The existing westbound bridge is a four - span structure including two eastern simple spans built in 1968 and two western continuous spans built in 1981. The proposed rehabilitation includes converting the two eastern simple spans to continuous, replacing the existing fixed bearings at the east abutment with expansion bearings, modifying the existing east abutment to a jointless semi-integral abutment, concrete deck replacement, replacing the existing chain link fences and substandard concrete parapets on both sides of the bridge with ornamental fences and crash-tested concrete parapets with aesthetic finish, replacing the existing sidewalk and safety curb on the bridge in-kind, repairing cracks and spalls of the east pier, center pier and east abutment, and reconstructing the east roadway approach as required.

## Capacity

Upon completion, the Average Daily Traffic (ADT) on the East Gude Drive Westbound Bridge will remain at 20,600 vehicles per day.

## **Estimated Schedule**

Design is estimated to be completed in Spring 2010, construction duration is estimated to be 16 months.

## **Cost Change**

Increase in construction cost due to the addition of a full deck replacement scope change and the escalation of material costs and updated estimates.

### Justification

The 2005 inspection revealed that the concrete decks and substructures of the two eastern spans, built in 1968 are in poor condition and require repairs. This bridge is considered to be structurally deficient. The proposed rehabilitation work is necessary to provide a safe roadway condition for the traveling public and prolong the service life of the structure. East Gude Drive is classified as Major Highway M-23 in the Shady Grove Sector Master Plan.

### Other

The project scope has changed from partial deck replacement to complete deck replacement of all four spans. After further design review, it was determined that replacing the deck in all four spans now, will prevent the necessity of returning in ten years with another contract for deck rehabilitation. Maryland State Highway Administration (MSHA) agrees with the scope change. The design costs for this project are covered in the "Facility Planning: Bridges" project (C.I.P. No. 509132). The costs of 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/Rehabilitation Program, Maryland State Highway Administration, Maryland Department of the Environment, Maryland-National Capital Park and Planning Commission, Montgomery County Department of Permitting Services, Utility Companies, CSX Transportation, Washington Metropolitan Area Transit Authority, Facility Planning: Bridges