

# **Montgomery County Department of Transportation Division of Transportation Engineering**

## **Public Meeting**

Replacement of Gold Mine Road Bridge No. M-0096 Over Hawlings River



May 15, 2012



### Design Team

#### Montgomery County Department of Transportation

Barry Fuss Bridge Program Manager 240-777-7261

Brian Copley Project Manager 240-777-7227

Vincent Subramaniam Traffic Engineering and 240-777-2196

Operations Section

### Design Consultant: Brudis & Associates

Greg Giering
Project Manager

Tim McShane
Structural Engineer



## Purpose of the Meeting

### **Obtain community input on:**

- Proposed Preliminary Engineering Concept
  - Bridge Replacement
  - Bike Path Extension
- Proposed Project Schedule





PLEASE HOLD
YOUR QUESTIONS
UNTIL
THE END



# **Project Location**



N

**Project Location** 





### History

- Built 1958
- Deck Replaced 2010
- Currently posted for :
  - 22,000lbs GVW
  - 34,000lbs GCW
- School Bus Waiver
- Frequent Flooding





### Bridge Condition

- Bridge is Safe
- Structural Deterioration
- Narrow Bridge
- Frequent Flooding



### ◆ Structural Deterioration (Substructure)

Cracks and spalls in concrete wing walls







### Structural Deterioration (Superstructure)

- Rusting and section loss along beam flanges
- Cracked railing post bracket welds







### **♦ Narrow Bridge**



- 20' wide approach roadway
- 15'-6" bridge clear roadway width
- Inadequate sight distance





### Frequent Flooding



Floods two to three times a year





### ◆ Full Bridge Replacement Proposed

In accordance with FHWA guidelines they recommend to replace a bridge when the Bridge Sufficiency Rating (BSR) is less than 50

Gold Mine Road Bridge

BSR: 40.3

 Based on the observed condition of the bridge, load posting, and the age of the bridge, a total bridge replacement is proposed.

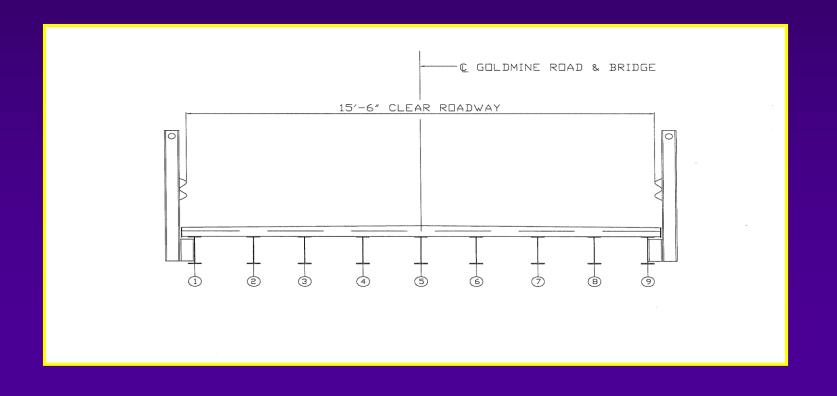


### Existing vs. Proposed Bridge Design

# Existing Typical Section

#### **EXISTING BRIDGE**

- Clear Width = 15 feet 6 inches
- No Sidewalk



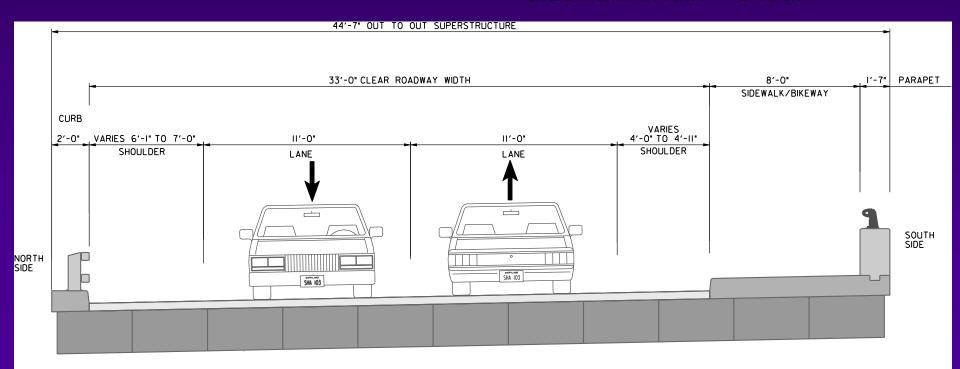


### Existing vs. Proposed Bridge Design

# Proposed Typical Section

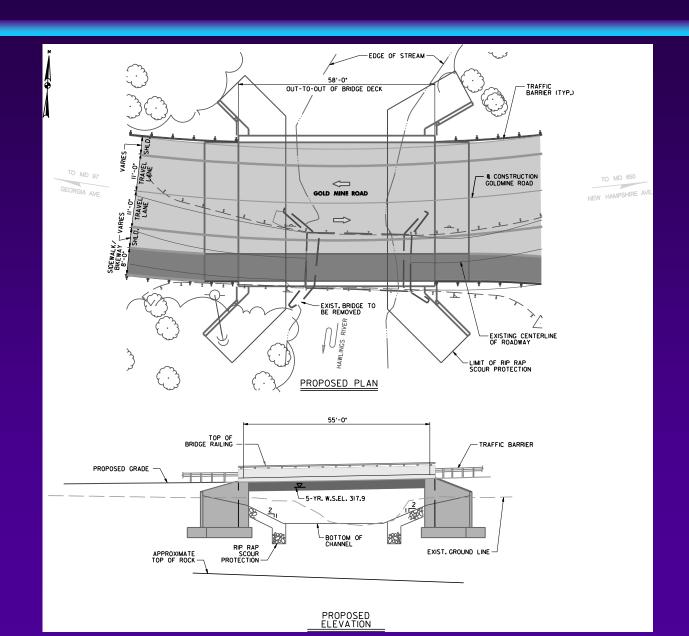
#### PROPOSED BRIDGE

- Lane Width = 11 feet
- Clear Width = 33 feet
- Sidewalk Width = 8 feet



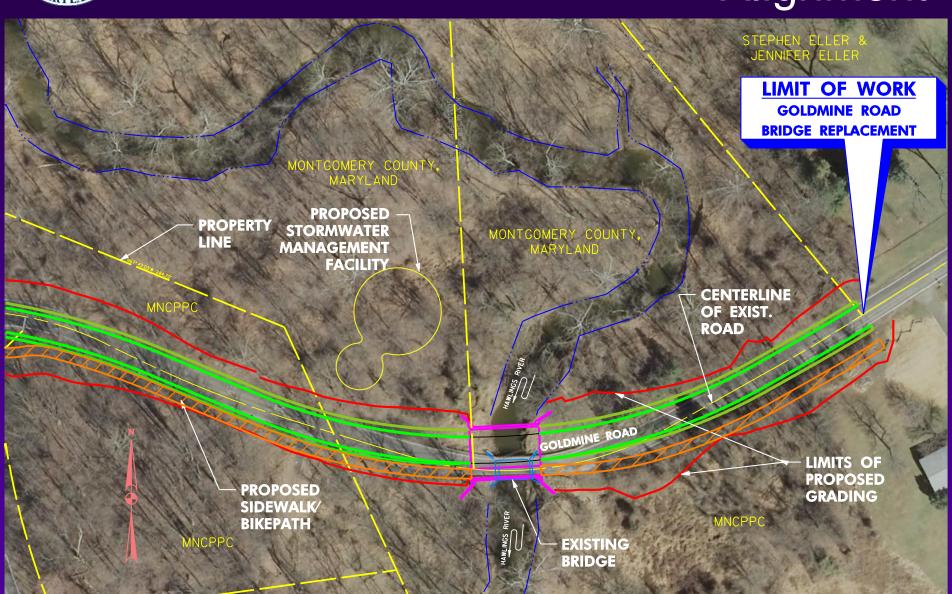


## Proposed Bridge



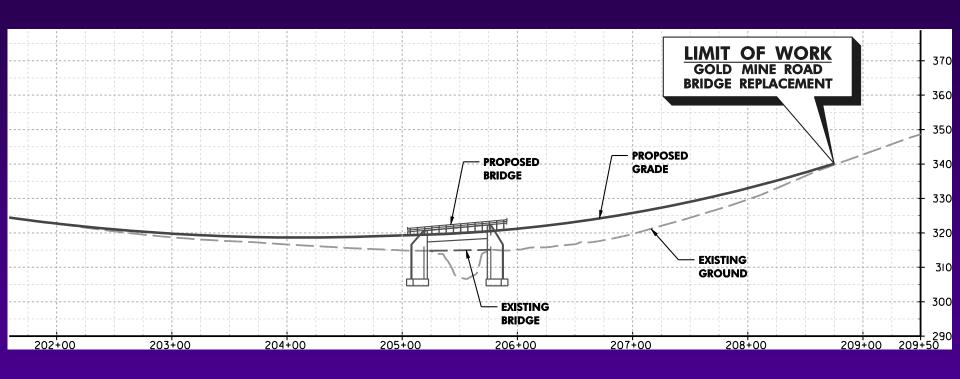


# Proposed Vs. Existing Road Alignment





# Proposed Vs. Existing Road Profile



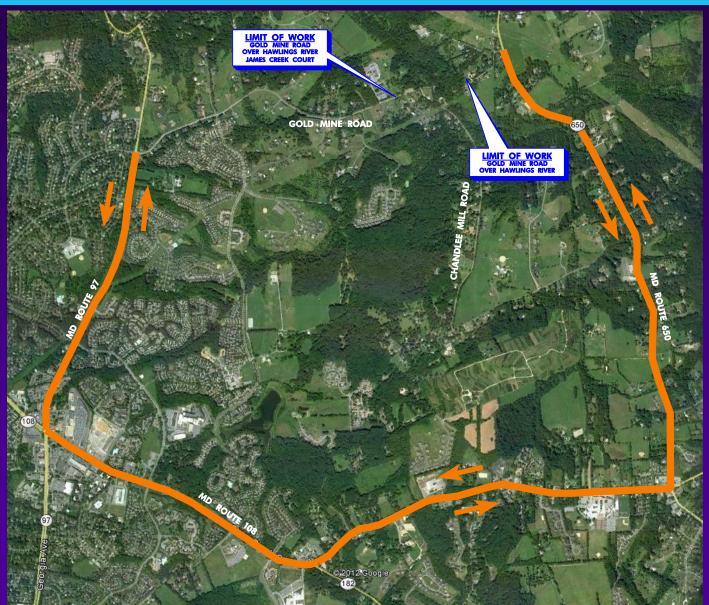


### Method of Bridge Replacement

- ◆ Close the road and detour traffic
  - Reduced constructability & safety concerns
  - Shorter construction time
  - Decreased construction cost
  - ◆ Decreased environmental impacts
- Use precast construction to shorten construction duration



## Proposed Detour Route





# Gold mine Road Proposed Bike Path Extension

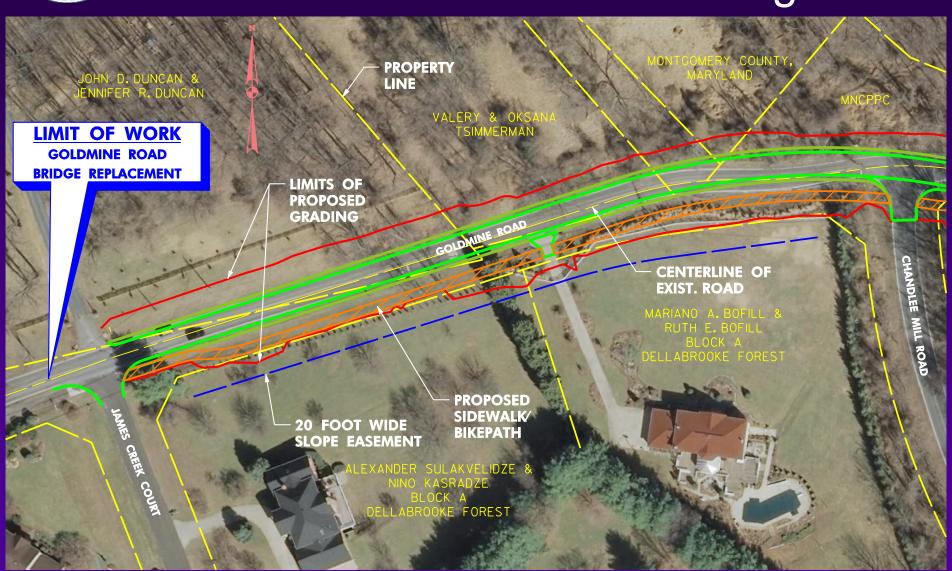




- **♦ Existing intersection** at James Creek Court
- **♦ Existing intersection** at Chandlee Mill Road

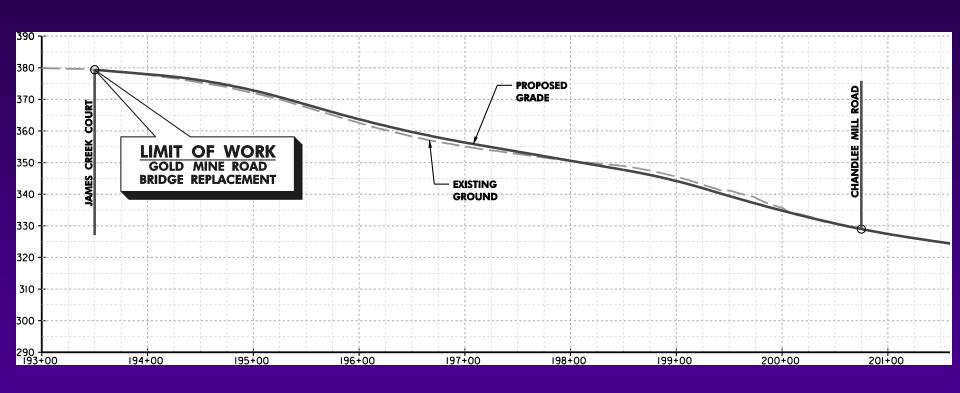


# Bike Path Proposed Vs. Existing Road Alignment





# Bike Path Proposed Vs. Existing Road Profile





# Gold Mine Road Proposed Bike Path Extension

- Improves pedestrian safety
- Continued all the way to New Hampshire Ave
- Provides access to the Hawlings River Greenway Trail



# Gold Mine Road Proposed Bike Path Extension

Bike path extension & roadway improvements construction between Chandlee Mill Rd and James Creek Ct.

- Completed concurrently with road closure
- Completed prior to or after road closure



## Minimize Community Disruption

- Detour Traffic to Shorten Construction Duration
- Coordinate with Montgomery County Public Schools
- Coordinate with Police, Fire and Rescue
- Minimize Environmental Impacts



### Proposed Project Schedule

- ◆ Final Design Complete Fall 2012
- Advertise for Construction Spring 2013
- Begin Construction Summer 2013
- End Construction Spring 2014



### Proposed Project Cost

- Total Cost ≈ \$3.5 Million Including Design, Construction, Utilities and Site Improvement
- Construction Cost Will Be Funded By County/ Federal Funds
- No Right-of-Way Acquisition Required



- Proceed with Final Design based on
  - Tonight's Feedback
  - Comments from Environmental Agencies
  - Comments from Coordinating Agencies



## **QUESTIONS?**

