

# Design Public Hearing

## Bridge Rehabilitation and Widening on Route 27 over Route 110

### Arlington County

**February 13, 2013**

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# Agenda

- **Project Location & Aerial Map**
- **Existing Bridge Conditions**
- **Proposed Bridge**
  - **Bridge configuration**
  - **Bridge features/aesthetics**
- **Construction Staging & Maintenance of Traffic**
- **Schedule & Cost**
- **Questions / Answers**

# Location Map



# Aerial Map



# Existing Bridge Elevation



- Built in 1941
- 4-span continuous steel girders (79'-79'-80'-68') on a curved alignment.
- 6 lanes of traffic (3 each direction), raised sidewalks & median
- Concrete wall piers, tall abutments and integral vault structures

# Existing Bridge Approaches

**Rte 27  
Looking  
North**



**Rte 27  
Looking  
South**

# Approach Vault Condition



# Bridge Deck Condition



# Structural Steel Condition



# Proposed Bridge Rendering – Elevation (Looking West from Rte 110)



- **6-span (65'-91'-79'-80'-80'-73) continuous steel plate girder spans on a curved alignment. Total bridge length 468'.**
- **Increase vertical clearance over Rte 110 from 15'-4" to 17'-0"**
- **Accentuate bridge aesthetics with the addition of decorative wrought iron picket fence, LED pedestrian lighting, gateway pillars, parapet recesses, and forest green color.**

# Proposed Rte 27 Bridge Rendering (Looking North)

Gateway Pillars

Decorative (or Low Level)  
LED Pedestrian Lighting

Decorative Wrought  
Iron Picket Fence

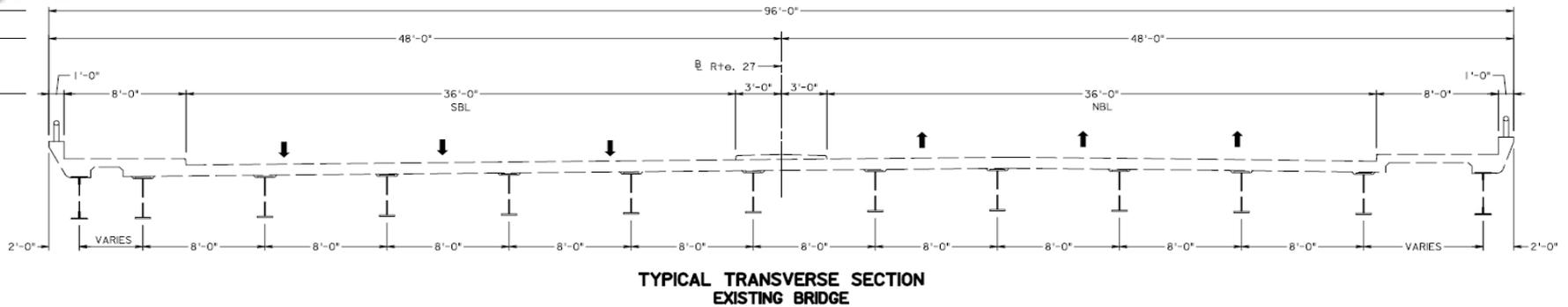


14'-0" Shared Use Path

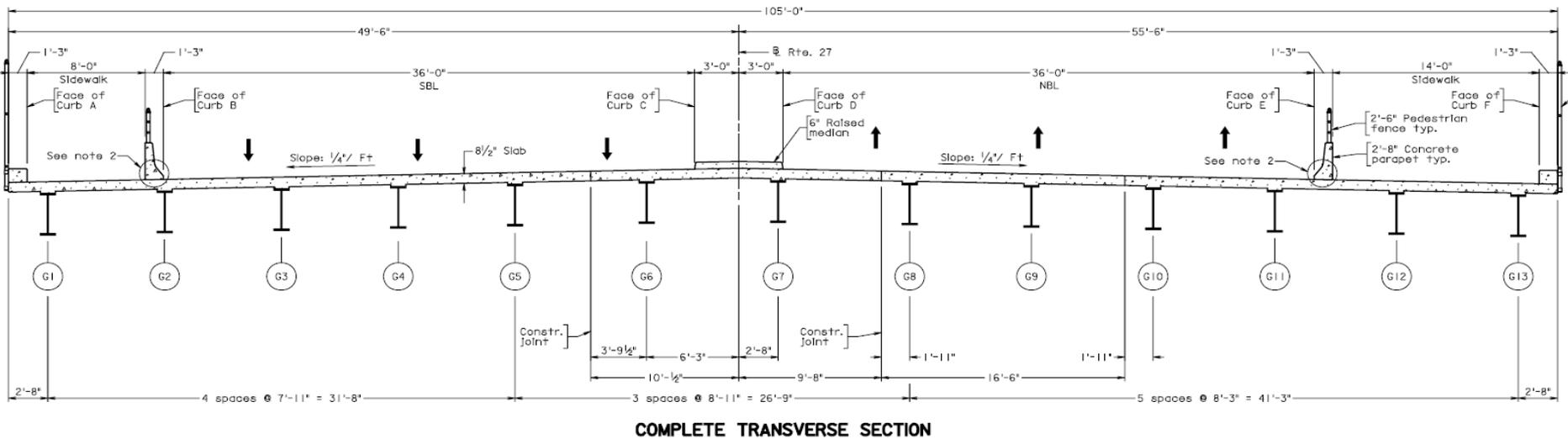
Recessed Concrete  
Pattern on Parapet



# Existing and Proposed Bridge Typical Sections

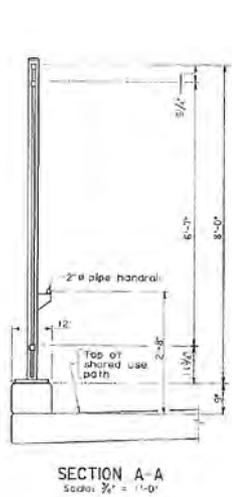


Existing bridge 96' total width (8' sidewalk, 36' clear roadway, 6' median, 36' clear roadway, 8' sidewalk)

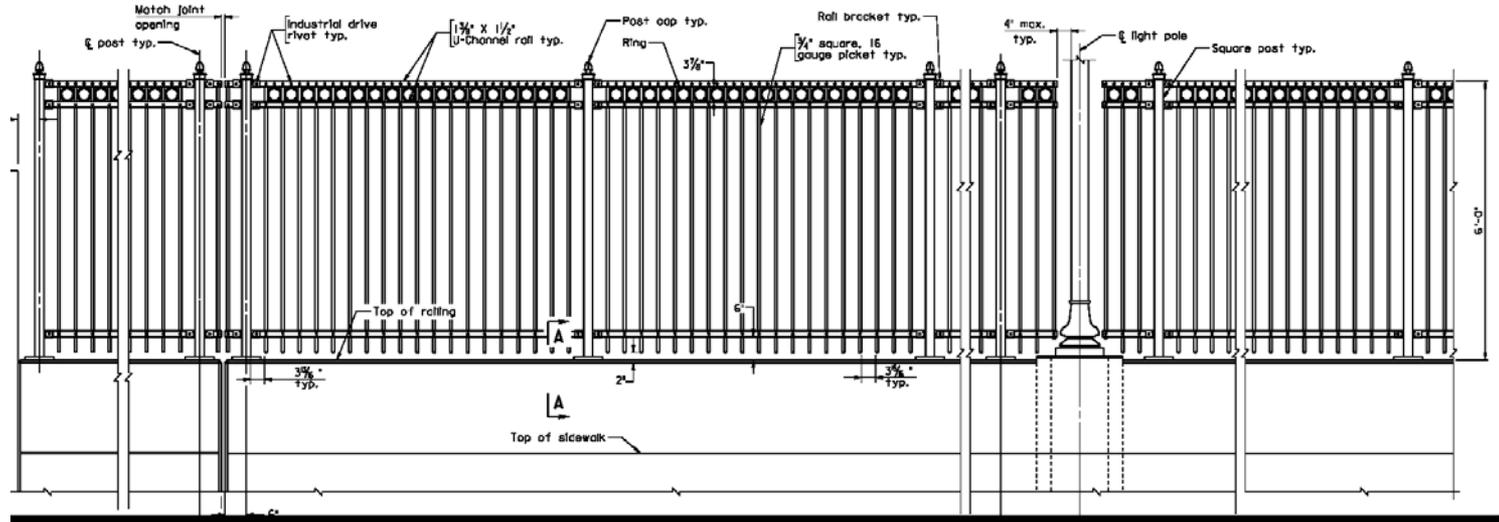


Proposed bridge 105' total width (8' sidewalk, 36' clear roadway, 6' median, 36' clear roadway, 14' multi-use trail)

# Architectural Features – Fence



Section

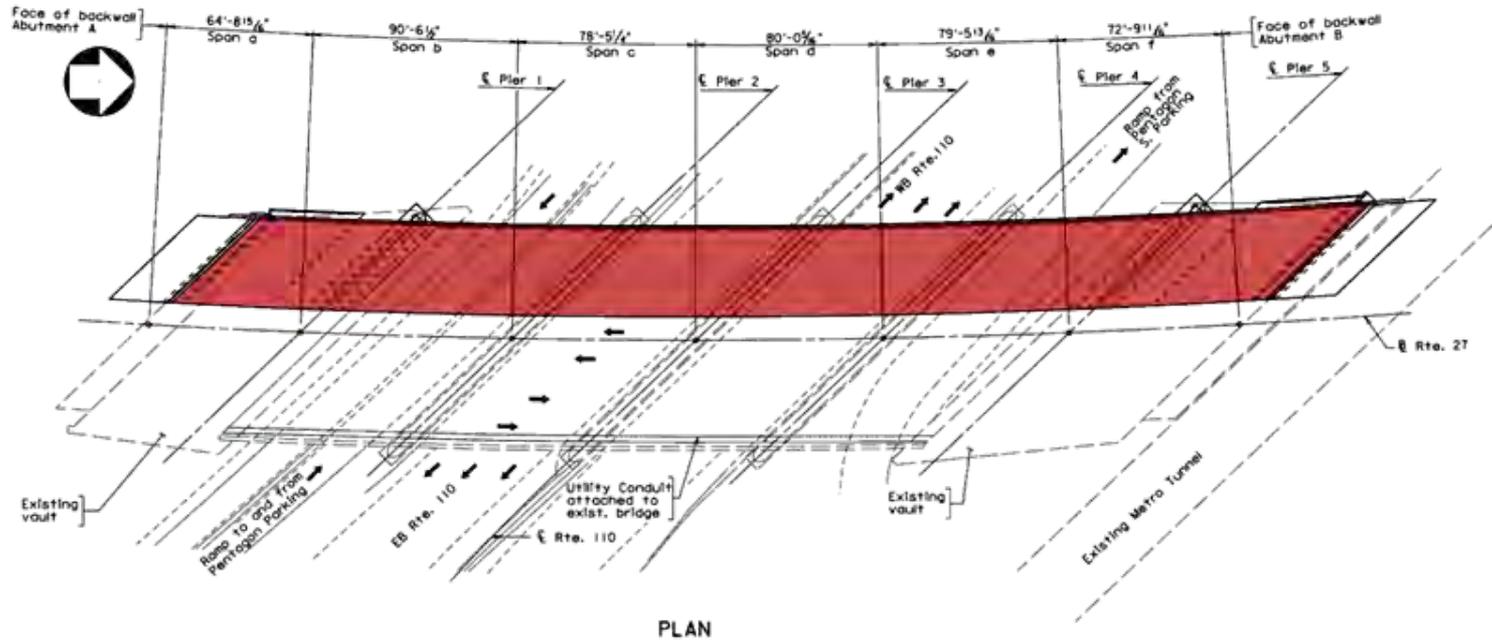


Elevation

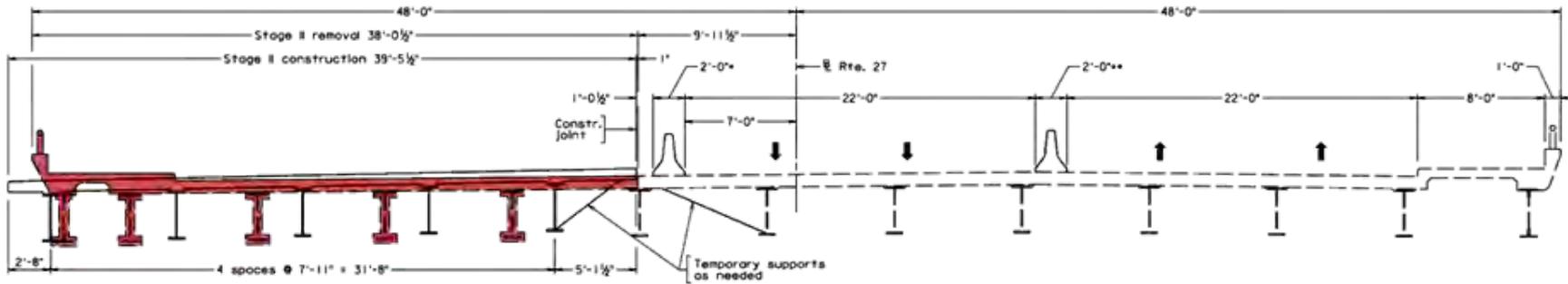
## Exterior Wrought Iron Picket Fence Detail



# Maintenance of Traffic / Staged Construction Stage II



PLAN

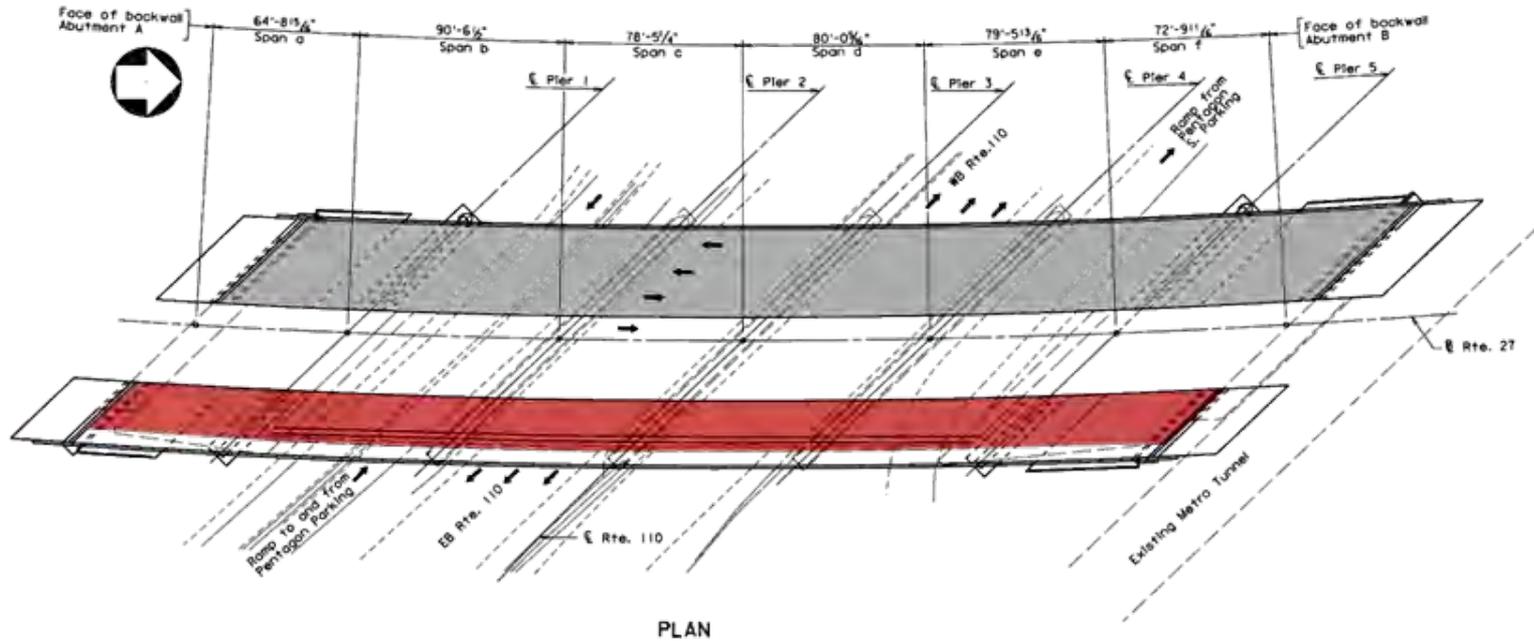


TYPICAL TRANSVERSE SECTION

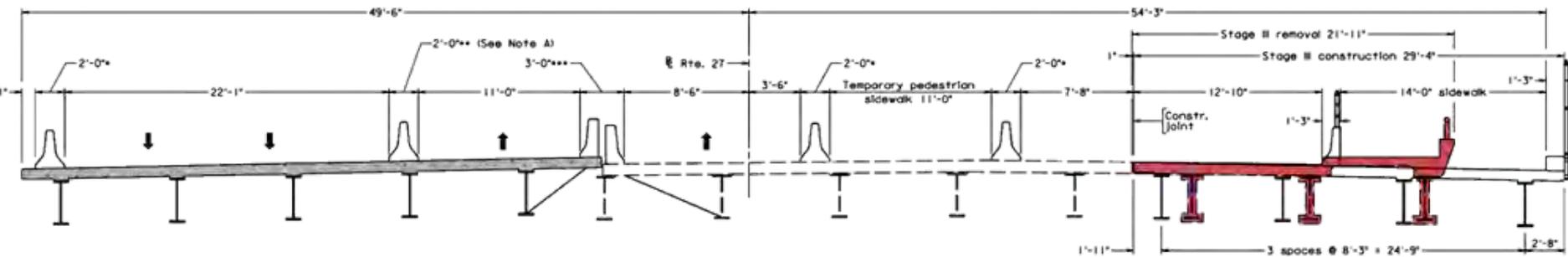
## LEGEND

- Existing Structure
- Part of Existing Structure to be Removed
- New Construction

# Maintenance of Traffic / Staged Construction Stage III



PLAN

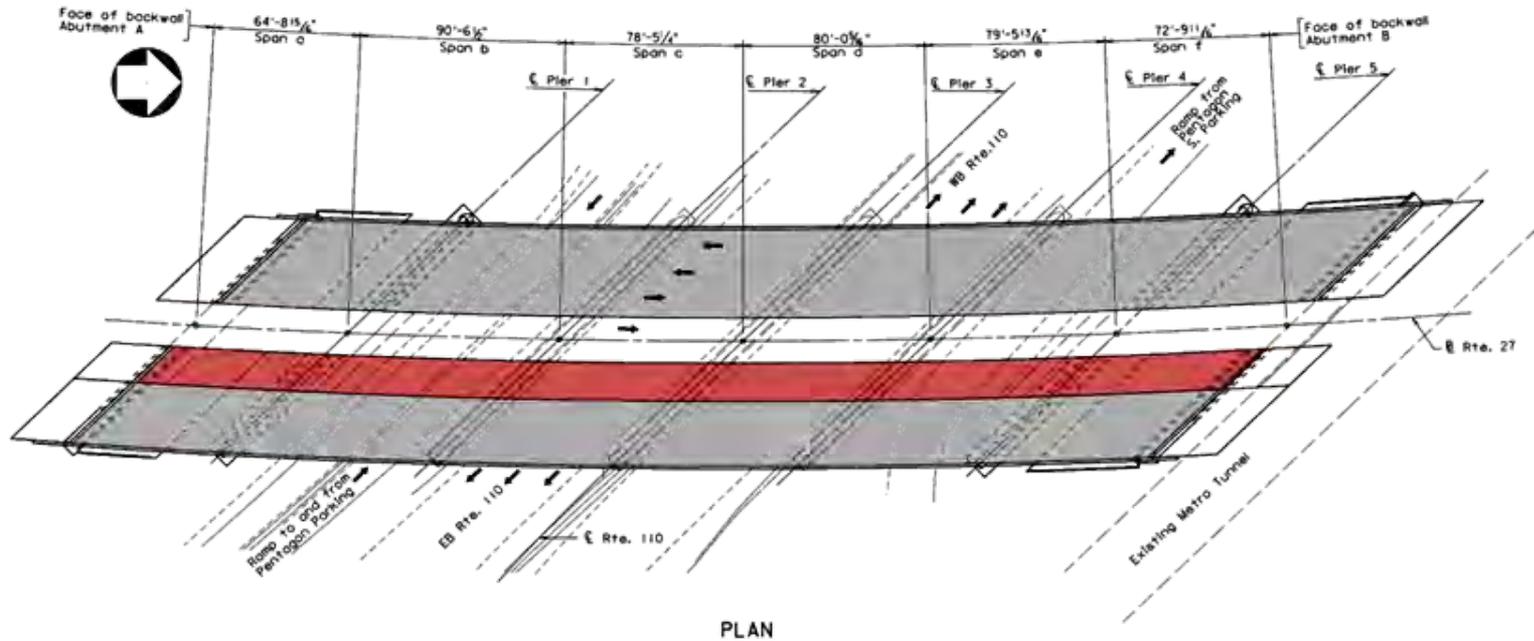


TYPICAL TRANSVERSE SECTION

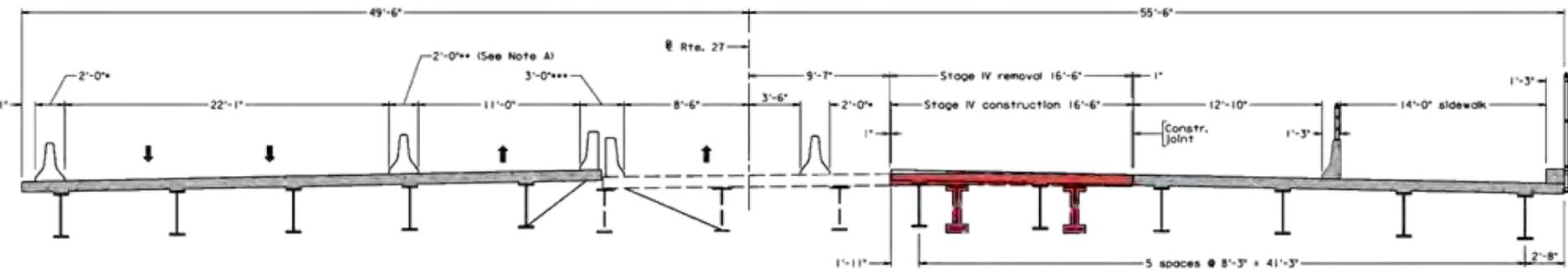
## LEGEND

-  Existing Structure
-  Part of Existing Structure to be Removed
-  New Construction
-  Completed Structure

# Maintenance of Traffic / Staged Construction Stage IV



PLAN

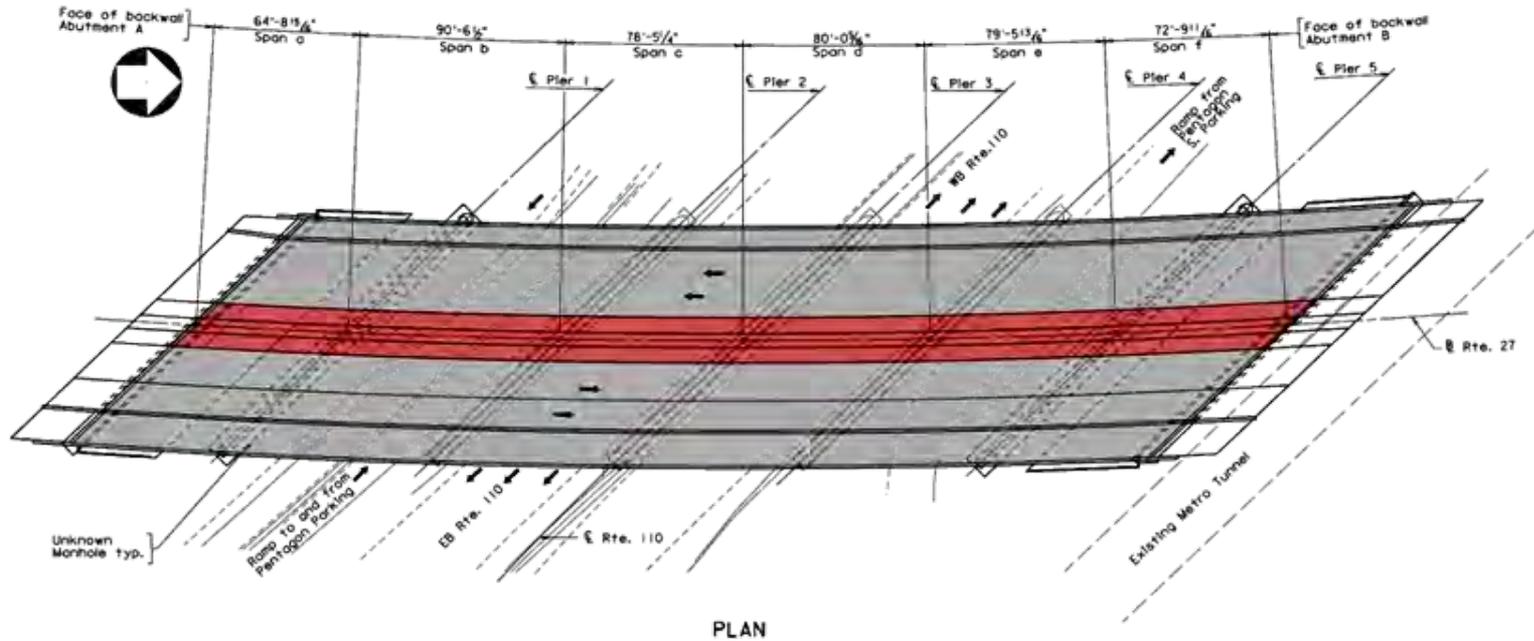


TYPICAL TRANSVERSE SECTION

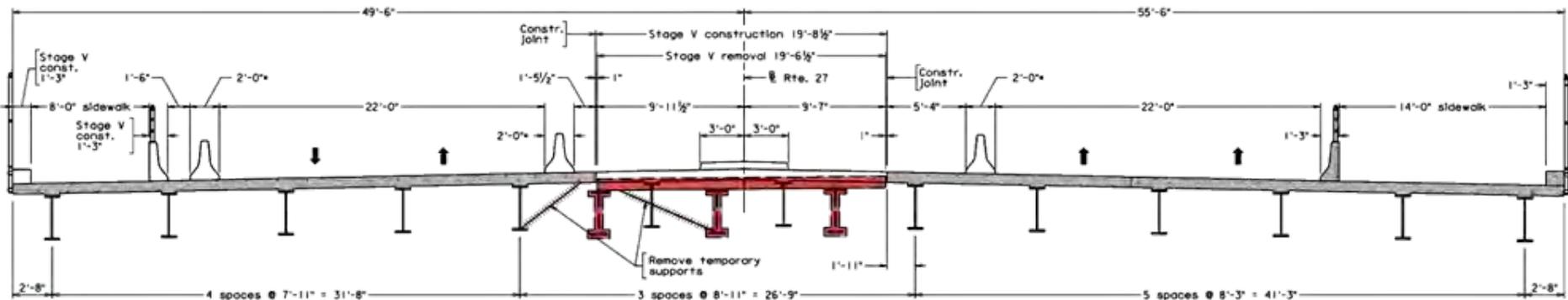
**LEGEND**

-  Existing Structure
-  Part of Existing Structure to be Removed
-  New Construction
-  Completed Structure

# Maintenance of Traffic / Staged Construction Stage V



PLAN



TYPICAL TRANSVERSE SECTION

- LEGEND**
- Existing Structure
  - Part of Existing Structure to be Removed
  - New Construction
  - Completed Structure

# Anticipated Schedule

## **Anticipated Schedule:**

End of Public Hearing comment period: March 2013

Right of way acquisition: April 2014

Construction: 2014 – 2015 (Tentative)

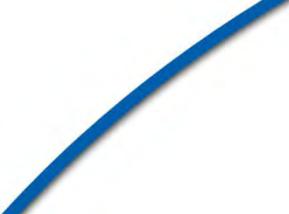
## **Estimated Project Costs:**

Preliminary Engineering: \$1.18 million

Right of way: \$206,000

Construction: \$18.67 million

Total: \$20.1 million



# Questions