



# I-81 WIDENING HARRISONBURG – PROJECT UPDATE

UPC 116280 Project #0081-115-270

Scott Alexander – Project Manager

Ross Hudnall – Noise Abatement Coordinator

September 12, 2023

# Agenda

- **Project Overview**
  - Scope, Schedule, Estimate
- **Features**
- **Coordination with City Staff, Stakeholders**
- **What's Ahead...**
- **Noise Barriers**
  - Overview of VDOT Noise Policy
  - Upcoming Balloting
- **Questions**

# Project Overview

## Scope:

- **Widening to 3 lanes NB & SB MM 242.0 - 248.8**
- **Evaluate, rehabilitate and/or replace existing bridges, pavement, safety features**
- **Evaluate need and install noise barriers where reasonable & feasible**
- **Rehabilitate drainage structures**
- **Onsite stormwater quality management**



# Project Overview

## Schedule:

- 02/20** Project authorized
- 09/21** Citizen information meeting
- 06/22** Public hearing
- 07/22** Pleasant Valley Rd meeting
- 12/22** Limited access changes approved
- 10/23** *Noise barrier balloting*
- 03/24** *Auth. RW acquisition & utility reloc.*
- 08/25** *Advertisement for construction*
- 12/29** *Substantial completion*



# Project Overview

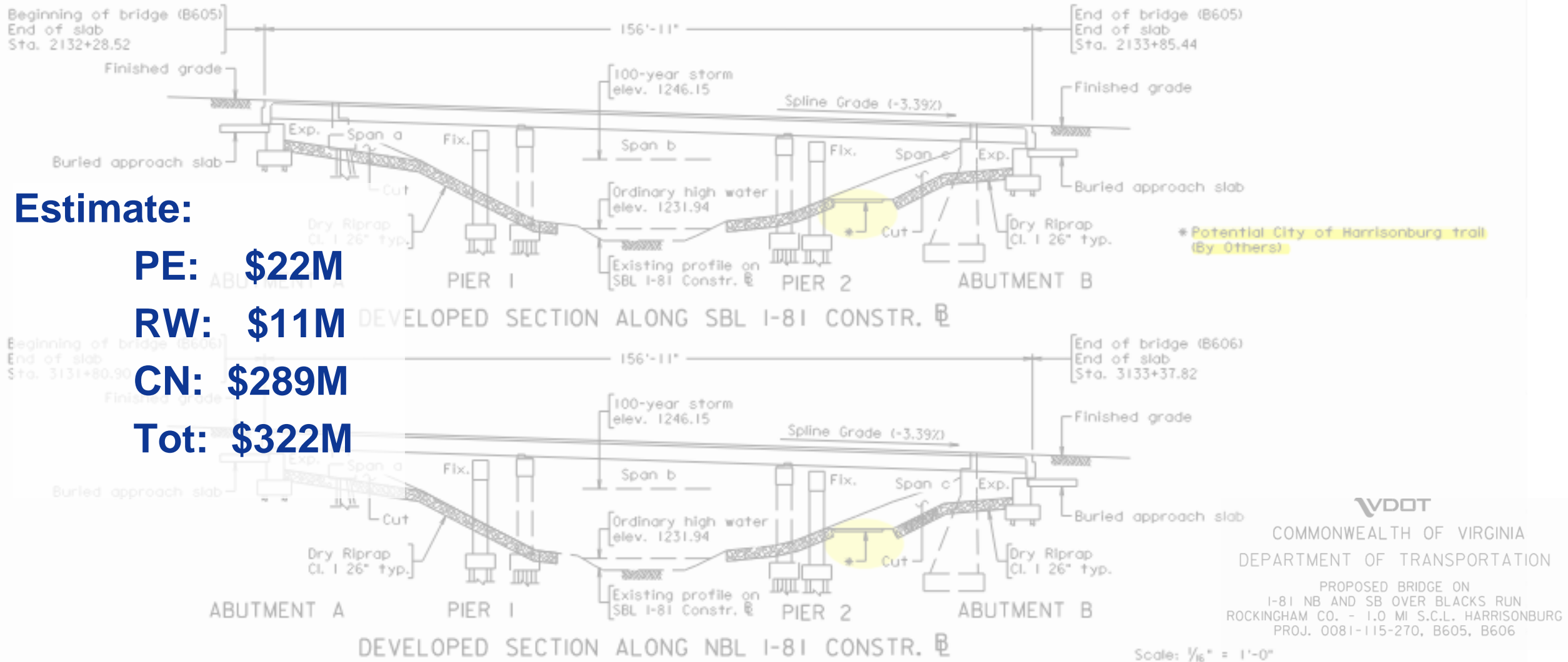
**Estimate:**

**PE: \$22M**

**RW: \$11M**

**CN: \$289M**

**Tot: \$322M**



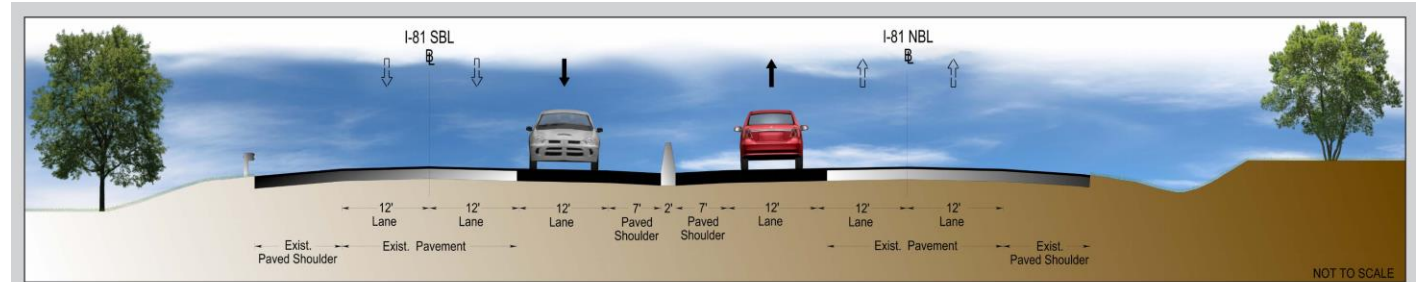
COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF TRANSPORTATION

PROPOSED BRIDGE ON  
I-81 NB AND SB OVER BLACKS RUN  
ROCKINGHAM CO. - 1.0 MI S.C.L. HARRISONBURG  
PROJ. 0081-115-270, B605, B606

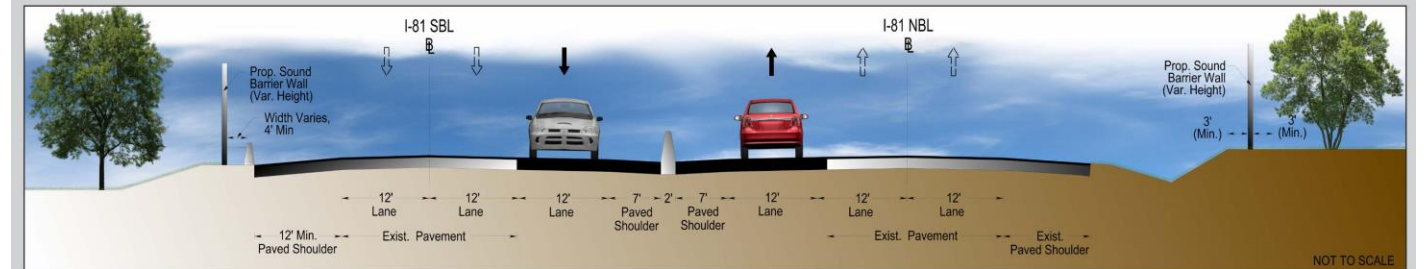
# Features

## Typical Section

- 3<sup>rd</sup> lane added towards the median
- Cross-slope, superelevation and crown rollover corrections
- Concrete median barrier
- Noise barrier location (where applicable) variable depending on grade



I-81 TYPICAL SECTION WITHOUT SOUND BARRIER WALLS



I-81 TYPICAL SECTION WITH SOUND BARRIER WALLS



Example A - Existing Roadway



Example A - With Sound Barrier Wall

# Features

## Digital copy of updated displays provided Displays, plans, videos and info linked at [Improve81.org](http://Improve81.org)

**VDOT** Virginia Department of Transportation

### Public Hearing (4 of 5)

I-81 Widening Project (MM 242.0 to MM 248.8) June 2022

**Project Location**  
Herndon, VA

**North Arrow & Scale**

**Legend**

- Proposed Pavement
- Proposed Bridge
- Proposed Sidewalk
- Stormwater Management Basin
- Rehabilitation Area
- Structural Grass Median
- Erosion SWM Access
- Proposed Traffic Signal
- Existing Right of Way
- Existing Property Line
- Proposed Limited Access Lane
- Proposed Permanent Drainage Easement
- Proposed Temporary Construction Easement
- Proposed Utility of Construction - Cut
- Proprietary Table Barrier

**Contact Information**

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Comments may also be sent to:  
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I-81 Improvement Project (MM 242.0 to MM 248.8)  
Herndon, Virginia  
06/16/22  
JPC / WJG  
Project Record Number

These plans are unperfected and unapproved and are not to be used for any type of construction or the acquisition of right of way. Approval processes for other jurisdictions may be required beyond the proposed project's jurisdiction on these plans.

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**Regional Storm Water Management Facility**



# Features

## Project By the Numbers:

<b>5.8</b>	<b>Miles I-81 mainline widening (both directions)</b>
<b>9</b>	<b>Complete bridge replacements</b>
<b>15</b>	<b>Stormwater management facilities</b>
<b>35</b>	<b>% of ex. lanes rec. cross-slope, superelevation, crown correction</b>
<b>11,705</b>	<b>LF of guardrail replacement/upgrades</b>
<b>22,362</b>	<b>LF of proposed sound walls</b>
<b>32,820</b>	<b>LF of median barrier (replaces cable barrier)</b>
<b>740,520</b>	<b>SF reforestation areas within the right of way</b>

***While maintaining 2 lanes of traffic in each direction during peak hours***

# Coordination with City Staff

## Ongoing Coordination with City & Stakeholders:

- Pleasant Valley Road improvements
- Early Rd. entrance at Pleasant Valley Elementary
- Bridges over Country Club Rd. (future widening of CC Rd.)
- Bluestone Trail accommodation at Blacks Run bridges
- SWM/flood control facility at Reservoir St. (Woodland Dr.)
- SWM facility at Paul St.
- Fire/rescue emergency access points through noise barriers
- Reforestation area plantings
- Upgraded concrete barrier on I-81 over Duke Dog Alley
- Coordination with adjacent City & VDOT projects

# What's Ahead

**Noise barrier balloting**  
**Right of way authorization**  
**Utility relocations**  
**Advertise construction**  
**Construction Mobilization**

**October 2023**  
**Spring 2024**  
**Summer 2024 – Summer 2025**  
**Summer 2025**  
**Fall/Winter 2025**

# VDOT Noise Policy Overview

- **Based on 23 CFR Part 772 which applies to all federally-funded Type I transportation improvement projects.**
- **VDOT must assess federally-funded Type I projects for:**
  - Highway traffic noise impacts
  - Avoidance/mitigation measures for noise impacts
- **Highway Traffic Noise Analysis is completed to determine whether noise abatement measures are *Warranted, Feasible, and Reasonable.***

# VDOT Noise Policy Overview

- **Warranted** – *Are there noise impacts?*
  - Increase of 10dBA from existing year to design year (2047)
  - Design year noise levels exceed the Noise Abatement Criteria
- **Feasible** – *If warranted, will a barrier work here?*
  - 5 dBA reduction to at least 50% of the impacted receptors
  - Constructable: safety, access, utilities, drainage, topography, etc.
- **Reasonable** – *Will it work well, is it wanted, and is it cost-effective?*
  - Provide 7 dBA reduction to at least one impacted site
  - At least 50% of the benefited sites vote in favor of the barrier
  - Does not exceed the maximum of 1,600 SF per benefited receptor

# Noise Study Updates

- **Preliminary Noise Analysis – August 2022**
  - Results presented at the 6/28/22 PH
  - Nine feasible and reasonable noise barriers
  - Totaling to over 4 miles and over 400,000 square feet
- **Final Design Noise Analysis – Fall 2023**
  - A more refined and detailed analysis
  - Updated roadway plans, topography, and land use data
  - Reevaluate noise impacts and noise barrier designs
  - Solicit public input – barrier voting

# Upcoming Noise Barrier Balloting

- **Ballots only sent to those benefited by barriers**
- **Owners and tenants both receive ballots**
- **Certified mailers with prepaid return envelopes**
- **21 days to respond**
- **Second round of voting if response rate below 50% with 14 days to respond**
- **50% of respondents must be in favor for the barrier to move forward to construction**
- **Votes only apply to the barrier benefiting the voter**

# Proposed Noise Barrier Aesthetic





# Online Resources

## **I-81 Projects:**

<https://improve81.org>

## **I-81 Harrisonburg Widening Project:**

<https://www.virginiadot.org/projects/staunton/interstate-81-harrisonburg-area-widening.asp>

## **VDOT Noise Program:**

<https://www.virginiadot.org/projects/pr-noise-walls-about.asp>