Route 28 Widening

Prince William County / Fairfax County Line to Route 29

“Pardon Our Dust” Meeting

James Beall, PE – Fairfax County Department of Transportation
Joseph Fragale, PE, DBIA – Shirley Contracting Company, LLC

Virtual
October 27, 2020
Introductions

• District Supervisors
  • Sully District – Supervisor Kathy Smith
  • Springfield District – Supervisor Pat Herrity
• Fairfax County Department of Transportation (FCDOT)
• Virginia Department of Transportation
• Shirley Contracting Company, LLC / Dewberry Engineers Inc.
Asking Questions

✔ Use the Q&A Function
✔ Questions may be held so that everyone can participate
✔ Unanswered questions will be addressed post-meeting
✔ Phone participants with questions will be called on after the presentation

❌ Do not use the Chat function
❌ This meeting will focus only on the Fairfax County portion of the project
Purpose

To update project status, provide information to the community on the Design Features, Construction Phasing, and Schedule of the proposed widening of Route 28 from the Prince William/Fairfax County Line to Route 29.

Please note: The purpose of this meeting is to discuss the Fairfax County Route 28 widening project. Fairfax County plans to hold separate meetings in the future regarding Prince William County’s plans for Route 28 Improvements. The meeting on October 27, 2020, is not intended to address the improvements or alignment alternative(s) that Prince William County has proposed.
Agenda

• Project Overview
• Design Enhancements
• Noise Barrier
• Right-of-Way
• Construction Sequence and Schedule
• Public Comment/Questions
Route 28 Widening and Reconstruction:

- Total Project Budget = $78,782,000 (PE, RW, Construction, Inspection, Administration, etc.)
- Construct an additional through lane in each direction (three lanes in each direction) from just north of the bridge over Bull Run to the Route 29 Interchange
- Reconstruct sub-standard crest vertical alignment on SB Route 28 to meet current standards
  - SB Route 28 between Compton Road and Bradenton Drive
  - SB Route 28 just south of New Braddock Road
- Include Shared Use Paths
  - Both Sides of Route 28
  - Short Section of Sidewalk on SB side between Upperridge Drive and Machen Road due to Right-of-Way constraints
Route 28 Widening

Typical Sections

Original Design

SB Route 28

NB Route 28

Design Enhancement
Southern Terminus to Old Mill Rd/Green Trails Intersection

Proposed Future 4th Lane

Proposed Future 4th Lane

Proposed Future 4th Lane

Location of Future NB 4th Lane Varies

Department of Transportation

VDOT

This project is funded in part by NVTA
Project Overview – Rt. 28 South of Compton

- SB Inside Lane Curb and Gutter
- SB Route 28 Transitions from 3 Lanes to 2 Lanes
- Median Cross-Over Closed
- NB Route 28 Widened to Provide 3 Thru Lanes
- NB Outside Lane Curb and Gutter
Design Enhancement
Eliminated Retaining Wall – South of Compton Road
Route 28 Widening

Project Overview – Rte. 28/Compton/Ordway

- Planned SWM Pond
- Compton Road EB
  - 1 - Left Turn Lane
  - 1 - Right Turn Lane
- Ordway Rd. EB
  - 2 - Left Turn Lanes
  - 1 - Thru Lane
  - 1 - Right Turn Lane
- Route 28 NB
  - 1 - Left Turn Lane
  - 3 - Thru Lanes
  - 1 - Right Turn Lane
- Route 28 SB
  - 1 - Left Turn Lane
  - 3 - Thru Lanes
  - 1 - Right Turn Lane
- Compton Road WB
  - 1 - Left Turn Lane
  - 1 - Thru Lane
  - 1 - Right Turn Lane
- Potential Noise Barrier
Route 28 Widening

Noise Barrier along SB Route 28 Approx. 600’ South of Bradenton Drive to Ordway / Compton Intersection

Original Design

Design Enhancement
Project Overview – Bradenton Drive

- Potential Noise Barrier
- Route 28 SB
  1 - Left Turn Lane
  3 - Thru Lanes
- Route 28 NB
  Widened to the Outside within existing RW
- Planned SWM Pond
- Bradenton Drive
  1 - Left Turn Lane
  1 - Right Turn Lane
**Route 28 Widening**

**Project Overview – Old Mill/Green Trails**

Old Mill Road EB
1 – Left Turn Lane
1 – Thru Lane
1 – Right Turn Lane

Route 28 SB
1 - Left Turn Lane
3 - Thru Lanes
1 – Right Turn Lane

Rte. 28 NB
1 – Left Turn Lane
3 – Thru Lanes
1 – Right Turn Lane

Green Trails Blvd.
1 - Left Turn Lane
1 – Thru Lane
1 - Right Turn Lane

Route 28 NB
Widened to the outside within existing ROW
Project Overview – Darkwood Drive Area

Centerline of SB Route 28
Shifted toward median

Potential Noise Barrier

Existing Median Break to be CLOSED

Planned SWM Pond

3 Thru Lanes NB and SB Route 28
Project Overview – New Braddock Road

New Braddock Rd EB
2 – Left Turn Lanes
2 – Thru Lanes
1 – Right Turn Lane

Route 28 SB
2 – Left Turn Lanes
3 – Thru Lanes
1 – Right Turn Lane

New Braddock Rd WB
3 – Left Turn Lanes
2 – Thru Lanes
1 – Right Turn Lane

Route 28 NB
2 – Left Turn Lanes
3 – Thru Lanes
1 – Right Turn Lane
Design Enhancement
Eliminated SWM Pond at New Braddock Road
Replaced with 3 Underground Detention Facilities to be Placed in Existing RW
Project Overview – Machen Road

**Route 28 Widening**

- **Machen Rd EB**
  - 2 – Left Turn Lanes
  - 1 – Thru Lane
  - 1 – Right Turn Lane

- **Route 28 NB**
  - 2 – Left Turn Lanes
  - 3 – Thru Lanes
  - 1 – Right Turn Lane

- **Machen Rd WB**
  - 1 – Left Turn Lane
  - 1 – Thru Lane
  - 1 – Right Turn Lane

- **Route 28 SB**
  - 1 – Left Turn Lane
  - 3 – Thru Lanes
  - 1 – Right Turn Lane
Design Enhancement
Eliminated Retaining Wall – Machen Rd (West of Rt 28)
Original Design
Route 28 South Bound (North of Machen Road)

Design Enhancement
Old Centreville Rd WB
2 – Left Turn Lanes
1 – Thru Lane
1 – Right Turn Lane

Route 28 NB
1 – Left Turn Lane
3 – Thru Lanes
1 – Right Turn Lane

Route 28 SB
1 – Left Turn Lane
3 – Thru Lanes
1 – Right Turn Lane

Upperridge Rd EB
2 – Left Turn Lanes
1 – Thru Lane
1 – Right Turn Lane
• As required by Federal law, a preliminary noise impact analysis was conducted as part of the NEPA process per VDOT Noise Policy.

• Where project noise levels are projected to exceed established criteria, FCDOT is required to propose noise mitigation.

• Sound Barriers will be constructed only if the people who are directly benefitted vote in favor of them.

• Noise Analysis
  • Computer model calibrated to existing conditions (Pre-COVID).
  • Based on design year traffic volumes (2040) with future 8-lanes.
  • Loudest hour – AM or PM on Route 28.
Summary of Preliminary Noise Analysis and Results

- Currently, 26 noise-sensitive receptors (e.g., residences, etc.) experience “noise impacts” defined as approaching (within 1 dBA) or exceeding the Noise Abatement Criteria (67 dBA (Leq)) during the loudest hour of the day.

- By 2040, it is anticipated that the number of impacted receptors will increase to 68.

- All proposed Sound Barriers must be “Reasonable and Feasible” per VDOT Noise Barrier Policy.
Summary of Preliminary Noise Analysis and Results

10 Sound Barriers were evaluated based on VDOT’s five criteria of reasonableness and feasibility:

1. Acoustically effective by reducing levels at impacted receptors by at least 5 dBA.

2. Possible to design and construct the barrier (Feasible).

3. Face of barrier cannot be larger than 1600 sq. ft. per benefited receptor (Reasonable).

4. At least one receptor achieves a 7 dBA reduction.

5. Most owners or residents of benefited receptors favor the barrier.
Summary of Preliminary Noise Analysis and Results

- Two barriers were found to meet the first four criteria and are undergoing further evaluation:

  A. Barrier D1 - East side of Route 28 between New Braddock Road and Darkwood Drive.

  B. Barrier I - West side of Route 28 north of Compton Road.
Route 28 Widening

Noise Barrier D1 - NB Route 28
Between Darkwood Drive and New Braddock Road
Route 28 Widening

Noise Barrier I - SB Route 28
Between Bradenton Drive and Ordway Road
**Criterion 5: Noise Barrier Voting – Barrier I**

<table>
<thead>
<tr>
<th>Color</th>
<th>No. of Benefited Receptors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue</td>
<td>24</td>
</tr>
<tr>
<td>Green</td>
<td>33</td>
</tr>
</tbody>
</table>

Blue receptor – impacted and benefited: each vote weighted as 5  
Green receptor – not impacted but benefited: each vote weighted as 3  
Yellow receptor – Not impacted and not benefited: do not vote  
Both owners and renters can vote
Final Noise Analysis

• Final Noise Analysis and Design of the Barriers, including exact location, length, height, architectural treatment, etc., will be performed by the Design-Build Contractor under supervision of FCDOT, VDOT and FHWA.

• Once Final Noise Analysis is complete including barrier location, height, length, and impacted receptors identified, Design-Build Contractor will contact benefited receptors (property owners and/or tenants) to start the voting process. Those eligible to vote will also be able to vote on the architectural treatment/style of the noise barrier.
# Route 28 Widening

## Estimated ROW Requirements

**Based Upon Preliminary 6-Lane Plans**

<table>
<thead>
<tr>
<th></th>
<th>Total Affected</th>
<th>ROW and Easements</th>
<th>Easements Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route 28 Roadway</td>
<td>46</td>
<td>19</td>
<td>27</td>
</tr>
<tr>
<td>Stormwater Management Ponds</td>
<td>4</td>
<td>4 (3 Total Acquisitions)</td>
<td>0</td>
</tr>
<tr>
<td>Total Parcels</td>
<td>50</td>
<td>23</td>
<td>27</td>
</tr>
</tbody>
</table>

**No demolition or removal of residential or commercial structures.**

**Utility relocations may require additional easements**

Design Enhancement – Eliminated Fee Simple Acquisitions ~ 6.0 Acres for SWM Pond
Reduced Fee Simple Acquisitions ~ 0.1 Acres for SB Route 28
Area 1 Construction Sequence – Southern Terminus to Green Trails Blvd / Old Mill Road

Stage 1A

Stage 1B
Area 1 Construction Sequence – Southern Terminus to Green Trails Blvd / Old Mill Road

Stage 2

Stage 3

Stage 4
Area 2 Construction Sequence – Green Trails Blvd / Old Mill Road to the Northern Terminus
County of Fairfax, Virginia
Area 2 Construction Sequence – Green Trails Blvd / Old Mill Road to the Northern Terminus

Stage 3

Stage 4

Department of Transportation

VDOT

This project is funded in part by NVTA
## Design-Build Schedule (6 Lane Design)

- **Design Public Hearing** – September 23, 2019
- **Final Environmental (NEPA) Document** – October 30, 2019
- **Award Design Build Contract** – May 26, 2020
- **Notice to Proceed to D-B Contractor** – June 15, 2020
- **Advanced Temporary Traffic Control Plan** – July 31, 2020 (Under Review)
- **Roadway Plans (60% Complete)** – October 12, 2020 (Under Review)
- **Start ROW Acquisition (Total Acquisitions)** – November 2020
- **Start Temporary Roadway Widening** – Approx. Dec. 1, 2020
- **Start Permanent Roadway Widening** – Spring/Summer 2021
- **Substantial Construction Completion** – Spring 2023
- **Final Construction Completion** – Summer 2023
What to Expect During Construction

- Work hours are set by VDOT and Fairfax County.
  - Night work is likely.
- Contractor must maintain pedestrian and vehicular traffic and signals during construction.
- No lane closures will be allowed during peak travel hours.
- Weekend work anticipated.

<table>
<thead>
<tr>
<th>Roadway</th>
<th>Single Lane Closures</th>
<th>Temporary 20 Minute Complete Stoppages</th>
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</thead>
<tbody>
<tr>
<td>Route 28 NB and SB</td>
<td></td>
<td>Monday - Sunday</td>
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<tr>
<td>New Braddock Road (Route 620)</td>
<td>Mon - Thurs</td>
<td>9:30 AM - 3:00 PM</td>
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<tr>
<td></td>
<td>10:00 PM - 5:00 AM (Next Day)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Friday</td>
<td>9:30 AM - 2:00 PM</td>
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<tr>
<td></td>
<td></td>
<td>10:00 PM - 9:00 AM (Sat)</td>
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<tr>
<td></td>
<td>Saturday</td>
<td>10:00 PM - 8:00 AM (Sun)</td>
</tr>
<tr>
<td></td>
<td>Sunday</td>
<td>10:00 PM - 5:00 AM (Mon)</td>
</tr>
<tr>
<td>Connecting Roadways</td>
<td></td>
<td>All other road’s hours</td>
</tr>
<tr>
<td></td>
<td>Mon - Thurs</td>
<td>9:30 AM - 3:30 PM</td>
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<tr>
<td></td>
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Project References

Website will be updated monthly or as more information/data becomes available.

Project Contacts:
Fairfax County Department of Transportation – Jim Beall, P.E. (703-887-5673)
james.beall@fairfaxcounty.gov

Shirley Contracting Company, LLC - Joseph R. Fragale, P.E., DBIA (703-898-5885)
joe.fragale@shirleycontracting.com

Thank You!
Public Comments/ Questions

Please provide comments by Friday, November 13, 2020

To submit comments, questions or feedback, please contact FCDOT:

- Online via red feedback form link at the bottom of the project website
  https://www.fairfaxcounty.gov/transportation/projects/route28-widening
- In writing to: FCDOT, Attn: Route 28 Widening Feedback, 4050 Legato Road, Suite 400, Fairfax, VA 22033
- By phone: 703-877-5673, TTY 711
Asking Questions

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