Rolling Road (Route 638) Widening Project

From: 0.369 Mile North of Fairfax County Parkway (Route 286)
To: Old Keene Mill Road (Route 644)

State Project No. 0638-029-156, P104, R204, C504; UPC 5559

Public Information Meeting #2

November 30, 2017
6:30 to 8:30 PM
Presentation at 7:00 PM
Presentation Agenda

• **Introduction and Project Overview**  
  Nick Roper, VDOT

• **Design Updates and Utility Design Comparison**  
  John Maddox, Project Designer

• **Project Schedule and Cost Summary**  
  Nick Roper, VDOT

• **Questions and Comments**
First initiated in 1988
Project Development initiated early 2000s
Public Hearing conducted 2008
Funds removed in 2009 & project put on hold
Funds restored in 2015; Began Survey & Conceptual Design Fall 2015
Meetings with Elected Officials & HOA Representatives – May 2016
Public Information Meeting #1 – June 22, 2016
Public Outreach conducted Fall 2016
Meetings with Elected Officials & HOA Representatives – September - November 2017
Public Information Meeting #2 – November 30, 2017
What We’ve Heard from You

Raised Median vs. Two Way Left Turn Lane
  • Nearly 70% Prefer Raised Median (based on feedback from the June 2016 Public Information Meeting)

Shared Use Path and Sidewalks
  • Nearly 75% Report Frequent or Occasional Use (based on feedback from the June 2016 Public Information Meeting)

Parking
  • Provide on-street parking

Safety Concerns
  • Sight Distance
  • Traffic Volumes and Speed
  • Pedestrian Crossings
Project Design Updates
(from June 2016 Public Information Meeting #1)

- Preliminary Design Plans Completed
- Evaluation of Undergrounding Existing Utilities
- Preliminary Noise Analysis
- Preliminary Design of Storm Drainage and Storm Water Management

The purpose of tonight’s meeting is to share additional information with you and solicit feedback.
Evaluation of Undergrounding Existing Utilities
Pole location considerations:

- Between road and Shared Use Path / Sidewalk
- Guy wire 10 ft. vertical clearance over Shared Use Path / Sidewalk
- Minimum offset from sidewalk 1.5’ and from shared use path 2’
Utility Design Comparison
Aerial Relocation Option Overview

Pole mounted transformers for conversion to residential connections
Easement Requirements:  20 feet behind pole line
3 feet behind guy wire
Utility Design Comparison
Aerial Relocation Impacts Summary

Impacts:

• Poles avoid conflict with existing and proposed storm drainage
• Limited Traffic Control
• Guy wires will extend into the property
Utility Design Comparison
Underground Duct Bank Option Overview

- Proposed Duct Bank in relation to Underground Infiltration BMP and relocated sanitary sewer
Utility Design Comparison
Underground Duct Bank Option Overview

- Above ground transformers
- Residential connections converted to underground
- Underground Concrete Vaults
Utility Design Comparison
Underground Duct Bank Impacts Summary

SB Rolling Road

Transformer 5'x4'x3'

Varies 15’-40’

Ashford Court

Section A-A

Section B-B

Varies 5’-10’
10’ +/-

Transformers 5’x4’x3’

PROP. SANITARY SEWER EASEMENT 5’ min.

Relocated Sanitary Sewer

Approx. Units of Excavation

4x6x6’ COX Vault

8x6x12’ DOMINION VAULT

Approx. 5’

Varies 15’-40’

15’ +/-

Concrete Encased Duct Bank (Dominion, Verizon, and COX)

Approx. Units of Excavation

Sewer Elevation

Shared Use Path
## Aerial vs. Underground Relocation Estimate

*(cost from Viola Street to Barnack Drive)*

<table>
<thead>
<tr>
<th></th>
<th>Aerial Relocation</th>
<th>Underground Relocation</th>
<th>(\Delta)</th>
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</thead>
<tbody>
<tr>
<td><strong>Preliminary Engineering</strong></td>
<td>PE Budget</td>
<td>PE Budget + $826,000</td>
<td>$ (826,000)</td>
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<tr>
<td><strong>Right of Way</strong></td>
<td>$ 5,629,000</td>
<td>$ 6,917,000*</td>
<td>$ (1,288,000)</td>
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<td><strong>Utility Relocation</strong></td>
<td>$ 3,581,000</td>
<td>$10,872,000</td>
<td>$ (7,291,000)</td>
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<td><strong>Sub-Total</strong></td>
<td>$ 9,210,000</td>
<td>$ 18,515,000</td>
<td>$ (9,405,000)</td>
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*This cost includes the relocated sewer line (partial) from the roadway to the side*
Preliminary Noise Analysis
**Noise Analysis**

*Required* to evaluate noise levels on federally funded projects to comply with federal law under the National Environmental Protection Act

Where project noise levels are projected to exceed established criteria, VDOT is *required to propose noise mitigation*

Sound Barriers will be constructed *only* if the people who are directly benefitted vote for them

**Noise Analysis**

- Computer model calibrated to existing conditions
- Based on design year traffic volumes (2040)
- Loudest hour – PM on Rolling Road
Potential Noise Barriers
(from Nov. 2017 Noise Study)
Potential Noise Barriers
(from Nov. 2017 Noise Study)
Potential Noise Barriers
(from Nov. 2017 Noise Study)

Additional noise barrier
Example - Sound Barrier Voting

Only benefited receptors vote

- Blue - Impacted and Benefited is weighted as a 5
- Green - Benefited but not impacted is weighted as a 3
- Yellow – Not Benefited and not impacted – Do not vote
- Rentals – Owner and renter votes

<table>
<thead>
<tr>
<th>Color</th>
<th># of Benefited Receptors</th>
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</thead>
<tbody>
<tr>
<td>Blue</td>
<td>13</td>
</tr>
<tr>
<td>Green</td>
<td>16</td>
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</table>

Voting for Barriers C(1) & C(2)
Potential Noise Wall Finishes

- Rustic Brick
- Chiseled Sandstone
- Dogwood (Urban)
- 3D Brick
Preliminary Design of Storm Drainage

and

Storm Water Management
Storm Water Management (SWM) Options Evaluated

SWM Detention Basins:
- Requires 4 total property takes
- Construction Cost ~ $3 million

Best Management Practices (BMP) Underground Infiltration:
- Requires 0 total property takes
- Higher Maintenance Costs
- Construction Cost ~ $1.3 million
Best Management Practices (BMP)
Underground Infiltration

- Reduced Amount of Rainwater Leaving the Project Area to Match Existing Volumes
- Rainwater Storage and Controlled Release
- TREE BOX
Best Management Practices (BMP)
Underground Infiltration

Underground Infiltration Example
(Rainwater Storage and Controlled Release)
Project Development & Delivery Schedule

Public Information Meeting       November, 2017
Design Public Hearing Meeting    January, 2018
Phase I Construction Begins      Summer 2019
Right of Way Acquisition         November, 2020
Utility Relocation               July, 2022
Advertise for Construction       July, 2022
Award to Contractor              October, 2022
Construction Ends                Summer/Fall 2024
## Total Project Cost Estimates
*(30% Completed Design Plans)*

<table>
<thead>
<tr>
<th></th>
<th>January 2008</th>
<th>March 2017</th>
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<tr>
<td><strong>Preliminary Engineering:</strong></td>
<td>$5,795,000.</td>
<td>$5,887,000.</td>
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<td><strong>Right of Way:</strong></td>
<td>$8,567,000.</td>
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<td><strong>Utility Relocation:</strong></td>
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<td><strong>Construction:</strong></td>
<td>$19,589,000.</td>
<td>$28,296,000.</td>
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<td><strong>Total:</strong></td>
<td>$35,279,000</td>
<td>$51,605,000*</td>
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*Total Estimated Project Cost for Aerial Relocation w/ BMP (Best Management Practice) Facilities*
Public Input Points

Pedestrian and Bicycle Facilities/General

- Questions on Comment Sheet for Public Input

1. Which of the following best applies to you?
   - I live on Rolling Road. If so, what is the closest cross street to your home:
   - I live in a neighborhood adjacent to Rolling Road, please name the community:
   - I commute on Rolling Road.
   - Other

2. As a pedestrian or bicyclist what facility width do you prefer? Select one choice from each category below.
   - Sidewalk: 5-foot-wide
   - 6-foot-wide
   - No Preference
   - Shared-Use Path: 8-foot-wide
   - 10-foot-wide
   - No Preference

3. Please provide us with any additional information or suggestions that you think will assist in the completion of the project.

4. How did you hear about this meeting?
   - Newspaper
   - Social Media
   - Website
   - Other
Rolling Road Widening

Questions & Answers