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**

Project History & Background

- 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)

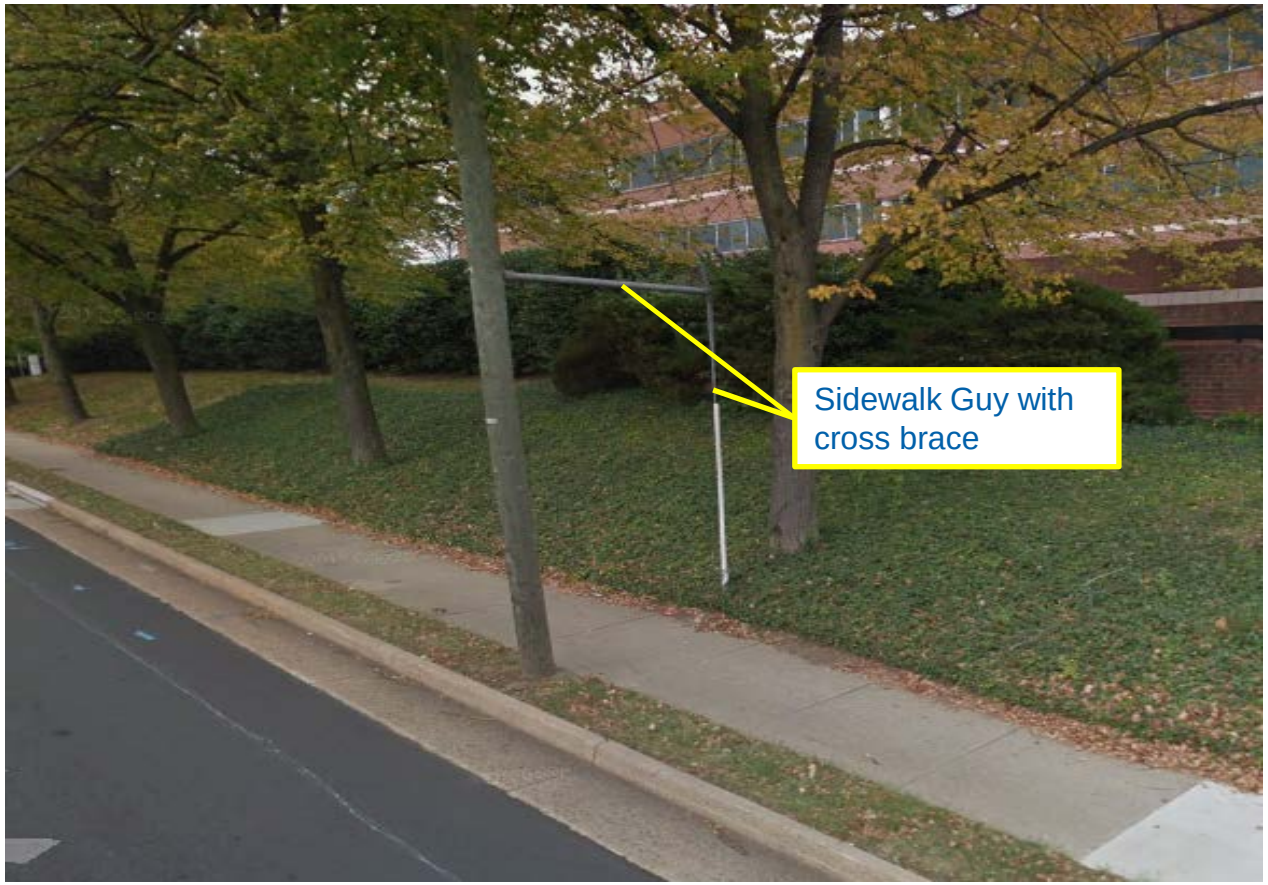
- **Preliminary Design Plans Completed**
- **Evaluation of Undergrounding Existing Utilities**
- **Preliminary Noise Analysis**
- **Preliminary Design of Storm Drainage and Storm Water Management**

The purpose of tonight's meeting is to share additional information with you and solicit feedback.

Evaluation of Undergrounding Existing Utilities

Utility Design Comparison

Aerial Relocation Option Overview

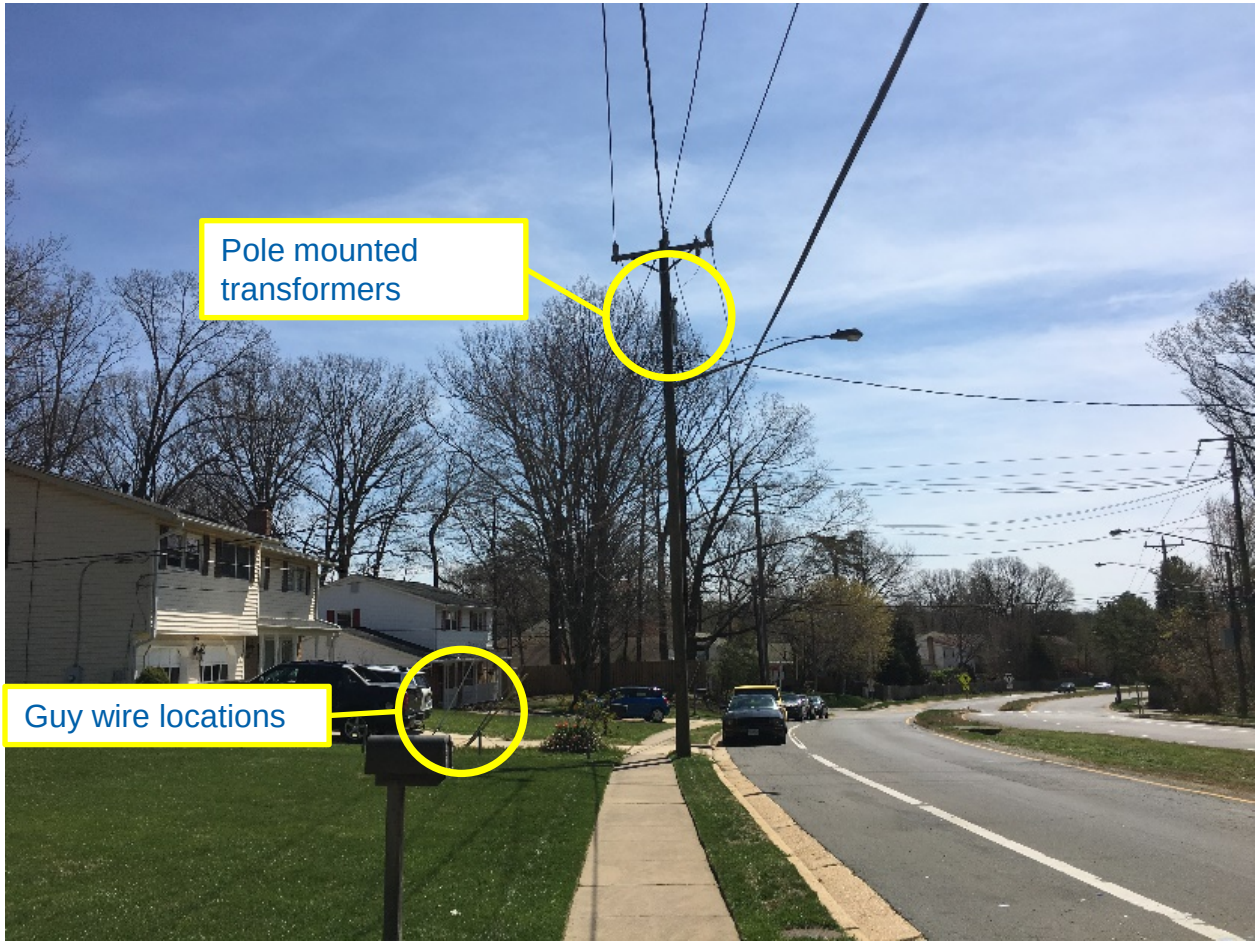


Pole location considerations:

- **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



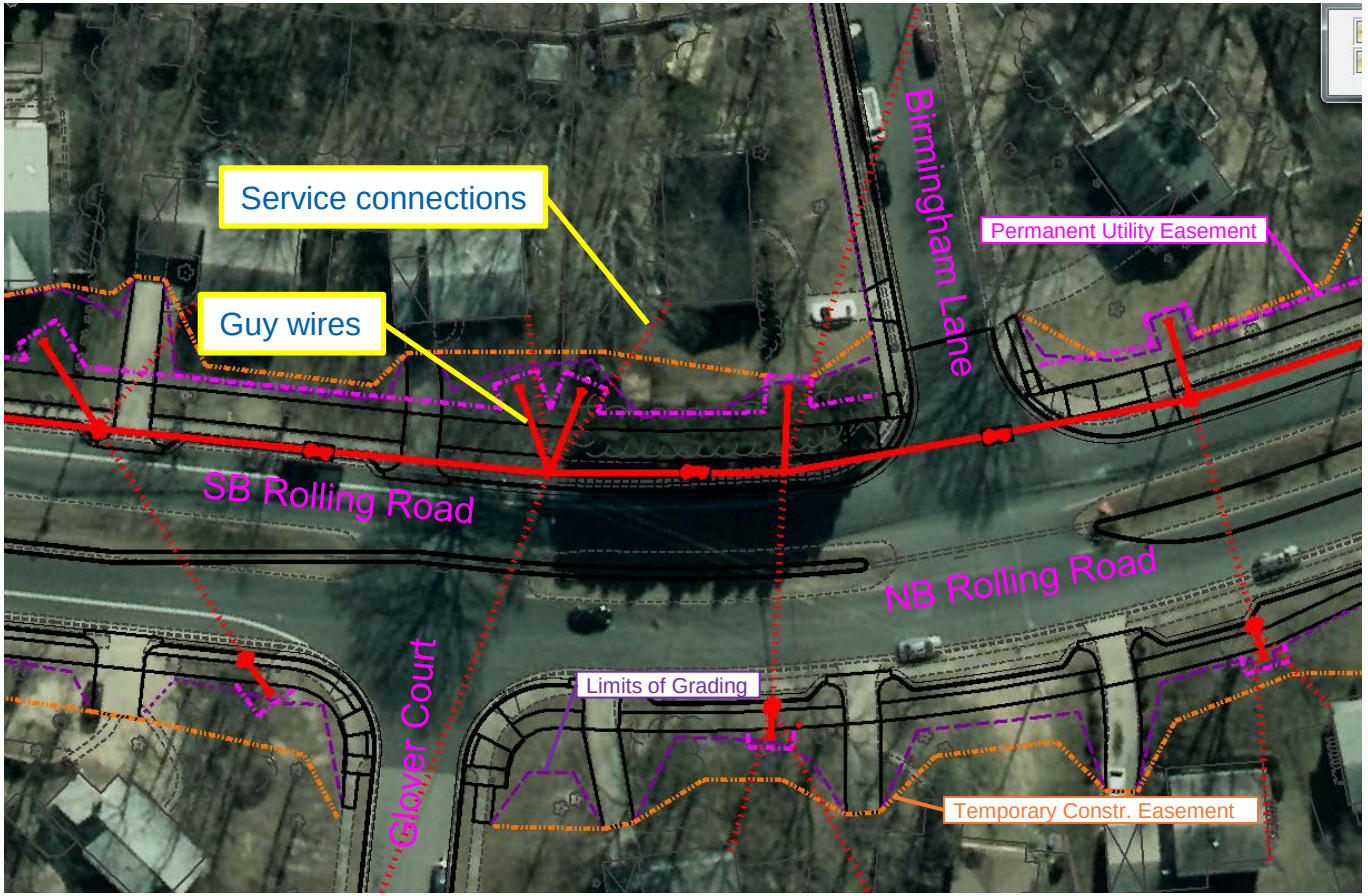
Pole mounted transformers for conversion to residential connections

Easement Requirements: **20 feet behind pole line**

3 feet behind guy wire

Utility Design Comparison

Aerial Relocation Impacts Summary

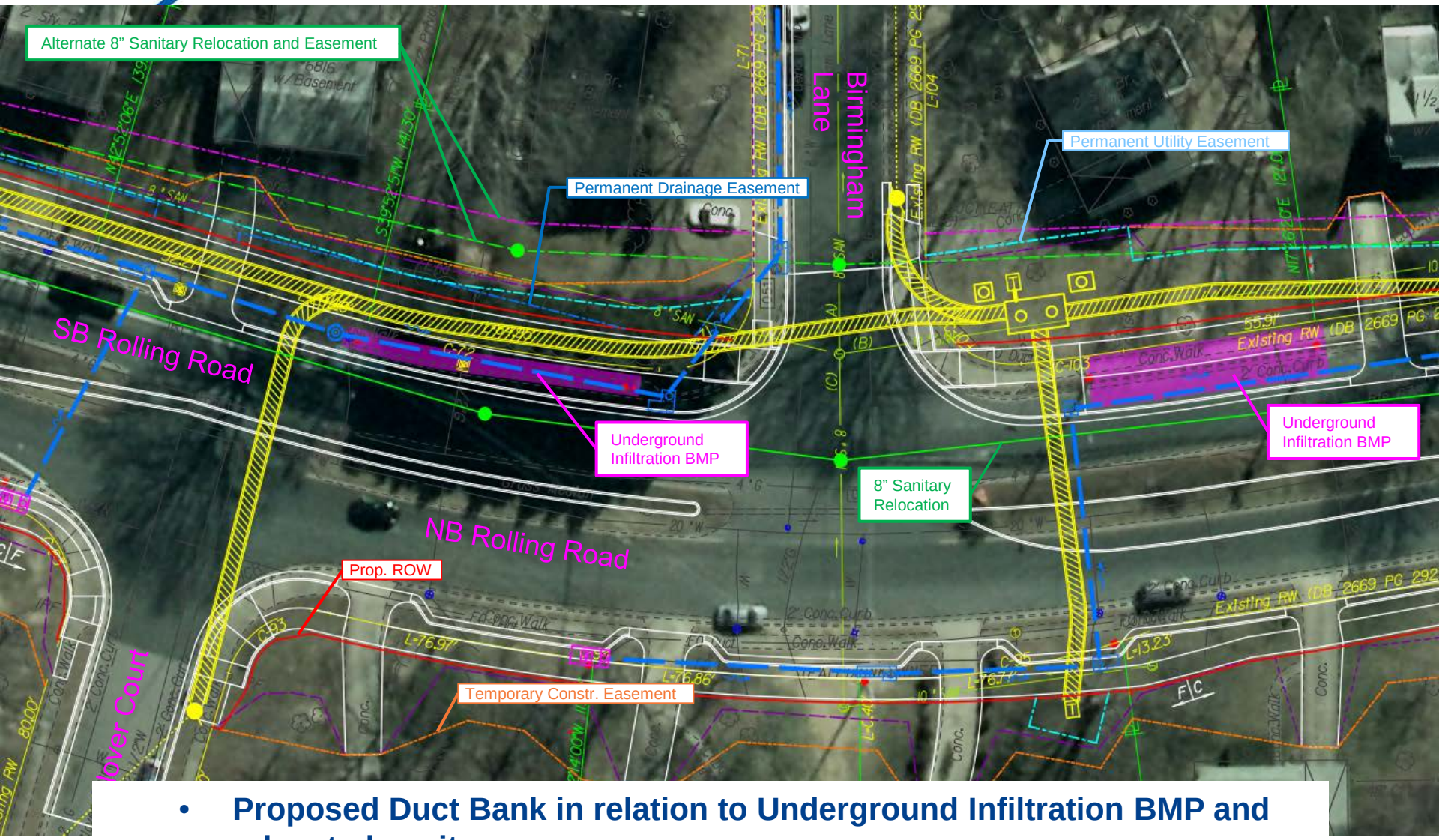


Impacts:

- **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

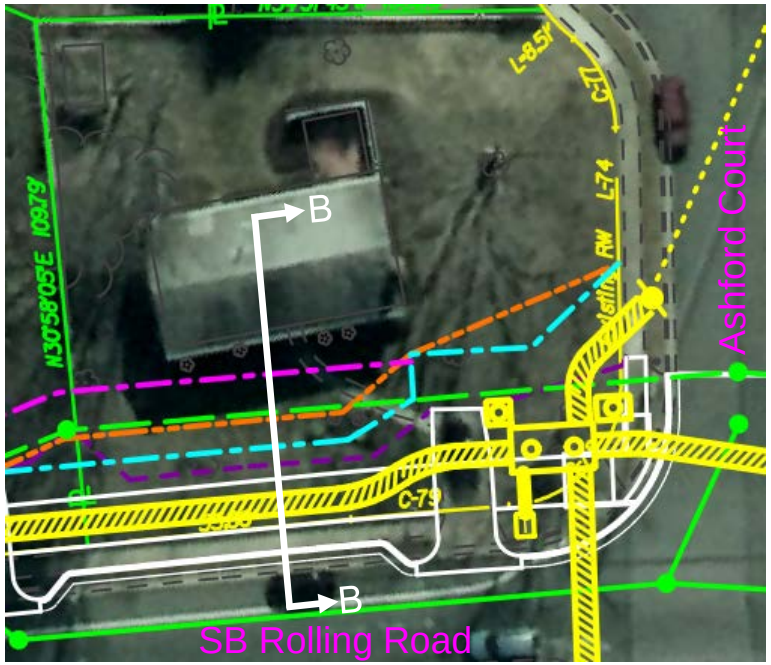
- **Above ground transformers**
- **Residential connections converted to underground**
- **Underground Concrete Vaults**

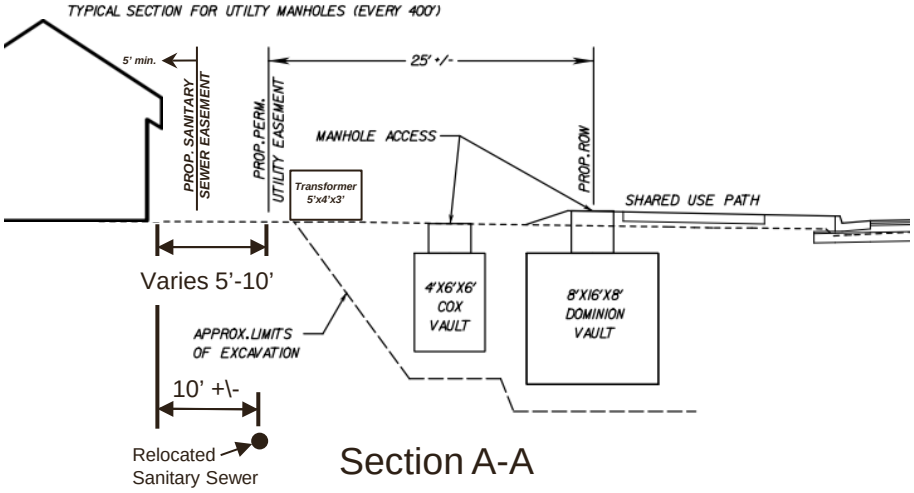
Utility Design Comparison

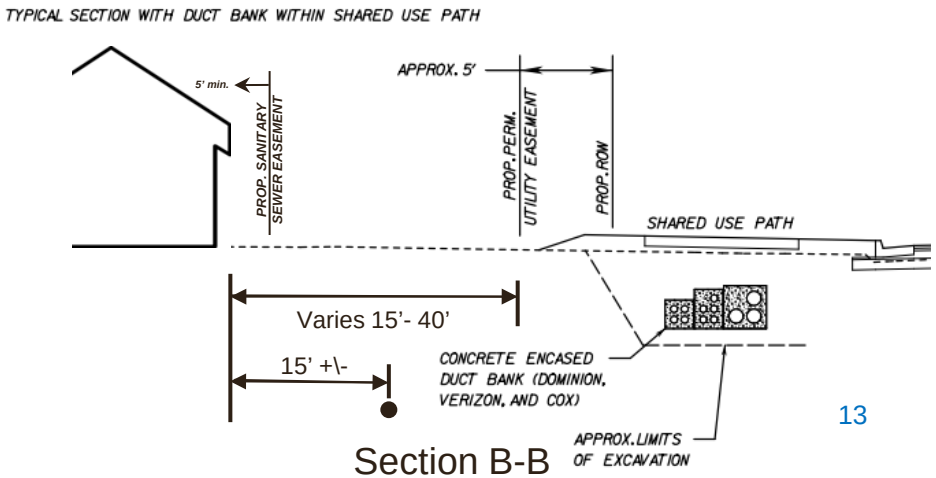
Underground Duct Bank Impacts Summary

Utility Design Comparison

Underground Duct Bank Impacts Summary







Aerial vs. Underground Relocation Estimate

(cost from Viola Street to Barnack Drive)

	Aerial Relocation	Underground Relocation	△
Preliminary Engineering	PE Budget	PE Budget + $826,000	$ (826,000)
Right of Way	$ 5,629,000	$ 6,917,000*	$ (1,288,000)
Utility Relocation	$ 3,581,000	$10,872,000	$ (7,291,000)
Sub-Total	**$ 9,210,000**	**$ 18,515,000**	**$ (9,405,000)**

* *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*

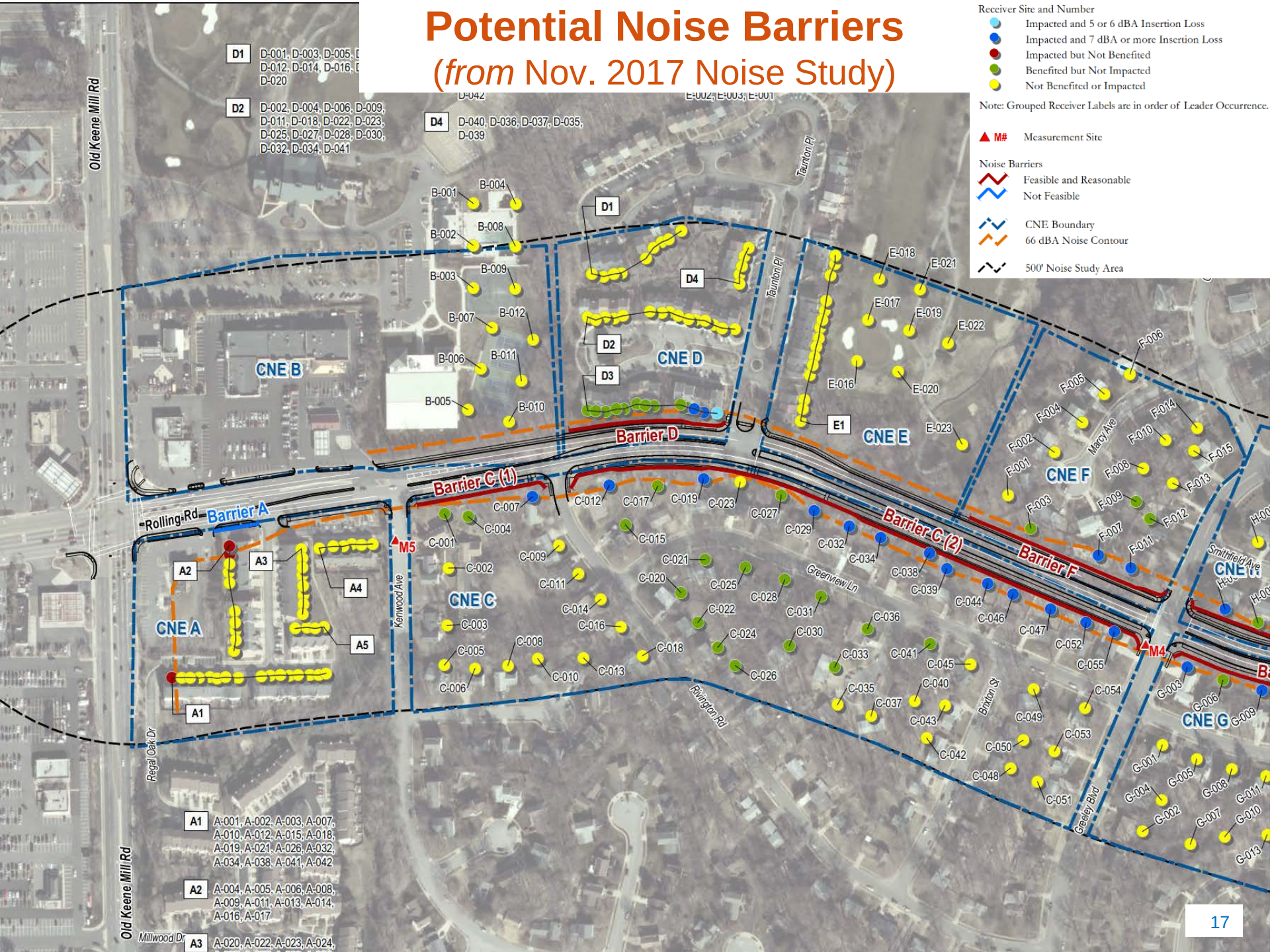
Sound Barriers will be constructed *only* if the people who are directly benefitted vote for them

Noise Analysis

- **Computer model calibrated to existing conditions**
- **Based on design year traffic volumes (2040)**
- **Loudest hour – PM on Rolling Road**

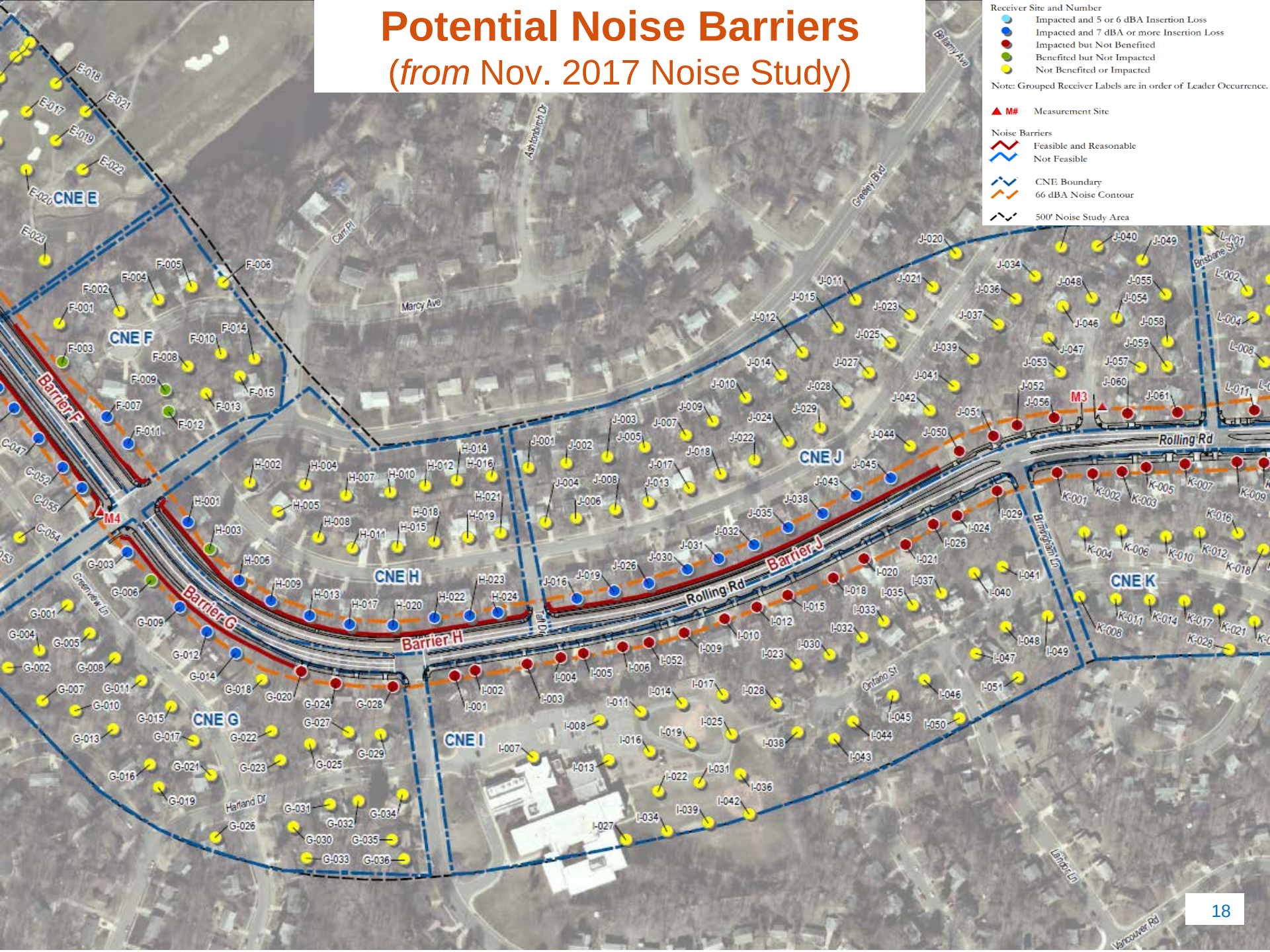
Potential Noise Barriers

(*from* Nov. 2017 Noise Study)

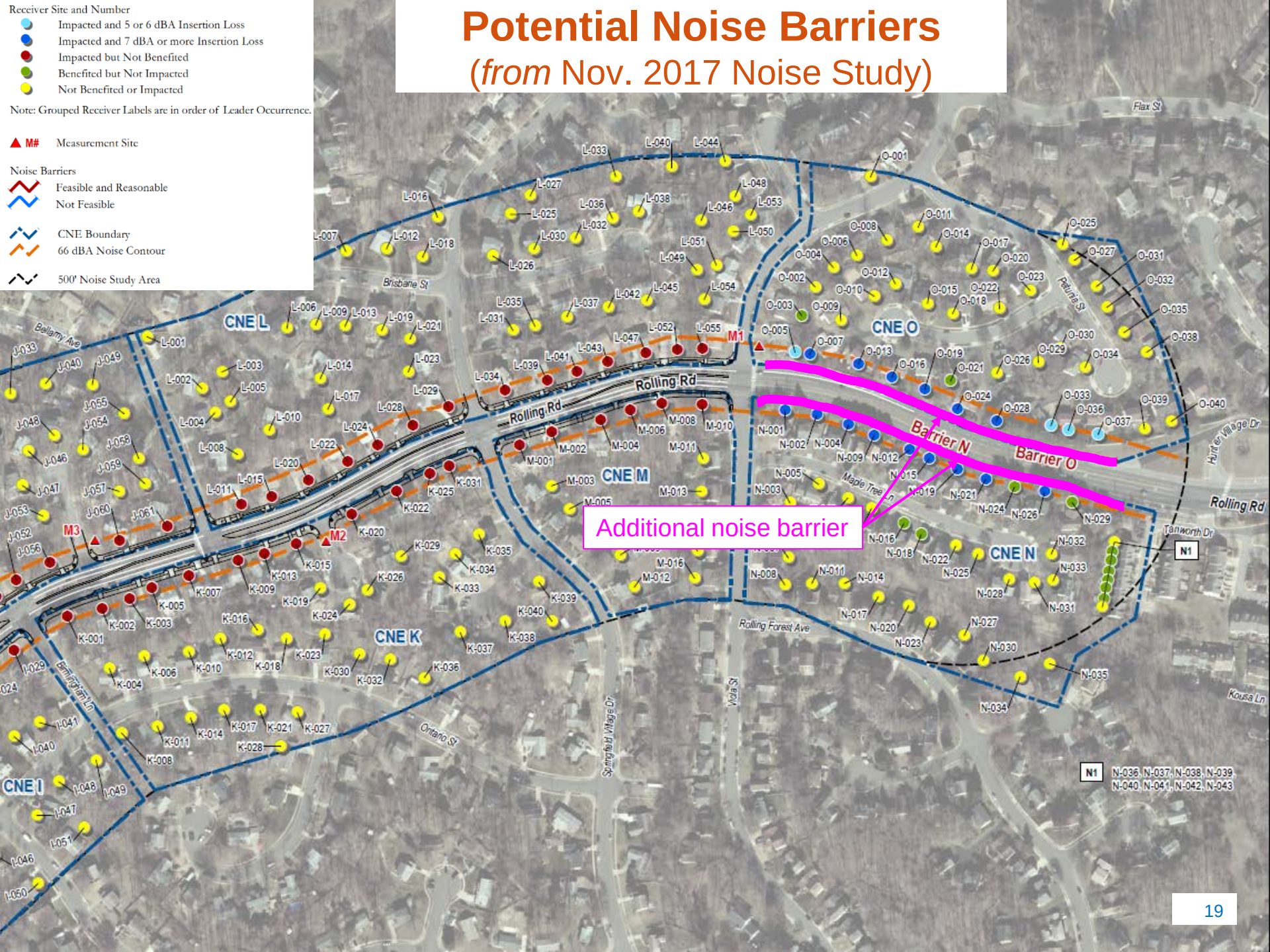


Potential Noise Barriers

(*from* Nov. 2017 Noise Study)

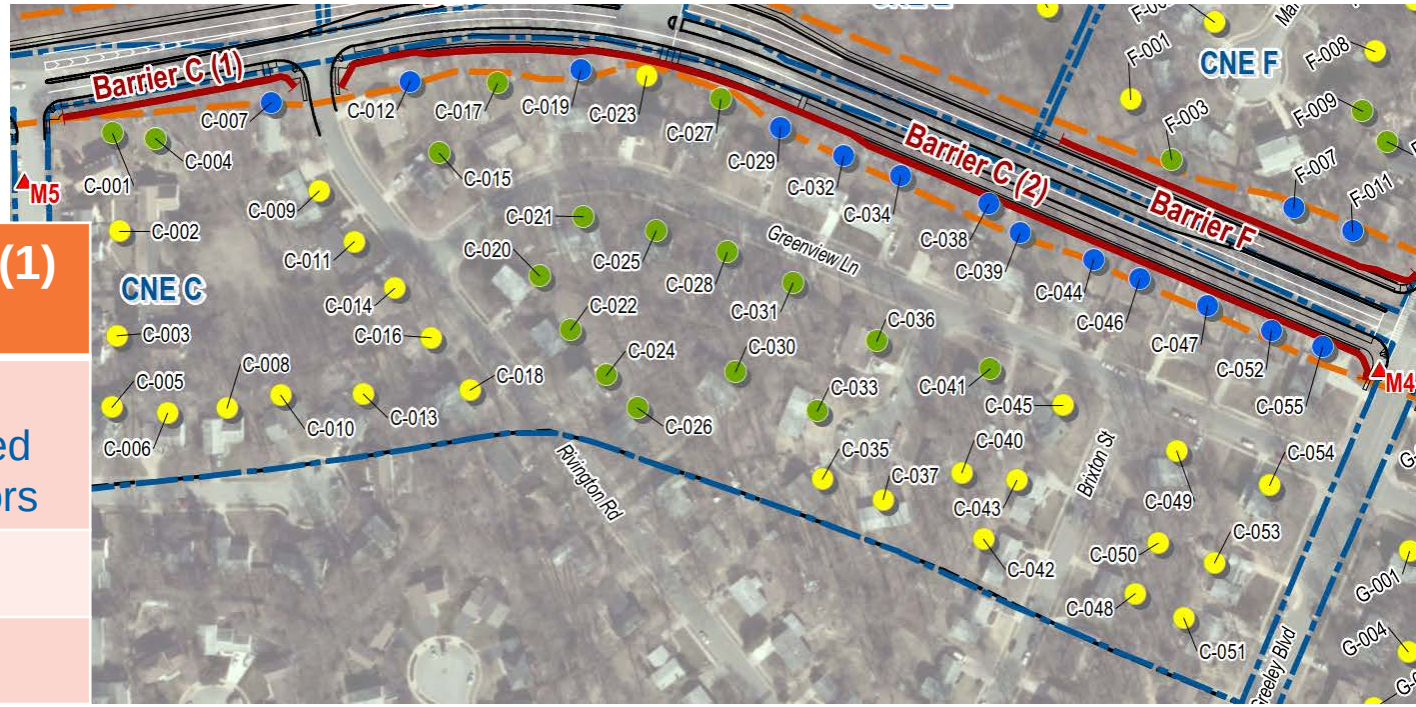


Potential Noise Barriers
(*from* Nov. 2017 Noise Study)



Example - Sound Barrier Voting

Voting for Barriers C(1) & C(2)	
Color	# of Benefited Receptors
Blue	13
Green	16



- **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**

Potential Noise Wall Finishes

Rustic Brick

Chiseled Sandstone

Dogwood (Urban)

3D Brick

Preliminary Design of Storm Drainage

and

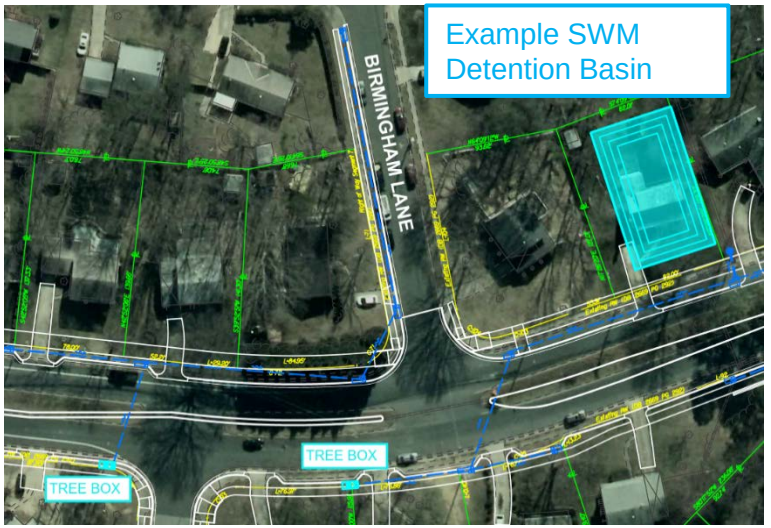
Storm Water Management

Storm Water Management (SWM)

Options Evaluated

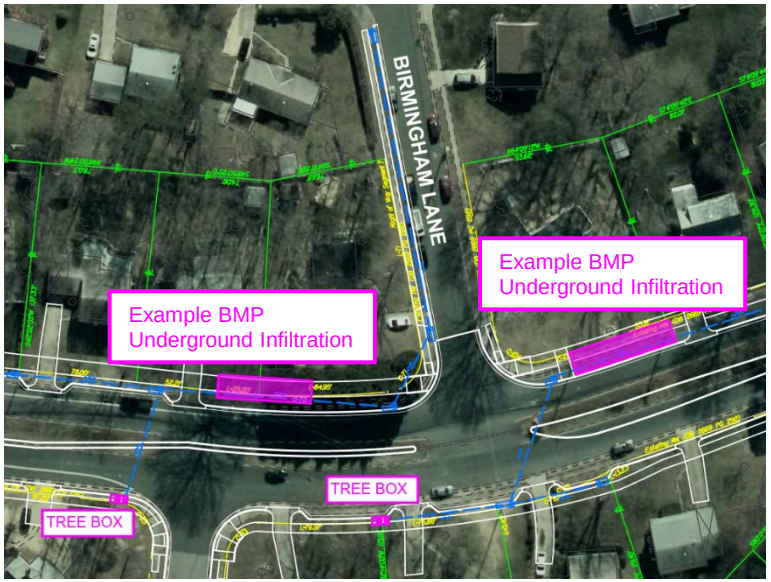
SWM Detention Basins:

- Requires 4 total property takes
- Construction Cost ~ $3 million

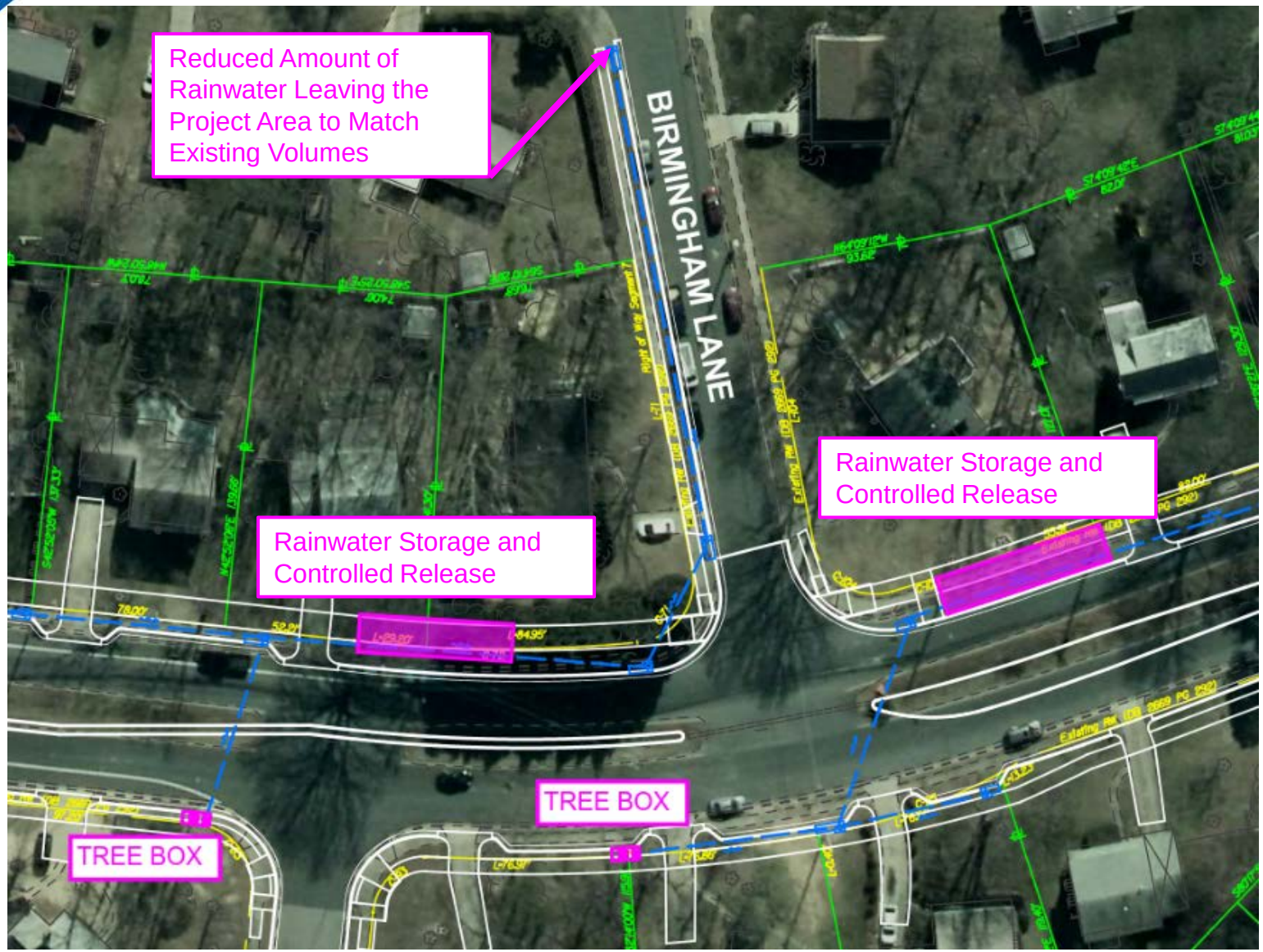


Best Management Practices (BMP) Underground Infiltration:

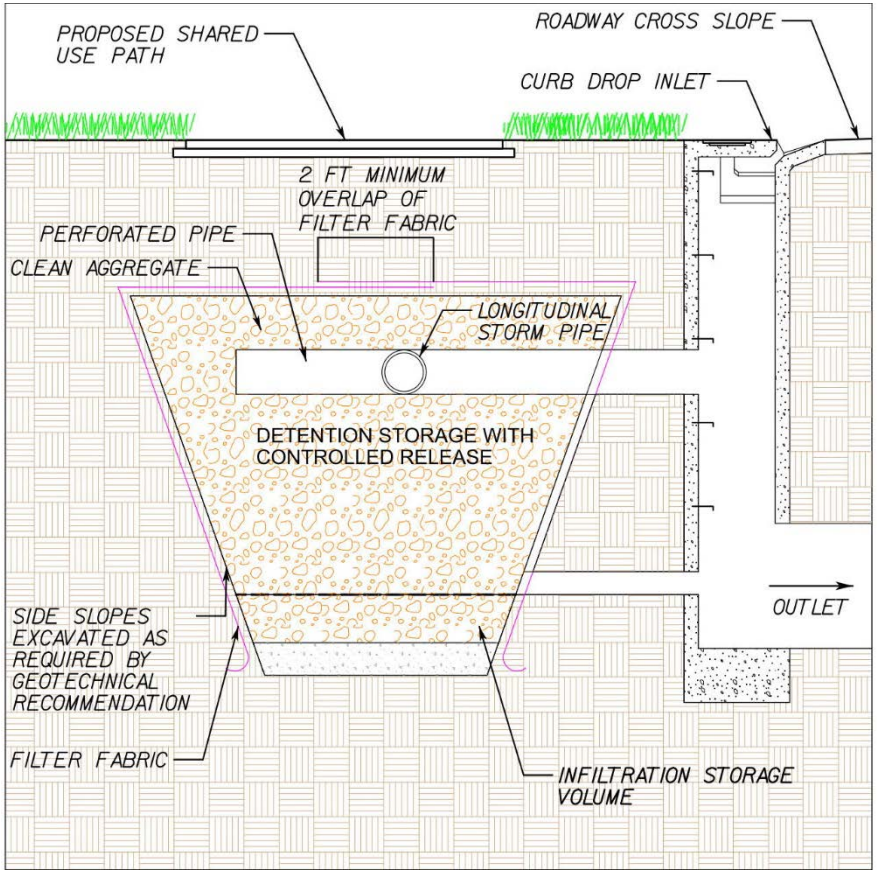
- Requires 0 total property takes
- Higher Maintenance Costs
- Construction Cost ~ $1.3 million



Best Management Practices (BMP)
Underground Infiltration

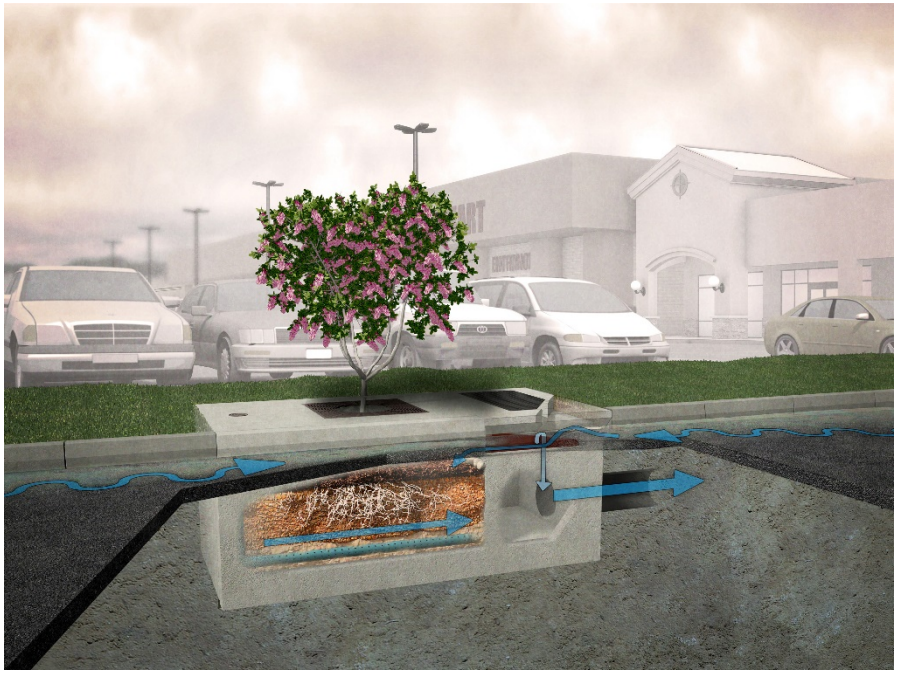


Best Management Practices (BMP)
Underground Infiltration



Underground Infiltration Example

(Rainwater Storage and Controlled Release)



Tree Box Example

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)

	January 2008	March 2017
Preliminary Engineering:	$ 5,795,000.	$ 5,887,000.
Right of Way:	$ 8,567,000.	$ 9,650,000.
Utility Relocation:	$ 1,328,000.	$ 7,772,000.
Construction:	$19,589,000.	$28,296,000.
Total:	**$35,279,000**	**$51,605,000***

*: 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