



COMMONWEALTH of VIRGINIA

Commonwealth Transportation Board

Shannon Valentine
Chairperson

1401 East Broad Street
Richmond, Virginia 23219

(804) 786-2701
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Agenda item # 5

RESOLUTION OF THE COMMONWEALTH TRANSPORTATION BOARD

December 11, 2019

MOTION

Made By: Ms. DeTuncq, Seconded By: Mr. Yates

Action: Motion Carried, Unanimously

Title: Location Approval for the Route 670 Connector Road

WHEREAS, State Highway Project 9999-039-591, P101, R201, C501 (the "Project") will relocate existing Route 670, referred to as the Route 670 Connector Road, to connect to U.S. Route 29 and construct a Restricted Crossing U-Turn (RCUT) intersection along U.S. Route 29 in Greene County; and

WHEREAS, in accordance with §33.2-208 of the Code of Virginia and the policies and regulations of the Commonwealth Transportation Board (CTB), including 24VAC 30-380-10, a Location Public Hearing was held on May 21, 2019 from 4:30 pm to 6:30 pm at the Holiday Inn Express & Suites in Ruckersville, Virginia for the purpose of considering alternative alignments to the preferred alignment (Alternative B) for the Route 670 Connector Road as shown on the attached exhibit; and

WHEREAS, proper notice of the Location Public Hearing was given in advance, and all those present were given a full opportunity to express their opinions and recommendations on the alternative alignments under consideration, and their statements have been duly recorded; and

WHEREAS, the economic, social and environmental effects of the evaluated alternative alignments have been examined and given proper consideration and this evidence, along with all other relevant evidence has been carefully reviewed; and

WHEREAS, on September 10, 2019 the Greene County Board of Supervisors adopted a Resolution of Support for Alternative B as the preferred alignment. See attached;

WHEREAS, the Virginia Department of Transportation's (VDOT's) Environmental Division has completed environmental reviews and coordination to identify environmental resources in the project vicinity, provide natural and historic resource agencies an opportunity to review and comment on the project during development, determine the potential for environmental impacts upon the local community and surrounding area and identifies opportunities for avoidance and minimization of potential and unavoidable environmental impacts; and

WHEREAS, the proposed Project is not programmed with any federal funding, and as such the National Environmental Policy Act (NEPA) does not apply to this Project; and

WHEREAS, a review of all data, including the May 2019 Traffic Engineering Analysis prepared by the Culpeper District Traffic Engineering Office, resulted in VDOT's recommendation that Alternative B be approved as the location for the Route 670 Connector Road.

NOW, THEREFORE, BE IT RESOLVED, that the CTB hereby approves Alternative B as the location for the Route 670 Connector Road as presented at the May 21, 2019 Location Public Hearing.

#####

Commonwealth Transportation Board (CTB) Decision Brief

Route 670 Connector Road in Greene County

Issue: The Route 670 Connector Road project will involve construction of a new two-lane roadway on new alignment to connect U.S. Route 29 to Route 670 along with a Restricted Crossing U-Turn (RCUT) intersection along U.S. Route 29.

Facts: The purpose of the project is as follows:

1. Improve connectivity and accommodate future commercial and residential growth⁽¹⁾ within the Corner Store Mixed Use Village Center Urban Development Area (UDA) in Greene County.
2. Mitigate congestion and address safety needs along a Corridor of Statewide Significance⁽²⁾ by increasing peak period person throughput, reducing peak period delays, improving travel time reliability and reduce the number of fatal and injury crashes.⁽³⁾

(1) See Code of Virginia §15.2-2223.1.F.

(2) See attached SMART SCALE Project Scorecard (Application ID #1167).

Recommendations: The Virginia Department of Transportation recommends approval of Alternative B as the location for the Route 670 Connector Road as presented at the Location Public Hearing and shown on the attached exhibit.

Action Required by CTB: *Code of Virginia* §33.2-208, requires a majority vote of the CTB to locate and establish the routes to be followed by the roads comprising systems of state highways between points designated in the establishment of such systems.

Result, if Approved: If approved by the CTB, the Route 670 Connector Road project will move forward to the final design phase.

Options: Approve, Deny or Defer

Public Comments/ Reaction: A Location Public Hearing was held May 21, 2019 from 4:30 pm to 6:30 pm at the Holiday Inn Express & Suites in Ruckersville, Virginia. Citizens who attended were able to view displays for two potential alignments for the proposed Route 670 Connector Road, labeled as Alternatives A and B as shown on the attached exhibits. A No-Build option was presented as Alternative C.

A total of 65 citizens attended the Location Public Hearing. A total of 44 comments (not counting duplicates) were received during the comment period. A review of the comments revealed the following results:

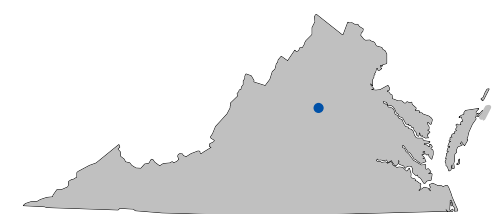
- 1 Person expressed support for Alternative A (with modifications)
- 8 People expressed support for Alternative B
- 27 People expressed support for Alternative C (No Build)
- The remaining 8 people who provided comments did not indicate a preference.

On September 10, 2019 the Greene County Board of Supervisors adopted a Resolution of Support for Alternative B as the preferred alignment. See attached.



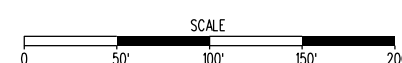
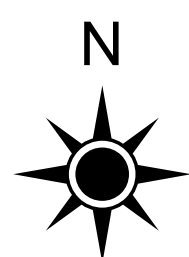
Virginia Department of Transportation

Route 670 Connector Road Alternative A



Ruckersville
Greene County

North Arrow & Scale



Legend

- Proposed Road
- Proposed Sidewalk, Raised Median
- Proposed Gravel Entrance
- Proposed (Grass)
- Proposed Storm Water Management Pond
- Ex. Property Line
- Proposed Limits of Construction - Cut
- Proposed Limits of Construction - Fill
- Existing Right of Way
- Proposed Right of Way Line

Contact Information

John Rose
Project Manager
Virginia Department of Transportation
1601 Orange Road
Culpeper, Va 22701

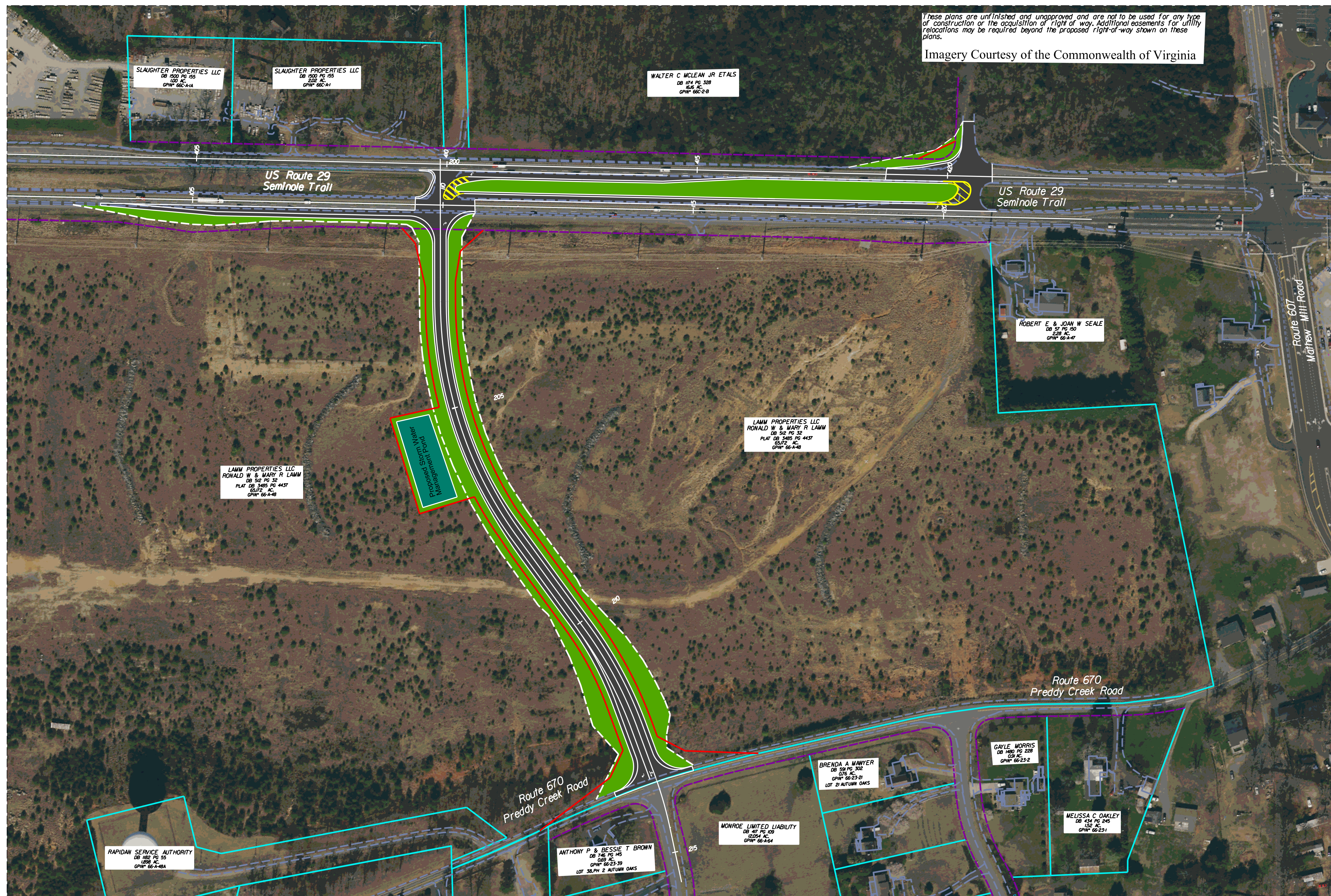
Comments may also be sent to:
John.Rose1@VDOT.Virginia.gov

Route 670 Connector Road
Ruckersville, Virginia

State Project Number: 9999-039-591
UPC: 111650

These plans are unfinished and unapproved and are not to be used for any type of construction or the acquisition of right of way. Additional easements for utility relocations may be required beyond the proposed right-of-way shown on these plans.

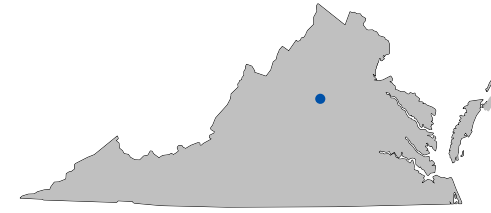
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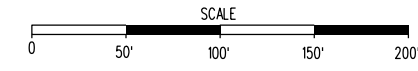
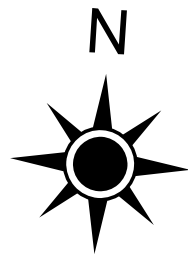
Virginia Department of Transportation

Route 670 Connector Road Alternative B



Ruckersville
Greene County

North Arrow & Scale



Legend

- Proposed Road
- Proposed Sidewalk, Raised Median
- Proposed Gravel Entrance
- Proposed (Grass)
- Proposed Storm Water Management Pond
- Ex. Property Line
- Proposed Limits of Construction - Cut
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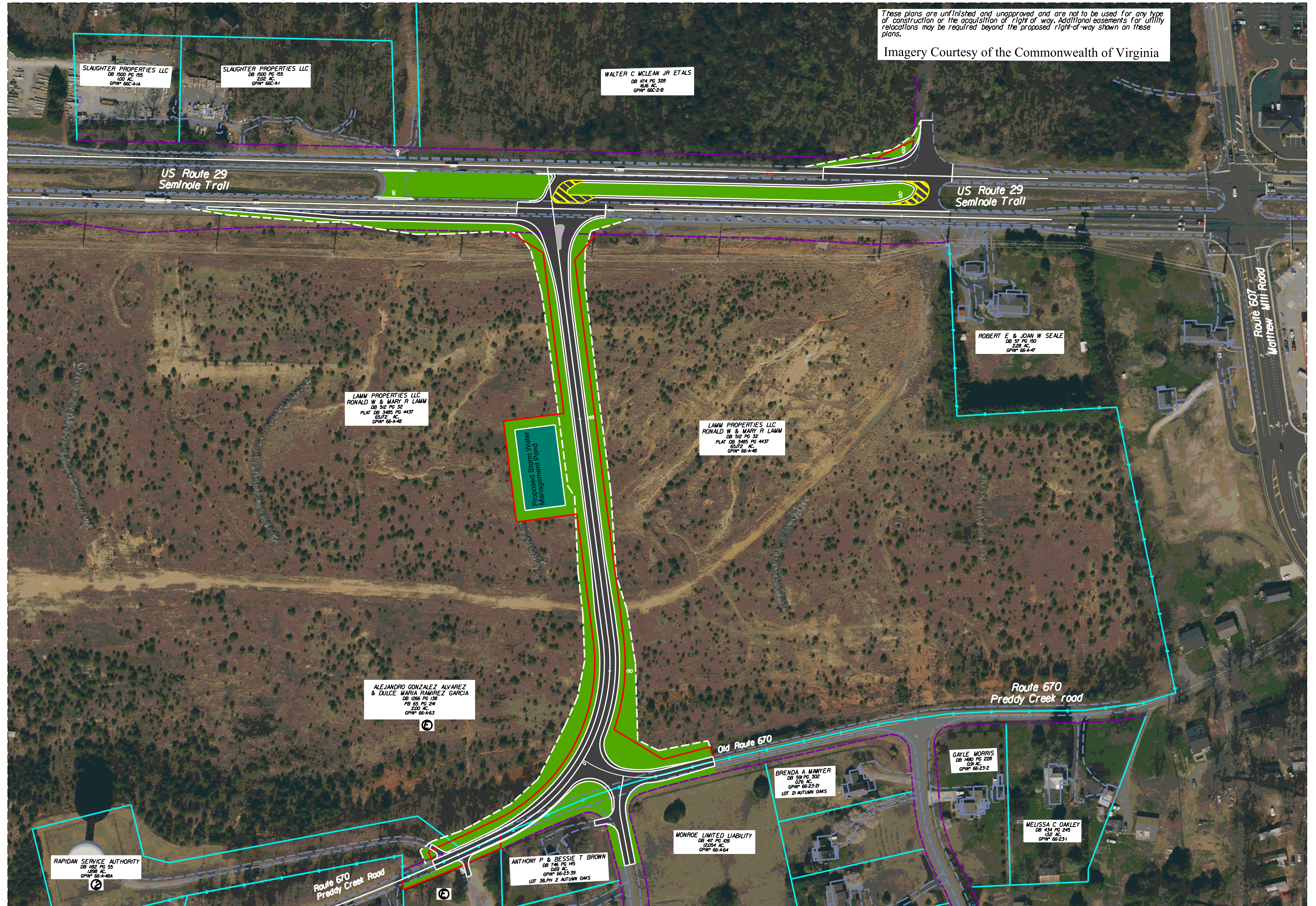
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Route 670 Connector Road
Ruckersville, Virginia

State Project Number: 9999-039-591
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Imagery Courtesy of the Commonwealth of Virginia copyright 2019.



These plans are unfinished and unapproved and are not to be used for any type of construction or the acquisition of right of way. Additional easements for utility relocations may be required beyond the proposed right-of-way shown on these plans.
Imagery Courtesy of the Commonwealth of Virginia

**RESOLUTION OF SUPPORT FOR
ROUTE 670 CONNECTOR ROAD IMPROVEMENTS (ALTERNATIVE B)**

WHEREAS, Greene County considers a connection from Route 670 to US 29 to be a priority road improvement; and

WHEREAS, the Commonwealth Transportation Board approved funding necessary to complete the connector road to be awarded to Greene County through the Smart Scale program based on Greene County's 2018 Grant application; and

WHEREAS, the Virginia Department of Transportation worked extensively with Greene County staff, which received a letter of intent from a property owner willing to donate Right of Way for the proposed alignment of the connector road; and

WHEREAS, the Virginia Department of Transportation advertised and held a Location Public Hearing for the project on May 21st, 2019 at which sixty-five (65) citizens attended and reviewed two (2) preliminary design and alignment alternatives (Alternatives A and B) in addition to a third No-Build alternative (Alternative C); and

WHEREAS, the public comments received by the Virginia Department of Transportation on the three project alternatives included one (1) person expressing support for Alternative A (with modifications), eight (8) people expressing support for Alternative B, and twenty-six (26) people expressing support for Alternative C (the No-Build alternative).

NOW, THEREFORE, BE IT RESOLVED, that the Greene County Board of Supervisors hereby fully endorses and supports the proposed Alternative B as presented by the Virginia Department of Transportation for the Route 670 Connector Improvements; and


BE IT FURTHER RESOLVED, that the Board of Supervisors hereby respectfully requests the Commonwealth Transportation Board to approve the proposed alignment for design and construction.

ADOPTED BY THE GREENE COUNTY BOARD OF SUPERVISORS ON SEPTEMBER 10, 2019


Motion: Dale Herring
Second: Michelle Flynn

Recorded Vote:

Bill Martin	<u>Yes</u>
Michelle Flynn	<u>Yes</u>
David Cox	<u>Yes</u>
Marie Durrer	<u>Yes</u>
Dale Herring	<u>Yes</u>



William Bryan Martin, Chair
Greene County Board of Supervisors



Mark B. Taylor, Clerk
Greene County Board of Supervisors



COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION
1401 EAST BROAD STREET
RICHMOND, VIRGINIA 23219 2000

Stephen Brich
Commissioner

December 1, 2019

The Honorable Shannon Valentine
The Honorable Stephen C. Brich, P. E.
The Honorable Jennifer Mitchell
The Honorable Jerry L. Stinson II
The Honorable Mary Hughes Hynes
The Honorable Allison DeTuncq
The Honorable Bert Dodson, Jr.
The Honorable W. Sheppard Miller III
The Honorable Carlos M. Brown
The Honorable Cedric Bernard Rucker
The Honorable Stephen A. Johnsen
The Honorable F. Dixon Whitworth, Jr.
The Honorable E. Scott Kasprovicz
The Honorable Raymond D. Smoot, Jr.
The Honorable Marty Williams
The Honorable John Malbon
The Honorable Greg Yates

Subject: Location Approval of the Route 670 Connector Road in Greene County

Dear Commonwealth Transportation Board Members:

The Department has initiated the above request for Location Approval for your consideration. The proposed Location Approval on State Highway Project 9999-039-591, P101, R201, C501 has been recommended for approval by the Department's staff.

I have reviewed the staff's recommendations and determined that this request should be considered by the Board.

Sincerely,

A handwritten signature in blue ink that reads "Barton A. Thrasher".

Barton A. Thrasher, P.E.
Chief Engineer

PROJECT SCORECARD

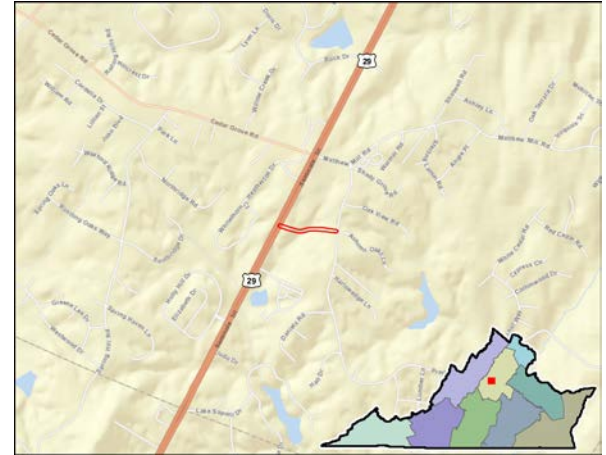
For more information on how to read a scorecard, click here.

Route 670 Connector Road

App Id: 1167

Connector road from Route 670 to Route 29 to address congestion and safety issues. The design for the Route 607 improvements take this proposed connector road into consideration.

Project Location..... Greene County
 SMART SCALE Area Type..... C
 Submitting Entity..... Greene County
 Preliminary Engineering..... Not Started
 Right of Way..... Not Started
 Construction..... Not Started
 Expenditures to Date..... N/A
 Key Fund Sources..... N/A
 Administered By..... VDOT
 Eligible Funding Program(s)..... District Grant
 VTrans Need..... Corner Store UDA
 (Click for details)



<h1>8.6</h1> <p>SMART SCALE SCORE</p>	<h2>#88</h2> <p>OF 404 STATEWIDE</p>
	<h2>#3</h2> <p>OF 35 DISTRICTWIDE</p>

SMART SCALE Requested Funds..... **\$5,400,000**
 Total Project Cost..... **\$5,400,000**
 Project Benefit..... **4.6**
 Project Benefit / Total Cost..... **8.6**

Factor	Congestion Mitigation		Safety		Accessibility			Economic Development			Environment		Land Use
	Increase in Peak Period Person Throughput	Reduction in Peak Period Delay	Reduction in Fatal and Injury Crashes	Reduction in Fatal and Injury Crash Rate	Increase in Access to Jobs	Increase in Access to Jobs for Disadvantaged Populations	Increase in Access to Multimodal Travel Choices	Square Feet of Commercial/Industrial Development Supported	Tons of Goods Impacted	Improvement to Travel Time Reliability	Potential to Improve Air Quality	Other Factor Values Scaled by Potential Acreage Impacted	Support of Transportation-Efficient Land Development
Measure Value	1,788.0 persons	744.0 person hrs.	30.5 EPDO	108.5 EPDO / 100M VMT	0.4 jobs per resident	0.5 jobs per resident	0.0 adjusted users	32,247.3 thousand adj sq. ft.	7,423.7 thousand adj daily tons	999,718.9 adj. buffer time index	0.0 adjusted points	3.4 scaled points	adjusted jobs & pop.
Normalized Measure Value (0-100)	17.6	22.9	9.3	0.6	0.0	0.0	0.0	0.1	0.4	0.1	0.0	6.6	
Measure Weight (% of Factor)	50%	50%	50%	50%	60%	20%	20%	60%	20%	20%	50%	50%	N/A
Factor Value	20.3		4.9		0.0			0.2			3.3		0.0
Factor Weight (% of Project Score)	15%		25%		25%			25%			10%		N/A
Weighted Factor Value	3.0		1.2		0.0			0.0			0.3		
Project Benefit	4.6												
SMART SCALE Cost	\$5,400,000												
SMART SCALE Score (Project Benefit per \$10M SMART SCALE Cost)	8.6												

CTB PUBLIC HEARING SUMMARY

Route 670 Connector Road

Greene County

State Project: 9999-039-591
UPC: 111650
Fr: Route 670
To: U.S. Route 29
Project Length: 0.2790 Miles

PROJECT HISTORY

Greene County applied for this project in 2016 through the Smart Scale prioritization process (Project ID 1167). The project will construct a new two-lane connector road on new alignment from Route 670 to US Route 29 to address congestion and safety issues. The project satisfies VTrans2040 Needs by addressing connectivity within the Corner Store Mixed Use Village Center Urban Development Area (UDA) and mitigating safety and congestion on the US Rte. 29 corridor. The project received a SMART SCALE score of 8.6 and was funded by the CTB in FY18.

PROJECT PURPOSE

The purpose of the project is to improve connectivity and accommodate future commercial and residential growth⁽¹⁾ within the Corner Store Mixed Use Village Center Urban Development Area (UDA) in Greene County by constructing a new east-west roadway to connect US Route 29 with Route 670 (Preddy Creek Road). The project will also mitigate congestion and address safety needs along a Corridor of Statewide Significance⁽²⁾ by increasing peak period person throughput, reducing peak period delays, improving travel time reliability, and reducing the number of fatal and injury crashes.⁽³⁾

(1) See Code of Virginia §15.2-2223.1.F.

(2) See attached SMART SCALE Project Scorecard (App ID 1167)

TYPICAL SECTION

The proposed typical section will consist of two variable width (10-14 ft.) travel lanes with 8 ft. shoulders (4 ft. paved) within a 50-60 ft. right of way. A design speed of 35 mph is currently proposed.

PUBLIC HEARING

Type - Location

Date - May 21, 2019

Time - 4:30 PM to 6:30 PM

Location – Holiday Inn Express & Suites (5920 Seminole Trail) in Ruckersville, Virginia

Public Hearing Summary
Route 670 Connector Road
December 11, 2019

ATTENDANCE

65 citizens attended the Location Public Hearing.

COMMENTS RECEIVED

44 comments (not counting duplicates) were received during the comment period which ended on May 31st 2019. Of the 44 comments received, one supported Alternative A (with modifications), eight supported Alternative B, 27 supported Alternative C (No-Build), and eight provided comments which did not indicate a preference.

ENVIRONMENTAL DATA

The environmental effects of the evaluated alternative alignments have been examined and given proper consideration and this evidence, along with all other relevant evidence has been carefully reviewed. The Virginia Department of Transportation's (VDOT's) Environmental Division has completed environmental reviews and coordination to identify environmental resources in the project vicinity, provide natural and historic resource agencies an opportunity to review and comment on the project during development, determine the potential for environmental impacts upon the local community and surrounding area and identifies opportunities for avoidance and minimization of potential and unavoidable environmental impacts. The Project is not programmed with any federal funding, and as such the National Environmental Policy Act (NEPA) does not apply to this Project.

ESTIMATED COST

Preliminary Engineering	- \$ 676,570
Right of Way and Utilities	- \$ 850,000
Construction	- \$ 3,700,000
Total estimated cost	- \$ 5,226,570

ADVERTISEMENT

Construction is currently scheduled for October 2022.

RIGHT OF WAY

As currently proposed, five property owners and parcels will be affected by acquisition of right-of way and /or easements along the preferred alignment. The project is not expected to require displacement and relocation of any businesses nor residences along the Connector Road. No non-profit organizations are being impacted with this project.

TRAFFIC DATA

It is anticipated that in the design year of 2048 the average daily traffic volume will be 2460 vehicles per day on the new roadway. See Traffic Operation Analysis (Build vs No Build) below.



➤ Traffic Operation Analysis Build Versus No-Build:

Intersection analysis for the build versus no-build has been conducted for the signalized intersection of US 29 and Rte 607 and the un-signalized intersection of Rte 607 and Rte 670.

Table 4: US 29 and Rte 607 Signalized Intersection

Intersection	No- Build	Delay (veh/sec)	LOS	Build	Delay (veh/sec)	LOS	Percent Delay Reduction Build Vs. No- Build
US 29 (Seminole Trail) and Rte 607 (Cedar Grove Rd/ Matthew Mill Rd)	2022 No-Build AM Peak	46.7	D	2022 Build AM Peak	34.9	C	25%
	2022 No-Build PM Peak	51.7	D	2022 Build PM Peak	34.4	C	33%
	2048 No-Build AM Peak	96.1	F	2048 Build AM Peak	54.4	D	43%
	2048 No-Build PM Peak	110.5	F	2048 Build PM Peak	53.9	D	51%

As shown in Table 4 above for the impact on the signalized intersection of US 29 and Rte 607, for the 2022 build-out year, the Connector Rd will result in an intersection delay reduction of 25% during the AM peak and 33% during the PM peak. Similarly, for the 2048 design year, the construction of the Connector Rd will result in 43% delay reduction during the AM peak and 51% during the PM peak. It is anticipated that the overall intersection delay reduction will lead to shorten the queue length on the mainline US 29, which will enhance the traffic signal operation at this location.

Table 5: Rte 607 and Rte 670 Un-Signalized Intersection

Intersection	Movement		No- Build	Delay (veh/sec)	LOS	95th Queue (ft)	Build	Delay (veh/sec)	LOS	95th Queue (ft)	Percent Delay Reduction Build Vs. No- Build	Percent Queue Reduction Build Vs. No- Build
Rte 670 (Paddy Creek Rd) and Rte 607 (Matthew Mill Rd)	NB	L/R	2022 No-Build	17.9	C	67.5	2022 Build AM Peak	11.7	B	12.5	35%	81%
	Intersection Overall		AM Peak	6.0	A		Peak	2.1	A		65%	
	NB	L/R	2022 No-Build	16.6	C	25	2022 Build PM Peak	12	B	7.5	28%	70%
	Intersection Overall		PM Peak	2.1	A		Peak	1.2	A		43%	
	NB	L/R	2048 No-Build	30.7	D	147.5	2048 Build AM Peak	13.2	B	17.5	57%	88%
	Intersection Overall		AM Peak	10.7	B		Peak	2.5	A		77%	
	NB	L/R	2048 No-Build	23.4	C	50	2048 Build PM Peak	13.8	B	12.5	41%	75%
	Intersection Overall		PM Peak	3.1	A		Peak	1.4	A		55%	

The intersection of Rte 607 and Rte 670 will be positively impacted by the construction of the Connector Rd. Not only the intersection delay will be reduced, but also the queue lengths will be significantly shortened. The intersection overall delay will be reduced by 65% during the AM peak and reduced by 43% during the PM peak in the build-out year of 2022. In addition, the queue lengths will be shortened by 81% during the AM peak and 70% during the PM peak in the build-out year of 2022. Similarly, for the 2048 design year, the intersection delay will be reduced by 77% and 55% during the AM and PM peak, respectively. Furthermore, the queue lengths will be shortened by 88% and 75% for the AM and PM peak, respectively.

Conclusion and Recommendation:

As explained throughout the document, the construction of the Connector Rd will relieve some of the traffic from approaching the signalized intersection of US 29 and Rte 607 to reach US 29. In addition, the Connector Rd will result in overall intersection delay reduction at the signalized intersection of US 29 and Rte 607 and the un-signalized intersection of Rte 607 and Rte 670.

Alternative B design will have the following advantages compared to Alternative A:

- Less intersection conflict points at the intersection of Rte 670 and the Connector Road.
- Eliminates the need for left turn lane on Rte 670 and right turn lane on the Connector Road.
- Results in overall intersection delay reduction at the intersection of Rte 670 and the Connector Rd.

Based on the analysis above, Traffic Engineering recommends that Alternative B is the preferred Alternative.

Public Hearing Summary
Route 670 Connector Road
December 11, 2019

STAFF RECOMMENDS

The Virginia Department of Transportation recommends approval of Alternative B as the preferred location for the Route 670 Connector Road.