



## Washington Grove Connector – Crabbs Branch Way Extension Facility Planning Study Briefing

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Completed: 04-22-21

### Description

The Montgomery Department of Transportation (MCDOT) will be providing a briefing to the Planning Board on two projects in the Shady Grove/Washington Grove area that are being managed together: 1) the Washington Grove Connector, a trail connecting Crabbs Branch Way into the Town of Washington Grove and 2) The Crabbs Branch Way Extension facility planning study for a road connecting Crabbs Branch Way to Amity Drive. MCDOT has developed four trail alternatives for the Washington Grove Connector to improve connectivity between the Town of Washington Grove and the Shady Grove Metrorail Station. The Planning Board is asked to recommend a preferred alternative to MCDOT for the trail project.

- Applicant: Montgomery County Department of Transportation
- Shady Grove Sector Plan (2006), Bicycle Master Plan (2018) and Shady Grove Minor Master Plan Amendment (2021 anticipated)

### **Staff Recommendation: Approval to Transmit Comments**

### Summary

The Montgomery County Department of Transportation (MCDOT) is conducting a facility planning study for two related projects in the Shady Grove/Washington Grove area: 1) the Washington Grove Connector, a trail connecting Crabbs Branch Way into the town of Washington Grove, and 2) the Crabbs Branch Way Extension study, which would connect Crabbs Branch Way to Amity Drive.

The project location is depicted in Figure 1. The Washington Grove Connector project is being funded through the Bikeway Program Minor Projects program (P507596), and this project is funded for planning, design and construction. It is anticipated to be fully constructed in FY24. The Crabbs Branch Way Extension project is being funded through the Facility Planning-Transportation program (P509337), and this project is only funded through facility planning during FY20-21. The Crabbs Branch Way Extension project has been delayed largely to due to COVID-19 issues, the main one being the difficulty in collecting accurate transportation data during the pandemic. This study will include a detailed transportation analysis of the transportation effects of this proposed road extension; however, at this briefing, MCDOT will present the proposed road connection and estimated construction costs.

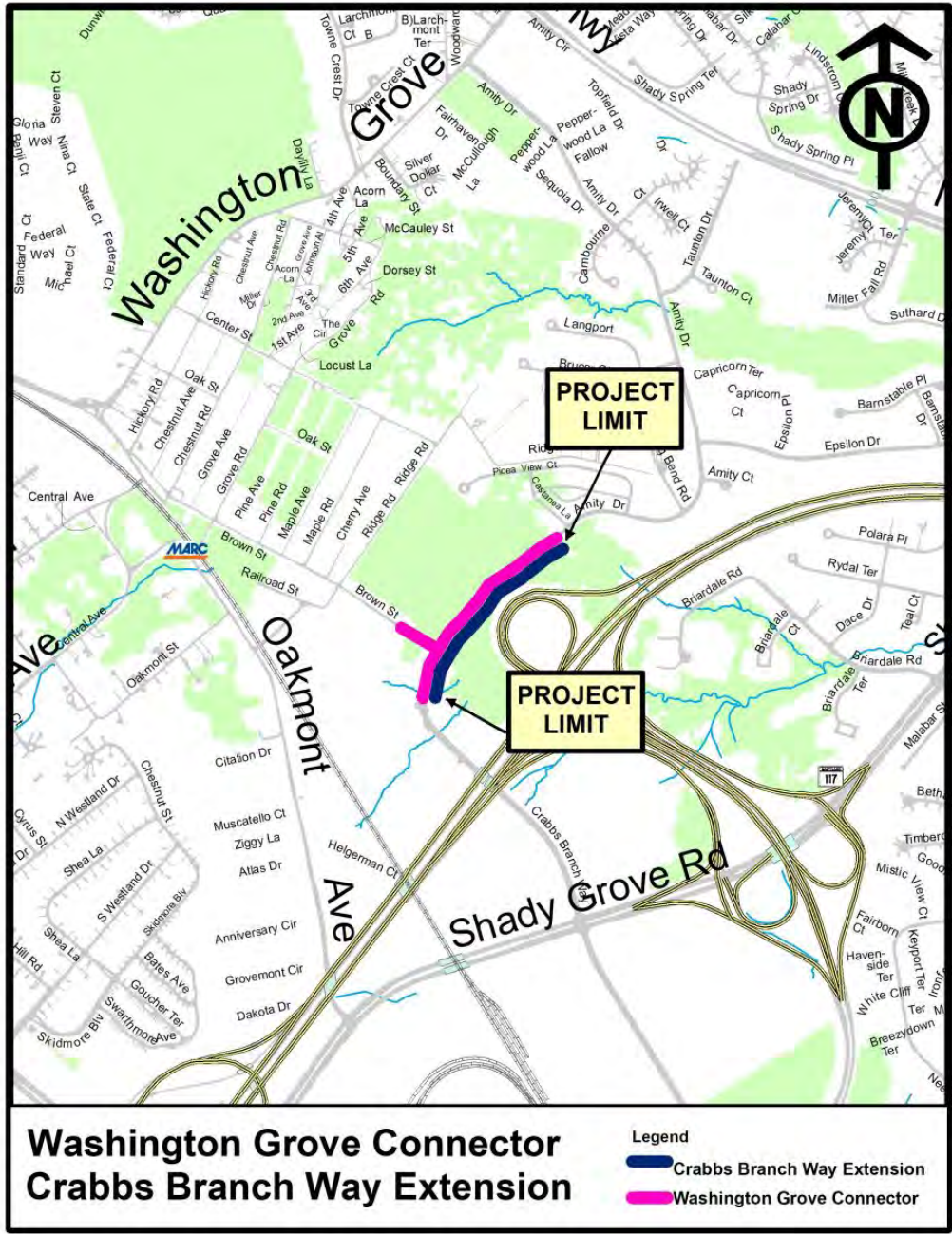


Figure 1: Project Limits and Site Vicinity

Recommendations

Staff recommends approval to transmit the following comments to the Montgomery County Department of Transportation:

1. Washington Grove Connector Alternative #3 (Brown Street) should be advanced as the preferred trail alignment. This trail should be designed to county typical standards, including a trail width of ten feet with 2-foot wide unpaved, graded shoulders, and with no obstructions within two feet of the trail edge,

2. Washington Grove Connector Alternative #4 (Picea View Court Connector) should be advanced as an additional trail connection, as it has its own merits/independent utility for connecting the Amity Drive area with the Town of Washington Grove for pedestrians and cyclists,
3. The cross section used to design the Crabbs Branch Way Extension should use the Neighborhood Connector street type presented in the Complete Streets Design Guidelines,
4. MCDOT should come back for a second briefing for the Crabbs Branch Way Extension project, once significant study and conclusions are reached for this facility planning study,
5. MCDOT should re-evaluate the need and alignment for the Amity Drive Trail Connector as presented in the briefing, as this connections could either be accomplished using the Crabbs Branch Way Extension alignment (if this road is constructed) or as a separate trail along generally the same alignment (if the road is not constructed). Montgomery Parks has concerns with the alignment shown during this briefing and has noted the existence of an unsigned, people's choice trail that would be preferable.
6. Any trail or roadway alignments pursued are required to proceed through Montgomery Parks Concept Review process and Park Construction Permit Review and Approval prior to any construction.

## Proposed Study

### **Project Description**

The Montgomery County Department of Transportation (MCDOT) is conducting a facility planning study for two related projects in the Shady Grove/Washington Grove area: 1) the Washington Grove Connector, a trail connecting Crabbs Branch Way into the town of Washington Grove, and 2) the Crabbs Branch Way Extension study, which would connect Crabbs Branch Way to Amity Drive. For this review, comments have been primarily limited to the Washington Grove Connector, as there are limited analysis and findings from the Crabbs Branch Way Extension study at this time.

MCDOT initiated this study in coordination with the Town of Washington Grove in early 2020. The first public meeting was held on this project on February 13, 2020. The second public meeting was held one year later on February 21, 2021. Meeting materials are provided on MCDOT's project website located at <https://www.montgomerycountymd.gov/dot-dte/projects/washgroveconnector/index.html>. A copy of the presentation materials from the February 21, 2021 public meeting are included with this staff report as Attachment A. MCDOT, in addition, hosted an in-person walking tour recently with a few Brown Street residents to walk the routes to address resident concerns.

## Alternatives Developed

The Washington Grove Connector study developed four trail alternatives, which were presented at the February 21, 2021 public meeting. Figure 2 presents a map showing the approximate routings of each alternative. The Alternatives are as follows:

- Alternative 1: Railroad Drive/Roberts Oxygen
- Alternative 2: Ridge Road
- Alternative 3: Brown Street
- Alternative 4: Picea View Court

For each alternative, MCDOT prepared a concept layout and developed cost estimates and a summary of project impacts for each alternative. Concept layouts for the four alternatives are presented in Figures 3 through 6. It is worth noting that Alternatives 1 through 3 share a similar alignment from Crabbs Branch Way to roughly the property line of Roberts Oxygen.

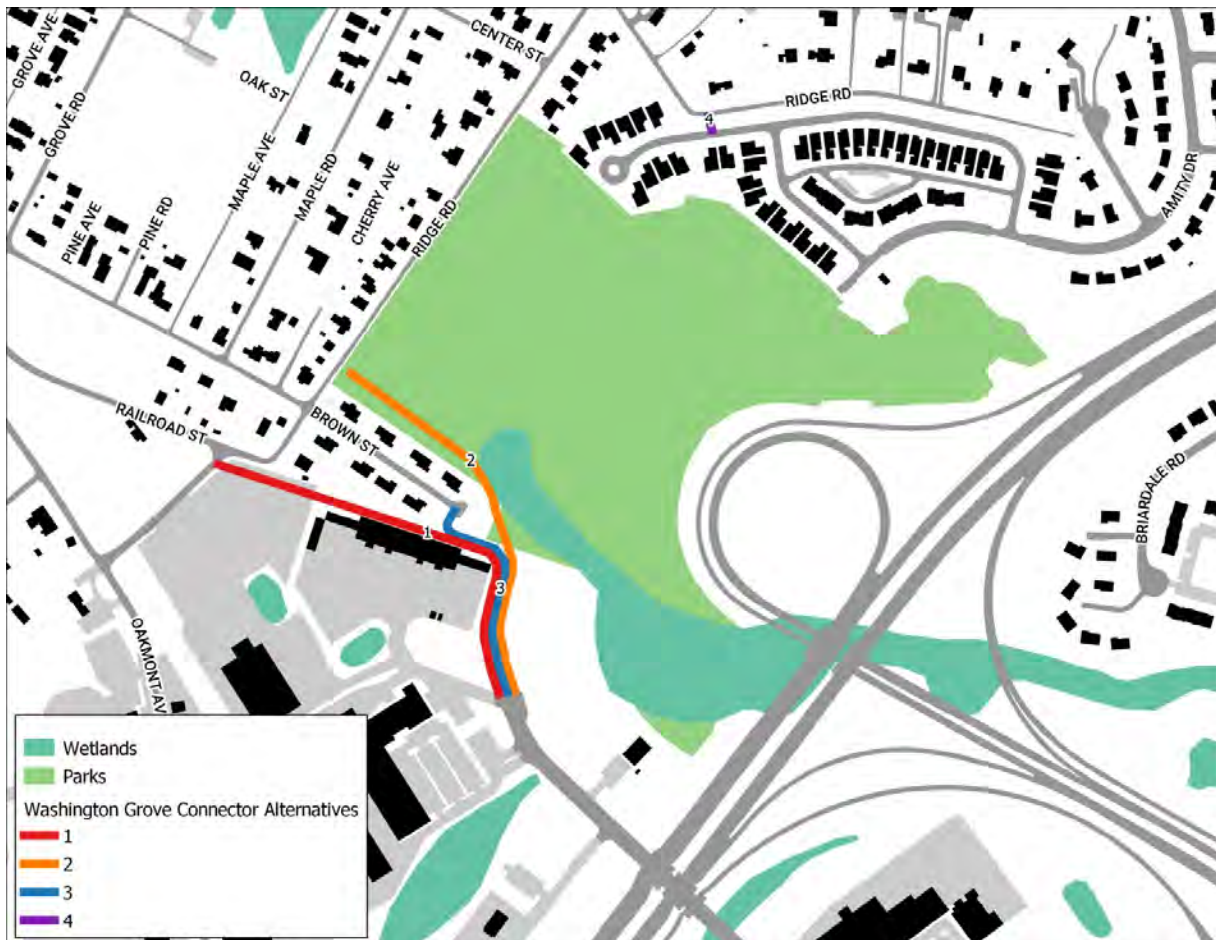


Figure 2: Washington Grove Connector Trail Alternatives



### Alternative #1 (Railroad Street/Roberts Oxygen)

Alternative #1 is the longest trail route proposed connecting Crabbs Branch Way to Railroad Street, however it requires the acquisition of property from the Roberts Oxygen parcel. It also passes through parkland owned by the Maryland-National Capital Park and Planning Commission (M-NCPPC). This connection provides a logical direct connection; however, the tie into Railroad Street near the three-leg intersection of Railroad Street with Ridge Road may be problematic. Traffic volumes on Railroad Street are higher than the other route ends for the other alternatives. The north-south portion of this alignment would run directly on a WSSC utility easement, which might pose maintenance of trail issues when work is done on the WSSC utilities.



Figure 3: Washington Grove Connector – Alternative 1 (Railroad Avenue/Roberts Oxygen)

## Alternative #2 (Ridge Road)

Alternative #2 is the second longest trail route proposed connecting Crabbs Branch Way to Ridge Road (to the east of Brown Street). This connection passes through the Town of Washington Grove Meadow Conservation Park and M-NCPPC property. This alternative would have the greatest impacts to parkland of the alternatives studied.



Figure 4: Washington Grove Connector – Alternative 2 (Ridge Road)



### Alternative #3 (Brown Street)

Alternative #3 is the shortest trail route (of the three primary alternatives) proposed connecting Crabbs Branch Way to Brown Street. This connection passes through M-NCPPC property, similar to Alternative #1, then travels along a short section of the WSSC easement before terminating at the existing stub end of Brown Street.



Figure 5: Washington Grove Connector – Alternative #3 (Brown Street)

### **Alternative #4 (Picea View Court)**

Alternative #4 (Picea View Court) was identified by public comments received at the first 2020 public meeting, and this would provide a short connection between Picea View Court and Ridge Road. The intent is to provide a direct connection between the Town of Washington Grove street network and the Amity Drive neighborhood.

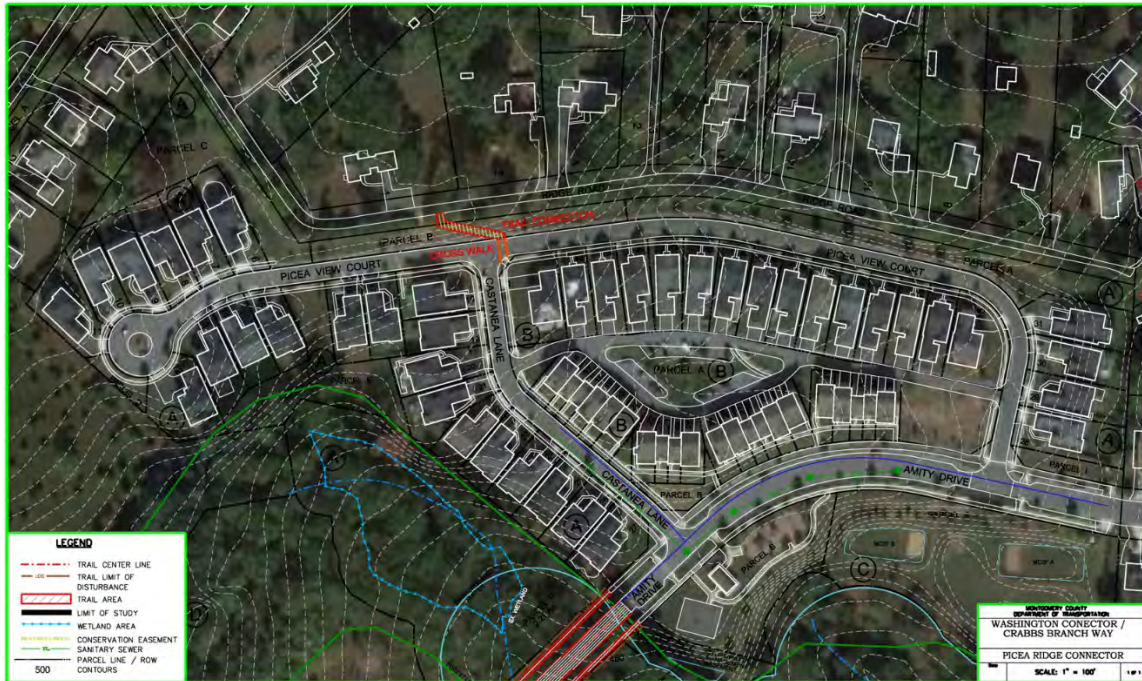


Figure 6: Washington Grove Connector – Alternative #4 (Picea View Court)

### **Comparison of Impacts – Washington Grove Connector Alternatives**

Table 1 presented below provides a summary of anticipated effects/impacts of three of the four alternatives. During MCDOT’s study, Alternative 4 was not evaluated in the same detail, and from a Planning Department perspective, seems to have independent utility compared to the three alternatives presented below. In general, of the three primary alternatives, Alternative #3 (Brown Street) has the lowest estimated construction cost, the shortest route, and the lowest impact to forested areas. It is also preferable to Alternative 1 because the street that it connects to (Brown Street) is lower volume than the street that Alternative 1 connects to (Railroad Avenue). All Alternatives provide acceptable slopes along the trails under consideration; however Alternative #1 (Railroad Avenue/ Roberts Oxygen) has the lowest maximum slope.



Impact	Unit	Alt #1	Alt #2	Alt #3
Surface Area	SQ FT	21,000	20,000	11,000
Forest	SQ FT	26,000	15,000	12,000
Stream Crossing	FT	15	15	15
Wetlands	SQ FT	1,000	1,000	1,000
Flood Plain	SQ FT	2,000	2,000	2,000
ROW Acquisition	SQ FT	16,000	0	2,500
Permanent Easement	SQ FT	500	500	500
Max Slope	%	4.0%	4.5%	4.5%
Cost*	\$	\$575,770	\$360,490	\$326,430

\* Total construction costs (including 30% contingency) are for comparison and do not include Stormwater Management, Utilities, Lighting, Site Prep, etc.

*Table 1: Washington Grove Connector – Comparison of Impacts by Alternative*

**Crabbs Branch Way Extension Facility Planning Study**

Limited progress has been made on this facility planning study to-date. But we did want to share the conceptual alignment of this planned road connection, an evaluation of effects/impacts and costs. In addition, a fifth potential trail connection was developed as part of this road project which would connect Amity Drive to the proposed Washington Grove Connector.

A concept plan was developed by MCDOT for this proposed road connection which is shown in Figure 7. This road connection is master planned as a primary residential street. The proposed cross section is shown in Figure 8.

During the study, MCDOT also developed the Amity Drive Trail Connector, as shown in Figure 9. This trail was developed for consideration if the Crabbs Branch Way Extension project is not advanced. This trail would connect into either of the three primary alternatives studies at the WSSC easement.

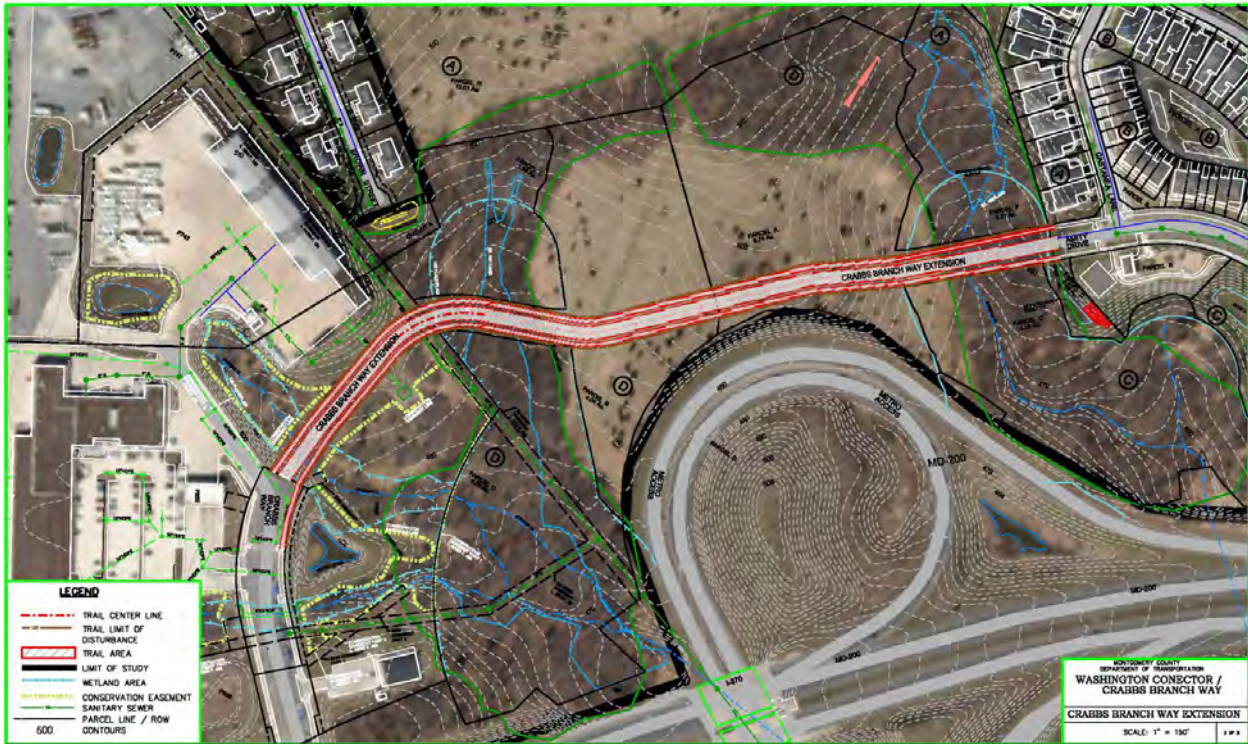


Figure 7: Crabbs Branch Way Extension – Plan View



Figure 8: Crabbs Branch Way Extension – Cross Section



Figure 9: Crabbs Branch Way Extension – Amity Drive Trail Connector

A summary of project impacts for the Crabbs Branch Way Extension project are provided in Table 2.

Impact	Unit	Crabbs Branch Way Extension	Amity Drive Connector
Surface Area	SQ FT	98,000	20,000
Forest	SQ FT	48,000	14,000
Stream Crossing	FT	15	0
Wetlands	SQ FT	6,000	1,200
Flood Plain	SQ FT	7,500	0
ROW Acquisition	SQ FT	0	200
Permanent Easement	SQ FT	2,000	0
Cost*		\$2,201,290	\$150,800

\* Total construction costs (including 30% contingency) are for comparison and do not include Stormwater Management, Utilities, Lighting, Site Prep, etc.

Table 2: Crabbs Branch Way Extension – Project Impacts

### Town of Washington Grove Recommendation

Following the February 21, 2021 Virtual public meeting, the Town of Washington Grove submitted a letter to MCDOT on March 24, 2021 endorsing Alternative #3 (Brown Street) as the Town’s preferred bikeway alignment. A copy of this letter is included with this staff report as Attachment B.



## February 2021 Public Meeting Scoring

MCDOT will present more detailed information during their briefing on this project; however, it should be noted that as part of the public meeting, MCDOT received 55 public comments scoring each Alternative from 1 to 10. Figure 10 below provides a summary of the average scores of the four alternatives. Overall, Alternative #3 (Brown Street) scored the highest at 6.59, with Alternative #4 (Picea View Court) coming in second. Alternative #2 (Ridge Road) received the lowest average score at 4.33.

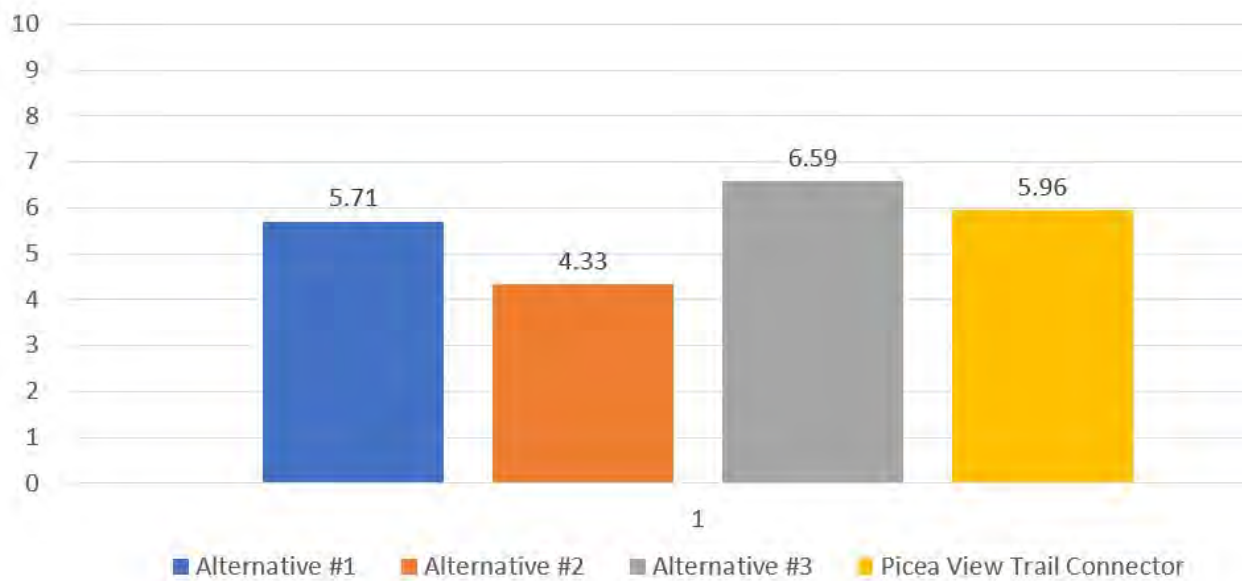


Figure 10: Washington Grove Connector – Summary of Public Scoring of Alternatives

## Master Plan Compliance

The Washington Grove Connector trail being studied is a planned master planned facility. The planned connection itself is recommended in the Bicycle Master Plan, the 2006 Shady Grove Sector Plan, and the ongoing 2021 Shady Grove Minor Master Plan Amendment.

The 2006 Shady Grove Sector Plan called for a bicycle connection between the northern terminus of Crabbs Branch Way and Brown Street. The recent 2021 Minor Master Plan Amendment effort also contemplated a connection at this location; however, when the Planning Board Draft was released, the Town of Washington Grove submitted testimony requesting the recommendation for a northern terminus be generalized to the “Town of Washington Grove.” The rationale for this request was because MCDOT had initiated its alternatives development work for the proposed connection, but no consensus had been reached and no alternative had been selected. The Planning Board accepted this request and the edit is reflected in the approved and adopted Plan Amendment. The Council on April 6, 2021 completed its review and approval of the Sector Plan Amendment and supports both the roadway connection between Crabbs Branch Way and Amity Drive. The approval also includes general language regarding the bikeway connection to the Town of Washington Grove.



The Crabbs Branch Way Extension between Crabbs Branch Way and Amity Drive is master planned as a Primary Residential Street in the Master Plan of Highways and Transitways. This planned connection was included in the 2006 Shady Grove Sector Plan and has been continued as a recommendation in the recent 2021 Minor Master Plan Amendment. A trail facility called the Piedmont Crossing Local Park Trail is also master planned in the Bicycle Master Plan along the general alignment of this planned road connection. It should be noted that this planned extension would likely be re-classified as a Neighborhood Connector using the ongoing Complete Streets Design Guidelines. The typical cross section on this type of street would call for a sidepath on one side of the street (which would satisfy the Bicycle Master Plan trail connection), and a sidewalk on the other side of the street. The width of the travel lanes shown in the concept for this planned extension would also call for 11-foot wide travel lanes.

### Parkland Impacts

There are two park units within the project area, the Piedmont Crossing Local Park and the Washington Grove Meadow Conservation Park. Together the park units support a diverse natural and cultural setting and offer significant recreational opportunities for the local community. The existing natural surface trail network that connects both parks provides for active and passive recreation and is highly utilized.

The location's geologic substrate is serpentine bedrock, which can support some of the most unique plant communities in the piedmont region. The meadow onsite is considered a Tier 1 meadow (Parks' highest quality rating) due to its size and appropriate vegetative structure to support grassland obligate species. There is only one other such meadow managed on county parkland. As is, the attribute of this site with the most importance for conservation is its size and interior, which is extremely rare in Montgomery County. The upland forest area is dominated by mature oaks and still retains native ground layer species. The forested areas of the site, particularly on the southern and western perimeters of the Piedmont Crossing Local Park, contain significant hydrologic features that include wetland seeps, a wetland complex, and a perennial tributary of Mill Creek. An ephemeral tributary of Mill Creek also runs through the forest along the northern boundary of both parks. The wetland features within the site are fed by both groundwater input as well as a stormdrain network coming off the existing Crabbs Branch Way and the adjacent county facility to the west. Despite these stormwater inputs, the wetlands are highly functional and sustainable trail design techniques would be required in any areas where there is overlap.

The proposed trail alignments may have an effect on known National Register-listed and/or potentially National Register-eligible cultural resources as well as on Park-owned cultural resources. The historic Washington Grove Methodist Camp Meeting is a significant 19th century National Register historic district in Montgomery County and within the state of Maryland. The natural setting of this National Register district is defined on its southern edge by Washington Grove Conservation Park, which is maintained as a meadow habitat. Additionally, the area of investigation has the potential to encompass known and/or high potential prehistoric archaeological sites, including a steatite quarry, a source of stone used by Native American peoples (18MO621, Washington Grove Steatite Quarry). The area of prehistoric high potential includes land in both Washington Grove Conservation Park and Piedmont Crossing Local Park. No ground disturbance should be undertaken in this area without an archaeological treatment plan being in place, including any staging of construction machines or materials. Any project will need to be evaluated as an

Undertaking in the context of Section 106 of the 1966 National Historic Preservation Act should any federal and/or state licenses and/or permits be anticipated for the project.

Of the alternatives advanced by MCDOT, Montgomery Parks supports Alternative #3 (Brown Street) as the most effective connection from the Washington Grove neighborhood to the end of Crabbs Branch Way. This option provides an efficient connection while minimizing impacts to natural, cultural, and historical resources outlined. Alternative #2 is not supported due to the additional impacts this alignment presents to existing forest, wetland, and meadow habitat, and potential historic/archaeological resources.

The proposed Amity Drive Connector Trail would impact and replace a section of the existing natural surface trail on Piedmont Crossing Local Park. A trail connection in this location would only be considered once the evaluation of the Crabbs Branch Way Extension project is complete. If the roadway is extended, the trail alignment should follow immediately adjacent. A natural surface trail connection from the end of Amity Drive to the existing Natural Surface Trail loop in the park should be a consideration as part of the overall trail plan where an unsigned people's choice trail exists now. Signs, a kiosk at Amity Drive, and a small bridge would be needed to make this connection official. The master planned road alignment would have significant impacts to the existing recreational, environmental, and historic resources in the park.

Any trail or roadway alignments pursued are required to proceed through Montgomery Parks Concept Review process and Park Construction Permit Review and Approval prior to any construction.

#### Attachment

- A. MCDOT Virtual Public Meeting (Feb 21, 2021) Presentation
- B. Town of Washington Grove letter (March 24, 2021) to MCDOT



# WASHINGTON GROVE CONNECTOR & CRABBS BRANCH WAY EXTENSION

PLANNING BOARD BRIEFING  
4-29-2021



**MC DOT**



# Outline

- Study Overview
- Washington Grove Connector
  - Alternatives
  - Impacts
  - Costs
  - Public Input Summary
- Crabbs Branch Way Extension
  - Alternatives
  - Impacts
  - Costs
  - Public Input Summary
- Discussion



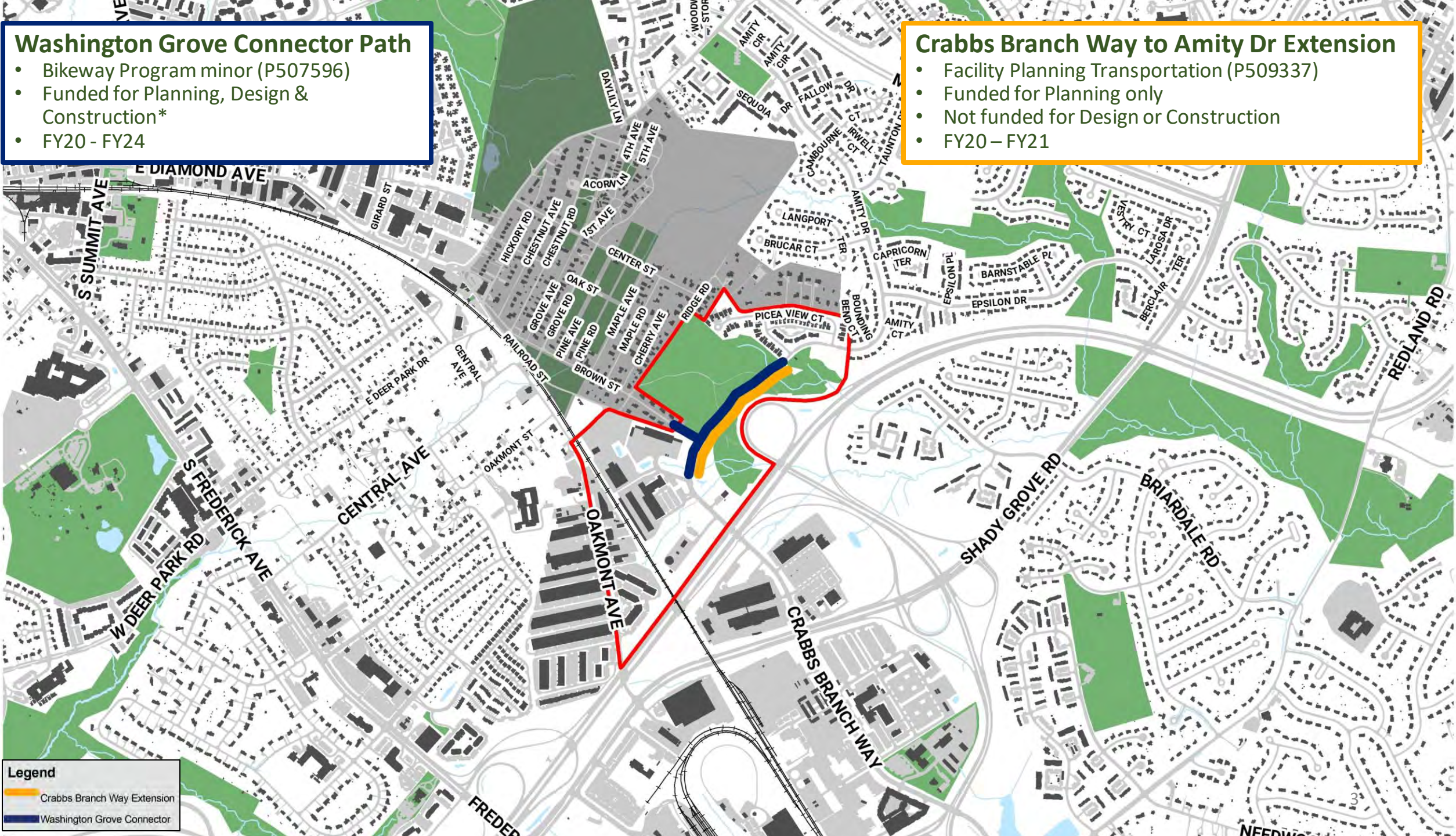


## Washington Grove Connector Path



- Bikeway Program minor (P507596)
- Funded for Planning, Design & Construction\*
- FY20 - FY24

## Crabbs Branch Way to Amity Dr Extension

- Facility Planning Transportation (P509337)
- Funded for Planning only
- Not funded for Design or Construction
- FY20 – FY21

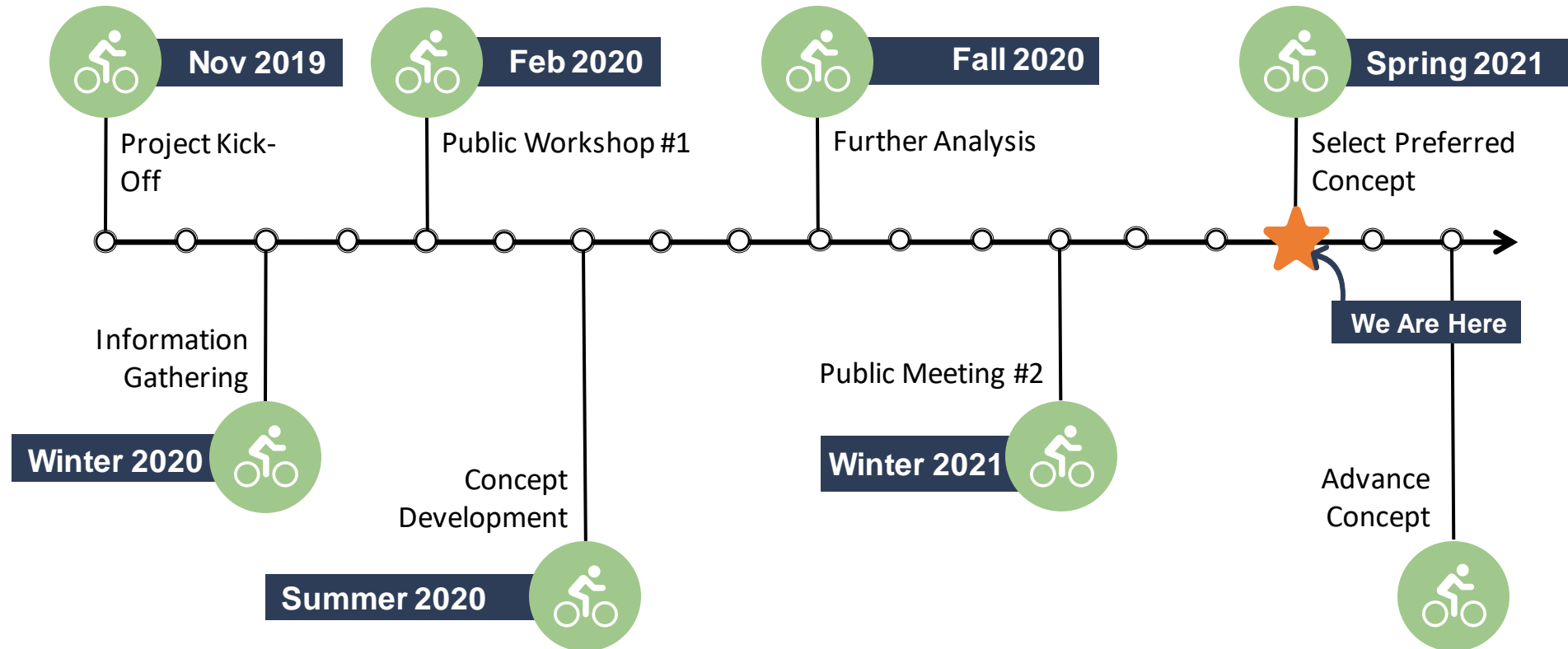


**Legend**

-  Crabbs Branch Way Extension
-  Washington Grove Connector



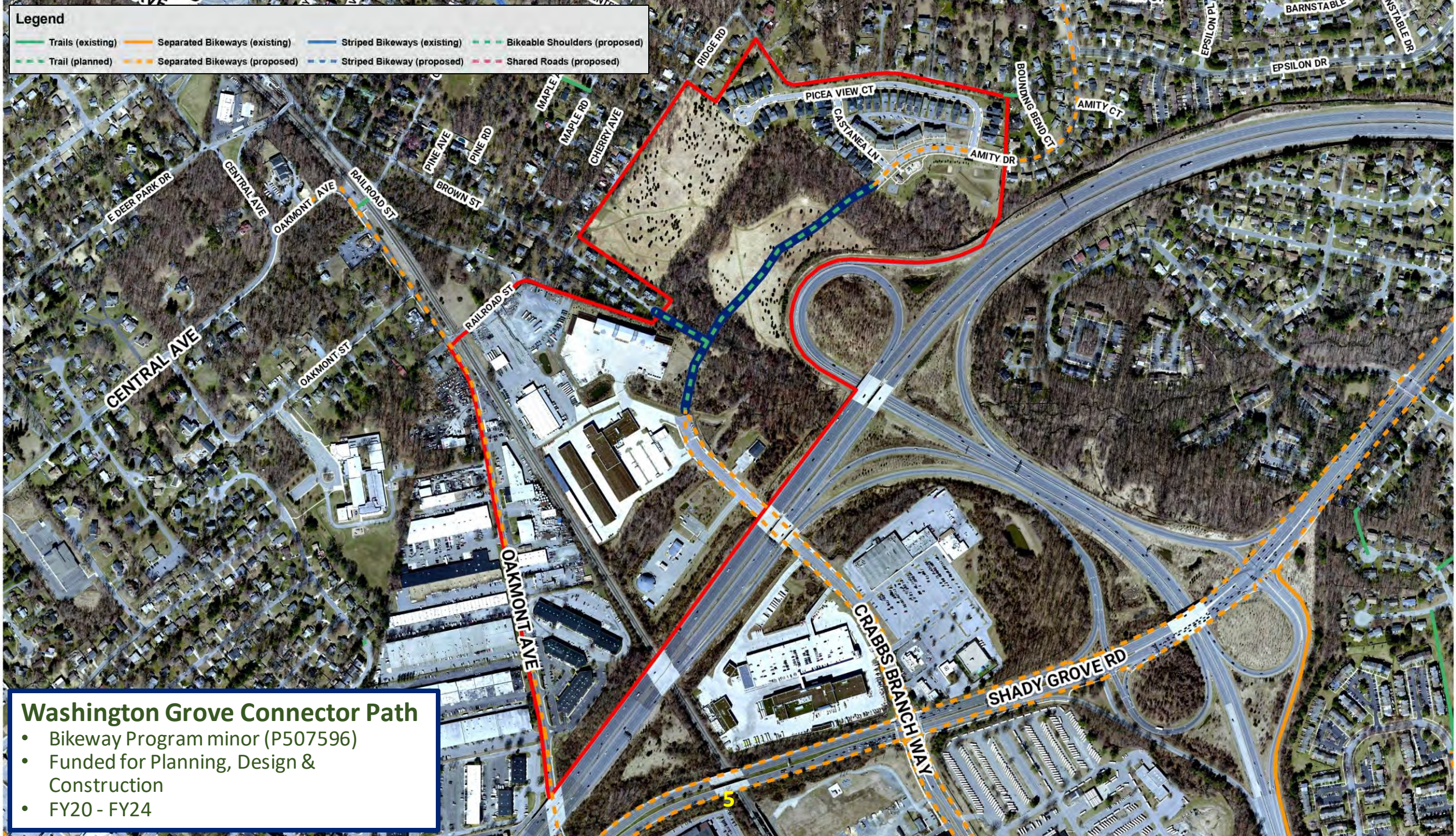
# Project Schedule





**Legend**

- Trails (existing)
- Separated Bikeways (existing)
- Striped Bikeways (existing)
- Bikeable Shoulders (proposed)
- Trail (planned)
- Separated Bikeways (proposed)
- Striped Bikeway (proposed)
- Shared Roads (proposed)



**Washington Grove Connector Path**

- Bikeway Program minor (P507596)
- Funded for Planning, Design & Construction
- FY20 - FY24



# Trail Alternatives





# Washington Grove Connector

Alignment #1 – Railroad Street



















FOR  
SALE

Railroad St



# Alignment #1 - Impacts

Impact	Unit	Total
Surface Area	SQ FT	21,000
Forest	SQ FT	26,000
Stream Crossing	LF	15
Wetlands	SQ FT	1,000
Flood Plain	SQ FT	2,000
ROW Acquisition	SQ FT	16,000
Permanent Easement	SQ FT	500





# Alignment #1 - Costs

ITEM	UNIT	QTY	COST
Picea View Ct to Ridge Rd – 10 ft Asphalt Trail with 2 ft Grass Shoulders	LF	100	\$8,000
10 ft Asphalt Trail with 2 ft Grass Shoulders	LF	1,350	\$108,000
Wooden Retaining Wall	LF	130	\$16,900
10 ft Stream Crossing/Ped Bridge	LS	1	\$80,000
10 ft Elevated Boardwalk	SF	1,000	\$65,000
Row Acquisition	LS	16,000	\$160,000
Permanent Easement	LS	500	\$5,000
<b>Subtotal</b>			\$442,900
<b>Total (+30% Contingency)</b>			\$575,770

\*Costs are for comparison and do not include Stormwater Management, Utilities, Lighting, Site Prep, etc.



# Alignment #1 – Railroad Street

## Survey Comments

- Railroad Street is a dangerous road for walking and bicycling
- No bike or ped infrastructure on Railroad Street
- Requires purchase of private land
- Very close to backyards and eliminates buffer between homes and salt barn
- Least disruptive to neighborhood
- Would feel uncomfortable walking behind salt barns and Robert's Oxygen property when dark
- Least use of shared roadways
- Most expensive option
- Does not use Town of Washington Grove roads

# Washington Grove Connector

Alignment #2 – Ridge Road







**LEGEND**

- TRAIL CENTER LINE
- TRAIL LIMIT OF DISTURBANCE
- TRAIL AREA
- LIMIT OF STUDY
- WETLAND AREA
- CONSERVATION EASEMENT
- SANITARY SEWER
- PARCEL LINE / ROW
- 500 CONTOURS

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION	
WASHINGTON CONECTOR / CRABBS BRANCH WAY OPTION 2	
PROPOSED TRAIL	
1" = 100'	







## Alignment #2 - Impacts

Impact	Unit	Total
Surface Area	SQ FT	20,000
Forest	SQ FT	15,000
Stream Crossing	FT	15
Wetlands	SQ FT	1,000
Flood Plain	SQ FT	2,000
ROW Acquisition	SQ FT	0
Permanent Easement	SQ FT	500



# Alignment #2 - Costs

ITEM	UNIT	QTY	COST
Picea View Ct to Ridge Rd – 10 ft Asphalt Trail with 2 ft Grass Shoulders	LF	100	\$8,000
10 ft Asphalt Trail with 2 ft Grass Shoulders	LF	1,280	\$102,400
Wooden Retaining Wall	LF	130	\$16,900
10 ft Stream Crossing/Ped Bridge	LS	1	\$80,000
10 ft Elevated Boardwalk	SF	1,000	\$65,000
Row Acquisition	LS	-	-
Permanent Easement	LS	500	\$5,000
<b>Subtotal</b>			\$277,300
<b>Total (+30% Contingency)</b>			\$360,490

\*Costs are for comparison and do not include Stormwater Management, Utilities, Lighting, Site Prep, etc.



# Alignment #2 – Ridge Road Survey Comments

- Expensive and environmentally impactful to conservation meadow
- Close to backyards
- Requires paving parkland
- Sacrifices natural meadow to avoid Brown St
- Minimizes impact to Brown St residences

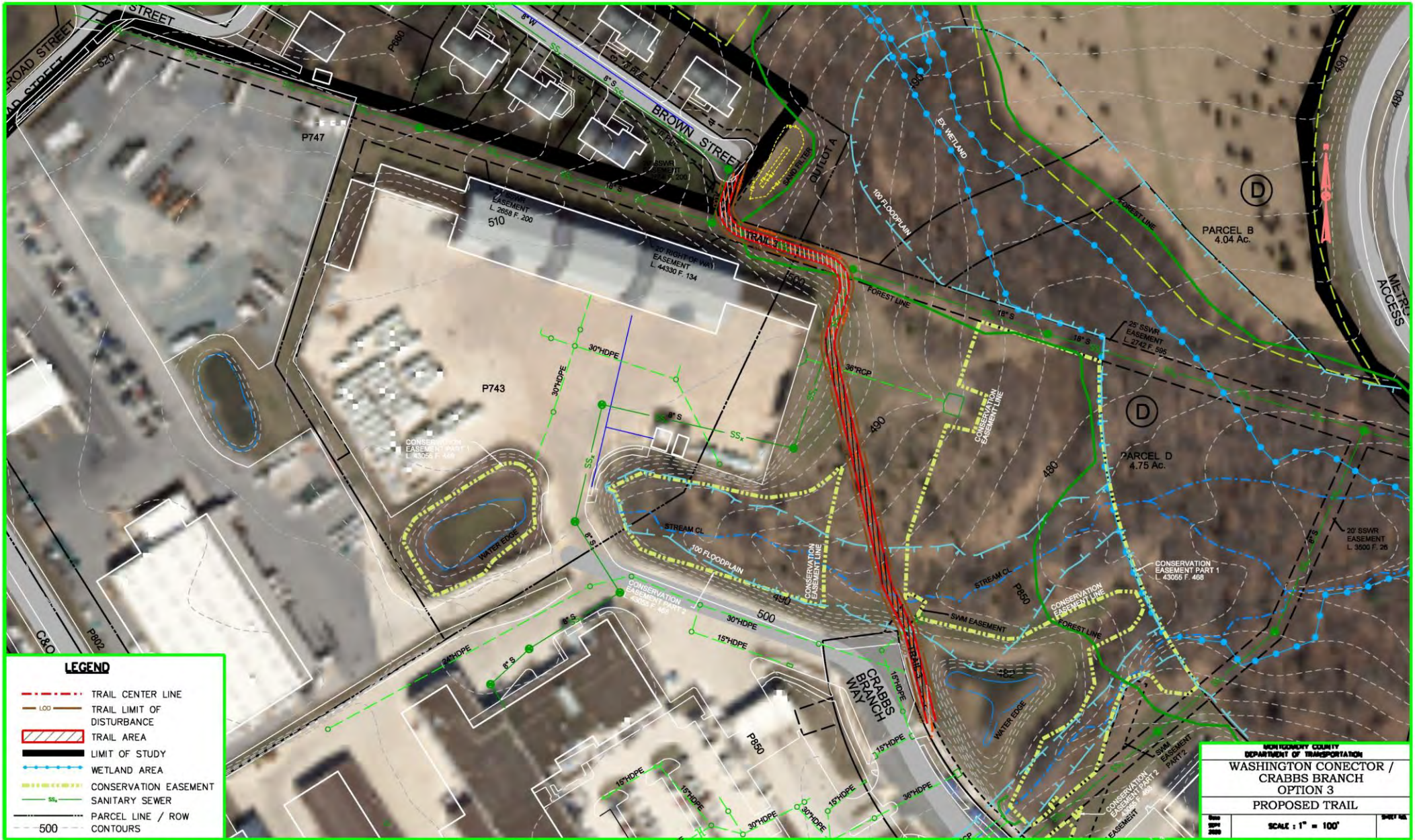




# Washington Grove Connector

Alignment #3 – Brown Street





**LEGEND**

- - - TRAIL CENTER LINE
- TRAIL LIMIT OF DISTURBANCE
- TRAIL AREA
- LIMIT OF STUDY
- - - WETLAND AREA
- CONSERVATION EASEMENT
- - - SANITARY SEWER
- PARCEL LINE / ROW
- - - 500 CONTOURS

MONTGOMERY COUNTY  
 DEPARTMENT OF TRANSPORTATION  
**WASHINGTON CONECTOR /**  
**CRABBS BRANCH**  
**OPTION 3**  
**PROPOSED TRAIL**

SCALE : 1" = 100'  
 SHEET NO. \_\_\_\_\_ OF \_\_\_\_\_



















## Alignment #3 - Impacts

Impact	Unit	Total
Surface Area	SQ FT	11,000
Forest	SQ FT	12,000
Stream Crossing	FT	15
Wetlands	SQ FT	1,000
Flood Plain	SQ FT	2,000
ROW Acquisition	SQ FT	2,500
Permanent Easement	SQ FT	500



# Alignment #3 - Costs

ITEM	UNIT	QTY	COST
Picea View Ct to Ridge Rd – 10 ft Asphalt Trail with 2 ft Grass Shoulders	LF	100	\$8,000
10 ft Asphalt Trail with 2 ft Grass Shoulders	LF	640	\$51,200
Wooden Retaining Wall	LF	130	\$16,900
10 ft Stream Crossing/Ped Bridge	LS	1	\$80,000
10 ft Elevated Boardwalk	SF	1,000	\$65,000
Row Acquisition	LS	2,500	\$25,000
Permanent Easement	LS	500	\$5,000
<b>Subtotal</b>			\$251,100
<b>Total (+30% Contingency)</b>			\$326,430

\*Costs are for comparison and do not include Stormwater Management, Utilities, Lighting, Site Prep, etc.





# Brown Street Connection History

- Ward Corporation – *Proposal for Annexation – January 10, 1994*
  - “After meeting with the Town’s planning commission on January 4, 1994; Ward or his assigns, agree with the following conditions of annexation:
    - The Development of the site will provide...a bike path which connects the Brown Street Extension with the future Amity Way.”
- Resolution 94-04 – *Resolution Authorizing the Annexation to the Town of Washington Grove of Approximately 2.88 Acres of Land Located at the intersection of Brown Street and Ridge Road*
  - “Dedication of an outlot to the Town, such outlot to include stormwater facility required by the County, an area for afforestation, and a bike path connecting Brown Street and future Amity Drive;”



# Alignment #3 – Brown St Survey Comments

- Safest option
- Avoids backyards
- Shortest and least costly alternative
- Minimizes impact on trees
- Consistent with 1994 annexation agreement, adopted resolution, and conveyance of outlot
- Would increase traffic on Town of Washington Grove roads.



# Trail Alternatives Comparison

Impact	Unit	Alt #1	Alt #2	Alt #3
Surface Area	SQ FT	21,000	20,000	11,000
Forest	SQ FT	26,000	15,000	12,000
Stream Crossing	FT	15	15	15
Wetlands	SQ FT	1,000	1,000	1,000
Flood Plain	SQ FT	2,000	2,000	2,000
ROW Acquisition	SQ FT	16,000	0	2,500
Permanent Easement	SQ FT	500	500	500
Max Slope	%	4.0%	4.5%	4.5%
Cost	\$	\$575,770	\$360,490	\$326,430



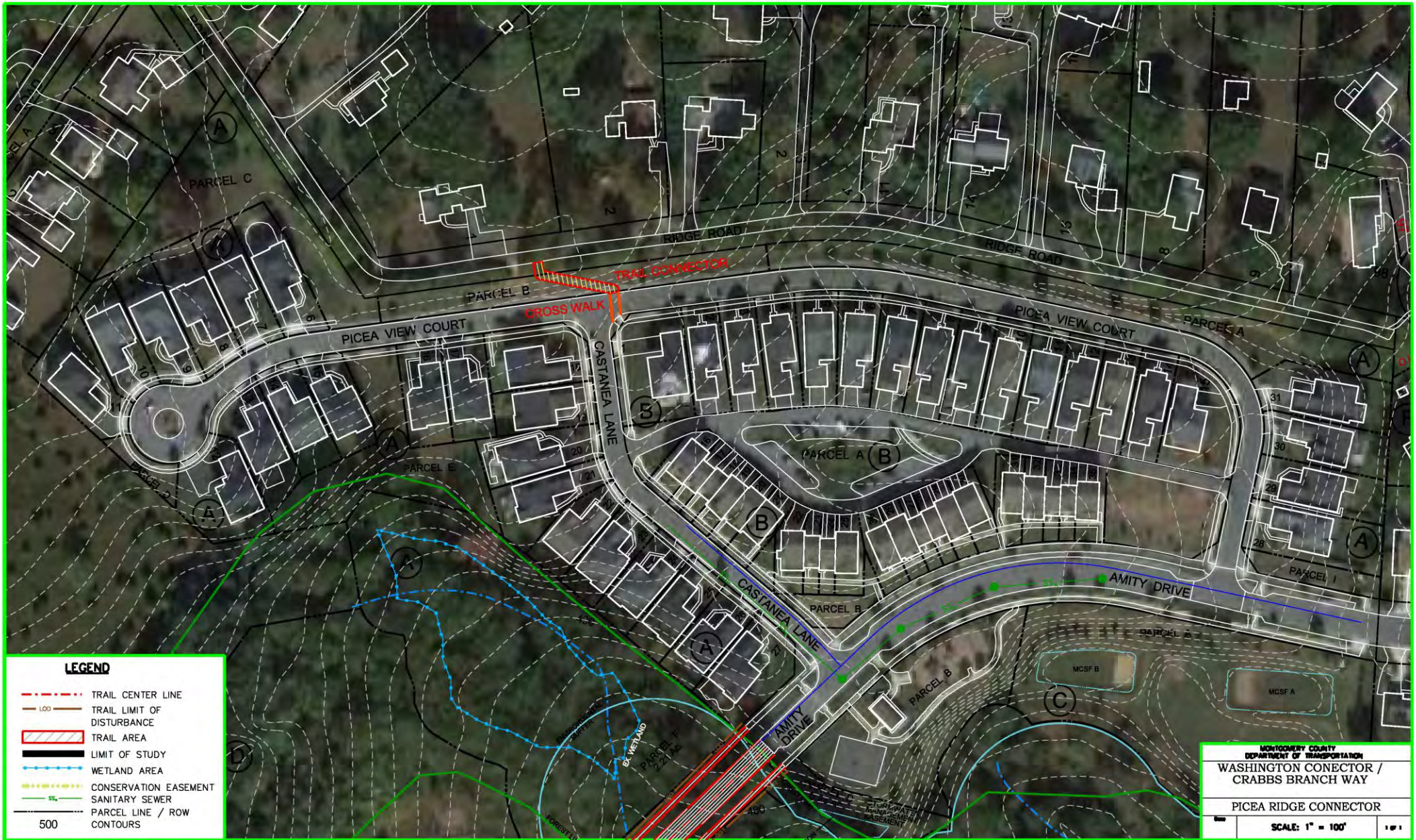


# Washington Grove Connector

Picea View Ct Connector







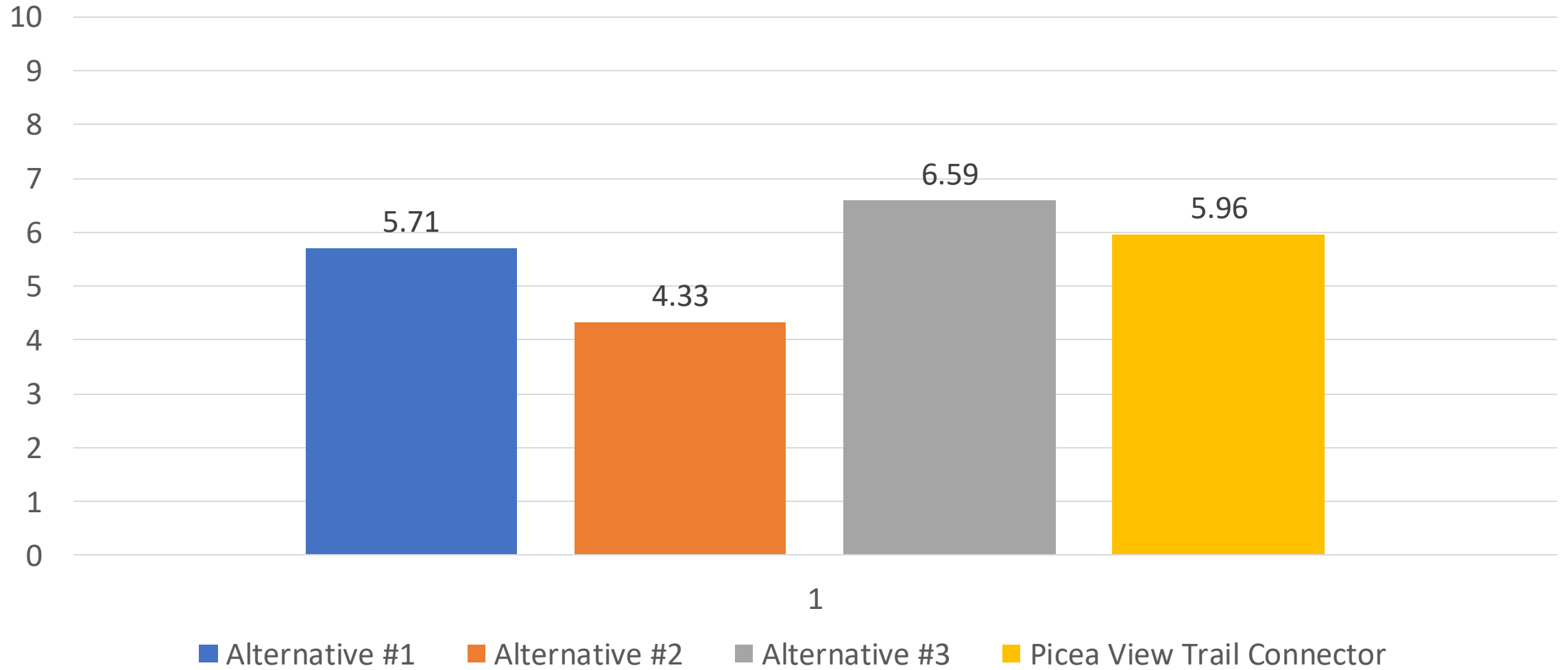
**LEGEND**

- - - - - TRAIL CENTER LINE
- - - - - TRAIL LIMIT OF DISTURBANCE
- TRAIL AREA
- LIMIT OF STUDY
- - - - - WETLAND AREA
- - - - - CONSERVATION EASEMENT
- - - - - SANITARY SEWER
- PARCEL LINE / ROW
- 500 CONTOURS

MONTEREY COUNTY DEPARTMENT OF TRANSPORTATION	
WASHINGTON CONECTOR / CRABBS BRANCH WAY	
PICEA RIDGE CONNECTOR	
	SCALE: 1" = 100'



# Trail Alternative Ratings







### Crabbs Branch Way to Amity Dr Extension

- Facility Planning Transportation (P509337)
- Funded for Planning only
- Not funded for Design or Construction
- FY20 – FY21

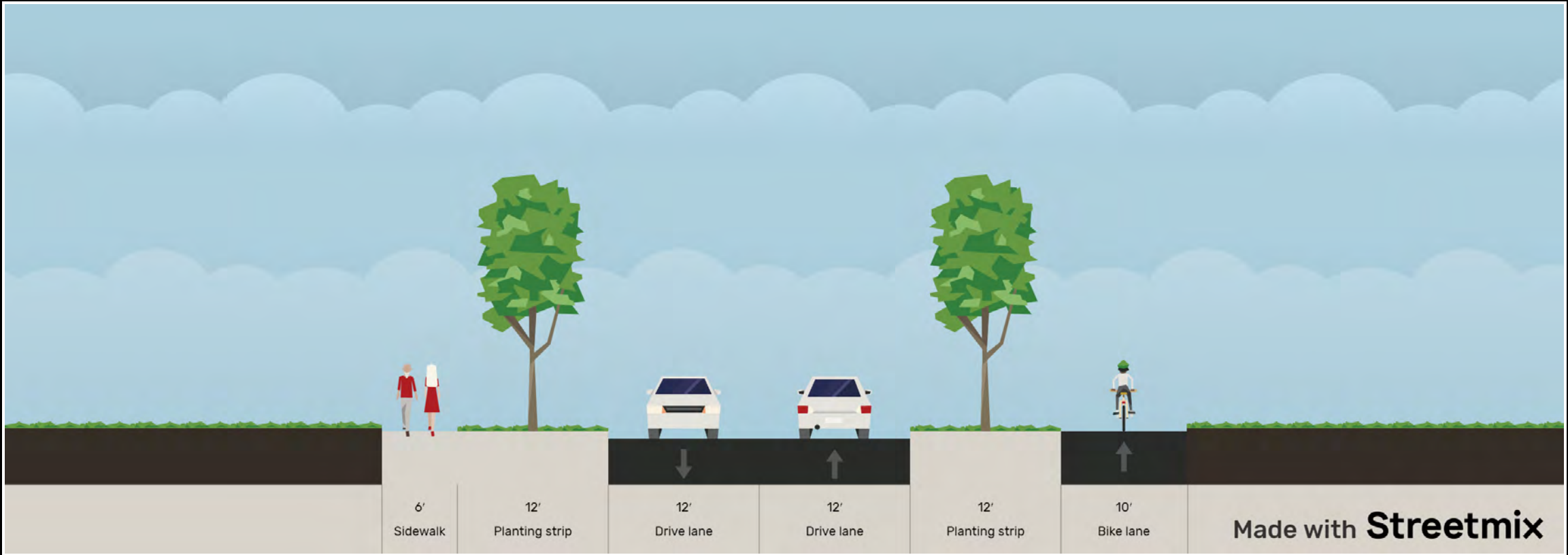


# Crabbs Branch Way Extension

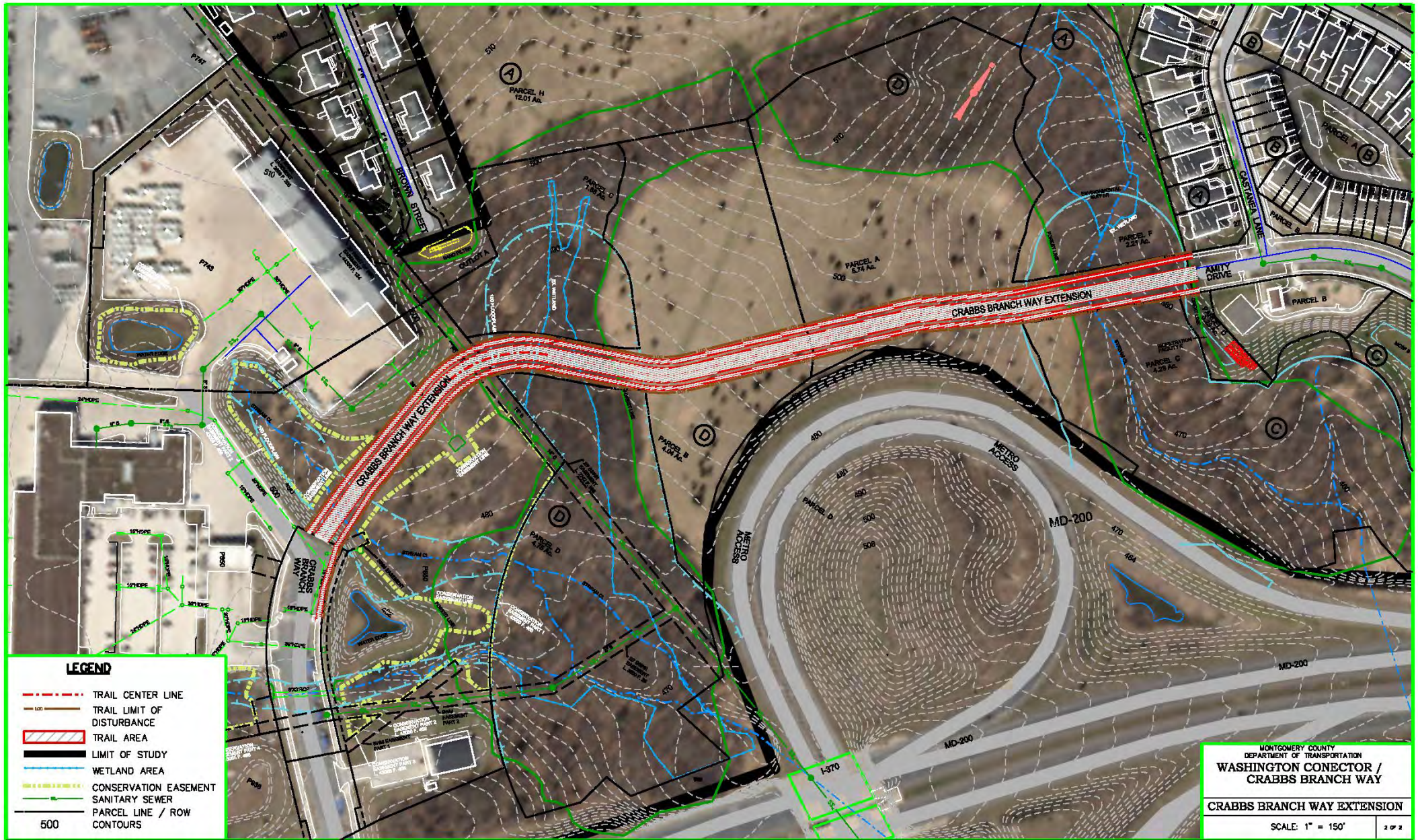
Roadway Alignment











**LEGEND**

- TRAIL CENTER LINE
  - TRAIL LIMIT OF DISTURBANCE
  - TRAIL AREA
  - LIMIT OF STUDY
  - WETLAND AREA
  - CONSERVATION EASEMENT
  - SANITARY SEWER
  - PARCEL LINE / ROW
- 500  
CONTOURS

MONTGOMERY COUNTY  
DEPARTMENT OF TRANSPORTATION  
**WASHINGTON CONECTOR /  
CRABBS BRANCH WAY**

**CRABBS BRANCH WAY EXTENSION**

SCALE: 1" = 150'  
2 OF 2



# Crabbs Branch Way Extension - Impacts

Impact	Unit	Total
Surface Area	SQ FT	98,000
Forest	SQ FT	48,000
Stream Crossing	FT	15
Wetlands	SQ FT	6,000
Flood Plain	SQ FT	7,500
ROW Acquisition	SQ FT	0
Permanent Easement	SQ FT	2,000





# Crabbs Branch Way Extension - Costs

ITEM	UNIT	QTY	COST
Wooden Retaining Wall	LF	260	\$33,800
24FT Asphalt Roadway (Connector)	MILE	0.31	\$1,178,000
24FT Roadway Culvert	LS	1	\$200,000
8ft Asphalt Trail With 2 ft Grass Shoulders (Shared Path Connector)	LF	1,500	\$97,500
8 ft Elevated Boardwalk (Shared Path Connector)	LF	800	\$48,000
6ft Asphalt Trail with 2 ft Grass Shoulders (Sidewalk Connector)	LF	1,500	\$75,000
6 ft Elevated Boardwalk (Sidewalk Connector)	LF	600	\$33,000
Permanent Easement	LS	2,000	\$20,000
<b>Subtotal</b>			\$1,693,300
<b>Total (+30% Contingency)</b>			\$2,201,290





# Crabbs Branch Way Extension Survey Comments

- Increased traffic on Amity Drive
- Creates a new cut-through route
- Increased noise and light pollution
- Would destroy wildlife habitat
- Would reduce passive recreation area
- Would improve connectivity to Shady Grove Metro
- Access to Amity Drive Neighborhood Park would be more difficult with increased traffic



# Crabbs Branch Way Extension

Amity Drive Trail Connector







# Amity Drive Trail Connector - Impacts

Impact	Unit	Total
Surface Area	SQ FT	20,000
Forest	SQ FT	14,000
Stream Crossing	FT	0
Wetlands	SQ FT	1,200
Flood Plain	SQ FT	0
ROW Acquisition	SQ FT	0
Permanent Easement	SQ FT	20





# Amity Drive Trail Connector - Costs

ITEM	UNIT	QTY	COST
10 ft Asphalt Trail with 2 ft Grass Shoulders	LF	1,450	\$116,000
		<b>Subtotal</b>	\$116,000
		<b>Total (+30% Contingency)</b>	\$150,800





# Questions?

Please submit feedback to [Kyle.Lukacs@montgomerycountymd.gov](mailto:Kyle.Lukacs@montgomerycountymd.gov) or  
[www.tinyurl.com/WashGroveConnectorSurvey](http://www.tinyurl.com/WashGroveConnectorSurvey)

# Contact



Kyle Lukacs, AICP – Project Manager



240-777-7207



[Kyle.Lukacs@montgomerycountymd.gov](mailto:Kyle.Lukacs@montgomerycountymd.gov)



<https://www.montgomerycountymd.gov/dot-dte/projects/washgroveconnector/index.html>



[www.tinyurl.com/WashGroveConnectorSurvey](http://www.tinyurl.com/WashGroveConnectorSurvey)







Town of Washington Grove  
P.O. Box 216  
Washington Grove, MD 20880  
301-926-2256  
[washgrove@comcast.net](mailto:washgrove@comcast.net)

24 March 2021

Montgomery County Department of Transportation  
Attention: Kyle Lukacs, AICP  
Planning Specialist, Division of Transportation Engineering  
100 Edison Park Drive, 4th Floor SE, Gaithersburg, MD 20878

Dear Kyle,

On March 8<sup>th</sup> the Washington Grove Town Council endorsed Brown Street (alignment 3) as the Town's preferred bikeway connection to Crabbs Branch Way. Thank you for the helpful interim findings the Study reported at the public meeting in February. With this action, the Council expresses support for recommendation of this alignment by the Washington Grove Connector Study, and for the County to proceed with detailed design and construction in the near future.

We want to emphasize that Washington Grove residents and the Town Council remain very concerned over the environmental impacts, safety, "gateway" design, potential placement of bike racks, as well as specifics of the route at the Metro "end", Gaithersburg's connection plans, and more.

*In adopting this recommendation, the Town Council has charged me to insure that the Town be involved in detailed planning decisions during construction of the connector. Residents and the Town Council wish to insure the design of the pathway minimizes adverse effects on the residents of Brown Street, the woodlands and the wetlands (decisions including width, type and exact path through wetlands, aesthetics, tree loss and replacement, etc.).*

It is in our joint interest to cooperate in building the best pathway possible. I request that all players involved sit down to discuss how to assure the Town's participation in the process. A Memo of Understanding may be appropriate, wherein we define the Town's participation and perhaps also expectations of all parties for the work. I will identify a small group of residents having interest and some expertise to work with the County.

Please let me know how we should proceed to assure that Washington Grove has a significant role in the bikeway implementation process. And thank you for continuing to work towards the best possible outcome for all.

Sincerely,



John G. Compton, Mayor