

**Mandatory Referral for the Capital Crescent Surface Route, MR2019004**

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**Completed:** 010/18/2018

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**DESCRIPTION**

The Capital Crescent Surface Trail (CCST) project would construct two-way separated bike lanes along Bethesda Avenue and Willow Lane in Downtown Bethesda, provide a diagonal, protected crossing for bicyclists at the intersection of Bethesda Avenue and Woodmont Avenue and provide a protected phase for trail users to cross Wisconsin Avenue.

Applicant: Montgomery County Department of Transportation

**SUMMARY**

Staff recommends **approval with comments** on the Mandatory Referral for the Capital Crescent Surface Trail.

**COMMENTS**

1. Per the Art Review Panel's comments in the letter dated June 28, 2018, provide:
  - a. Written proof that contact has been made with John Van Alstine (the artist of the "Artery Sunwork").
  - b. An appraisal for the "Artery Sunwork" art piece prior to removal.
2. Page 108 of the Bethesda Downtown Plan recommends including special paving at the Woodmont Ave/Bethesda Ave intersection to enhance a plaza-like feel to the space as an extension of the planned Capital Crescent Civic Green. Consider options such as stamped concrete, while providing a smooth bicycling surface.
3. Consider the following changes to the curb ramps at the intersection of Woodmont Ave and Bethesda Avenue:
  - a. East Leg: Widen the curb ramps on the north side of Bethesda Avenue to a minimum of 10 feet.
  - b. West Leg: Shift the crosswalk on the south side of Bethesda Avenue to the west to align with the crosswalk on the north leg and to reduce the crossing distance. Also, consider enlarging the plaza at the northwest corner by eliminating southbound right turns.
  - c. North Leg: Shift the crossing to the north to where the lane markings are located so that the curb ramps align. This will reduce the crossing distance.

4. While there is a substantial queuing area for bicyclists at the southwest corner of the intersection of Bethesda Avenue and Woodmont Avenue, the queuing area at the northeast corner is limited and will likely back up, obstructing pedestrian and bicycle flows between Bethesda Avenue and Woodmont Avenue. Consider ways to create additional queuing space to accommodate bicyclists queuing at the northeast corner, such as creating more space for bicyclists to queue at the diagonal crossing.
5. Consider shifting the CCST at the connection to the existing portion of the Capital Crescent Trail (CCT) to reduce potential conflicts between pedestrians and bicyclists in gathering areas on both sides of the Trail. Coordinate final design and connection point with the Department of Parks.
6. The signs directing motorists to watch for cyclists are mounted in the tree buffer between the sidewalk and the separated bike lanes, which is set back from the road by over 10 feet. Consider mounting these signs in the buffer between the bike lane instead to increase their visibility.
7. Provide a stop sign on the east leg of the intersection of Willow Lane and 47th Street to reduce conflicts between motorists and bicyclists.

## **PROJECT DESCRIPTION**

The Capital Crescent Surface Trail project will construct two-way separated bike lanes (also known as protected bike lanes or cycle tracks) along Bethesda Avenue and Willow Lane (see Attachment A). This bikeway will connect the existing segment of the Capital Crescent Trail (CCT Mainline), which runs between Georgetown in the District of Columbia and the trailhead just west of the intersection of Woodmont Avenue and Bethesda Avenue, to Elm Street Local Park, providing a bikeway at street-level that will include a signalized crossing at Wisconsin Avenue. It will provide an alternative route to the Capital Crescent Trail Tunnel (CCT Tunnel), which is currently under design and will cross beneath Wisconsin Avenue.

The full buildout of the CCST is envisioned to occur in two phases, each of which will be the subject of mandatory referrals. The first phase is the subject of this mandatory referral. The second phase will include a bikeway along 47th Street on the west side of Elm Street Local Park, providing a connection to the CCT Mainline and CCT Tunnel at the eastern portal. However, the 47<sup>th</sup> Street segment of the project has not yet been advanced to 30 percent design due to continuing discussions with the Department of Parks and the Town of Chevy Chase and uncertainty about the location of the eastern portal of the CCT Tunnel.

Along Bethesda Avenue, the CCST will be located on the south side of the street, west of Woodmont Avenue, and on the north side of the street, east of Woodmont Avenue (Figure 1). The portion along Willow Lane will be located on the south side of the street. A diagonal crossing for cyclists will be provided across the intersection of Bethesda Avenue and Woodmont Avenue with a protected traffic signal phase.



Figure 1: Capital Crescent Surface Trail along Bethesda Avenue

The County will obtain an easement to provide a direct crossing of Wisconsin Avenue at Willow Lane (Figure 2). This crossing will require removal of the artwork, “Artery Plaza Sunwork” (see Site Plan 81984002E). The crossing will permit cyclists to cross Wisconsin Avenue within a protected phase of the traffic signal cycle. The design also intends to incorporate a leading pedestrian interval for the northern crosswalk at the intersection of Bethesda Avenue and Wisconsin Avenue, pending approval by the Maryland State Highway Administration.



Figure 2: Capital Crescent Trail along Bethesda Avenue and Willow Lane

## BACKGROUND

The Capital Crescent Surface Trail route was initially recommended as part of the 1990 *Georgetown Branch Master Plan Amendment*. That Plan recommended construction of both a light rail line and paved pedestrian / bicycle trail within the Georgetown Branch and Metropolitan Branch rights-of-way, providing a direct connection between downtown Bethesda and downtown Silver Spring. Over the years, the design

of the light rail evolved, from a predominantly single-track line design, with double tracks at the stations, to the currently under construction Purple Line, a double-tracked line for its entire length.

Perhaps the most challenging component of the master plan vision was accommodating the Purple Line, the Bethesda Purple Line station platform and the Capital Crescent Trail in a single tunnel beneath the Apex Building, Wisconsin Avenue and the Air Rights Building. The 1994 *Bethesda CBD Sector Plan* anticipated this challenge and recommended two trails: a “tunnel” route under Wisconsin Avenue and a “surface” route along Bethesda Avenue, Willow Lane and along Elm Street Park. The 1994 Plan stated on page 156:

“The tunnel area for the CCT may be greatly reduced or perhaps eliminated if double tracks for the trolley are needed there. In the event that the CCT does not run through the tunnel, the CCT will follow only a street level route.”

In 2010, the *Purple Line Functional Plan* revised county policy by extending the dual track light rail system to the Prince George’s County line. The 2010 Plan also recommended elevating the Capital Crescent Trail above the Purple Line transitway within the tunnel beneath Wisconsin Avenue to accommodate both a high-quality transitway and high-quality trail in this constrained portion of the project.

In response to the 2010 Plan’s recommendation to elevate the trail above the transitway, the Maryland Transit Administration analyzed that option, in fall 2011, and determined that elevating the trail in this manner would increase the cost of the trail project by about \$45 million and could threaten the structural integrity of the Apex Building (7272 Wisconsin Avenue). In 2012, the County Council recommended against constructing a trail in a shared tunnel with the Purple Line and instead focus on constructing a high-quality surface trail.

In an effort to incentivize redevelopment of the Apex Building to occur in tandem with the Purple Line construction, the County Council approved the Bethesda Purple Line Station Minor Master Plan Amendment in 2013. The benefit of redeveloping this site at the same time the Purple Line is constructed is a wider Bethesda Purple Line station platform and a new Capital Crescent Trail tunnel, among other things. The Apex Building is now being redeveloped and will provide space for a portion of the future trail in a new tunnel adjacent to the station platform. MCDOT is evaluating options for completing the new tunnel to the CCT Mainline, passing through the northern section of Elm Street Park.

Figure 3 shows the location of the Purple Line, the CCT Mainline, the original CCT Tunnel Route, the new CCT Tunnel Route and the CCT Surface Route.



Figure 3: Capital Crescent Trail Alignments through Downtown Bethesda

### RELATED BIKEWAY PROJECTS

As with any transportation system, bikeways projects are most effective when they are included as part of a network of bikeways. This project will be a critical segment of such a network. Bikeway projects, and other related projects, currently under construction and in design are listed below with the expected date of completion, if known. A map of these projects is provided in Attachment B. Once complete, this network of bikeways will create one of the most connected systems of low-stress bikeways in the region.

#### Phase: Under Construction

- Capital Crescent Trail between Elm Street Urban Park and the Silver Spring Transit Center (2022)
- Purple Line Station (2022)
- Bethesda Red Line South Entrance (2022)
- Capital Crescent Trail along Reed Street Right-of-Way

#### Phase: Fully Funded

- Capital Crescent Trail adjacent to Ourisman Honda (2018/2019)
- Montgomery Lane / Montgomery Avenue Two-Way Separated Bike Lanes (2020)
- Woodmont Avenue Separated Bike Lanes (2020)
- Capital Crescent Surface Trail along 47<sup>th</sup> Street (TBD)

#### Phase: Partially Funded

- Capital Crescent Trail Tunnel Route (TBD, funded only for design at this time)

- Bicycle Parking Station at the Bethesda Purple Line station (station envelope by 2020, outfitting TBD)

### PHASED UPGRADES TO THE WILLOW LANE BIKEWAY

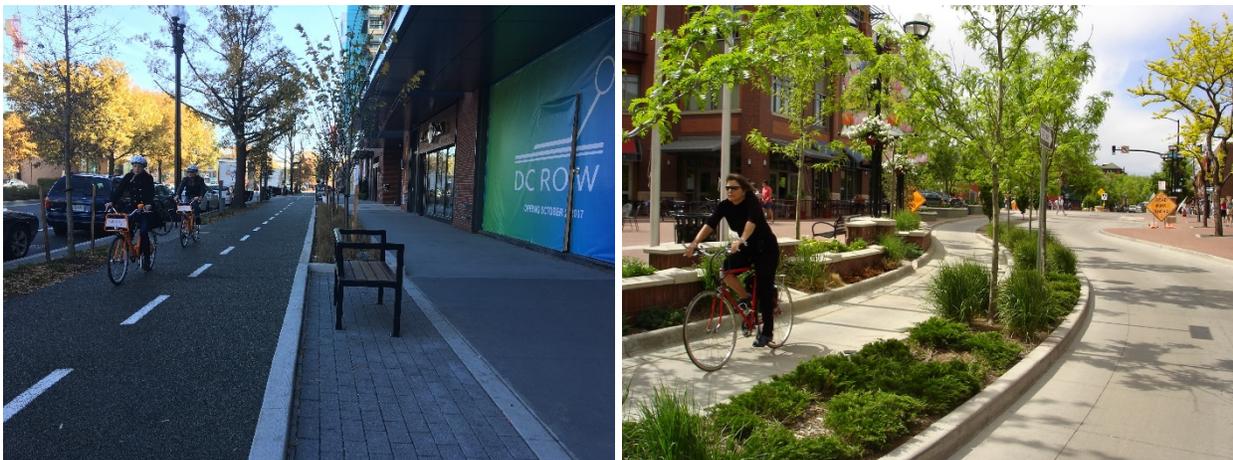
A common strategy to implementing separated bike lanes is a phased approach, installing interim bikeways initially, and then upgrading them over time as part of separate capital projects or as conditions of development approvals.

Interim separated bike lanes are typically implemented as low-cost/retrofit projects within existing improved roadways using materials such as flexible delineator posts and pavement marking, parking stops, planters and jersey barriers (Figure 4). Although interim separated bike lanes can be easier to implement, there are concerns about their maintenance costs and aesthetics, and some provide less protection from adjacent automobile traffic than more permanent solutions.



*Figure 4: Interim separated bike lanes with flexible delineator posts / parked cars (left) and planters (right)*

High-quality separated bike lanes use permanent, physical separation from traffic, such as raised bike lanes and raised medians (Figure 5).



*Figure 5: High-quality separated bike lanes with raised bike lanes (left) and raised medians (right)*

While the CCST project is proposing high-quality/permanent separated bike lanes on Bethesda Avenue, the project is proposing interim separated bike lanes along Willow Lane, due to limited right-of-way. Anticipating that development on the Farm Women’s Cooperative and Lot 24 could be forthcoming, they have prepared a design for upgrading the separated bike lanes as part of the redevelopment of this property (Attachment C). Although these plans are not part of the subject mandatory referral, they are included in the staff report to show that MCDOT has a long-term vision to achieve high-quality separated bike lanes over time. These plans should be consulted by any future development of the Farm Women’s Market as a frontage improvement on Willow Lane. As the Farm Women’s Cooperative is a designated Master Plan Historic Site, when this opportunity arises, it will require review and approval by the Historic Preservation Commission (HPC) through the Historic Area Work Permit (HAWP) process.

### **MASTER PLAN CONSISTENCY**

The Capital Crescent Surface Trail is consistent with the applicable Master and Sector Plans. The 2017 *Bethesda Downtown Plan* confirms the recommendation for the Capital Crescent Trail (surface route) as a separated bike lane (CT-3). The 2018 *Planning Board Draft Bicycle Master Plan* confirms this recommendation.

### **SITE PLAN AMENDMENT**

Site Plan Amendment 81984002E, “Artery Plaza” proposes improvements necessary to accommodate the CCST, as presented in this mandatory referral, and ensures that the redesigned plaza remains an important gathering place in downtown Bethesda (Figure 6). Specifically, those improvements ensure that the surface trail’s design ties into existing topography appropriately and eliminates the existing art piece within the surface trail alignment.



*Figure 6: View of the Northwest Corner of Wisconsin Ave and Bethesda Ave Showing the CCST at the Artery Plaza*

The Site Plan Amendment proposes to redevelop the plaza to provide a more up-to-date, relevant design to refresh this corner of the Artery Plaza Property, encourage use of the plaza, provide desired outdoor dining opportunities, coordinate the design of the plaza with the construction of the CCST and physically integrate the CCST into the overall plaza design. The proposed redesign of this space will create a three-level plaza from Bethesda Avenue to the primary building entrance to the north. The new plaza is positioned to be a multi-functional gathering space and is designed to simultaneously accommodate separate uses, provide a variety of experiences and improve pedestrian circulation. Proposed improvements to the plaza include removing the existing arcade, trellis and pavilion; removing two art pieces – Drinking Fountain and Column (a third art piece, the Artery Sunwork, is located within the area to be acquired and improved by MCDOT to accommodate the CCST. MCDOT will be responsible for the removal of the Artery Sunwork); designating two private outdoor dining areas; re-grading the southern portion of the plaza to transition to Bethesda Avenue; adding shade trees to the plaza; providing new seating and platforms; providing planter beds to transition grade immediately north of CCST; providing new landscaping in the southern portion of the plaza; installing a bike rack immediately north of the Bethesda Avenue sidewalk; constructing a ramp from Bethesda Avenue to the first level of the plaza; and pedestrian-scale lighting.

On June 13, 2018, Site Plan 81984002E Applicant (JBG/7200 Wisconsin Avenue, LLC) and MCDOT, presented to the Art Review Panel the proposal to remove the Drinking Fountain, the Column, and the Artery Sunwork (removal of the Artery Sunwork is due to the construction of the CCST). Comments from the Art Review Panel are included in Attachment D. Comments that are relevant to MCDOT’s project include:

- Provide written proof that contact has been made with John Van Alstine (the artist of the “Artery Sunwork”).
- Provide an appraisal for the “Artery Sunwork” art piece prior to removal.

## **STAFF ANALYSIS**

The CCST is a critical connection in Montgomery County’s low-stress bicycle network. The existing CCT is among the most heavily used trails in the region (on average there are over 2,000 users per day; on peak days there are close to 5,000 users) and usage is anticipated to substantially increase with the completion of the Purple Line, new entrance to the Bethesda Metrorail Red Line station and the extension of the CCT to Silver Spring. The CCST will provide a high-quality connection between the Town of Chevy Chase and the existing Capital Crescent Trail, west of Woodmont Avenue during the construction of the Purple Line and will help to alleviate some of the congestion that can be expected in the CCT Tunnel, once that project is complete.

As shown in Attachment A, the “Capital Crescent Surface Trail plan”, and discussed below, this project provides the following benefits:

1. Extends the CCT from its current, temporary terminus just west of the intersection of Woodmont Ave and Bethesda Ave to the intersection.

2. Provides a diagonal trail crossing of the intersection of Woodmont Ave and Bethesda Ave with a protected traffic signal phase at a location that avoids areas with large numbers of queuing pedestrians and that requires a single crossing of the intersection instead of crossing two legs of the intersection.
3. Connects seamlessly to proposed bikeways on Woodmont Avenue and to the future CCT Tunnel.
4. Provides high-quality separated bike lane construction along Bethesda Avenue using raised medians to create permanent separation from traffic.
5. Provides a protected phase for pedestrians and bicyclists to cross Wisconsin Avenue, subject to approval by the Maryland State Highway Administration.
6. Creates a plan to upgrade the project along Willow Lane, with redevelopment of the Farm Women's Cooperative.

### **Impacts to Parkland**

The project will be adjacent to two parks controlled by the Maryland-National Capital Park and Planning Commission, Montgomery County Department of Parks. At the northeast corner of Woodmont and Bethesda Avenues, is the future Capital Crescent Civic Green. On the northeast corner of Willow Lane and 47th Street is the Elm Street Urban Park.

Impact to Elm Street Urban Park is not anticipated as part of the project subject to this Mandatory Referral. The section of the bikeway along 47th Street may create impacts to this park, however design of this section is not being advanced at this time, and will be subject to a future mandatory referral.

Impact to the Capital Crescent Civic Green will be limited to impact within the County's right-of-way. The park has not yet been designed, so any design of the park can be tailored to the bikeway, which is outside park bounds in the right-of-way.

### **Impacts to Historic Properties**

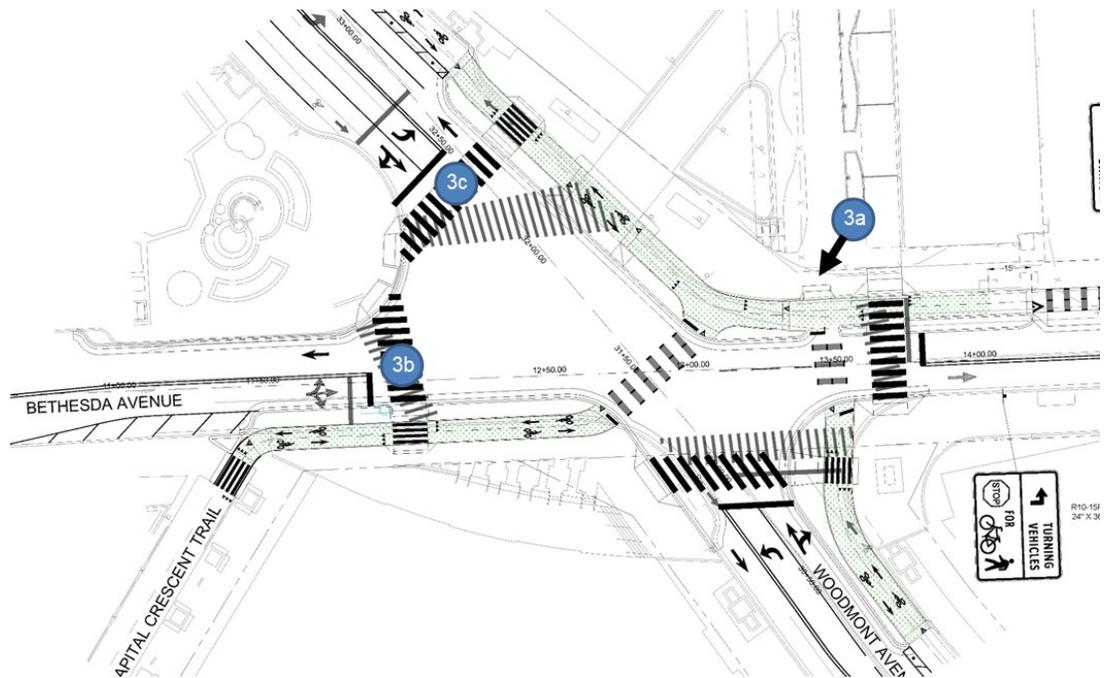
The project is located adjacent to the Farm Women's Market, a designated Master Plan Historic Site. The designated environmental setting for the historic site conforms to the boundary of the existing parcel. The current proposal does not encroach into the parcel boundaries.

While not part of this mandatory referral, the plans to upgrade the Willow Lane separated bike lanes (see Attachment C) place portions of the trail and an extended right-of-way within the boundary of the environmental setting of the Farm Women's Market. Any work within the environmental setting would require review and approval by the Historic Preservation Commission (HPC) through the Historic Area Work Permit (HAWP) process. There are no archaeological sites or features impacted by any of the proposed ground disturbance.

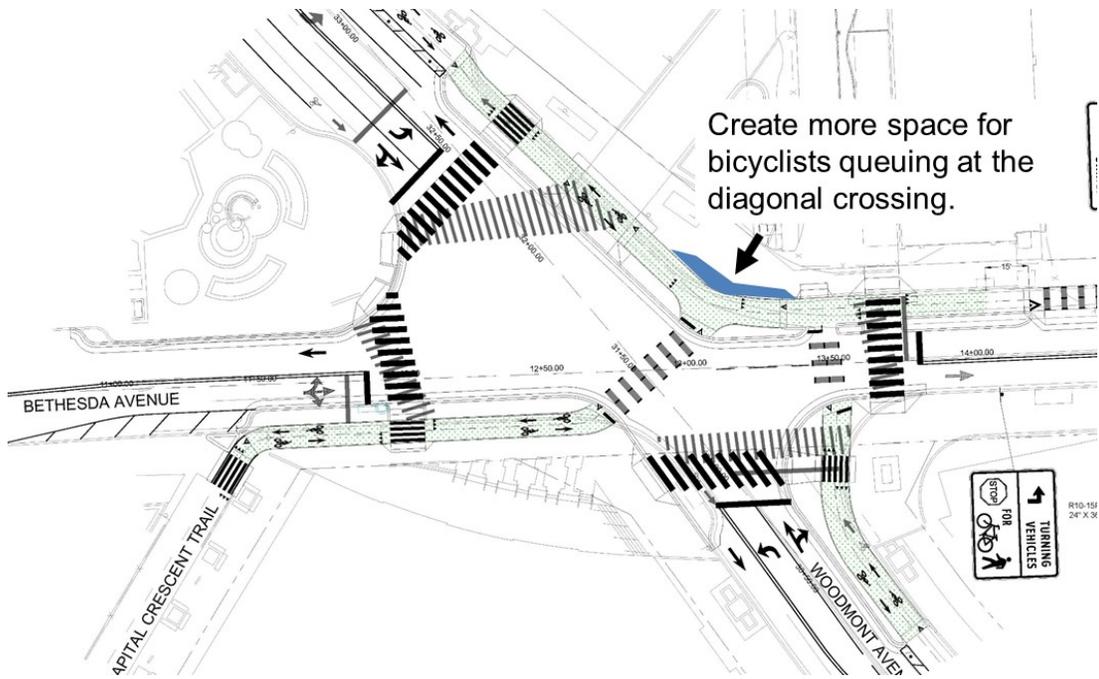
### **RECOMMENDATIONS**

1. Per the Art Review Panel's comments in the letter dated June 28, 2018, provide:
  - a. Written proof that contact has been made with John Van Alstine (the artist of the "Artery Sunwork").

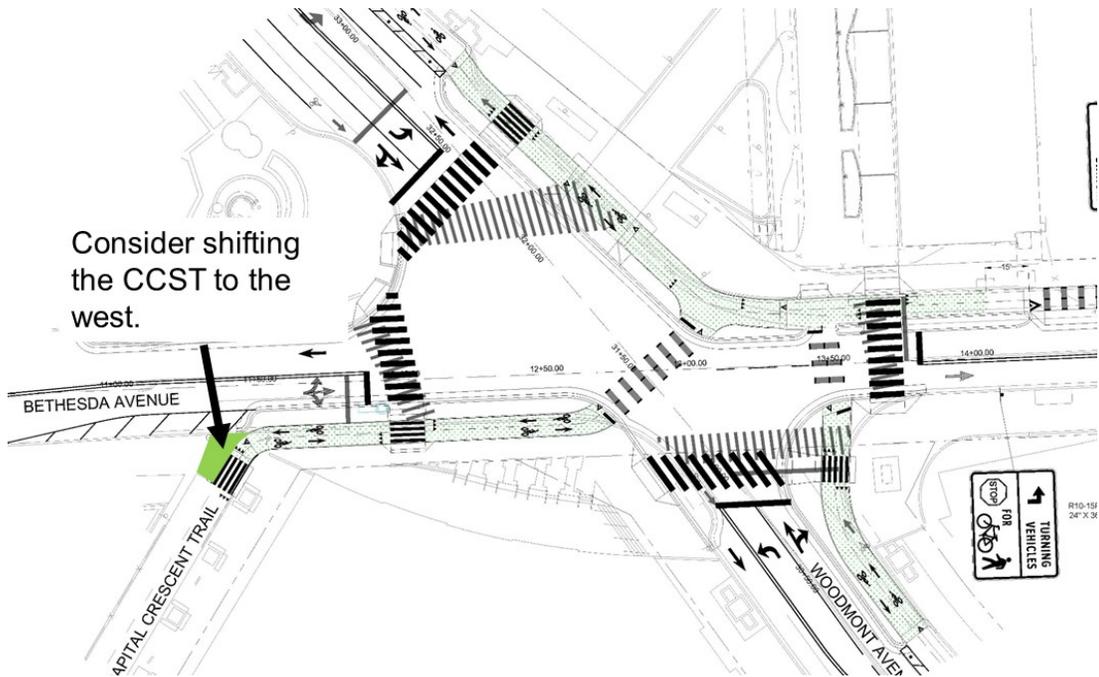
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- 3. Consider the following changes to the curb ramps at the intersection of Woodmont Ave and Bethesda Avenue:
  - d. East Leg: Widen the curb ramps on the north side of Bethesda Avenue to a minimum of 10 feet.
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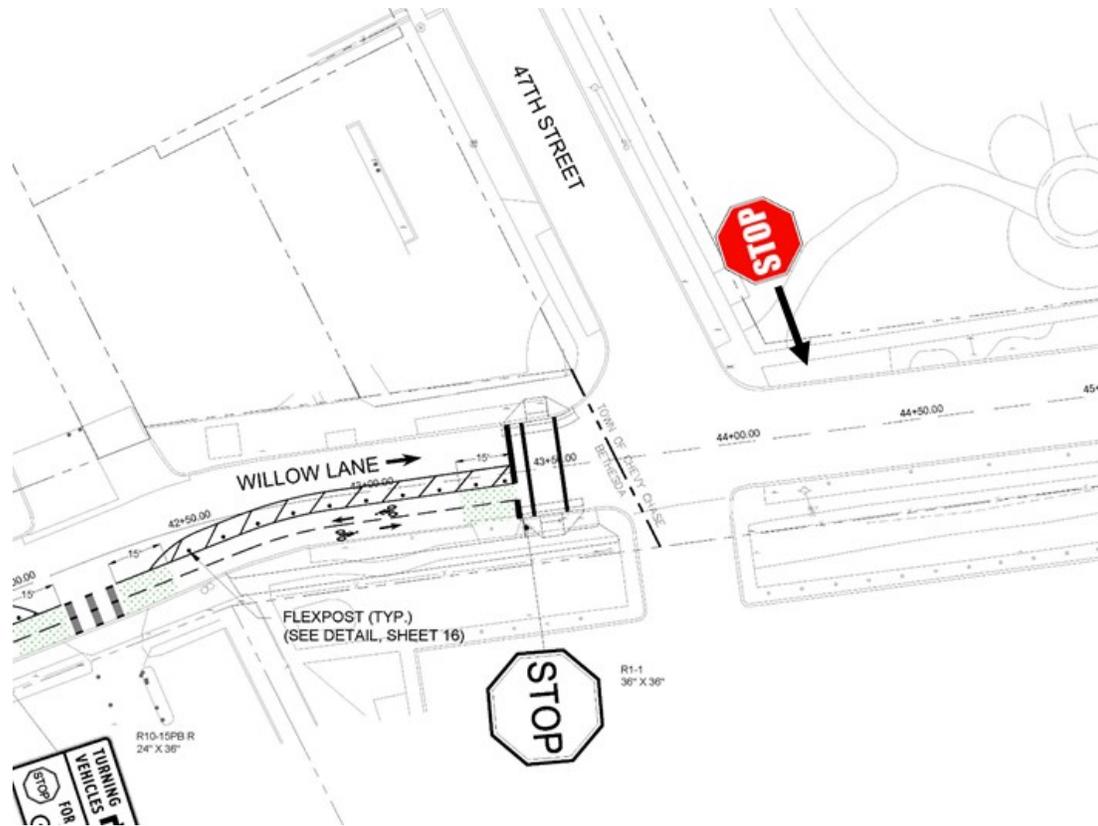
- 4. While there is a substantial queuing area for bicyclists at the southwest corner of the intersection of Bethesda Avenue and Woodmont Avenue, the queuing area at the northeast corner is limited and will likely back up, obstructing pedestrian and bicycle flows between Bethesda Avenue and Woodmont Avenue. Consider ways to create additional queuing space to accommodate bicyclists queuing at the northeast corner, such as creating more space for bicyclists to queue at the diagonal crossing.



5. Consider shifting the CCST at the connection to the existing portion of the CCT to reduce potential conflicts between pedestrians and bicyclists in gathering areas on both sides of the Capital Crescent Trail. Coordinate final design and connection point with the Department of Parks.



6. The signs directing motorists to watch for cyclists are mounted in the tree buffer between the sidewalk and the separated bike lanes, which is set back from the road by over 10 feet. Consider mounting these signs in the buffer between the bike lane instead to increase their visibility.
7. Provide a stop sign on the east leg of the intersection of Willow Lane and 47th Street to reduce conflicts between motorists and bicyclists.



## PUBLIC MEETING

The Montgomery County Department of Transportation conducted a public hearing on several bikeways in Downtown Bethesda, including the Capital Crescent Surface Trail, on Tuesday, October 9, 2018. MCDOT will summarize public feedback in their presentation to the Planning Board. Planning Department staff has not received any public comment as of the date of this staff report.

## CONCLUSION

Staff recommends **approval with comments** on the Mandatory Referral for the Capital Crescent Surface Trail.

## ATTACHMENTS

- Attachment A: Capital Crescent Surface Trail Plan
- Attachment B: Related Bikeway Projects
- Attachment C: Future Willow Lane Separated Bike Lane Concept Plans
- Attachment D: Comments from the Art Review Panel