



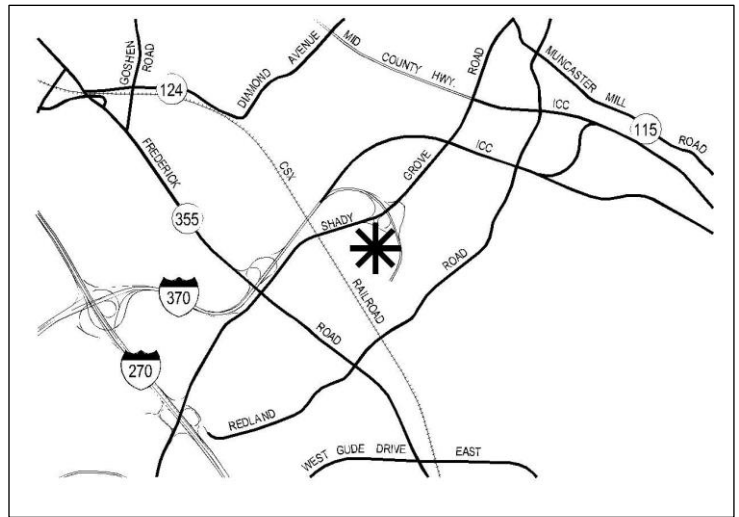
**Shady Grove Station Public Infrastructure Improvements, Mandatory Referral, MR 2014019**

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**Completed 1/9/14**

**Description**

- Reconstruction of Crabbs Branch Way into an urban boulevard with on-street parking, shared use paths and new streetscape; pedestrian improvements at the Shady Grove Metro Station; new sidewalk along the south side of Shady Grove Road; upsizing of existing sanitary sewer to serve the approved Shady Grove Station development; and the construction of a new pedestrian trail at the stormwater management pond at Crabbs Branch Way and Redland Road;
- Associated with the Montgomery County Service Park redevelopment, Shady Grove Station;
- TOMX-2/TDR and R-90 Zones;
- Located within the 2006 *Shady Grove Sector Plan* area;
- Filing Date: October 28, 2013;
- Applicant: Montgomery County Department of General Services (DGS)



**Summary**

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

- Dedicate approximately 11,118 square feet of additional right-of-way for Crabbs Branch Way to establish a uniform 120-foot right-of-way for the street.
- Minimize the turning radius for the western and eastern intersection of Shady Grove Road and Crabbs Branch Way to 30 feet.
- Install a traffic signal at Road “I” and Crabbs Branch Way and at Roads “E” and “BB” and Crabbs Branch Way, if Montgomery County Department of Transportation (MCDOT) determines that signalization is warranted.
- Receive a Department of Parks permit for utilities upgrades in Crabbs Branch Stream Valley Park.
- Provide park benches and signage along the stormwater management trail that identifies the Shady Grove Metro Station, Blueberry Hill Local Park, and the Metro Access Road shared use path.

## OVERVIEW

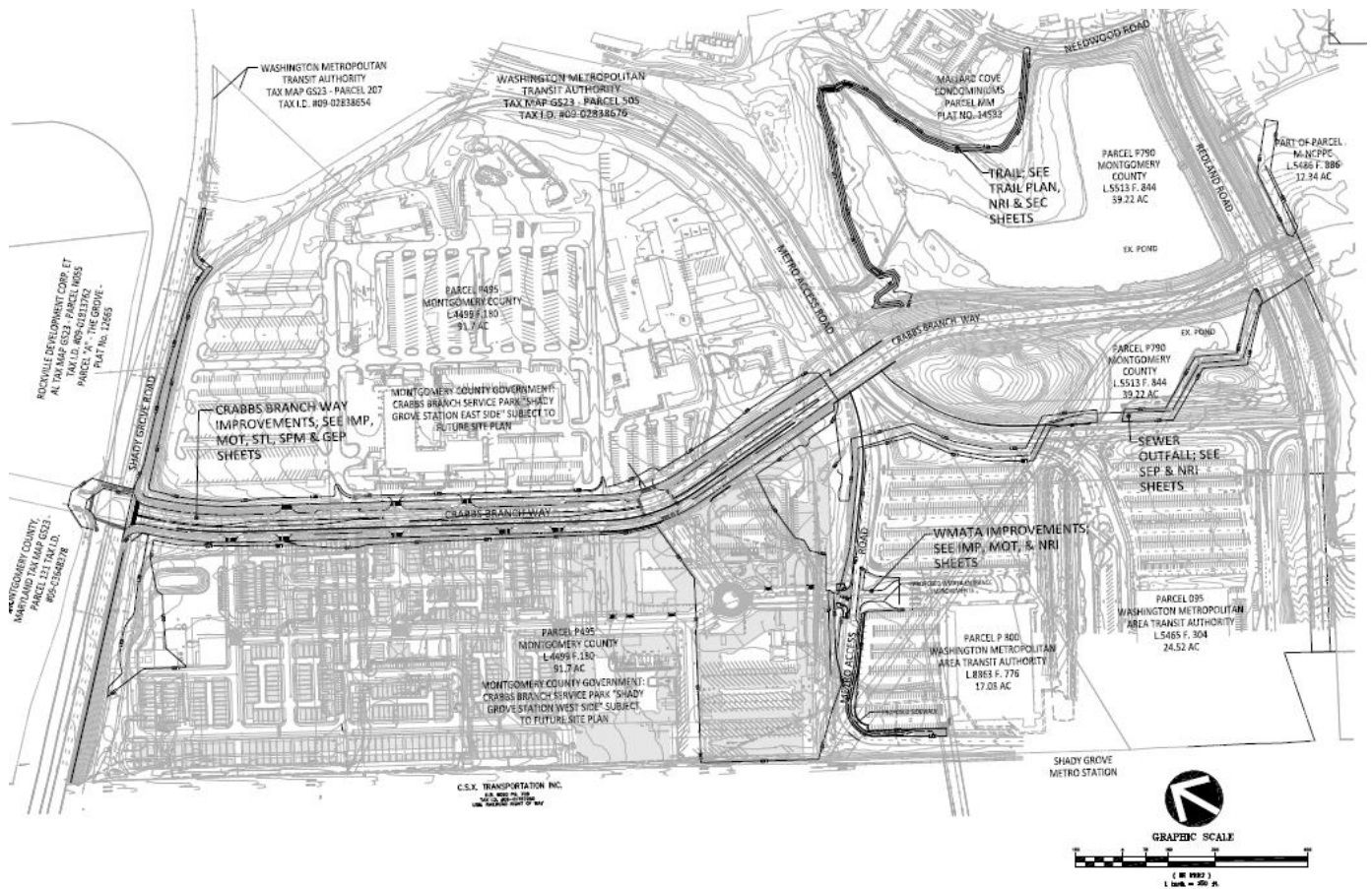
The Shady Grove Station Public Infrastructure Improvements Mandatory Referral will provide public improvements that are associated with the approved Preliminary Plan No. 120120080, Shady Grove Station, and the proposed Site Plan No. 820130220, Shady Grove Station – Westside (presented in a separate staff report), for the redevelopment of Montgomery County Service Park (CSP).

The Montgomery County Service Park is located south of Shady Grove Road, east of the CSX rail tracks, and north of the Shady Grove Metro Station. The CSP consists of several public agencies, including the Montgomery County Public Schools Bus Depot and the Montgomery County Department of Parks Training and Maintenance Center.

In September 2008, the County Executive established the Smart Growth Initiative to redevelop the CSP as envisioned in the 2006 *Shady Grove Sector Plan* and to provide a new site for the Public Safety Training Academy (PSTA).

The County purchased two vacant properties, known as Casey 6 and Casey 7, at the northwest quadrant of Crabbs Branch Way and Shady Grove Road to relocate the Montgomery County Department of Transportation Equipment Maintenance Operations Center (EMOC). The new EMOC, which is called David F. Bone Equipment Maintenance and Transit Operations Center (EMTOC), opened on October 30, 2013.

On December 20, 2010, EYA of Bethesda (EYA), Maryland and Montgomery County entered into a Master Planning and Real Estate Purchase Agreement. This agreement gave EYA the exclusive right to purchase and redevelop the CSP on the west side of Crabbs Branch Way and to serve as the master planner for all of the CSP redevelopment. The Shady Grove Station Infrastructure Public Improvements is another step towards the continued implementation of the Smart Growth Initiative.



*Overview of Shady Grove Station Public Infrastructure Improvements*

## PROPOSAL

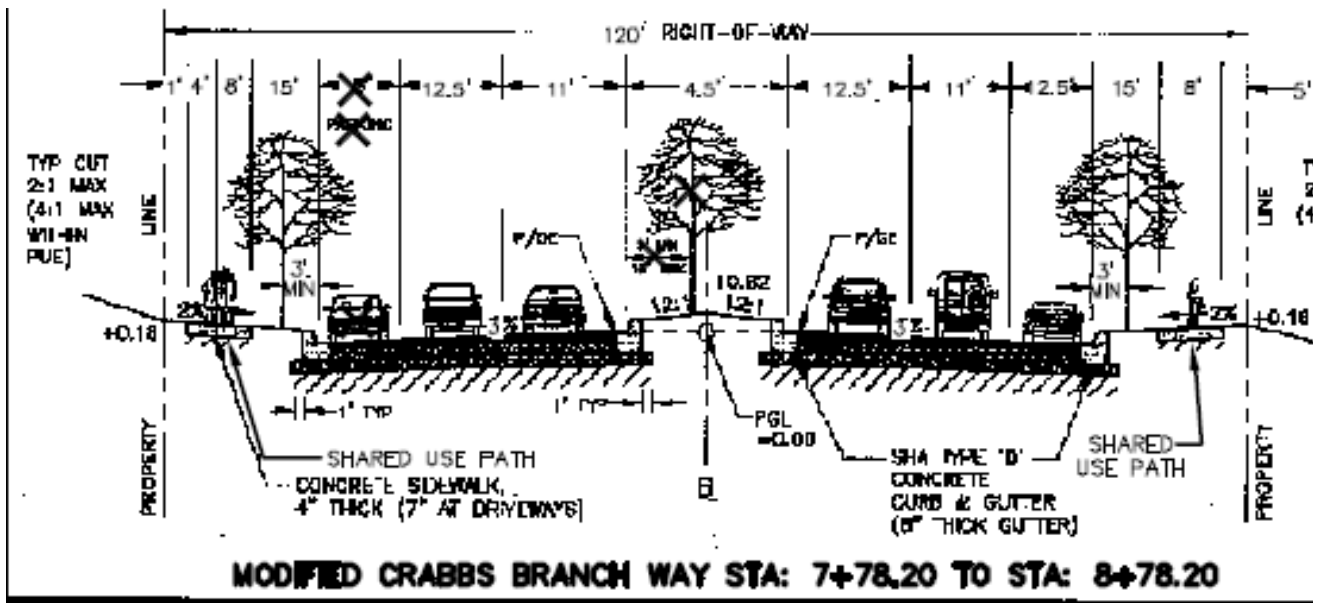
This Mandatory Referral consists of the following elements:

1. Reconstruction of Crabbs Branch Way, between Shady Grove Road and the Metro Access Road overpass bridge, into an urban boulevard with on-street parking, landscaped median, and shared use paths;
2. Pedestrian improvements and reconfiguration of an exit at the Shady Grove Metro Station;
3. Upsizing the existing sanitary sewer to serve the proposed Shady Grove Station development; and,
4. Construction of an eight-foot pedestrian trail around the existing regional stormwater management pond at the northeastern portion of the intersection of Crabbs Branch Way and Redland Road.

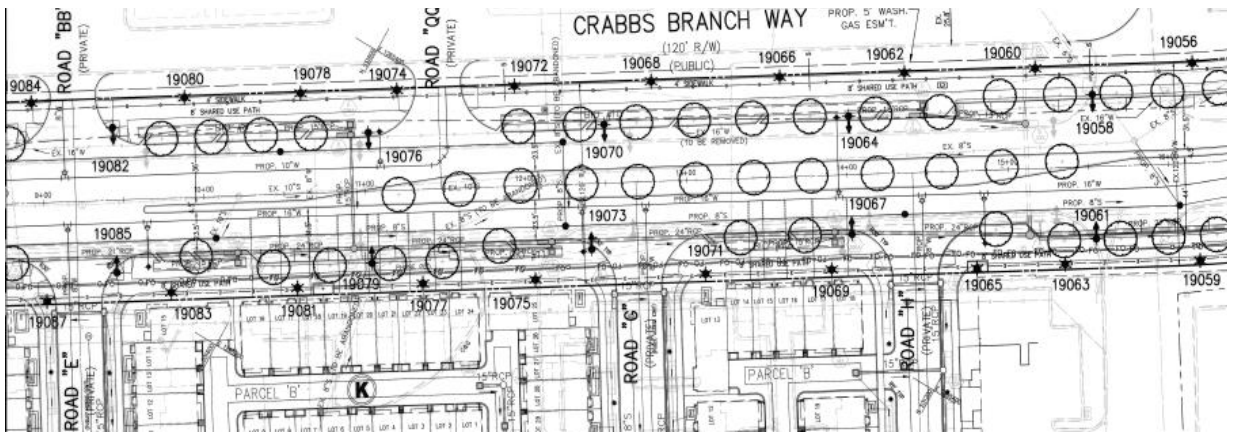
Crabbs Branch Way

Crabbs Branch Way, between Shady Grove Road and the Metro Access Road bridge, will be converted into an urban boulevard with a new landscaped median, on-street parking, shared-use paths, street lights and traffic signals. The intersection of Crabbs Branch Way and Shady Grove Road will be improved with new four-way pedestrian crosswalks, handicapped ramps, and the installation of a new sidewalk along the southern segment of Shady Grove Road, east of Crabbs Branch Way to the I-370 interchange. This sidewalk will link to an existing sidewalk that terminates at the I-370 interchange. A traffic signal may be installed at the future Road "I" and Crabbs Branch Way and an additional traffic signal may be installed at Road "E" and "BB", if it is warranted. The proposed infrastructure improvements will use the existing 120-foot right-of-way, and most of the public utilities are proposed within the right-of-way except for a five-foot gas easement adjacent to the eastern segment of the street. The Applicant must dedicate approximately 11,118 square feet of additional right-of-way, west of the Metro Access Road, to establish a uniform 120-foot right-of-way.

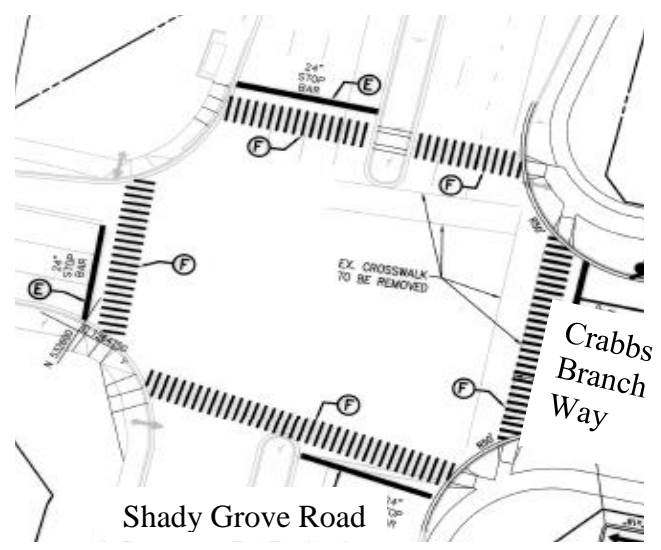
Staff recommends that the Applicant modify turning radii at the eastern and western intersection of Shady Grove Road and Crabbs Branch Way to 30 feet since it would create consistent turning configurations for the street and will further enhance the pedestrian environment.



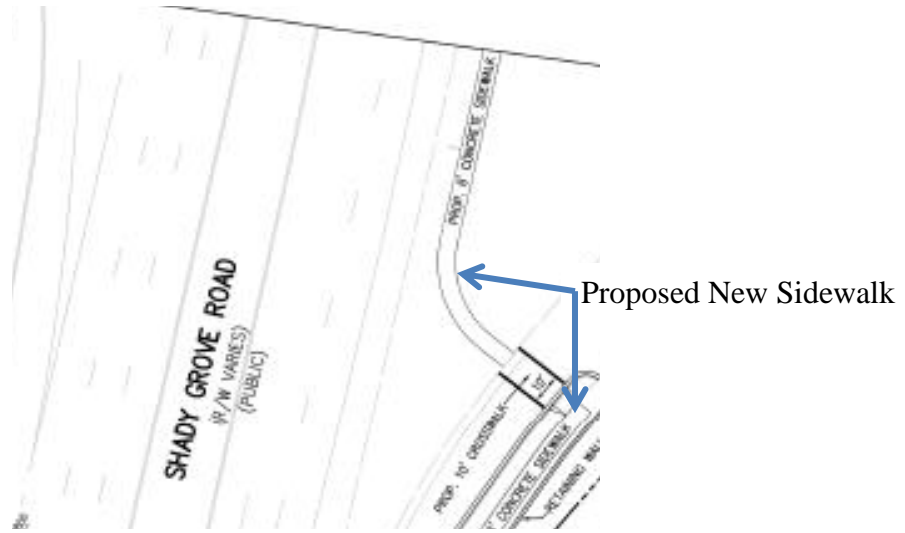
*Typical cross-section for Crabbs Branch Way reconstruction*



*Proposed streetscape and lighting along Crabbs Branch Way*



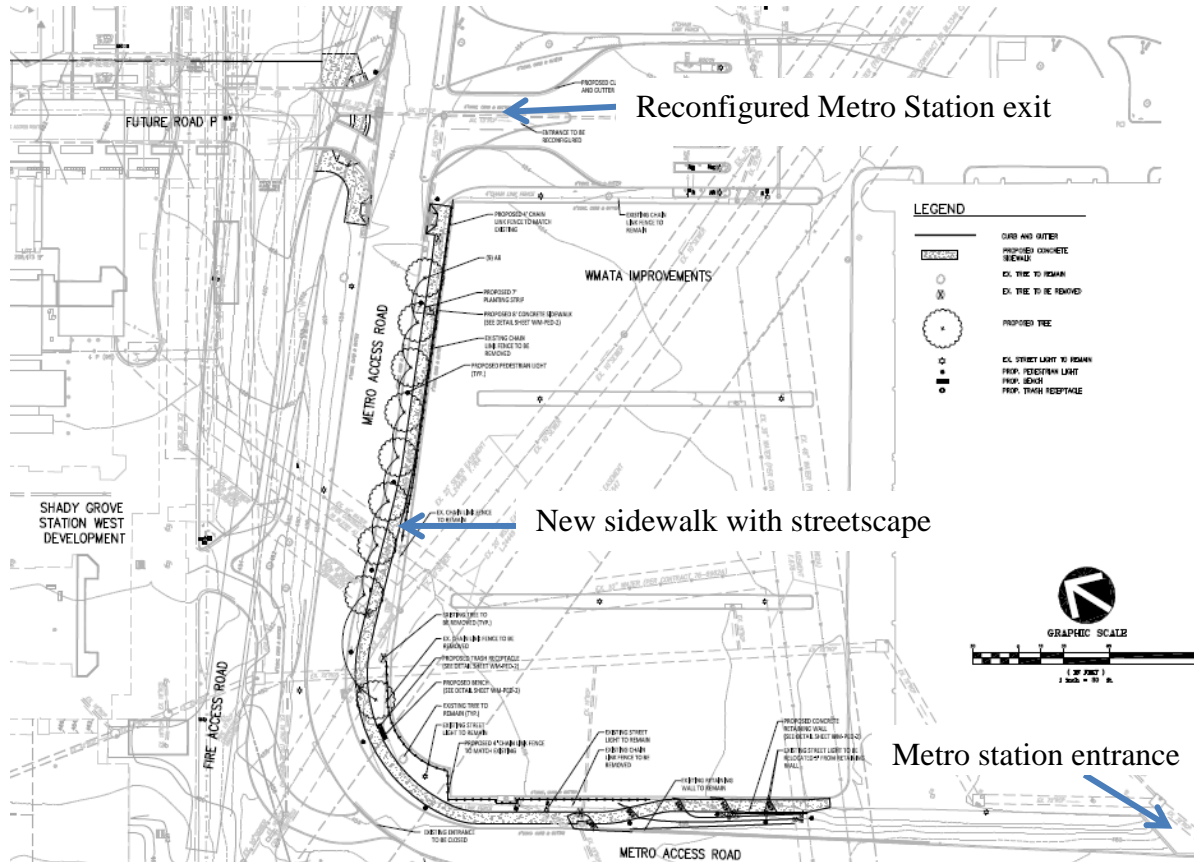
*Proposed pedestrian crosswalks at Shady Grove Road and Crabbs Branch Way*



*New sidewalk along the southern side of Shady Grove Road*

## Metro Pedestrian Connection

A new eight-foot sidewalk, lights, landscaping and street furniture will be installed on the Metro Station property that will link the future Road "P" on Shady Grove Station- Westside to the Metro Station. In addition, the existing garage exist from the Metro Station will be modified to align it with future Road "P". This pedestrian connection will provide an important connection to the Metro Station.

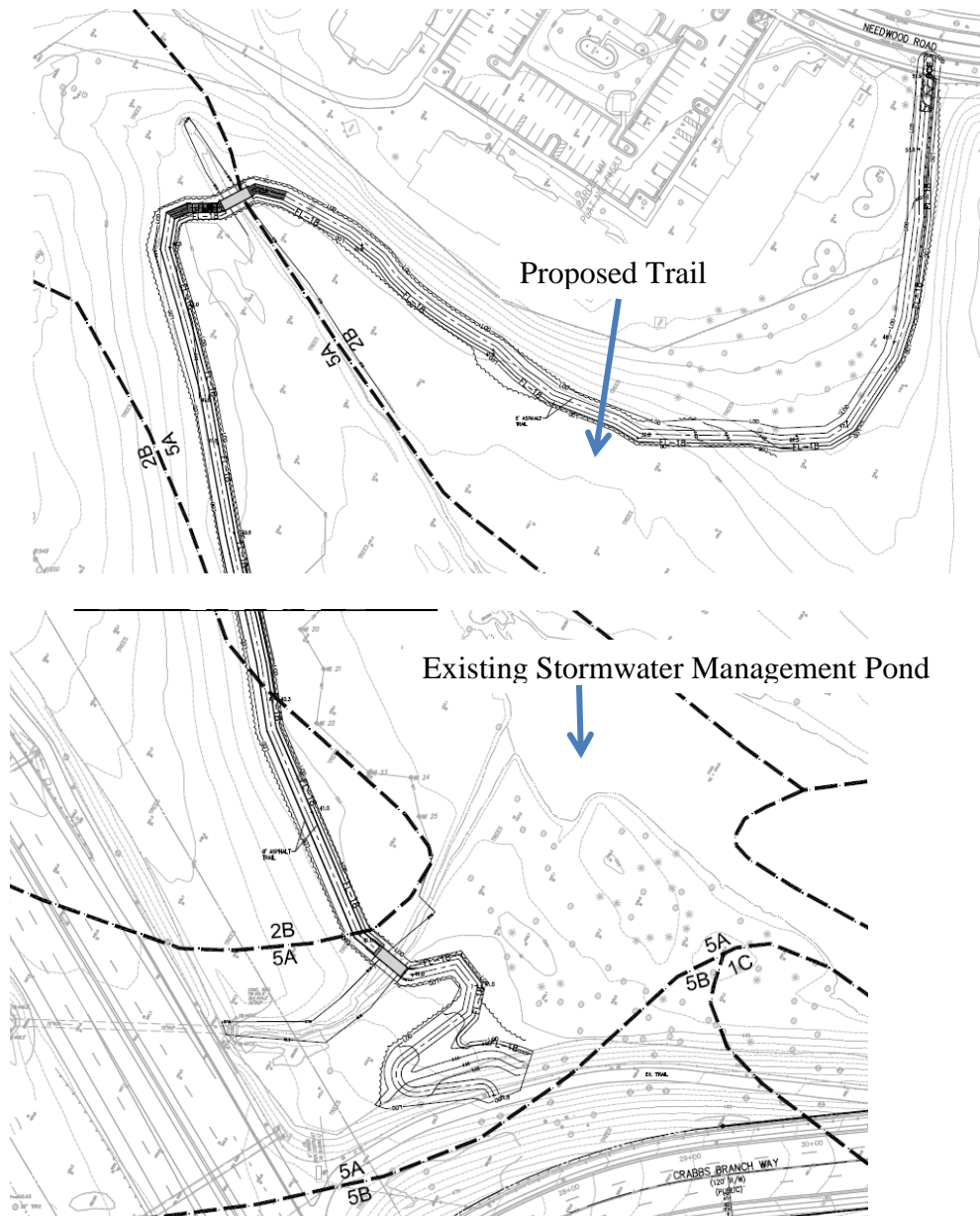


*Proposed new sidewalk connection with streetscape and modifications to the Metro Station exit*

## Trail

A new eight-foot asphalt path will surround the northern portion of the existing regional stormwater management pond, which is located at the northeast quadrant of Crabbs Branch Way and Redland Road. This path will provide passive recreation, and it will link the Mallard Cove/Park Overlook residential community to the recently completed Metro Access Road shared use path. The trail is designed to be ADA compliant; it will have two stream channel crossings.

Staff recommends that the Applicant provide directional signage to other public amenities and benches along the trail.



*Proposed trail around the stormwater management pond*



## Utilities

A new sanitary sewer main will be installed to serve the proposed Shady Grove Station development, in accordance with an approved hydraulic analysis conducted by Washington Suburban Sanitary Commission (WSSC). The proposed sewer extension will run from future Road "P" and the Metro Access Road intersection to the existing sewer main in Crabbs Branch Stream Valley Park in the southeast quadrant of Redland Road and Crabbs Branch Way intersection.

## **MASTER PLAN**

The proposed Shady Grove Station Public Infrastructure Improvements are within the Approved and Adopted (2006) *Shady Grove Sector Plan* area. The Sector Plan recommended the redevelopment of the County Service Park to accommodate new residential and non-residential development as well as new public facilities, including an urban park, a library, and an elementary school site. The Sector Plan also made recommendations for streetscape, trails, public streets and pedestrian network improvements.

## Street Network

The proposed public infrastructure improvements will implement the Sector Plan recommendations for the reconstruction of Crabbs Branch Way into an urban boulevard. A new landscaped median, on-street parking, shared use paths and environmental site design features such as including biofilters will comprise the rebuilt street. This is consistent with the Sector Plan recommendations that support a landscaped median, on-street parking for residents and the future public park, Jeremiah Park (p. 80). The proposed Crabbs Branch Way reconstruction will also implement the Sector Plan's streetscape recommendations to "create a main street with extensively landscaped median. Provide lawn panels for street tree planting to complement the primarily residential character." (p. 89)

## Pedestrian Network

Crabbs Branch Way reconstruction, new crosswalks at Shady Grove Road and Crabbs Branch Way, a new sidewalk along the south side of Shady Grove Road, and a new sidewalk at the Shady Grove Metro Station will further the Sector Plan's recommendations for "sidewalks on both sides of public streets in the Metro Neighborhoods" and "four-way crosswalks at all intersections." (p. 73)

## Bikeway Network

The Sector Plan bikeway network recommends a Class I bikeway (SP-53), along the east side of Crabbs Branch Way, from Amity Drive to Redland Road (p. 76). The proposed shared use paths on both sides of Crabbs Branch Way implements the Sector Plan's recommendation by creating an environment that improves the overall bikeway network.

## Trail Network

A new 8-foot trail will traverse the northeastern boundary of the existing stormwater management facility at Redland Road and Crabbs Branch Way. The Sector Plan recommends to “provide passive recreation at the stormwater management pond, including trails, interpretive material, seating, and picnic facilities. Provide a high point viewing station and consider a fountain in the pond. Connect trails to the Metro station and to surrounding communities” (p. 95). This new trail will link the existing Park Overlook/Mallard Cove residential community to the recently built Metro Access Road shared use path.

Staff recommends addition of new benches and signage to the Metro Station, Blueberry Hill Local Park, and Metro Access Road shared use path.

## **ENVIRONMENT**

### Forest Conservation

The proposed Public Infrastructure Improvements comply with Chapter 22A, Forest Conservation Law, and Montgomery County Planning Department’s *Environmental Guidelines*. The disturbance associated with these improvements has been included in the Final Forest Conservation Plan for Site Plan No. 820130220, Shady Grove Station - Westside, which will be reviewed by the Planning Board concurrently with this Mandatory Referral. Based on the staff’s recommendation of approval for the Final Forest Conservation Plan, staff has determined that this project is in compliance with Chapter 22A.

### Environmental Guidelines

The *Environmental Guidelines* state that “only unavoidable road and utility crossings will be permitted in the stream buffer when it is clearly demonstrated that no feasible alternatives exist, and every effort is made to locate road alignment and/or utilities to create the least disturbance to existing vegetation, grade, wetlands, trout spawning areas in Use III watersheds, etc.” (*Environmental Guidelines* Section V.A.1.f). Since the sanitary sewer system in Montgomery County conveys effluent by gravity, the sanitary sewers follow the low point of the drainage. This is also where the streams are, so avoiding sanitary sewers crossing stream buffers is generally not possible. Clearly, the proposed sanitary sewer crossing the stream valley meets the definition of “unavoidable” utility crossings. The proposed improvements to the Metro garage entrance, however, are outside of any stream or wetland buffers.

Though significant portions of the stormwater management trail lie within stream buffers, the trail is recommended by the Sector Plan and the construction of the trail is a condition of approval for the approved Preliminary Plan No. 120120080, Shady Grove Station. The *Environmental Guidelines* permit construction of infrastructure in stream buffers when necessary (Section V.A.1.b) and state that “small amounts of clearing and grading for other purposes within the stream buffer, such as paving for bikeways, may be recommended for approval by staff on a case-by-case basis so long as the modification is consistent with a

comprehensive approach to protecting areas that are critical to preserving or enhancing streams, wetlands, and their ecosystems” (Section V.A.1.e). Since the proposed trail follows the border of a regional stormwater management facility, any runoff from the trail will be controlled and treated by the pond. This is “consistent with a comprehensive approach to protecting areas that are critical to preserving or enhancing streams, wetlands, and their ecosystems” (Section V.A.1.e).

### Stormwater Management

On November 5, 2013, the Montgomery County Department of Permitting Services approved the stormwater management concept.

### **COMMUNITY OUTREACH**

The Applicant presented the Public Infrastructure Improvements plan to the Shady Grove Civic Alliance on November 20, 2013, and to the Shady Grove Advisory Committee on January 8, 2014. The Planning Department has also notified local citizen associations, adjoining and nearby property owners and other interested parties of this proposal. Planning staff has received no emails, phone calls or letters.

### **CONCLUSION**

Staff recommends approval of the Shady Grove Station Public Infrastructure Improvements with the comments noted at the beginning of this report since it implements several conditions for the approved Shady Grove Station Preliminary Plan, furthers the recommendations of the Shady Grove Sector Plan, and is in compliance with Chapter 22A and the *Environmental Guidelines*.

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### **ATTACHMENT**

1. Transportation Planning Memorandum



December 18, 2013

**MEMORANDUM**

**TO:** Nkosi Yearwood, Senior Planner  
Area 2 Planning Division

**VIA:** Khalid Afzal, Supervisor  
Area 2 Planning Division

**FROM:** Ed Axler, Transportation Planner Coordinator  
Area 2 Planning Division

**SUBJECT:** Shady Grove Station Infrastructure  
Mandatory Referral No. 2014019  
Shady Grove Metro(rail) Policy Area

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This memorandum is Area 2 transportation planning staff's review of the subject Mandatory Referral to upgrade Crabbs Branch Way and improve pedestrian connections along Shady Grove Road.

**COMMENTS**

Area 2 transportation planning staff supports the subject Mandatory Referral which includes the following improvements:

1. Dedicating additional right-of-way for Crabbs Branch Way to have a consistent 120-foot wide right-of-way for the entire segment between Shady Grove road and the Shady Grove Metro Access Road.
2. Reconstructing of the entire section of Crabbs Branch Way from Shady Grove Road to the Shady Grove Metro Access Road including on-street parking, shared use paths on both sides, and a raised median with street trees.
3. Providing dual directional handicapped ramps and marked crosswalks at all four corners at the intersection of Shady Grove Road and Crabbs Branch Way.
4. Providing a sidewalk along the south side of Shady Grove Road from Crabbs Branch Way to the interchange with Metro Access Road/I-370.
5. Providing a pedestrian connection from proposed Road "P" proposed in the Shady Grove Station West Side, across the Metro Access Road, along the south and east sides of the Metro Access Road, and to the entrance of the Shady Grove Metrorail Station.

6. Providing a new pedestrian trail at the stormwater management pond at Crabbs Branch Way/Redland Road intersection to Needwood Road.

The Area 2 transportation planning staff recommends the following comments be included in the Planning Board's transmittal to the Montgomery County Department of Transportation (MCDOT) regarding its compliance with the *Shady Grove Sector Plan* recommendations and the Road Code standards:

1. The Applicants must install a traffic signal at the intersections of Crabbs Branch Way/commercial business district street, B-12 (Road "I"/Road "DD") and Crabbs Branch Way/proposed internal road "E"/"BB", if and when MCDOT determines a traffic signal is warranted.
2. The Applicants must minimize the turning radius at each corner of the intersections of Shady Grove Road and Crabbs Branch Way to 30 feet.

## DISCUSSION

Associated with Preliminary Plan No. 120120080, Shady Grove Station, and Site Plan No. 820130220, Shady Grove Station – West Side, the subject Mandatory Referral is for the following improvements:

1. Roadway, pedestrian, and bicycle improvements along the segment of Crabbs Branch Way between Shady Grove Road and the bridge over the Metro Access Road.

### Existing Conditions:

Currently, Crabbs Branch Way has a 120-foot right-of-way and a 47-foot wide paved travelway consisting of an undivided five-lane roadway with two travel lanes in each direction and a center turning lane/left-turn lane. Street lights exist along both sides of Crabbs Branch Way. An eight-foot wide shared-use path exists on the east side with a 12-to-24-foot green panel, while a five-foot wide sidewalk exists on the west side that is at the curb for most of its length.

Between the signalized intersection with Shady Grove Road and the bridge over the Metro Access Road, Crabbs Branch Way has six unsignalized intersections with the driveways from the adjacent County service facilities. These six intersections do not have marked crosswalks on any leg or handicapped ramps to cross Crabbs Branch Way.

Currently, Ride-On and Metrobus do not operate transit service along Crabbs Branch Way between Shady Grove Road and Redland Road. Future transit service would be needed when the Shady Grove Station development is built and occupied.

### Proposed Improvements:

The Applicants propose to retain the existing 120-foot right-of-way for Crabbs Branch Way. A four-lane divided roadway is proposed with 11-or-12.5-foot wide lanes, a green 4.5-to-17-foot wide raised median with street trees except where left-turn lanes are proposed at intersection approaches, and a 12.5-foot wide parking lane on each side..

Pedestrian/bicycle improvements include a 4-foot wide sidewalk on the east side and an 8-foot wide shared use path on both sides of the road. A 7-foot or 15-foot wide tree panel is proposed between the shared-use path and curb.

Sector/Master Plan Recommendations for Crabbs Branch Way:

The 2006 *Shady Grove Sector Plan* recommend Crabbs Branch Way as a four-lane divided commercial business district street, B-2, with a 100-foot right-of-way. However the existing and proposed 120-foot wide right-of-way is 20 feet more than recommended in the *Sector Plan*. The *Shady Grove Sector Plan* and the 2005 *Countywide Bikeways Functional Master Plan* recommend a shared use path, SP-53, on the east side of the road, but the Applicants are proposing a shared-use path on both sides.

2. Pedestrian improvements at the intersection of Crabbs Branch Way and Shady Grove Road.

Existing Conditions:

Single handicapped ramps exist at each intersection corner. Marked crosswalks exist on the north, east, and south legs of this intersection.

Proposed Improvements:

The Applicants propose to provide marked crosswalks across all four intersection legs and upgraded dual directional handicapped ramps at all four corners in accordance with the ADA best practices. The marked crosswalk on the east leg will be relocated to provide pedestrians upgraded protection and refuge in the Shady Grove Road median. In addition, the turning radii are recommended to be reduced to 30 feet that would slow down turning vehicles and create a more pedestrian friendly intersection.

3. A sidewalk along the south side of Shady Grove Road between Crabbs Branch Way and west side of the interchange with Metro Access Road/I-370 (or specifically its receiving lane from westbound Shady Grove Road left turns onto the southbound Metro Access Road on-ramp.)

Existing Conditions:

Currently there are no sidewalks on either side of this segment of Shady Grove Road. On the east of the southbound Metro Access Road on-ramp, an existing sidewalk is on the south side of the road. The segment west of Crabbs Branch Way has 6-to-7-foot wide sidewalks on both sides of road.

Ride-On routes 43 and 61 operate along Shady Grove Road along the northern property frontage. Existing bus stops are located in the northeast and southwest intersection corners.

Proposed Improvement:

The Applicants propose to construct the missing sidewalk segment on the south side as a six-foot wide sidewalk with a green panel between it and curb.

Sector/Master Plan Recommendations for Shady Grove Road:

The 2006 *Shady Grove Sector Plan* recommends Shady Grove Road as a six-lane divided major highway, M-42, with a 120-foot right-of-way. The *Shady Grove Sector Plan* and the 2005 *Countywide Bikeways Functional Master Plan* recommend bike lanes (on-road bikeway), BL-30.

4. Proposed future signalized intersections of Crabbs Branch Way with Road "E"/"BB" and Road "I"/"DD" (commercial business district street, B-12):

Existing Conditions:

These two intersections do not have marked crosswalks on any leg or handicapped ramps to cross Crabbs Branch Way.

Proposed Improvements:

The Applicants are proposing dual directional handicapped ramps at each corner and marked pedestrian crosswalks across each intersection leg. If and when traffic signal warrants are satisfied, traffic signals will be installed (refer to Comment No. 1).

5. Currently, the Metro Access Road has no sidewalks on either side of it. The proposed 8-foot wide sidewalk will provide a safe pedestrian connection between Shady Grove Station-West Side and the entrance of the Shady Grove Metrorail Station.
6. A new 8-foot wide trail connection is proposed from the stormwater management pond at the intersection of Crabbs Branch Way to Redland Road.

EA

mmo to Yearwood re Shady Grove Station Infrastructure Mand Ref 2014019.doc