**MCPB** ITEM NO. June 10, 2010

June 3, 2010

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### MEMORANDUM

TO:

Montgomery County Planning Board

VIA:

Dan Hardy, Chief

Move/Transportation Planning Division

Larry Cole, Master Planner LC

Move/Transportation Planning Division

FROM:

Cherian Eapen, Planner/Coordinator (301-495-4539)

Move/Transportation Planning Division

PROJECT:

Rainbow Drive Sidewalk Construction and Pavement Removal Project

From 100 feet west of Snider Lane to 400 feet west of Thompson Road

CIP Project No. 506747

REVIEW TYPE:

Mandatory Referral No. MR2010803

APPLICANT:

Montgomery County Department of Transportation (MCDOT)

APPLYING FOR: Plan Approval

COMMUNITY-BASED PLANNING TEAM AREA: Cloverly

### RECOMMENDATION:

Staff recommends that the Board approve the proposed project.

## PREVIOUS PLANNING BOARD ACTION:

None.

## PROJECT DESCRIPTION

The project includes:

1. Construction of a four-foot wide pervious (porous) concrete sidewalk along the south side of Rainbow Drive between Valencia Street to the west and Good Hope Road to the east within the existing roadway right-of-way.

This sidewalk would be constructed to provide safer pedestrian access to Briggs Chaney Middle School.

2. Removal of existing roadway pavement along Rainbow Drive at 21 specific locations between approximately 100 feet to the west of Snider Lane to 400 feet west of Thompson Road to narrow the roadway from 36 feet to 24 feet.

This pavement would be removed to obtain impervious surface area credits for constructing the Rainbow Drive sidewalk and to obtain similar credit toward constructing two other MCDOT projects within the Upper Paint Branch Special Protection Area (SPA): (i) the Cape May Road and Good Hope Road sidewalk project (Mandatory Referral No. MR04816-DPWT-01; to be constructed) and (ii) the Thompson Road Connection project (Mandatory Referral No. MR2010804, scheduled to be reviewed by the Board jointly with the subject Project). A total of 18,252 square feet of existing impervious surface of Rainbow Drive is to be removed to obtain the necessary credits, of which 4,512 square feet credit will be applied to the subject Project.

3. Construction of a median island along Rainbow Drive at two locations (at 440 feet east of Valencia Street and at 340 feet west of Aylesbury Street).

The median islands would be constructed as traffic-calming measures along Rainbow Drive.

# **EXISTING CONDITIONS**

Rainbow Drive is a primary residential street within the Cloverly Master Plan area that extends east-west between Thompson Road/Briggs Chaney Middle School to the east and Anselmo property to the west. The Project location is shown in Attachment No. 1.

Rainbow Drive is bisected by Good Hope Road and is currently approximately 36 feet wide with a posted speed limit of 25 mph. The section of the roadway to the east of Good Hope Road has a four-foot wide cement concrete sidewalk along its south side.

#### **FINDINGS**

# **Consistency with Cloverly Master Plan**

The Project is consistent with the 1997 Approved and Adopted Cloverly Master Plan roadway, pedestrian, and bikeway recommendations for Rainbow Drive. The narrowing of the roadway occurs only along sections of Rainbow Drive that border stream crossing and parkland areas. The reduction in pavement width therefore will not reduce the number of travel lanes or reduce on-road parking available to residents of Rainbow Drive, and therefore will continue to satisfy the intent of the primary residential street recommendation in the master plan.

# **Consistency with Road Code and Associated Executive Regulations**

- 1. The proposed pavement width of 24 feet at 21 specific locations of 50 feet to 330 feet along Rainbow Drive as identified on the plan is slightly less than the 26 feet in the new road standard for a primary closed-section residential street without parking (2003.10). Narrowing the pavement from the current 36 feet, which will still exist in areas where onstreet parking is needed, should however help offset imperviousness created by the proposed sidewalk projects and the Rainbow Drive/Thompson Road Connection project, and should reduce traffic speeds, provide traffic calming, and improve roadway safety.
- 2. The proposed four-foot wide sidewalk is not consistent with the minimum five feet recommended for primary residential streets in the new County standard. This reduction in sidewalk width will however help MCDOT meet the SPA requirements by minimizing the imperviousness created by the sidewalk projects.

### STAFF ANALYSIS

## **Consistency with Cloverly Master Plan**

The Cloverly Master Plan recommends Rainbow Drive, between approximately 100 feet to the west of Snider Lane (existing western terminus) and Thompson Road, as a two-lane primary residential street (P-8) with a minimum right-of-way width of 70 feet, with an on-road signed shared-roadway bikeway (PB-36, as Class III). The roadway is recommended not to connect to Briggs Chaney Road.

While the proposed Rainbow Drive sidewalk is appropriate for the primary residential street, there are no recommendations in the master plan specifically regarding reducing the travel lane width and constructing medians on Rainbow Drive as a traffic calming measure. The master plan discussion regarding Rainbow Drive is provided as Attachment No. 2. The specific master plan recommendations regarding traffic calming measures along Rainbow Drive to address roadway safety and cut-through traffic along Rainbow Drive are discussed in the staff report for Mandatory Referral for Thompson Road Connection project (Mandatory Referral No. MR2010804).

## **Typical Roadway Section**

The Project area lies within the Suburban area of the county, as defined by the Road Code. While the proposed roadway and sidewalk widths are narrower than the standard, we believe that the road's operation would be better than the existing via the proposed traffic calming and addition of the sidewalk, and that the narrower pavement widths are an appropriate response to the project's location in the Upper Paint Branch SPA.

# **Pedestrian and Bicyclist Accommodation**

#### On-Road Bike Accommodation

The Cloverly Master Plan recommends an on-road signed shared-roadway bikeway for Rainbow Drive, which will have a minimum pavement width of 24 feet along sections that do not directly abut residences. The roadway will be 36 feet wide at other locations, however with parking permitted on both sides. The reduction in pavement width will not substantially affect on-road bicyclist accommodation since the low volumes of traffic on this residential road (approximately 370 total vehicles to the east of Good Hope Road and 93 total vehicles to the west of Good Hope Road during the weekday morning peak-hour) should be traveling at speeds consistent with shared travel.

#### Pedestrian Accommodation

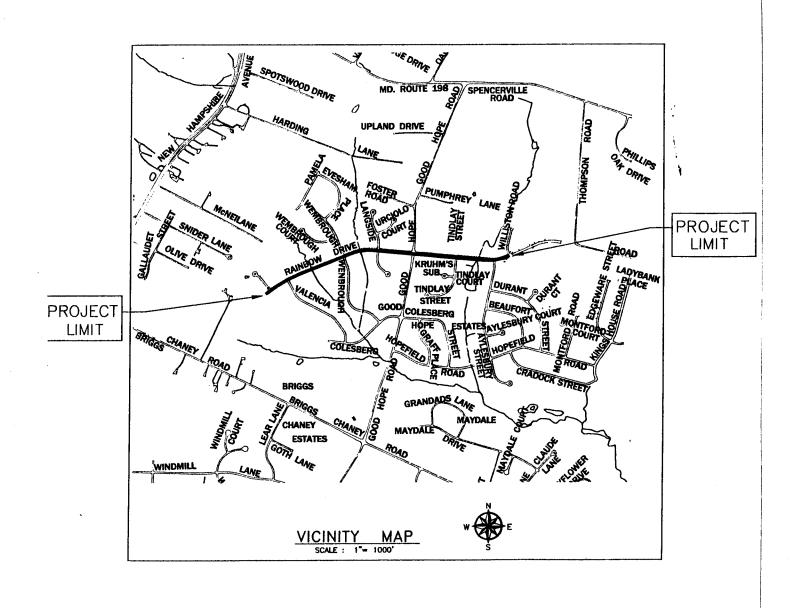
Pedestrians will be accommodated on the proposed four-foot wide sidewalk along the south side of Rainbow Drive between Valencia Street to the west and Good Hope Road to the east within existing roadway right-of-way, offset from the roadway by a minimum of eight feet. The proposed new sidewalk would provide children living in the neighborhood to the west of Good Hope Road a safe off-road facility to walk to the Briggs Chaney Middle School.

#### ENIRONMENTAL REVIEW

The Environmental Planning Division staff's regulatory review of the Upper Paint Branch SPA Preliminary/Final Water Quality Plan as well as review for exemption from the Forest Conservation Law is addressed in a separate staff packet.

#### **PUBLIC HEARING**

A public hearing for the Project was held on January 26, 2006, at the Executive Office Building in Rockville.



Rainbow Drive Sidewalk Construction and Pavement Removal Project
From 100 feet west of Snider Lane to 400 feet west of Thompson Road
CIP Project No. 506747

Mandatory Referral No. MR2010803

Attachment No. 1

#### **Rainbow Drive**

- Retain the recommended connection of Rainbow Drive and Thompson Road from the 1981 Plan. A bikeway and pedestrian connection should be constructed between Rainbow Drive and Thompson Road. See the Thompson Road recommendations for details about school-related safety improvements.
- Remove the recommended connection of Rainbow Drive to Briggs Chaney Road from the 1981 Plan.

### **Thompson Road**

• Improve the western section of Thompson Road, near Briggs Chaney Middle School to enhance safety for the drop-off of students and on-street parking. In addition, a turn-around would improve safety and circulation. A specific design is not recommended by this Plan. Since this improvement would take place on school property or in the right-of-way, the Planning Board will review it as part of a mandatory referral. A sidewalk is under consideration by the DPW&T and is endorsed by this Plan.

### INTERSECTION IMPROVEMENTS

The following intersections have been identified for improvements because of existing or forecasted levels of congestion. Other intersections that are not highlighted here also may require improvements. General types of improvements include the addition of turning lanes, bypass lanes, or changes in signalization and signage. In all cases, modifications to intersections should minimize impacts on the rural character of the area while improving pedestrian safety and convenience. The detailed design of each improvement will occur closer to its actual construction and should be consistent with the roadway character and streetscape recommendations. Improvements to the intersections along Ednor Road should be coordinated with the Rural Entry recommendations of the Sandy Spring/Ashton Plan.

New Hampshire Avenue/Ednor Road Norwood Road/Layhill Road/Ednor Road Norwood Road/Attleboro Road New Hampshire Avenue/Briggs Chaney Road New Hampshire Avenue/Norwood Road Spencerville Road/Peach Orchard Road

### ROAD INTERCONNECTIONS

There are limited street connections between neighborhoods. This restricts opportunities for local circulation and requires residents to travel longer distances and use major and arterial highways for short, local trips. As development occurs, connections to existing residential streets can be designed to improve local circulation without creating excessive levels of cut-through traffic.

**OBJECTIVE:** Provide connections between communities.

### **RECOMMENDATION:**

All new residential developments should include, where feasible, interconnected vehicle and pedestrian
networks that permit movement between existing and proposed neighborhoods and public facilities. The
design of interconnections can utilize measures that allow local circulation without creating routes that
attract an inappropriate level of cut-through traffic.

