



MONTGOMERY COUNTY PLANNING DEPARTMENT
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

MCPB
Item # 8A
June 10, 2010

MEMORANDUM

TO: Montgomery County Planning Board

VIA: Mark Pfefferle, Acting Chief, Environmental Planning Division *MP*
Stephen D. Federline, Master Planner, Environmental Planning Division *SD*

FROM: *C3* Candy Bunnag, Planner Coordinator, Environmental Planning Division

DATE: May 27, 2010

SUBJECT: Staff Recommendations for Planning Board Approval of:
Special Protection Area (SPA) Preliminary/Final Water Quality Plan
for Mandatory Referral No. MR2010804, Thompson Road Connection

STAFF RECOMMENDATIONS

Staff recommendations are made below for the Planning Board action on the following plan:

SPA Water Quality Plan recommendations:

1. Approval of the Preliminary/Final Water Quality Plan with the following conditions:
 - a. Total net increase of impervious surface area for the project to be no more than 4144 square feet.
 - b. Submit plans that include specifications for restoration of areas where pavement will be removed into pervious, vegetated, natural surfaces.
 - c. Impervious surface removal credits of 3287 square feet will be provided from the Rainbow Drive Sidewalk Construction and Pavement Removal project (MR2010803).
 - d. DOT must remove an additional 857 square feet of impervious surfaces within the Upper Paint Branch SPA after the plan for this work has been reviewed and approved by M-NCPPC staff. Plans must include specifications for restoration of these areas to pervious, vegetated natural surfaces. Prior to start of work, DOT must obtain the necessary permits for the work and conduct a pre-construction meeting with inspection staff from M-NCPPC and DPS. The removal of these impervious surfaces must be accomplished by July 1, 2011. Written notification of the completion of the impervious surface removal must be sent to the Planning Director no later than July 15, 2011.
 - e. Tree save plan, dated April 29, 2010, to be revised to include the following notes:
 - i. Specific locations of root pruning must be determined by the certified arborist or the M-NCPPC forest conservation inspector as part of the pre-construction meeting.

- ii. Root pruning must be performed at the direction of a certified arborist or the M-NCPPC forest conservation inspector.

BACKGROUND

Montgomery County Department of Transportation (DOT) proposes to connect the eastern terminus of Rainbow Drive with Thompson Road, and to construct new sidewalk segments on the south side of Rainbow Drive and the west side of Thompson Road to create a continuous sidewalk system in that area. The project area lies within the Upper Paint Branch Special Protection Area (SPA). In addition, DOT proposes to narrow a segment of existing Rainbow Drive and to reconfigure the current right angle road pavement of Thompson Road to minimize the net gain of impervious surfaces of the proposed road connection.

The right-of-way within the project area is adjacent to existing single-family detached homes and the Briggs Chaney Middle School. There is no existing forest within the project area. The project area is adjacent to an existing conservation easement that lies within a single-family residential lot. Figure 1 shows the general location of the project area within the Upper Paint Branch SPA. The project drains to the Left Fork Tributary of Paint Branch.

Figure 1

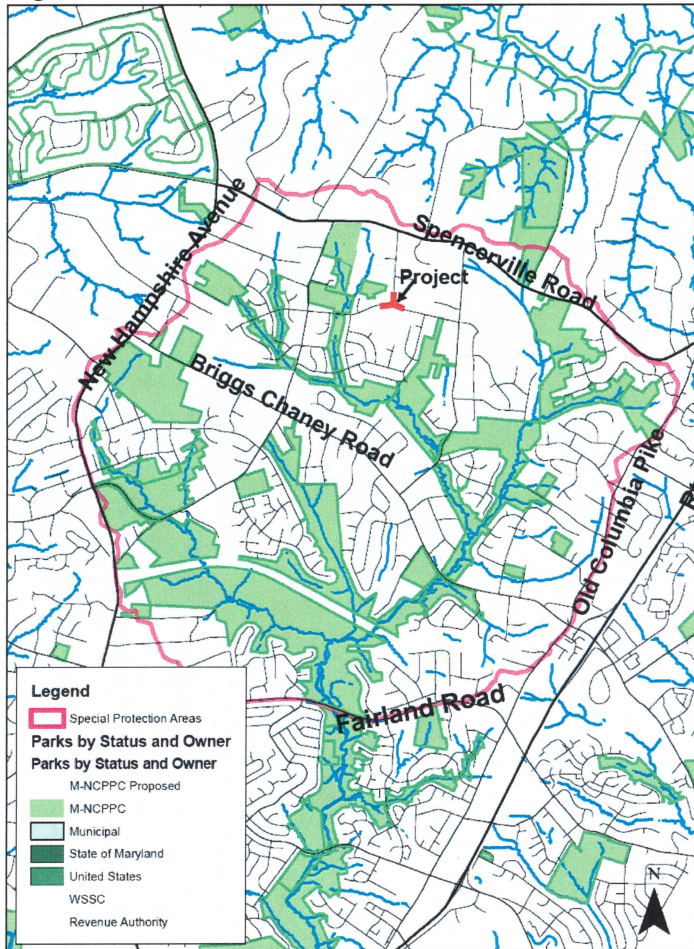


Figure 2 shows a more detailed location of the project area and its limits.

Figure 2



DISCUSSION

There are two items for Planning Board review for the Thompson Road Connection project: the mandatory referral and the Special Protection Area (SPA) Combined Preliminary and Final Water Quality Plan. This memorandum covers staff's review and recommendations on the SPA Combined Preliminary and Final Water Quality Plan.

The Board's action on the SPA Water Quality Plan is regulatory and binding. The Planning Board must act on the SPA Water Quality Plan before it can proceed to make recommendations on the mandatory referral.

SPA PRELIMINARY/FINAL WATER QUALITY PLAN REVIEW

DOT proposes to connect Thompson Road to the eastern terminus of Rainbow Drive, a distance of approximately 200 feet. The proposed road connection will be an open-section road with grass

swales on either side of the road. The project also includes a 4-foot wide concrete sidewalk along the south side of Rainbow Drive and along a portion of the western side of Thompson Road. These new sidewalk segments will create a continuous sidewalk network near the school.

Review for Conformance to the Special Protection Area Requirements

As part of the requirements of the Special Protection Area law, a SPA Water Quality Plan should be reviewed in conjunction with a mandatory referral¹. Under the provision of the law, the Montgomery County Department of Permitting Services (DPS) and the Planning Board have different responsibilities in the review of a water quality plan. DPS has reviewed and conditionally approved the elements of the Preliminary/Final Water Quality Plan under its purview. The Planning Board responsibility is to determine if environmental buffer protection, SPA forest conservation and planting requirements, and site imperviousness limits have been satisfied.

Site Imperviousness

Impervious surface restrictions for development projects in the Upper Paint Branch SPA are set forth in the Environmental Overlay Zone for the Upper Paint Branch SPA. The Environmental Overlay Zone has an 8 percent imperviousness limit for new development projects. It also allows for existing impervious surfaces that exceed the 8 percent imperviousness limit to remain or be reconstructed.

Section 59-C-18.152(a)(1) of the Environmental Overlay Zone states:

“(1) Any development must not result in more than 8 percent impervious surface of the total area under application for development.
(A) Any impervious surface lawfully existing pursuant to a building permit issued before July 31, 2007 that exceeds the 8 percent restriction, may continue or be reconstructed under the development standards in effect when the building permit was issued.”

The three limits of the project have been defined as the eastern terminus of Rainbow Drive roadway pavement, the eastern boundary of the proposed roadwork on Thompson Road, and the northern edge of the proposed sidewalk segment on Thompson Road. Since this project includes the reconstruction and expansion of existing road segments, and the imperviousness of the existing road segments within the project boundaries currently exceed 8 percent of the project area, staff has determined that Section 59-C-18.152(a)(1) of the Environmental Overlay Zone applies to the project. That is, the existing imperviousness within the project area is 25.6%. Therefore, there should be no net overall increase in impervious surfaces for the project so that the overall project's imperviousness will not exceed 25.6% imperviousness. The project will create 7004 square feet of new impervious surfaces. In order for the project to minimize the net increase of impervious surfaces over the existing level, DOT proposes the following:

- The project includes the removal of existing pavement of Rainbow Drive to the east of the entrance to Briggs Chaney Middle School. This would narrow the cross-section of this

¹ Section 19-62 (c) of the Montgomery County Code states that “ before engaging in any land disturbing activity on publicly owned property in an area designated as a special protection area, the applying agency or department should prepare a combined preliminary and final water quality plan.”

segment of the existing road. The project also includes the removal of existing pavement along the L-shaped section of Thompson Road. In addition, a section of existing sidewalk within the road right-of-way will be removed because the new road section will overlap this section of sidewalk. The removal of pavement in these areas would result in the removal of 2860 square feet of existing impervious surfaces.

- DOT will be removing impervious surfaces along the segment of existing Rainbow Drive west of the limits of this project. The removal of road pavement is part of a separate mandatory referral project (MR2010803). The amount of pavement removal that the other mandatory referral project will have available for this project will be 3287 square feet.

The net result of all the DOT projects above will result in a net increase of impervious surfaces for the project. In order to meet the standard of no net increase of impervious surfaces over the existing level, DOT would have to remove 857 square feet of additional impervious surfaces in the SPA. Staff recommends that DOT identify and implement a project to remove 857 square feet of existing impervious surfaces within this SPA by July 1, 2011.

Staff recommends that the areas where impervious surfaces are removed be restored to create an uncompacted soils layer which enables vegetation to be established.

Environmental Buffers

The project does not traverse through or directly impact environmental buffer areas.

County DPS Special Protection Area Review Elements

DPS has reviewed and conditionally approved the elements of the SPA water quality plan under its purview with a synopsis provided below (see Attachment 1).

Site Performance Goals

As part of the water quality plan, the following performance goal was established for the site:

1. Maintain stream baseflow through the incorporation of disconnection of impervious surfaces to encourage groundwater recharge.
2. Minimize sediment loading through the use of quick stabilization of disturbed areas, using sod.

Stormwater Management Concept

The new road segment will be designed as an open-section road and grassed swales that will provide environmentally-sensitive design (ESD) treatment volume per the latest Maryland Department of Environment (MDE) design criteria.

Sediment and Erosion Control

DPS is requiring that all disturbed areas be stabilized with topsoil and sod as soon as possible and as work progresses.

Monitoring of Best Management Practices

There are no monitoring requirements for this project.

REVIEW UNDER THE COUNTY FOREST CONSERVATION LAW

Forest Conservation Plan Exemption

The project qualifies for a forest conservation plan exemption (FCP exemption no. 42010085E) under the Section 22A-5(e)² of the County Forest Conservation Law. It is considered to be a County highway project that is part of a Capital Improvements Project (CIP) and is subject to Section 22A-9³ of the law. The project will not clear forest. Individual trees will be affected by the project, and a tree save plan has been submitted to show which individual trees near the project site will be protected and which trees will be removed. There are some trees that are between 4” and 20”, diameter at breast height (DBH), which will be removed due to the creation of grass swales adjacent to the new road segment for stormwater treatment. Trees within an existing, adjacent conservation easement on a residential lot will be protected during construction, as identified on the tree save plan. Staff believes the submitted tree save plan minimizes the loss of individual trees. The tree save plan is acceptable if notes related to root pruning are added to the plan.

² Section 22A-5(e) covers a State or County highway construction activity that is subject to Section 5-103 of the Natural Resources Article of the Maryland Code, or Section 22A-9.

³ Section 22A-9 applies to construction of a highway by the County as part of an approved Capital Improvements Program project. This section states that the project should minimize forest cutting or clearing and loss of specimen or champion trees to the extent possible while balancing other design, construction, and environmental standards. The constructing agency must make a reasonable effort to minimize the cutting or clearing of trees and other woody plants.

ATTACHMENT 1
(1 of 2)



DEPARTMENT OF PERMITTING SERVICES

Carla Reid
Director

Isiah Leggett
County Executive

May 3, 2010

Ms. Rebecca Park
Montgomery County Department of Transportation
Division of Transportation Engineering
100 Edison Park Drive, 4th Floor
Gaithersburg, Maryland 20878

Re: Preliminary/Final Water Quality Plan
for the Thompson Road Connection
SM File #: 237570
Tract Size/Zone: 1 acre / Public R/W
Watershed: Upper Paint Branch

SPECIAL PROTECTION AREA

Dear Ms. Park:

Based on a review by the Department of Permitting Services, the Preliminary/Final Water Quality Plan (PFWQP) for the above mentioned project is conditionally approved. This approval is for the elements of the Final Water Quality Plan of which DPS has lead agency responsibility, and does not include limits on imperviousness or stream valley buffer encroachments.

Site Description: The project encompasses approximately one acres of disturbance on Thompson Road, and proposes to provide approximately 300 feet of two-lane roadway, 24-feet in width, from the terminus of Rainbow Drive to Thompson Road. This project will improve the flow of traffic from Briggs Chaney Middle School and improve the roadway network connectivity for the community. The project area is tributary to the Left Fork of the Upper Paint Branch. This watershed and has been designated as a Special Protection Area.

Stormwater Management: The new connection will incorporate open section roadway and grassed swales sized to provide ESD treatment volume per the latest MDE design criteria.

Sediment Control: Strict sediment control is to be used throughout the project. The following features are to be incorporated into the sequencing of the detailed sediment control plans:

1. All disturbed areas must be stabilized with topsoil and sod as soon as soon as possible and as work progresses.

Performance Goals: The performance goals that were established at the pre-application meeting are to be met as specified in the Preliminary and Final Water Quality Plan. They are as follows:

ATTACHMENT 1
(2 of 2)

Ms. Rebecca Park
May 3, 2010
Page Two

1. Maintain stream baseflow through the incorporation of disconnection of impervious surfaces to encourage groundwater recharge.
2. Minimize sediment loading through the use of quick stabilization of disturbed areas, using sod.

Monitoring: There are no monitoring requirements for this project.

Conditions of Approval: The following condition(s) must be addressed in the initial submission of the detailed sediment control/stormwater management plan. This list may not be all inclusive and may change based on available information at the time of the subsequent plan reviews:

1. Prior to permanent vegetative stabilization, all disturbed areas must be topsoiled per the latest Montgomery County Standards and Specifications for Topsoiling.

Any divergence from the information provided to this office; or additional information received during the development process; or a change in an applicable Executive Regulation may constitute grounds to rescind or amend any approval actions taken, and to reevaluate the site for additional or amended Water Quality Plan requirements.

If you have any questions regarding these actions, please feel free to contact Mark Etheridge at (240) 777-6338.

Sincerely,

 Richard R. Brush, Manager
 Water Resources Section
 Division of Land Development Services

RRB:dpm:CN237570

cc: C. Bunnag (MNCPPC-ED)
R. Gauza (MCDEP)
SM File # 237570

Qn: on-site 1 ac.
Ql: on-site 1 ac.
Recharge is provided on-site