

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

MCPB
 Item #
 7-29-10

MEMORANDUM

TO: Montgomery County Planning Board
VIA: Mark Pfefferle, Acting Chief, Environmental Planning *MP*
FROM: Josh Penn, Senior Planner, Environmental Planning *JP*
DATE: July 16, 2010
PLAN NAME: Travilah Fire Station #32
PLAN NUMBER: MR 2010721
PLAN TYPE: Preliminary Forest Conservation Plan
 Special Protection Area Water Quality Plan
REVIEW BASIS: Chapter 22A of the County Code
 Chapter 19 of the County Code
ZONE: Life Science Center (LSC)
LOCATION: The northwest quadrant of the intersection of Shady Grove Road and
 Darnestown Road
APPLICANT: Montgomery County Department of General Services
HEARING DATE: July 29, 2010

RECOMMENDATIONS

The Environmental Planning staff has reviewed the special protection area water quality and forest conservation plans. Staff recommends:

APPROVAL of the SPA Water Quality Plan subject to the following condition:

1. Conformance to the conditions as stated in Montgomery County Department of Permitting Services (DPS) preliminary water quality plan approval letter (Attachment 1).

APPROVAL of the Preliminary Forest Conservation Plan subject to the following conditions:

1. Submission and approval of a final forest conservation plan prior to any land disturbing activities.
2. Applicant must record a category I conservation easement over all forest plantings and stream environmental buffers prior to any land disturbing activities.
3. All reforestation plantings must be completed within the first planting season after issuance of the first sediment and erosion control permit.
4. Approval of the forest conservation plan is contingent upon the successful abandonment of the Right-of-Way.

BACKGROUND

The Montgomery County Department of General Services (DGS) is proposing to construct a new

26,268 square feet fire station containing four apparatus bays, dorm/bunk rooms, living and public areas, administration offices, training spaces, and space for law enforcement personnel. The facility will be operated primarily by the Montgomery County Department of Fire and Rescue Services (DFRS). The facility is to be located in the northwest quadrant of the intersection of Shady Grove Road and Darnestown Road, and comprises 5.63 acres of land.

A natural resource inventory/forest stand delineation (NRI/FSD #420101390) was approved by Environmental Planning staff on May 5, 2010. The site contains no forest, no streams, 0.27 acres of wetlands, and approximately 0.87 acres of wetland buffer. The property is located within both the Muddy Branch and Watts Branch watersheds, both of which are USE I designations. The Countywide Stream Protection Strategy (CSPS) rates both of these watersheds as fair. The proposed project does not have any proposed activities within any streams, wetlands, or environmental buffers and is in compliance with the Environmental Guidelines.

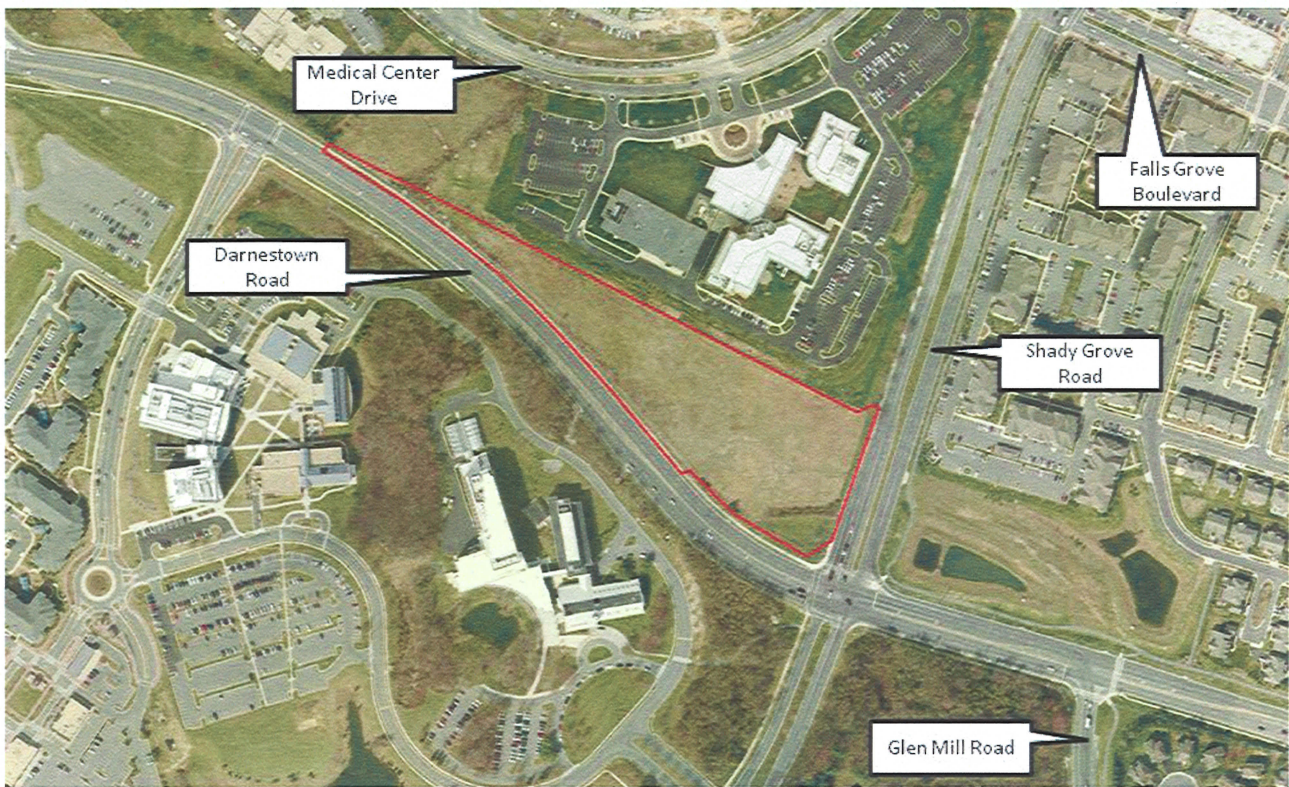


Figure 1: 2008 Aerial Photograph with Parcel Boundaries

DISCUSSION

There are four items for Planning Board review for the Travilah Fire Station: the mandatory referral, the right-of-way abandonment, the special protection area (SPA) water quality plan, and the forest conservation plan. This memorandum covers staff's review and recommendations on the SPA preliminary/final water quality plan and the forest conservation plan.

The Board's actions on the SPA preliminary/final water quality plan and forest conservation plan are regulatory and binding. The Planning Board must act on the SPA preliminary water quality plan and forest conservation plan before it can act on the mandatory referral.

SPA WATER QUALITY PLAN

This project is within the Piney Branch SPA and on publicly owned property so it is subject to submitting a water quality plan under section 19-62(c) of the Montgomery County Code. This section of the code states:

(c) Publicly owned property. 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.

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 Water Quality Plan under its purview. The Planning Board responsibility is to determine if environmental buffer protection, SPA forest conservation and planting requirements have been satisfied.

Environmental Planning Staff has reviewed and recommends Planning Board approval with conditions of the elements of the SPA water quality plan under its purview:

County DPS Special Protection Area Review Elements

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

Site Performance Goals

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

1. Maintain stream base flows.
2. Minimize storm flow run off increases.
3. Maintain drainage divides.
4. Minimize sediment loading and land disturbances with an emphasis on immediate stabilization.

Stormwater Management Concept

Stormwater management will be provided on site by a combination of ESD practices that include

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.”

grass buffers, landscaped infiltration, and submerged gravel wetlands. The part of the site that drains to the Special Protection Area ultimately drains to an existing offsite stormwater management structure that is sized for the entire drainage area and therefore provides redundancy.

Sediment and Erosion Control

Redundant sediment controls are to be used throughout the site. The use of sediment traps with forebays that provide 125% of the normally required storage volume is acceptable for larger disturbed areas. Silt fence alone will not be allowed as a perimeter control. The use of super silt fence will be acceptable for small areas of disturbance.

Monitoring of Best Management Practices

Monitoring must be in accordance with the BMP monitoring protocols which have been established by the Department of Permitting Services (DPS) and Department of Environmental Protection (DEP). The pre-construction monitoring requirements that were established at the pre-application meeting are still applicable (groundwater elevation and chemistry monitoring). The number and location of the groundwater monitoring wells will be determined prior to the submission of the detailed sediment control plan. The construction and post construction monitoring requirements will be determined upon the finalization of the actual sediment control and stormwater management structure locations. One year of pre-construction monitoring must be completed prior to the issuance of a sediment control permit.

FOREST CONSERVATION

This project is subject to the Montgomery County Forest Conservation law (Chapter 22A of the County code) under section 22A-4(d) “*a government entity subject to mandatory referral on a tract of land 40,000 square feet or larger...*” The site is 5.63 acres in size and contains no forest. The submitted preliminary forest conservation plan (PFCP) shows no forest removal and no retention of forest. The forest conservation worksheet indicates 0.84 acre planting requirement associated with the afforestation threshold. The subject site is applicable to section 22A-12(d) “*A site with less than 20 percent of the net tract area in forest cover must be afforested in accordance with the required afforestation percentages shown on the table in subsection (a) of this Section.*” The table in 22A-12(a) lists the afforestation thresholds as a percentage of net tract area for different land use types. The proposed use of this site is a fire station and is therefore considered an institutional land use and the afforestation threshold for Institutional Development Areas (IDA) was used. The IDA afforestation threshold is 15% of the net tract area. The net tract area for this project is 5.63 acres and 15% of that would be 0.84 acres.

The applicants are proposing to meet the forest planting requirements by planting 1.45 acres of forest onsite labeled as afforestation areas A and B in figure 2. The applicant proposes to use the 0.61 acres of planting from afforestation area B as forest conservation bank credits for future County projects. All forest plantings and stream/environmental buffers must be protected by a Category I conservation easement.

In SPAs where forests play an important role in protecting water quality and the overall health of the stream ecosystem, there are specific guidelines which ask for accelerated afforestation. Section V.C.2.a of the Montgomery county Environmental Guidelines, Page 37, it states “*The applicant should retain or establish forest in all buffers on a site. Reforestation on SPA sites is to begin as soon as possible after the issuance by DPS of grading permits, with appropriate phasing to allow*

for the construction of sediment and erosion control structures.” Since all sediment and erosion control structures are being constructed outside of the proposed afforestation areas, it is recommended that all plantings be completed within the first growing season after the issuance by DPS of a grading permit.

The forest conservation plan meets the requirements of the Forest Conservation Law.

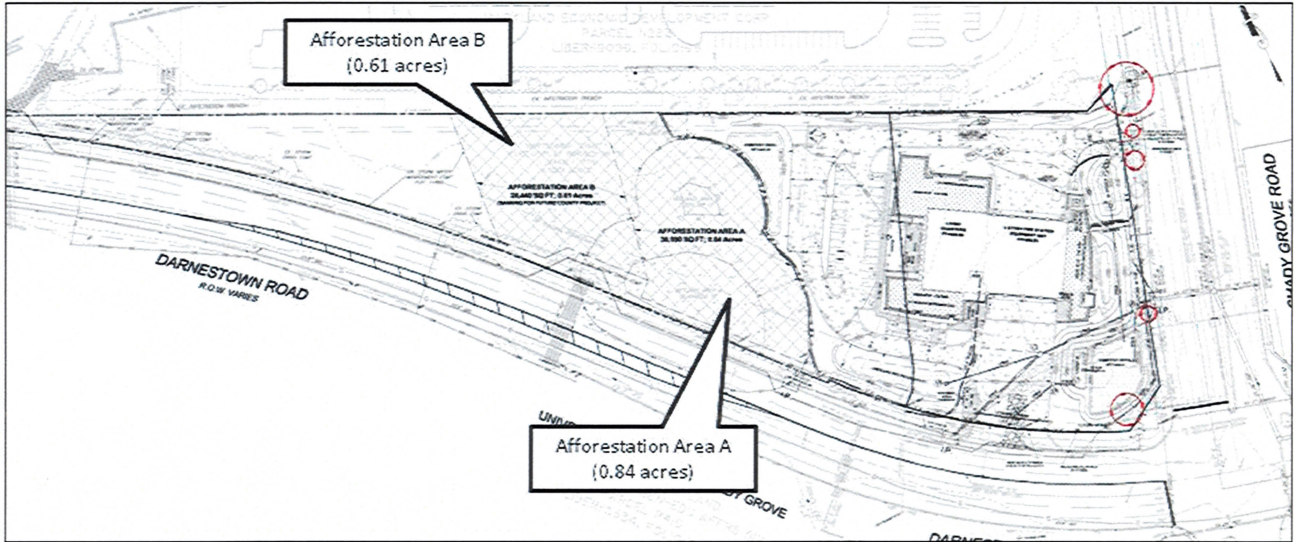


Figure 2: On-site Afforestation Areas

CONCLUSION

Staff recommends the Planning Board approve the preliminary/final water quality plan and the preliminary forest conservation plan.

July 15, 2010

Mr. Brandon J. Fritz, PE
Dewberry
203 Perry Parkway, Suite 1
Gaithersburg, Maryland 20877

Re: **Preliminary/Final** Water Quality Plan
and Stormwater Management Concept
for Travilah Fire Station #32
SM File #: 237925
Tract Size/Zone: 5.63 acres/LSC
Watershed: Piney Branch/Watts Branch

SPECIAL PROTECTION AREA

Dear Mr. Fritz:

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

Site Description: The proposal is for a new Fire Station on 5.63 acres at the northwestern corner of the intersection of Darnestown Road and Shady Grove Road. This is located partially within Piney Branch Special Protection Area.

Stormwater Management: Stormwater management will be provided on site by a combination of ESD practices that include grass buffers, landscaped infiltration, and submerged gravel wetlands. The part of the site that drains to the Special Protection Area ultimately drains to an existing offsite stormwater management structure that is sized for the entire drainage area and therefore provides redundancy.

Sediment Control: Redundant sediment controls are to be used throughout the site. The use of sediment traps with forebays that provide 125% of the normally required storage volume is acceptable for larger disturbed areas. Silt fence alone will not be allowed as a perimeter control. The use of super silt fence will be acceptable for small areas of disturbance.

Performance Goals: The performance goals that were established at the pre-application meeting still apply. The performance goals are as follows:

1. Maintain stream base flow.
2. Minimize storm flow run off increases.

Brandon Fritz
July 15, 2010

3. Maintain drainage divides.
4. Minimize sediment loading and land disturbances with an emphasis on immediate stabilization.

Monitoring: The monitoring must be in accordance with the BMP monitoring protocols which have been established by the Department of Permitting Services (DPS) and Department of Environmental Protection (DEP). The pre-construction monitoring requirements that were established at the pre-application meeting are still applicable (groundwater elevation and chemistry monitoring). The number and location of the groundwater monitoring wells will be determined prior to the submission of the detailed sediment control plan. The construction and post construction monitoring requirements will be determined upon the finalization of the actual sediment control and stormwater management structure locations. **One year of pre-construction monitoring must be completed prior to the issuance of a sediment control permit.**

Prior to the start of any monitoring activity, a meeting is to be held on site with DEP, DPS, and those responsible for conducting the monitoring to establish the monitoring parameters.

Conditions of Approval: The following are additional conditions which must be addressed in the initial submission of the detailed sediment control Plan. This list may not be all inclusive and may change based on available information at the time of the subsequent plan reviews:

1. Address the existing storm drain easement that will be impacted. It appears that this easement may need to be extinguished or revised prior to development.
2. A detailed review of the stormwater management computations will occur at the time of detailed plan review.
3. Show conveyance for the runoff to submerged gravel wetland #2. It appears that a portion of the parking and drive area will not drain to the gravel wetland as shown.
4. Provide a geotechnical report that verifies the infiltration at the proposed infiltration location. If infiltration is not feasible a micro-biofilter will be acceptable as a means to address ESD stormwater management.
5. 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 Leo Galanko at (240) 777-6242.

Sincerely,

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

RRB:img:CN237925

cc: (MNCPPC-DR)
M. Pfefferle (MNCPPC-ED)
R. Gauza (MCDEP)
L. Galanko
SM File # 237925

Qn: on-site 5.63 ac
Ql: on-site 5.63 ac.
Recharge provided