MCPB ITEM NO. <u>3+4+</u> 9-9-04

# September 2, 2004

MOZ

## **MEMORANDUM**

TO:

Montgomery County Planning Board

VIA:

Jeffrey Zyontz, Chief

County-wide Planning Division

Judy Daniel, AICP: 301-495-4559

Community-Based Planning

FROM:

Michael Zamore: 301-495-2106 and

Larry Cole: 301-495-4528, for the Park and Planning Department  $\angle$ 

**PROJECT:** 

Valley Park Drive

CIP No. 509944

**REVIEW TYPE:** 

Forest Conservation Plan and

Mandatory Referral No. 04810-DPW&T-1

APPLICANT:

Montgomery County Department of Public Works and Transportation

APPLYING FOR:

Plan Approval

#### **COMMUNITY-BASED PLANNING TEAM AREA: Rural**

#### **RECOMMENDATIONS:**

#### **Forest Conservation Plan**

Staff recommends that the Board approve the Forest Conservation Plan of the proposed project (see Attachment 1: Location Map), with the following conditions:

- 1. Compliance with conditions of the approval of the Forest Conservation Plan prior to Montgomery County Department of Public Schools release of the sediment and erosion control permit.
- 2. Show root-pruning lines for impacted specimen/significant trees, and at forest edges along the limits of disturbance.

# **Mandatory Referral**

Staff recommends that the Board approve the Mandatory Referral of the proposed project, with the following comments:

- 1. Offset the proposed sidewalks from the curb or increase the width of the sidewalks adjacent to the curb by at least two feet.
- 2. Consider widening the proposed sidewalk on one side of Valley Park Drive to eight to ten feet to provide better accommodation for off-road bicyclists, including those wishing to access the Magruder Branch Trail.
- 3. Staff recommends that the disturbed area at the bottom of the wall be replanted with trees.
- 4. Provide ten-foot-wide handicap ramps for the trail on each side of Valley Park Drive and in the refuge island at the trail crossing.
- 5. Provide additional pavement for the trail on the north side of Valley Park Drive to allow more maneuvering room to compensate for the sharper angle at which the trail will meet the road, and provide a removable bollard to prevent vehicular access to the trail.

**PREVIOUS BOARD ACTION:** The design of this project was reviewed by the Planning Board on December 12, 1998. Department of Public Works and Transportation's (DPWT) responses to the Board's comments at that time are shown as Attachment 2.

# PROJECT DESCRIPTION

The project consists of the construction of 1,100 feet of Valley Park Drive from its current terminus west of the western leg of Shelldrake Circle to a point approximately 800 feet west of Woodfield Road (MD 124) (see Attachment 3). The portion of the roadway between the terminus of this project and Ridge Road is being built by a private developer. Approximately 450 feet of roadway between the project start and the midpoint of the existing Valley Park Drive between the two legs of Shelldrake Circle would also be reconstructed as part of this project.

The roadway would be constructed as reduced-width, closed-section arterial road – 26-foot pavement width curb-to-curb, curb and gutter, and a five-foot sidewalk on the north side of the roadway with an eight-foot landscape panel (see Attachment 4).

An additional 1,400 feet of sidewalk with curb and gutter would be constructed along both sides of the existing segment of Valley Park Drive east of the present terminus. The sidewalks would be constructed immediately adjacent to the curb.

A connection from Coltrane Drive to the proposed section of Valley Park Drive would be provided to serve the Damascus Manor neighborhood (see Attachment 5). Once that connection is made, the existing connection of Running Valley Lane to Ridge Road (MD 27) would be removed. That portion of Running Valley Lane is located on private property by means of an easement which terminates when Valley Park Drive is constructed and the alternate connection is made.

#### STAFF ANALYSIS

Valley Park Drive would provide a much-needed and long-planned through-traffic connection between Ridge Road (MD 27) and Woodfield Road (MD 124) and would provide an alternative to the more congested roads in the Damascus business district for residents of the adjacent neighborhoods. The project would also provide alternate means of access for emergency equipment to the existing homes in the area as well as those now being constructed by a private developer.

# **Roadway Typical Section**

## **New Roadway**

The typical section chosen for this roadway is non-standard. Arterial roadways are typically built with a 24-foot roadway with open shoulders or a 50-foot roadway with curb and gutter. The section chosen for Valley Park Drive more closely resembles a reduced-width primary road standard – 24-foot of pavement width plus curb and gutter, for a total pavement width of 26 feet. In the new segment of roadway, a five-foot sidewalk with an eight-foot landscape panel with street trees would be provided.

# **Existing Roadway**

An additional 1,400 feet of sidewalk with curb and gutter would be constructed along both sides of the existing segment of Valley Park Drive east of the present terminus to the western intersection of Shelldrake Circle. The proposed sidewalks would be constructed on both sides of the road adjacent to the curb, with street trees behind the sidewalks. While this design has been chosen to reduce slope impacts, the design does not conform to American Association of State Highway and Transportation Officials recommendations, which call for sidewalks adjacent to curbs to be two feet wider than elsewhere.

The additional two feet would provide a safety zone for pedestrians to be farther away from traffic and out of the range of overhanging mirrors. Particular attention should be paid to this issue on this project since the proposed roadway width is much less than usual, bringing vehicles and sidewalk users much closer together. Two additional feet would also provide room for traffic signs so that the sidewalk is not obstructed. Staff recommends that where sidewalks are adjacent to the curb their width be increased by two feet. A greater increase should also be considered to provide better accommodation of off-road bicyclists. This topic is discussed in greater detail below in the Current Master Plan Work section.

# **Slope Impacts**

The project would be constructed on the slopes of the Upper Magruder Branch Stream Valley and passes through Upper Magruder Branch Park. The reduced-width typical section noted above would greatly reduce impacts on the long, steep slopes encountered on the project site. Since the roadway would in effect be constructed on a shelf cut into the hillside, any widening of the shelf would involve greater cuts and fills. The road as designed has been well located to minimize impacts to the largest trees on the site and in Upper Magruder Branch Park. Any widening of the sidewalks, as recommended by staff, would require greater slope impacts in some areas.

No new stream crossing is proposed as part of this project. The narrow roadway section avoids requiring additional fill adjacent to the stream.

The proposed curb would prevent drivers from accidentally traversing adjacent slopes, although areas with the steepest slopes would be provided with a guardrail also. The closed-section roadway would also reduce the likelihood of erosion since runoff would be piped from the roadway, rather than run in ditches along the top of the slope.

# Magruder Branch Trail

Magruder Branch Trail crosses the existing segment of Valley Park Drive just east of Shelldrake Circle. The trail crosses the road on a skew at a non-intersection location. This is not a desirable situation but is not known to have been a problem since Valley Park Drive ends here and the road is now for local access only. Most users of the road know where the crossing is and that they should be cautious.

Since Valley Park Drive would become a through-road by construction of this project, the crossing is proposed to be improved by constructing a trail refuge on Valley Park Drive (see Attachment 6). Safety would also be enhanced by drivers being forced to slow down as they make the slight deviation around the refuge island.

Staff believes that the proposed trail crossing is a good design, but that a couple of changes are needed. The handicap ramps on the southern leg of the trail, and in the refuge island need to be increased in width from five feet to ten feet so that trail use is not constricted at the crossing. Also, additional pavement is needed for the trail on the north side of Valley Park Drive to allow more maneuvering room to compensate for the sharper angle at which the trail will meet the road, and a removable bollard is needed to prevent vehicular access to the trail, as is called for on the other side of the road.

#### **Current Master Plan Work**

The Countywide Park Trail Plan is anticipated to be amended to reflect a new concept for east-west connectivity between park trails and will recommend the following:

• Identify the importance of a sidewalk or bike path along Valley Park Drive to access this trail connection and, including special treatment for the Ridge Road crossing to ensure safety for those using the connection.

The proposed sidewalks along Valley Park Drive would meet this Trail Plan recommendation. However, the Staff Draft of the Damascus Master Plan will more specifically recommend that a bike path be provided along Valley Park Drive. The design of this project, which has been on hold for a number of years, would not conform to the latest recommendations.

Staff believes that the inclusion of a bike path along Valley Park Drive at this late stage of the project might require some substantial redesign because of the steep slopes involved and delay the project's schedule. However, widening the proposed five-foot sidewalk to an eight-to ten-foot bike path should be considered as part of this project, especially since the steep slopes would make the possibility of a follow-up project to widen the sidewalks later very unlikely.

Whether or not the sidewalk is widened to bikeway width, staff believes that the proposed sidewalks' use as a connection to the park trails increases the need to provide a greater separation between sidewalk users and vehicular traffic.

# **Proposed Retaining Wall**

A 450-foot long retaining wall is proposed approximately thirty feet off the pavement edge of Valley Park Drive, beginning 100 feet east of Coltrane Drive and extending westward. Catalog cuts for the type of wall to be used have been provided and staff finds them acceptable.

The plans reflect a maximum wall height of approximately twenty feet. Safety fencing atop the wall would be provided to prevent accidental falls. The vertical face of the wall would not be visible from the roadway but would face toward the park. The Board recommended in its last review of this project that screening of this wall be provided for the view from the park. DPWT responded that a strip of forest would need to be cut down to provide this screening but staff disagrees. Staff recommends that the disturbed area at the bottom of the wall be replanted with trees.

# Connection to Ridge Road (MD 27)

A connection from Coltrane Drive to the proposed section of Valley Park Drive would be provided to serve the Damascus Manor neighborhood. Once that connection is made, the existing connection of Running Valley Lane to Ridge Road (MD 27) would be removed. That portion of Running Valley Drive is located on private property very close to an existing lane by means of an easement. This easement will terminate when Valley Park Drive is constructed and the alternate connection is made.

# Intersection at Ridge Road

At the time of the last review, residents expressed some concern about the proximity of two intersections along Ridge Road - Valley Park Drive and Oak Drive - which are approximately 500 feet apart. Oak Drive is the access road to John T. Baker Middle School. Ridge Road is classified as an arterial road for which the recommended minimum intersection spacing is 600 feet by DPWT standards or 750 feet by State Highway Administration's standards. While the spacing is less than standard, the Oak Drive intersection already exists and the adjacent area has been developed.

In the work on the Damascus Master Plan update however, staff will recommend that the northern end of Oak Drive be realigned to tie intersect Ridge Road opposite the proposed Valley Park Drive. Oak Drive, which was not classified as a Master Plan road in the 1993 Damascus Master Plan, is recommended to be a Primary Residential roadway in the update. The Damascus Master Plan update is not yet an approved and adopted document and there is no schedule for this realignment, but staff believes that this is the ultimate solution to this problem. In the meantime, once the subject road is opened, DPWT will examine the warrants for a traffic signal at the Ridge Road/Valley Park Drive intersection.

# Forest Conservation Law Compliance

The project is subject to the Forest Conservation Act and a 1:1 replacement ratio for forest removal. As per the Forest Conservation Act, the project has an approved Natural Resource Inventory/Forest Stand Delineation, and a Forest Conservation Plan (FCP).

The FCP shows a total of 2.13 acres of forest, all of which the applicant proposes to remove. This removal includes two significant trees (one 29-inch and one 26-inch Tulip-poplar). Their removal is unavoidable as they are near the actual road alignment and within the road right-of-way. This removal includes four specimen trees. Their removal is unavoidable as they are either on the actual road alignment or within the road right-of-way. The total planting requirement is 2.13 acres of forest. The applicant has proposed a combination of landscaping and street trees (0.43 acres), onsite reforestation (0.71 acres), and off-site planting in an existing approved reforestation bank (0.99 acres). The amount of forest to be planted meets the 1:1 replacement ratio required. Therefore, the FCP submitted for this project meets the requirements for Section 22A-12(f) of the Montgomery County code.

# Water Quality

The project site is located within the Magruder Branch of the Upper Great Seneca Creek Watershed. Magruder Branch is a large tributary that begins in South Damascus. The *Countywide Stream Protection Strategy* (CSPS, 1998) lists stream conditions as 'fair' and habitat conditions as 'good'.

Despite this listing, Magruder Branch has been impacted from higher density land uses in older development in and around Damascus. Streams show varying degrees of degradation, and sediment deposition is already obvious. CSPS has categorized Magruder Branch subwatershed as a Watershed Restoration Area. The recommended management approach for such areas encourages projects to utilize all available opportunities to retrofit controls in older developments and high-density areas. For example, the subwatershed contains a system of vernal pools that supports a diverse amphibian community, built as mitigation for an adjoining hiker-biker trail system.

The project proposes no new stream crossing and the proposed stormwater management work meets the CSPS watershed management requirement. The Damascus Wastewater Treatment Plant (WWTP) is located in the Magruder Branch subwatershed.

# Stormwater Management

Many of the newer communities within the subwatershed contain stormwater controls, and large tracts of forested parkland protect much of the stream valley. The new roadway will increase impervious surface area by 1 to 2 acres. The proposed roadway improvements will drain mainly to an existing stormwater pond on adjoining private property and all roadway runoff will be channeled away from Magruder Branch Stream Valley Park.

Computations indicate that the pond will adequately provide quality and quantity management for the proposed roadway improvements. Silt fences alone will not be allowed as perimeter control. Site grading will be limited as much as possible and immediate stabilization will be emphasized for such grading.

#### **BACKGROUND**

#### **Private Development**

This project has been delayed for several years because of a stall in the construction of a previously proposed Housing Opportunities Commission development at the Ridge Road end of the project, a development that was approved in 1992. This residential project is instead being built by a private developer who is constructing the segment of Valley Park Drive between DPWT's western project limit and Ridge Road.

The Baum property, another proposed development, is within the limits of the DPWT project and Preliminary Plan 1-04098 is currently under review by staff. The right-of-way necessary to construct Valley Park Drive would be dedicated.

#### Master Plan

The construction of Valley Park Drive as an arterial road between Ridge Road (MD 27) and Woodfield Road (MD 124) is called for in the Damascus Master Plan, Approved and Adopted in June 1982. Valley Park Drive was initially intended to be a primary road, but was upgraded to an arterial in order to avoid an additional crossing of Upper Magruder Branch by a more southerly road, as recommended in the 1966 Damascus Master Plan.

The Master Plan calls for several rungs of the ladder to provide connections between Ridge Road (MD 27) and Woodfield Road (MD 124). Bethesda Church Road between these two roads was completed as an arterial road by DPWT a few years ago.

Sweepstakes Road is an existing primary road which was planned to be reconstructed to improve the vertical alignment of the roadway. During the County Council's discussions concerning the CIP in 1998, the Sweepstakes Road project was dropped for two reasons. First, improving the road might have increased the possibility that traffic-calming measures would later be requested by residents because of the higher design speed for this fairly straight connection between the two State roads. Second, since the Valley Park Drive project has a higher classification as an arterial, the Council gave it a higher priority to be constructed first. Even though the improvements to Sweepstakes Road were dropped, traffic-calming measurements were subsequently requested by the public and installed by DPWT.

#### **Public Coordination**

A public meeting sponsored by DPWT to discuss this project was held on April 21, 1998, at Damascus High School. In addition to the Ridge Road intersection, residents also expressed some concern about the road being opened to through-traffic rather than local access only which is the present condition. Their concern was with the volume of traffic, which is anticipated to increase with the opening of this arterial road, and with the operating speed. Staff believes that operating speeds will not be great on this road as both the design speed (35 mph) and posted speed (30 mph) are lower than standard. The narrower than standard pavement width may also help to keep operating speeds low.

LC:gw Attachments

mmo to MCPB re MR Valley Park Drive