May 31, 2006

MEMORANDUM

TO: Montgomery County Planning Board
VIA: Gwen Wright, Acting Chief
     Countywide Planning Division
     Richard C. Hawthorne, Chief
     Transportation Planning
     Sue Edwards, Team Leader
     Community-Based Planning

FROM: Michael Zamore: 301-495-2106 and
      Larry Cole: 301-495-4528, for the Park and Planning Department

PROJECT: Father Hurley Boulevard Extended/Germantown Road to Wisteria Drive
         CIP No. 500516
         NRI/FSD #4-04144

REVIEW TYPE: 1. Forest Conservation Plan
              2. Mandatory Referral No. 06807-DPW&T-1

APPLICANT: Montgomery County Department of Public Works and Transportation

APPLYING FOR: Plan Approval

COMMUNITY-BASED PLANNING TEAM AREA: I-270 Corridor

RECOMMENDATIONS:

1. Forest Conservation Plan:

   Staff recommends that the Board approve the Preliminary Forest Conservation Plan for
   the proposed project (see Attachment 1: Location Map) with the following conditions to DPWT:
1. Applicant to submit a Final Forest Conservation Plan that meets the requirements of Section 109(B) of the Forest Conservation Regulations.

2. Final FCP to be approved by M-NCPPC Staff prior to any clearing or grading for the project.

3. Required site inspections by M-NCPPC monitoring staff per Section 110 of the Forest Conservation Regulations.

4. Contractor to retain a certified arborist to selectively clear trees as needed within the LOD at the rear of residential properties.

2. Mandatory Referral:

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

1. Provide dual handicap ramps per ADA Best Practices and provide median pedestrian refuges wherever possible as a general practice within the limits of this project. The following changes are needed at the intersections noted below:

   a. At the Germantown Road (MD 118) intersection, provide dual handicap ramps in the northeast corner and provide a pedestrian refuge in the median on the north leg of Father Hurley Boulevard. Construct the proposed shared-use path to be behind the handicap ramp on the northwest corner.

   b. At the Hopkins Road intersection, provide dual handicap ramps on all four corners and provide median pedestrian refuges on the north and south legs of Father Hurley Boulevard.

   c. At the Sawyer Terrace intersection, provide dual handicap ramps in the northeast corner and provide a pedestrian refuge in the median on the north leg of Father Hurley Boulevard.

   d. At the Dawson Farm Road intersection, provide dual handicap ramps on all four corners and provide median pedestrian refuges on the north and south legs of Father Hurley Boulevard.

   e. At the Lullaby Road/Harvest Glen Way intersection, provide dual handicap ramps on all four corners and provide median pedestrian refuges on all four legs.

   f. At the Waterford Hills Boulevard intersection, provide dual handicap ramps in the southeast corner and provide a pedestrian refuge in the median on the south leg of Father Hurley Boulevard.

2. Coordinate the design of this project with the approved Fairfield at Germantown development, Site Plan No. 8-03003A. The proposed improvements should not
impact the development’s terraced retaining walls, stormwater management pond, or pedestrian system. Show the Forest Conservation Easement approved as part of this Site Plan.

3. Provide shade trees along both sides of Father Hurley Boulevard at fifty feet on center spacing, maintaining a continuous streetscape to the greatest extent possible.

4. Provide shade trees in the median at a spacing of fifty feet on center where possible. Where space is constrained, provide ornamental trees at a spacing of thirty feet on center.

5. Provide additional plant materials in the Germantown Road median adjacent to the left turn lane.

6. Consider using a simpler fence on top of the proposed retaining walls.

Additionally, not directly related to the design, DPWT should notify the Department of Permitting Services of the many private encroachments in the dedicated slope easement along the east side of Father Hurley Boulevard Extended and work to ensure that this problem is not repeated.

**PREVIOUS BOARD ACTION:** The Planning Board approved the draft Project Planning Prospectus for this project at the end of Phase I of Facility Planning.

**PROJECT DESCRIPTION**

The project would result in Father Hurley Boulevard being a continuous four-lane divided highway within a 120-foot right-of-way from Wisteria Drive to Germantown Road (MD118). It consists of four segments totaling 5,800 feet:

- Germantown Road (MD118) to Hopkins Road: a new four-lane divided roadway would be constructed and a 500-foot-long eastbound left-turn bay would be provided in the median of Germantown Road at the new intersection. An eight-foot-wide shared-use path would be constructed adjacent to the new roadway construction.
- Hopkins Road to Lullaby Lane: the existing roadway would become the southbound lanes would be overlaid with new asphalt.
- Lullaby Lane to just north of Waterford Hills Boulevard: a new four-lane divided roadway would be constructed, including a bridge over the CSX tracks. An eight-foot-wide shared-use path would be constructed adjacent to the new roadway construction.
- Just north of Waterford Hills Boulevard to 1,100 feet north of Waterford Hills Boulevard: the existing center lanes on either side of the median north of Waterford Hills Boulevard would be overlaid with new asphalt.

A five-foot-wide sidewalk would be constructed along the east side of Father Hurley Boulevard for all of the above segments.
STAFF ANALYSIS

Roadway

Father Hurley Boulevard now begins just west of Wisteria Boulevard and extends east to I-270. East of I-270, the road continues as Ridge Road (MD 27). The proposed extension of Father Hurley Boulevard would continue the road to the west to intersect Germantown Road (MD 118) and would complete this Master Planned roadway, which is anticipated to have an average daily traffic of 20,000 vehicles per day in the 2025 design year.

While Father Hurley Boulevard Extended is classified as a major highway, the design of the road is closer to that of an arterial. The design speed is 40 mph, far less than the 60 mph design speed of Germantown Road, and the anticipated posted speed is 35 mph. Low-speed design criteria were used to better fit the terrain and reduce grading impacts. As such, the proposed design is much more neighborhood-friendly than most major highways, particularly those outside commercial areas.

The roadway would be built in a 120-foot-wide right-of-way. Wide slope easements exist along both sides of the right-of-way for most of the project length south of the CSX tracks. The Germantown Estates development, on the west side of Father Hurley Boulevard Extended between Germantown Road and Hopkins Road, was built without such slope easements however. Slope easements to construct the road would be required from the homeowners association as well as from four individual homeowners. Sheds on two of the single-family properties would have to be relocated.

Bicyclist Accommodation

Off-Road Bike Accommodation

Off-road bike accommodation would be provided via an eight-foot-wide shared path along the north side of Father Hurley Boulevard. The path would be widened by two feet across the bridge over the CSX tracks.

On-Road Bike Accommodation

On-road bike accommodation is not called for in either the Glenmont Sector Plan or the Planning Board Draft of the Countywide Bikeways Functional Master Plan, but DPWT proposes to accommodate on-road bicyclist via fourteen-foot-wide shared-uses lanes in accordance with their general policy for on-road bike accommodation.

Pedestrian Accommodation

Excellent pedestrian accommodation would be provided along Father Hurley Boulevard via a five-foot-wide sidewalk on the east side and the eight-foot-wide shared-use path on the west side, both with an ample landscaped offset from the roadway curb. Across the bridge over the CSX tracks, the sidewalk would be widened by one foot and the shared-use path would be widened by two feet to offset the effects of being in a more constrained area.
Pedestrians would not be accommodated as well at the intersections however. The design of this project fails to follow ADA Best Practices by providing only single handicap ramps in each quadrant of the intersections, rather than the recommended dual ramps. Dual ramps that provide a perpendicular crossing are recommended by USDOT and USDOJ as the preferred treatment since they typically give the best directional guidance to blind pedestrians and provide the shortest crossing for all pedestrians.

The current Americans with Disabilities Act Accessibility Guidelines (ADAAG) are mostly aimed toward requirements for access inside and to buildings rather than along the right-of-way. The Designing Sidewalks and Trails for Access – Best Practices Design Guide, prepared for USDOT in September 2001, was created to give better guidance on accommodation in the right-of-way and shows eighteen types of ramp treatments at intersections, graded either “good”, “acceptable”, or “inaccessible”. While some of the single ramp designs are listed as acceptable, none are listed as good. Only dual ramp configurations are listed as good.

The Revised Draft ADAAG Guidelines for Accessible Public Rights-of-Way, dated November 23, 2005, are the result of a thirteen-years-long process, now relatively near completion, are intended to give better direction as to what accommodation is required in the public right-of-way. USDOT has recommended that these guidelines be used as Best Practices prior to their official adoption. The United States Access Board, which functions as the coordinating body among Federal agencies and disseminates information on ADA requirements, has the following advisory on their website:

“Curb ramps can be a key source of wayfinding information for pedestrians who travel without vision cues if they are installed in-line with the direction of pedestrian travel at crossings. This is most easily accomplished by locating the ramp at the tangent point of the curb return, using either a small curb radius in an attached sidewalk or, in larger radii, a border or setback from the street edge. The Institute of Transportation Engineers (www.ite.org) has undertaken an industry-wide effort to develop and standardize intersection plans that optimize wayfinding. The challenge for practitioners is to provide usability for pedestrians in wheelchairs and scooters with a rectangular ramp plan that can also be directional.” The draft ITE guidelines referenced above have recently been published as Context Sensitive Solutions in Designing Major Urban Thoroughfares for Walkable Communities. Every diagram in the chapter on recommended intersection design has dual ramps. SHA has also been working on this issue and has recently issued draft Bicycle and Pedestrian Design Guidelines. Attachment 2 shows the SHA-recommended intersection design with dual handicap ramps and median pedestrian refuges.

Dual ramps also make it much more likely that median refuges can be provided on divided roadways. The proposed project has designed the intersections so that the design vehicle can turn from the leftmost departure lane to the leftmost receiving lane, but with multi-lane roadways, the latter is not necessary since Maryland Law allows the turning vehicle to enter any lane legally available for travel in that direction (Section 21-601(c)).

The current design unnecessarily truncates the proposed median, allowing vehicles to make turns wider and faster. This makes less likely that median refuges can be provided and more likely that pedestrians will be exposed to fast-turning traffic. Attachment 3 shows one example (Dawson Farm Road) of the intersection design proposed by DPWT with single ramps, and Attachment 4
shows a recommended redesign by staff with dual ramps and median refuges. Staff believes that DPWT’s design would meet the minimum requirements of ADA, but that it falls short of the preferred design that would best accommodate all pedestrians.

Staff has the following comments at each intersection:

At the Germantown Road (MD 118) intersection, dual handicap ramps are needed in the northeast corner. The proposed shared-use path in the northwest corner should be constructed behind the handicap ramp. The ramps across Father Hurley Boulevard at this intersection should be pointed directly across from each other and a pedestrian refuge should be provided in the median on the north leg of Father Hurley Boulevard.

At the Hopkins Road intersection, dual handicap ramps should be provided on all four corners and median pedestrian refuges should be provided on the north and south legs of Father Hurley Boulevard.

At the Sawyer Terrace intersection: Sawyer Terrace is not a public street, but a handicap ramp is proposed on the east side of Father Hurley Boulevard to match the existing ramp on the west side. Staff believes that this is not an appropriate place for pedestrians to cross however as it is close to the center of the intersection in the middle of where traffic would be turning. Staff recommends that the ramp be moved to the north and a pedestrian refuge provided in the median of the north leg of the intersection.

At the Dawson Farm Road intersection, dual handicap ramps should be provided on all four corners and pedestrian refuges should be provided in the median on the north and south legs of Father Hurley Boulevard.

At the Lullaby Road/Harvest Glen Way intersection, dual handicap ramps should be provided on all four corners and median pedestrian refuges should be provided on all four legs.

Waterford Hills Boulevard: Crosswalks would be provided on two legs of this tee intersection. To improve pedestrian accommodation and safety, two handicap ramps should be provided on the southeast side corner providing a more direct route across both streets and allowing a pedestrian refuge to be provided in the wide median on the south leg of Father Hurley Boulevard. The ramps on either side of Waterford Hills Boulevard should point directly toward each other.

**Landscaping/Streetscaping**

The proposed project would provide street trees on both sides of Father Hurley Boulevard and in the median, but there are large gaps where no trees are proposed. It appears that this was largely caused by a consultant’s design error in the interpretation of guidelines on where trees are allowed to be planted over storm drainpipes. Staff recommends that street trees be planted fifty feet on center along both sides of the roadway between the curb and sidewalk/shared-used path wherever possible and in the median where the median width is over nine feet.
At the Germantown Road Intersection, the proposed project would remove most of the trees in the existing median on Germantown Road for a distance of about 900 feet to construct the proposed eastbound left turn lane and median break to create the intersection of Father Hurley Boulevard Extended. Staff recommends that additional plantings such as daylilies and wildflowers be provided in the Germantown Road median adjacent to the left turn lane.

A concrete formliner pattern would be used for the bridge and retaining walls that would replicate the large, coursed stone work on the railroad’s Waring Station and Little Monocacy viaducts which date to the 1906 major re-alignment of the B&O Metropolitan Branch, intended to provide a connection between this project to its past.

DPWT has proposed using an attractive wrought-iron type railing on the bridge and walls as alternate to the normal anti-vandalism chain link fence. While staff agrees that this would be desirable on the bridge, we believe that a simpler fence could be used for the retaining walls, which are offset from the roadway and sidewalk/bikeway and are not as visible.

Environmental

The Montgomery County Departments of Permitting Services and of Environmental Protection prohibited the existing 216"-diameter structural plate culvert from being lengthened. The structure was intended to accommodate the future construction of the subject project but was erroneously built too short. Because the proposed median width has been reduced, the culvert will not require an extension, although a retaining wall is required to limit the slope impact on the end of the pipe.

Forest Conservation

The project has an approved Natural Resources Inventory/Forest Stand Delineation (NRI/FSD) (No. 4-04144) granted on March 3, 2003 and recertified on March 6, 2006. Environmental Planning staff has reviewed the preliminary forest conservation plan submitted for the project. Per the plan, the applicant intends to clear 29,248 SF of forest. This includes 2,309 SF of forest within the CSX right-of-way. As a County highway project the applicant will meet these requirements by mitigating at a 1:1 ratio for forest removed. Planting requirements will be met offsite in an approved forest bank. Staff recommends approval of the preliminary forest conservation plan.

Water Quality

Most of the Father Hurley Boulevard Extended project drains to two sub-watersheds of the Little Seneca Creek Watershed. The portion east of Wisteria Drive drains to the Lake Churchill Tributary, while the portion between Wisteria Drive and Germantown Road drains to the Germantown Estates Tributary. At the Germantown Road/Father Hurley Boulevard intersection the drainage divides further into the Brodsky and Gunners Branch Tributaries. The Countywide Stream Protection Strategy (CSPS, 1998) lists stream and habitat conditions in the Germantown Estates Tributary as ‘good’ and ‘fair’ respectively, based on data available at that time. Both sub-watersheds are listed as Watershed Protection Areas indicating a need for special protection tools to protect water quality.
PUBLIC OUTREACH

During the Facility Planning phase, DPWT held two public information meetings at Kingsview Middle School, on 1/10/02 and on 6/19/02. Attendees at the meetings requested that DPWT reduce the proposed impacts to private property. In response to these comments, DPWT decided to change the roadway typical section, delaying the schedule by two years and resulting in a longer-than-normal time between the last public meeting and the Mandatory Referral.

A public hearing is anticipated to be held later this summer.

SLOPE EASEMENT CONCERNS

Father Hurley Boulevard is recommended in the Germantown Master Plan as a six-lane divided Major Highway in a 120-foot right-of-way. During the facility planning for this project, it was determined that only four lanes were needed to satisfy traffic demands in the 2025 design year. The Planning Board reviewed the Project and approved the four-lane typical section.

While there is ample right-of-way and a thirty-foot-wide slope easement was platted to allow future road construction when the abutting homes were built, there are extraordinarily large encroachments by individual property owners into these areas. As can be seen in Attachment 5, not only items such as fences and sheds, but decks, pools, and even apparently parts of the homes themselves were built in the easement areas.

During the development of this project, the median has been progressively narrowed down to its current proposed width of 20 feet, mostly in response to abutting owners’ desire for lesser impacts on their properties. The proposed roadway typical section now matches the existing typical section to the north. The need for extensive disruption of private property has been eliminated, but fences and sheds in the public right-of-way would still need to be removed.

In addition to the comments made specifically on this project, staff recommends that two actions be done to address the problem of encroachments by adjacent development into the slope easement. First, staff recommends that DPWT work with the Department of Permitting Services to ensure that the problems seen on this project, with multiple violations of the slope easement affecting the design of a major highway project, are not repeated. Second, staff believes that rough grading for future roadways should be required of the developer where individual lots abut the public right-of-way. While slope easements may still be necessary, having the site rough-graded should eliminate the occurrence of major disruptions on private property. Even if homeowners do not construct encroachments on slope easements, it would be preferable that the general terrain of the lot they purchase remains the same in the future after a temporary disruption. Transportation Planning staff will work with Development Review staff on this issue.

LC:gw