MCPB ITEM NO. (0B) 1-28-10

January 19, 2010

MEMORANDUM

TO:

Montgomery County Planning Board

VIA:

Dan Hardy, Chief

Move/Transportation Planning

Sue Edwards, Team Leader

Vision/Community-Based Planning Division

FROM:

Larry Cole: 301-495-4528, for Move/Transportation Planning **LC**

PROJECT:

Frederick Road (MD355)/Brink Road Intersection Improvements

REVIEW TYPE:

Mandatory Referral No. MR2009802

APPLICANT:

Montgomery County Department of Permitting Services (DPS)

APPLYING FOR:

Plan Approval

COMMUNITY-BASED PLANNING TEAM AREA: I-270 Corridor

RECOMMENDATIONS:

Staff recommends that the Board approve the proposed project (see Attachment 1: Vicinity Map) with the following comments to DPS that they should require the developer to:

- 1. Improve the superelevation of the northbound travel lanes of MD355 in conjunction with the proposed intersection relocation and redesign.
- 2. Provide fourteen-foot-wide outside travel lanes.
- 3. Provide a five-foot-wide sidewalk on the east side of Frederick Road, separated from the curb by a nine-foot-wide landscape panel with street trees.

- 4. Obtain a park permit for all work on park property prior to the start of construction. As compensation for the loss of approximately .75-acre of land currently used as park, for completion of the roadway improvements, and noting that approximately .65-acre of forest will also be lost, M-NCPPC will require that:
 - a. reforestation be completed by the applicant at a rate of 2 X the amount of acreage previously used as parkland and now required for this roadway improvement project (+-1.5 acres);
 - b. reforestation be at a site designated by M-NCPPC Parks Department that is within the same watershed with all reforestation work to be installed prior to completion of this roadway/SWM improvement project;
 - c. construction of a wall be considered to limit the construction encroachment onto parkland beyond the Master Plan roadway right-of-way and will require construction of the wall if feasible, with a suitable architectural treatment.
 - d. approval of the LOD be determined during the on-site pre-construction meeting;
 - e. root pruning be done along the entire LOD for the project;
 - f. reforestation aftercare work include two years maintenance and management of all trees.

Staff also recommends that the Executive:

- 5. Accept management and maintenance responsibilities, including stormwater management, for the property titled to Montgomery County that is now used as parkland but would be impacted by the proposed project.
- 6. Consider extending the recommended sidewalk along the east side of MD355. At a minimum, the sidewalk should be extended approximately 400 feet to the northern driveway of Ridge Road Recreational Park, but preferably it should be extended to the Milestone Manor Lane intersection.
- 7. Check the volume/water elevations of the sand filter in the stormwater concept for adequacy.

PREVIOUS BOARD ACTION AND MANDATORY REFERRAL PROCESS: This project would be constructed by Clarksburg Village, LLC and Greenway Village under permit from the Montgomery County Department of Permitting Services as a condition of approval for Preliminary Plans 1-01030 and 1-02033. The applicants are required to construct a separate left-turn lane from southbound MD355 to eastbound Brink Road, and to construct a separate left-turn lane from westbound Brink Road to southbound MD355.

Most Mandatory Referrals of transportation projects that the Planning Board reviews are projects that are proposed by either the Maryland State Highway Administration or the Montgomery County Department of Transportation. The proposed improvements at Frederick Road (MD 355) and Brink Road are being reviewed as a Mandatory Referral as they fall under the scope of Article 28, Sec. 7-113, which covers roads "located, constructed, or *authorized*" in the public

right-of-way. The details of these proposed off-site improvements have not previously been approved by the Board.

SITE DESCRIPTION

The area on the west side of MD355 is undeveloped. The northeast corner of the intersection has a single family house on a ½-acre lot but is otherwise bordered by vacant land and homes at least 400 feet from the road. The southeast corner of the intersection is the northernmost point of Ridge Road Recreational Park. The west side of the roadway is bordered by North Germantown Greenway Stream Valley Park.

PROJECT DESCRIPTION

The project is intended to satisfy conditions of approval on the Clarksburg Village and Greenway Village developments. Left turn lanes would be constructed on southbound MD355 with a curb along the east side of MD355. Left turn lanes would be constructed on westbound Brink Road, which would be realigned to meet MD355 at more of a 90-deree angle (see Attachment 2).

MASTER PLAN RECOMMENDATIONS

The Clarksburg Master Plan calls for Brink Road to be a 4-lane divided Arterial road in a 100' ROW and calls for Frederick Road to be a 4-lane divided Major Highway in a 120' ROW.

The Countywide Bikeways Functional Master Plan recommends a shared use path along Frederick Road and a signed shared roadway along Brink Road.

FINDINGS

The road improvements are consistent with the conditions of approval of Preliminary Plans 1-01030 and 1-02033.

The road improvements are consistent with the development of the recommended roadway widths of Frederick Road and Brink Road in the Clarksburg Master Plan.

No bike improvements are required at this time to be consistent with the Master Plan.

A five-foot-wide sidewalk on the east side of Frederick Road is required to be consistent with County road standards, but is not proposed to be provided.

STAFF ANALYSIS

The proposed construction would move the intersection of the two roads about 160 feet to the south. The existing horizontal curve on MD355 at this intersection has about a 600' radius, which is sufficient for a 40 mph design speed, the middle of the range for a Suburban Major Highway in the Road Code Executive Regulations approved by the Council in December 2008. The superelevation, or banking, of the roadway does not meet current standards however and

would need to be modified to reflect the intersection relocation and redesign. We recommend that DPS require the developer to correct the superelevation of northbound MD355 at the existing Brink Road intersection as required by the Maryland State Highway Administration.

Pedestrian Accommodation

Frederick Road is proposed to remain an open-section road on the west side but would be curbed on the east side, adjacent to Ridge Road Recreational Park. Sidewalks are generally needed where we have curbed sections since there is no place for the pedestrian to walk outside the travel lane, and it's more difficult to get out of the roadway quickly if there's a car coming. By County Code, sidewalks are generally required unless we have residential frontage with lots greater than 25K s.f.; the zoning here is R-200, i.e. 20K s.f. lots, and our general policy is to have them on Arterials and Major Highways in the Suburban area. Frederick Road also has two bus routes on it.

There is no standard for a four-lane Major Highway, but the new County Road Standard 2004.09 for a four-lane Divided Suburban Arterial Road requires a five-foot-wide sidewalk with a nine-foot-wide landscaped buffer. We recommend that sidewalks be constructed along the east side of Prederick Road and the north side of Brink Road. All sidewalks should be separated from the curb by a nine-foot-wide landscape panel and should extend through the limits of paving.

The closest intersection to the south with a crosswalk on Frederick Road is Milestone Manor Lane, opposite the southern park entrance, a distance of about 1,700 feet from the proposed relocated intersection of Frederick Road and Brink Road. The sidewalk that staff recommends along the east side of Frederick Road would be about 500 feet long. The County should also consider constructing a sidewalk connection between the developer-built segment to the northern park driveway (a 400-foot length), but a connection to Milestone Manor Lane (a 1,200-foot length) is preferred. The first would provide a good connection for Clarksburg residents to the recreational park; the second would provide a good connection to the rest of the sidewalk network.

Bicyclist Accommodation

There is an off-road bikeway on the west side of MD355 just to the south of the proposed improvements, which meets the Master Plan recommendations. We do not recommend that the bikeway be built on the west side of MD355 as part of this project since it would have to be torn up when the road is widened to its ultimate width. The same rationale should be used for not requiring a sidewalk to be built on the south side of Brink Road.

As part of the review of the Executive Regulations developed as a follow-up to the Road Code revisions, the Planning Board recommended that a standard for on-road bike accommodation be developed. No on-road bike standard has yet been developed but we recommend using the guidance the Board gave at that time. Therefore, fourteen-foot-wide (min.) outside travel lanes should be provided along MD355.

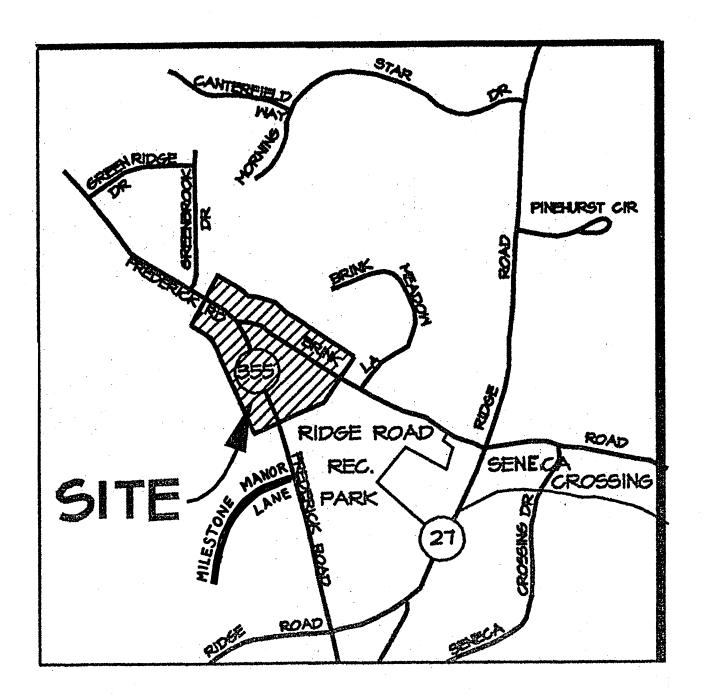
PARKS IMPACT

The parkland that is required to be taken for this project, as defined by the proposed ROW for Brink Road, is currently titled to Montgomery County while being managed and maintained by M-NCPPC Parks Department as part of Ridge Road Recreational Park. Parks Department staff recommends that the management and maintenance responsibilities for the affected property be transferred to the County upon approval of the Mandatory Referral for this project.

The proposed roadway improvements along Rte. 355 extend beyond the current public ROW, with 2:1 side slopes grading extending approximately 13 feet into the property now used as parkland. The applicant will need to apply for a 'Permit for Construction on Parkland' to complete the grading that extends into the parkland, once 100% plans are completed and approved. We recommend that the applicant investigate incorporating a wall, on or within the public ROW, in order to minimize the grading on land outside the Master Plan roadway ROW.

The proposed improvements along MD355 would set the ultimate edge of the roadway. The proposed improvements along the Brink Road park frontage would not be permanent however; the widening to the ultimate four-lane divided roadway per the Master Plan would take place at some future date.

The proposed SWM plan does include a splitter structure that sends storm water from smaller storms into the sand filter for quality control, while storm water from larger storms bypasses the splitter. We recommend that the volume/water elevations of the sand filter in the SWM concept be checked because it appears that any water over elevation 523.5' will cause an overflow in the splitter structure.



SCALE I'= 1000'

Source: Apex Engineering