



Platt Ridge Drive Extended Drive, Mandatory Referral No. MR2014012

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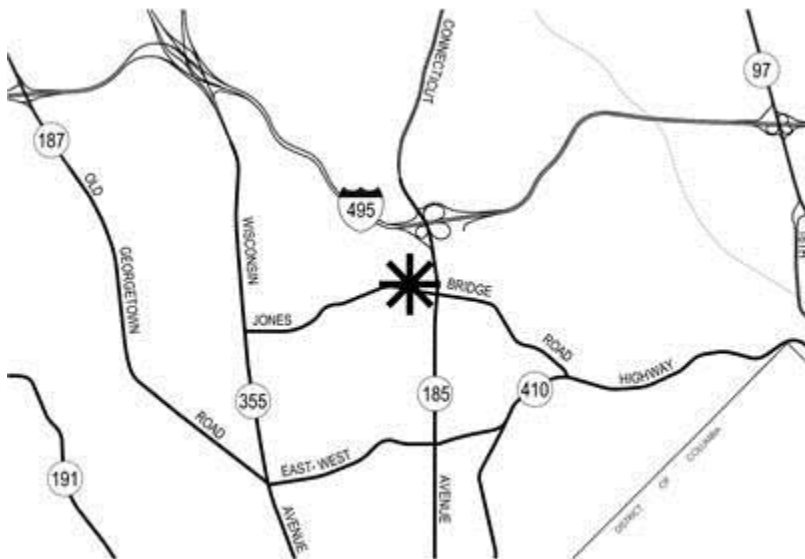
Completed: 07/03/14

Description

This project would construct an extension of the existing two-lane Platt Ridge Drive from its current terminus at Jones Bridge Road to the current terminus of Montrose Driveway just west of Spring Valley Road, a distance of approximately 483 feet. This non-master plan road project is proposed to be constructed through North Chevy Chase Local Park.

Mandatory Referral approval is requested for these improvements. A separate memo will also be provided by Parks staff on park impacts and the disposition of park property.

The project is located within the Bethesda-Chevy Chase Master Plan area. See Vicinity Map below.



Summary

Staff recommends that the Board approve this project with comments to MCDOT.

The Platt Ridge Drive Extended project is proposed as the new main entry to the Chevy Chase Valley community to resolve longstanding access issues to and from Jones Bridge Road. This project was

presented to the Board in September 2010 as the solution to avoid an expected safety problem with installing an “interim” traffic signal at Spring Valley Road, which had been requested by Chevy Chase Valley residents to address a neighborhood access problem. Both SHA and MCDOT expected that a signal at this location would cause safety problems, but MCDOT agreed to install it on an interim basis to respond to residents’ concerns about a forecast increase in traffic resulting from the 2011 BRAC move of Walter Reed Hospital to the National Military Medical Center (NMMC) in Bethesda. MCDOT stated that they would monitor the safety of the signal but would continue the design of the Platt Ridge Drive Extended project in expectation of the signal’s failure.

This project was presented to the Planning Board on April 3, 2014 but action on the submitted Forest Conservation Plan (FCP) had to be deferred because comments had not yet been received from the County Arborist. MCDOT then requested a deferral on the Mandatory Referral also since it could not be approved without an approved FCP. (Following the meeting, the County Attorney submitted an opinion that demonstrated that the project is not required to submit a Forest Conservation Plan for approval. MCDOT has submitted additional information to demonstrate that they are meeting their forest conservation requirements, as discussed in Attachment 1.)

While no action was taken at this meeting, the consensus of the Board appeared to be that our review should not be confined to MCDOT’s original justification for the project - whether the traffic signal at Jones Bridge Road and Spring Valley Road had created a safety problem - but whether the proposed new road would serve a more general public benefit. **This memo reflects that broader view.**

The Board also asked MCDOT to provide updated traffic counts and crash rates, which would address the original rationale for the project. The traffic information received from MCDOT since the Board’s April 3rd discussion shows that the Average Daily Traffic (ADT) has increased from 18,240 in 2008 to 23,580, a 23% increase. While the number of crashes increased slightly, the large increase in traffic meant that the crash rate declined slightly even with the Spring Valley Road traffic signal.

Since the interim traffic signal at Spring Valley Road has not been shown to be a safety problem, the decision to construct the road must be based more on its ability to provide easier local access and better traffic operations on Jones Bridge Road. As to these objectives:

- The project would provide easier access for Chevy Chase Valley residents during peak hours when westbound Jones Bridge Road traffic may be queued through the Spring Valley Road traffic signal.
- The conversion of the Spring Valley Road intersection to right-in/right-out-only would eliminate some types of potential crashes, possibly leading to a reduction in the current high crash rate on Jones Bridge Road.
- The elimination of conflicting traffic at Spring Valley Road could improve the flow of westbound Jones Bridge Road traffic during evening peak hours.

Achieving good operations for our major roadways is important, but traffic benefits need to be balanced against the impacts of making improvements. The Board’s decision on this project requires reconciling its custodial duties in regard to impacts on park property that would be caused by a non-master plan project, as covered by its action on the disposition of park property, with the broader view required for the mandatory referral.

At the April 3rd meeting, the Board also asked MCDOT to redesign the proposed road to address some safety concerns. The redesigned road is much improved over what was previously submitted, but would benefit from additional changes so that it can adequately serve as the main entry to the Chevy Chase Valley neighborhood.

Based on the Board's direction to look at a broader rationale for the proposed project, the receipt of updated traffic and safety information, and the redesign of the proposed Platt Ridge Drive Extended, we recommend the following detailed comments to MCDOT:

Comments to MCDOT

1. This project is approved to ensure permanent adequate access for the Chevy Chase Valley community and to improve safety along Jones Bridge Road.
2. While much improved over the previously submitted design, the horizontal alignment of the proposed road meets only the requirements of a tertiary road and is therefore less than desirable to serve as the primary access to the Chevy Chase Valley community and the Chevy Chase Recreational Association clubhouse and facilities. Consider making further revisions to meet at least secondary road standards; these revisions would likely impact the rear portion of the adjacent private property fronting on Jones Bridge Road.
3. The cost to acquire any park and private property required to construct this road at a satisfactory horizontal and vertical alignment should be reflected in this project's PDF.
4. Non-native Invasive species must be removed from the parkland to be transferred, as well as in the remaining forested area at North Chevy Chase Local Park.
5. For the proposed bioswale:
 - a. Design the bioswale and roadside swale slopes with channel stabilization methods to be non-erosive;
 - b. Stabilize the graded 2:1 side slope with low maintenance ground cover;
 - c. Incorporate underdrains incorporated into the media
 - d. Provide an access path from the road to the bioswales to facilitate future maintenance.

Previous Board action

On September 16, 2010, the Planning Board discussed MCDOT's traffic study of the Chevy Chase Valley area and the potential construction of an extension to Platt Ridge Drive. The Board did not take an official vote but the guidance to MCDOT was that the Board was agreeable to proceeding with the study with the understanding that MCDOT would assess the adequacy of the "interim" traffic signal at Spring Valley Road and Jones Bridge Road and quantify the environmental and park impacts when the project was submitted for the Board's formal review.

The Mandatory Referral of Phases 1 and 2 of the Maryland State Highway Administration's (SHA's) Jones Bridge Road/Connecticut Avenue intersection project was denied by the Board on July 22, 2010, in part because they felt that inadequate coordination had taken place to address the concerns of the Village of North Chevy Chase and of the residents of the west side of Connecticut Avenue north of Jones Bridge

Road. SHA overruled the Board's denial and proceeded with the project but made access changes along Connecticut Avenue at the residents' request.

In its Mandatory Referral review of Phase 3 of SHA's Jones Bridge Road/Connecticut Avenue intersection project on July 16, 2012, the Board approved the relocation of a portion of the Forest Conservation Easement on the south side of Jones Bridge Road at Howard Hughes Medical Center to accommodate the improvements on the west leg of Jones Bridge Road. But the Board denied the proposed improvements on the east leg of Jones Mill Road because the impacts to residents of Chevy Chase Park at the southeast corner (removal of an existing boundary wall and approximately 90 trees) were felt to be too great. SHA is proceeding with this project – including the improvements on the east leg of Jones Bridge Road - but the construction is not anticipated to begin until this fall.

Site Context and Background

The project would be constructed through North Chevy Chase Local Park and abut, but not significantly impact, adjacent single-family residential properties. One property with two single-family homes fronting on Jones Bridge Road abuts the project on the west. Abutting the project on the east are seven single-family homes, including one on the north side of Montrose Driveway. These homes are part of the Chevy Chase Valley community, consisting of 51 homes and the private Chevy Chase Recreational Association which includes the historic David Fairchild mansion. The Spring Ridge Drive/Jones Bridge Road intersection provides the principal ingress/egress to this community and is just east of the park.

In accordance with the recommendations of the 2005 Base Closure and Realignment Commission, Walter Reed Hospital in Washington, DC was moved in 2011 to the Walter Reed National Military Medical Center (NMMC), immediately west of North Chevy Chase Local Park. NMMC now serves as the headquarters for Joint Task Force National Capital Region/Medical – and is the core of an integrated tri-service, military medical facility serving the National Capital Region. As noted above, SHA will construct two intersection improvement projects at the Jones Bridge Road/Connecticut Avenue intersection, one block east of Spring Valley Road, to mitigate their forecast increase in traffic from the BRAC move.

Project Description

The proposed Platt Ridge Drive Extended would be built as a 483-foot-long, 20-foot-wide mostly open-section road that would be elevated as much as 13 feet above the existing ground level. The proposed site includes an existing drainage channel with drainage structures at either end. As part of this project, a pipe would be installed between these drainage structures and the significantly eroded channel would be regarded to create a bioswale to manage stormwater.

The southern end of the project is at the existing intersection of Jones Bridge Road and Platt Ridge Road, which primarily serves as the access to Howard Hughes Medical Institute (HHMI) on the south side of Jones Bridge Road. Directly opposite Platt Ridge Drive is the southeast corner of North Chevy Chase Local Park. (See map below.) The proposed road would extend north from the intersection, passing beside the homes on the west side of Spring Valley Road. The northern end of the project would tie into the existing terminus of Montrose Driveway, which has one additional house on the north side that fronts on Spring Valley Road.

The median on the west leg of Jones Bridge Road at Platt Ridge Drive would be removed to create a left turn bay to access the new road from eastbound Jones Bridge Road. The Jones Bridge Road curbs to be built by SHA would remain in place so there would be no additional impact on private property.



Master Plan Consistency

The 1990 Bethesda-Chevy Chase Master Plan recommends that the access problems associated with the Spring Valley Road/Jones Bridge Road intersection be addressed, however no extension of Platt Ridge Drive is recommended in this plan. We believe that the installation of the traffic signal is sufficient to fulfill the master plan’s recommendation for better access to the Chevy Chase Valley neighborhood. Whereas the roadway extension does not have such master plan support, it would provide better neighborhood access during peak hours. Conversion of the Spring Valley Road intersection to right-in/right-out only would meet the goal of facilitating smoother traffic flow.

Preservation of parkland and woodlands are also noted as objectives of the master plan. The construction of the proposed road would require the removal of forested parkland and would be inconsistent with those objectives.

Additional analysis

Transportation

Access

Ingress into the neighborhood is currently provided only from Jones Bridge Road via Spring Valley Road, which would become a right-in/right-out operation with the proposed elimination of the traffic signal at this intersection and closure of the median opening on Jones Bridge Road. The proposed new road would provide the primary ingress into the Chevy Chase Valley neighborhood for people traveling east on Jones Bridge Road; Spring Valley Road would continue to be the primary ingress from westbound Jones Bridge Road.

Ingress into the neighborhood was previously also provided directly from Connecticut Avenue via Woodlawn Drive, Montrose Driveway, and Parsons Road, but that access was removed by SHA in

response to a request by residents to reconfigure the intersections to prohibit turns into the neighborhood; that work was completed last year. Egress from the neighborhood is still permitted to southbound Connecticut Avenue at these three streets.

Egress from the neighborhood to Jones Bridge Road is currently provided by the traffic signal at Spring Valley Road; access to Connecticut Avenue in both directions is provided via eastbound Jones Bridge Road. The future primary egress from the neighborhood to Jones Bridge Road in both directions and to northbound Connecticut Avenue would be via Platt Ridge Drive Extended.

Safety

On September 16, 2010, MCDOT presented a concept for this project to the Planning Board and promoted the new road as the long-term solution for safe access to the Chevy Chase Valley community, with the expectation that the “interim” traffic signal at Spring Valley Road/Jones Bridge Road would prove to be unsafe. The Planning Board agreed to allow the study to proceed on that safety basis even though the new road is not in the master plan and would be constructed on parkland. The impacts of such road construction had not yet been identified and the expectation was that when MCDOT returned for approval of the project, those impacts and the safety experience of the “interim” signal would be detailed. Indeed, following up on an October 4, 2010 public meeting attended by Planning, MCDOT, and SHA staff, the Chevy Chase Valley Citizens Association wrote in their letter of November 15, 2010, *“It is our hope that once the light is installed, the actual operation of the intersection would disprove the assertions that the signal would inadvertently cause more harm than good.”*

As noted in the above Summary, recent traffic data provided by MCDOT show that the Average Daily Traffic (ADT) has increased from 18,240 in 2008 to 23,580, a 23% increase (see Attachment 2). But while the number of crashes increased slightly, the large increase in traffic meant that the crash rate declined even with the Spring Valley Road traffic signal. The small reduction in crash rates is statistically insignificant, but helps demonstrate that the interim traffic signal at Spring Valley Road has not been shown to cause a safety problem.

Capacity/Efficiency

While the project was initiated to address an expected safety problem, this effort is now focused more on standard engineering practice concerns with close spacing of intersections including queuing through the Spring Valley Road intersection. While the queuing problem through this intersection would be reduced by means of SHA’s Phase 3 improvements to the Jones Bridge Road/Connecticut Avenue intersection, these improvements are not a panacea. Backups for eastbound traffic on Jones Bridge Road in the afternoon peak period currently extend about a half-mile past Platt Ridge Road, as confirmed by SHA staff in a recent meeting.

SHA’s improvements to the Jones Bridge Road/Connecticut Avenue intersection were intended to ensure that the traffic congestion after the BRAC move of Walter Reed Hospital to the National Military Medical Center (NMMC) was no worse than it was prior to the move. While the objective was also to get these improvements done prior to the move, that did not occur. The Phase 3 improvements of the Jones Bridge Road/Connecticut Avenue project have not yet been advertised even though the BRAC move was completed in 2011.

We agree that the intersection spacing with the additional traffic signal at Spring Valley Road is less than guidelines call for and would work better in terms of the vehicular operations of the roadway without it.

As the updated traffic information from MCDOT shows, traffic volumes have increased since the BRAC move, but SHA's Phase 3 improvements - now scheduled to start construction later this year - will add a third eastbound left turn lane on Jones Bridge Road at Connecticut Avenue, reducing the length of the peak-hour period when the traffic queue extends through the Spring Valley Road intersection.

Priorities and Funding

This project is in the County Executive's Recommended Capital Improvements Program (CIP) with an estimated cost of \$3.7M for a 483-foot-long 20-foot-wide road, about \$7,551 per linear foot. This is actually more expensive on a linear foot basis than the master plan alternative for M-83, a four-lane divided roadway, which is estimated at \$350M for a 12.2-mile road, or about \$5,433 per linear foot. The cost for the Platt Ridge Drive Extended project however does not include right-of-way.

While we agree that this project would provide easier access during peak hours for Chevy Chase Valley residents and could improve operations on Jones Bridge Road, this is a very costly project whose benefits would likely not compare favorably to other competing projects in the CIP.

Design

Since this proposed new road is not in the master plan, it has not been classified. MCDOT's position is that since the 51 homes in Chevy Chase Valley is less than the 75-home maximum specified in the Subdivision Ordinance that can be adequately served by a tertiary street. But this gives little consideration to the additional traffic load that is generated by the Chevy Chase Recreational Association (CCRA) - which includes swimming pools, tennis courts and a nursery school/daycare among its facilities - for which it serves as the primary point of access. Also, a Primary street is normally the lowest classification street that is built as a CIP project without being partially funded by the community to be benefited.

Horizontal Alignment: The revised alignment of Platt Ridge Drive Extended is proposed to have back-to-back horizontal curves with 135-foot and 400-foot radii, which is a significant improvement over the one discussed at the April 3rd hearing. The proposed curves cause less of a concern than the originally proposed 100-foot and 500-foot curves because the degree of curvature is less on the smaller radius and the difference between the two - which governs how quickly drivers must correct their steering - is smaller.

The revised design is adequate for a tertiary street, but is far less than required for a primary street, which requires a 300-foot radius minimum, as well as a tangent (a straight length of roadway) at least 100 feet long between two reverse curves. It is also less than required for a secondary street, which requires a 150-foot radius minimum without a tangent between the curves. The proposed road is therefore sufficient to meet only the standard for a tertiary road.

The ability to improve the design further however has been constrained by MCDOT's decision to confine the footprint of the roadway to parkland as a base condition, rather than to design the road that we need and to determine whether or not the impacts on private property are acceptable.

The proposed horizontal alignment less than desirable to serve as the primary access to the Chevy Chase Valley community and the Chevy Chase Recreational Association clubhouse and facilities. MCDOT should consider making further revisions to meet at least secondary road standards, revisions that would likely impact only the rear portion of one adjacent residential lot.

Vertical Alignment: The maximum proposed grade of the proposed road has been reduced from 10.75 percent to 10 percent, and the grade would decrease as northbound drivers head into the proposed 135-foot radius horizontal curve. Therefore, our concern about the combination of the horizontal alignment and downslope is significantly reduced.

Bike and Pedestrian Accommodation

Bicyclists and pedestrians would not be accommodated on the proposed road, which is intended to bring vehicles to a signalized intersection and for which the minimum roadway width is proposed to reduce impacts to parkland. We concur with keeping the typical section as small as possible through parkland and that there is no reason to provide additional bike or pedestrian accommodation since there are no additional destinations on this short road.

The Platt Ridge Drive intersection is where the shared use path that MCDOT constructed on the north side of Jones Bridge Road a couple of years ago will switch to the south side of the road when SHA constructs their Phase 3 intersection project. The current design crosses the path on the east leg of the intersection but with no median pedestrian refuge and with only a single handicap ramp in the southeast corner. We recommend that MCDOT work with SHA to ensure that a safe crossing is provided that adequately accommodates bicyclists, a crossing that includes a median refuge on Jones Bridge Road as well as dual directional handicap ramps at the southeast corner; both ramps on the east leg should be constructed to be eight feet wide.

Parks

Background

North Chevy Chase Local Park serves the Bethesda/Chevy Chase area. It is located south of Interstate 495, west of MD Route 185 (Connecticut Avenue), east of the Walter Reed National Military Medical Center, and north of Jones Bridge Road. The park is approximately 31 acres in size and includes a park activity building, two tennis courts, a full basketball/multi-use court, playground, three athletic fields, and parking area. The three athletic fields include two diamonds and a rectangular overlay. One of the diamonds serves as the home field for Bethesda Little League.

Unimproved areas of the park are covered with relatively high quality, mature, mixed deciduous forest. Because of its structural complexity and maturity, the forest supports a wide variety of wildlife species and offers significant aesthetic appeal. The forest also provides significant air quality and stormwater management benefits.

The 1990 Bethesda-Chevy Chase Master Plan noted that the park acreage per person in the planning area is low compared to other planning areas and that these parks provide “relief from concrete and asphalt.” The plan also notes that the sense of openness and beauty of the area is enhanced by the presence of “wooded vacant developable land” in parks. Preservation of woodlands is also noted as an environmental objective.

Mitigation/Compensation for Proposed Impacts on North Chevy Chase Local Park

A separate memo to be discussed at this Board session will be provided by Parks staff on the specific impacts to North Chevy Chase Local Park and on the disposition of park property.

According to language in the Platt Ridge Drive Extended Project Description Form (PDF) in the CIP, M-NCPPC is expected to dedicate the right-of-way for the project, or it will be purchased by Montgomery County using ALARF funds.

Since this project is not a master planned road, dedication of parkland for the roadway right-of-way at no cost is not appropriate. A no-cost land transfer would set a bad precedent by making road projects through parkland far cheaper than alternatives outside of parks. Any land exchange or sale of parkland for this project would require approval of the Maryland-National Capital Park and Planning Commission (Montgomery County and Prince George's County Planning Boards).

As MCDOT stated at the April 3rd hearing, they do not include right-of-way costs in the PDF for projects when only one or two landowners are impacted, so as not to give the owners any edge in negotiations. M-NCPPC is the only landowner affected by this project in any significant way however, so this concern should not apply. In addition, replacing parkland is likely to be a significant proportion of the project cost and not showing it in this PDF substantially understates the true cost of this project.

As general background information on parkland impacts, we note that the United States Department of Transportation Act (DOT Act) of 1966 included a special provision - Section 4(f) - which stipulated that the Federal Highway Administration (FHWA) and other DOT agencies cannot approve the use of land from publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and private historical sites unless the following conditions apply:

- There is no feasible and prudent alternative to the use of land.
- The action includes all possible planning to minimize harm to the property resulting from use.

The design of the proposed roadway however is in large part the result of MCDOT trying to keep impacts of the road limited to park property rather than avoiding park property. We recommend that the Board consider what potential precedents could be set in the approval of this non-master planned project on park property, the land transfer, and the parkland mitigation

Adequate mitigation for parkland impacts needs to be required not just to keep the park system whole, but also to discourage parkland from being seen as an easy choice to resolve transportation problems or as a land bank for future County transportation projects. Until the DOT Act of 1966, as discussed above, this was the predominant view of transportation agencies when freeways were frequently run through parkland because it was "empty land". The fact that this is a County project that does not have federal funding and is therefore not subject to this law should not be seen as a reason to flout its intent. While the property in question is titled to M-NCPPC, much of the land that has been added to the park system in recent years is titled to Montgomery County and thus a transfer from parkland to public right-of-way would be easier, increasing our concern.

In addition to clarifying in its comments the reason for approval of the project - to ensure permanent adequate access for the Chevy Chase Valley community and to improve safety along Jones Bridge Road - we recommend that the Board consider the need to discourage the future targeting of park property as the site for non-master plan transportation projects when determining the parkland mitigation package.

Conclusion

The Platt Ridge Drive Extended project was intended as a backup solution should the “interim” traffic signal at Spring Valley Road not work safely, but there is no documented safety problem with that signal. The conversion of the Spring Valley Road intersection to right-in/right-out only in conjunction with construction of the proposed Platt Ridge Drive Extended however would provide easier access for Chevy Chase Valley residents during peak hours, eliminate some types of potential crashes on Jones Bridge Road, and possibly improve traffic operations.

The proposed alignment of Platt Ridge Drive Extended is less than desirable and would benefit from additional changes in the horizontal alignment, but does not pose a significant safety concern.

The reasons for any agreement on the transfer of parkland for non-transportation projects should be clearly outlined to avoid setting any undesirable precedents and the parkland mitigation package should consider both the need to keep the park system whole, as well as discouraging its being seen as a potential land bank for future non-master plan transportation projects.


ATTACHMENTS

1. Platt Ridge Drive Forest Conservation Law Requirements
2. Traffic Volumes, Queuing, and Crash Rates on Jones Bridge Road



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

MEMORANDUM

TO: Larry Cole, Master Planner, Functional Planning and Policy
FROM: Tina Schneider, Senior Planner, Area 1 
DATE: June 25, 2014
SUBJECT: Platt Ridge Drive Forest Conservation Law Requirements

ENVIRONMENT

Forest Conservation Law

On April 3rd, 2014, a Forest Conservation Plan (MR2014012) was presented to the Planning Board for the clearing of 1.35 acres of forest by the Montgomery County Department of Transportation (MCDOT). Staff recommended denial of the plan based on noncompliance with Section 22A-9, County Highway Projects; Section 22A-12(b)(1) & (2), Retention. At the time of the Board hearing the County Arborist had not had sufficient time to review the FCP and provide “a written recommendation” as required under Section 22A-21(c).

Subsequent to the April 3rd, 2014 hearing, the Applicant submitted a Forest Conservation Exemption on May 27, 2014, under Chapter 22A-5(e) “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”. The Exemption no longer requires the submittal of a Forest Conservation Plan. Instead, MCDOT must submit a Tree Save Plan and provide mitigation for specimen tree loss.

A Tree Save/ 22A-9 Compliance Plan was submitted on June 16, 2014 identifying tree protection and root pruning measures, offsite forest bank mitigation, and mitigation for the loss of specimen trees. The plan indicates a total forest clearing of 0.93 acres with a mitigation requirement of 0.93 acres. In addition, mitigation for the proposed removal of 718 inches of specimen tree caliper loss will occur at a 1:4 inch ratio. Therefore, the tree planting replacement requirement is 180-inch caliper with a minimum size planting of 3-inch trees which must result in the planting of 60 hardwood native 3-inch canopy cover trees.

Description

The Applicant has made efforts to minimize forest clearing by reducing the size and type of stormwater management facility proposed. Instead of a large open bioretention facility to the

north of the road, the stormwater treatment will now be linear bioswales, and located to the east of the road where impacts were have already proposed. This will reduce the forest clearing from 1.35 acres to 0.93 acres.

Modification to minimize forest impacts under Section 22A-9(a)(2)- County Highway Projects, have been taken to “minimize forest cutting or clearing and loss of specimen or champion trees to the extent possible”. In addition, other relevant Forest Conservation Law requirements have been applied:

- **Section 22A-9(b)**
Under Section 22A-9(b) the “constructing agency must reforest a suitable area at the rate of one acre of reforestation for each acre of forest cleared”. The Applicant will be removing 0.93 acres of forest and reforesting 0.93 acres of forest offsite.
- **Section 22A-9(c)**
Section 22A-9(c) requires meeting reforestation requirements under 22A-12(e) (Standards for reforestation and afforestation) which are proposed as offsite mitigation.
- **Section 22A-12**
Section 22A-12(e): Standards for reforestation and afforestation;
Section 22A-12(e): In lieu fee.
Section 22A-12 (h): (h) Agreements.
All requirements pertaining to the above law are being met.

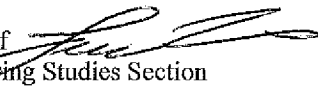
Stormwater Management

A Stormwater Management preliminary concept plan has not been approved by the Department of Permitting Services (DPS). DPS has however provided a verbal statement on July 2, 2014, that the proposed concept will likely work provided the grades of the swales can be addressed.

MEMORANDUM

June 6, 2014

TO: Bruce Johnston, Chief
Division of Transportation Engineering

FROM: Fred Lees, Chief 
Traffic Engineering Studies Section

RE: Traffic Volumes, Queuing, and Crash Rates on Jones Bridge Road

This memorandum is to address several requests raised in the April 14, 2014 letter from Montgomery County Planning Board Chair, Françoise M. Carrier to Arthur Holmes, Director of the Montgomery County Department of Transportation regarding traffic related issues associated with the proposed Platt Ridge Drive Extension project. Responses are outlined below:

- *The Board requests that MCDOT provide additional traffic data so that the safety experience along Jones Bridge Road since the installation of the signal, including any changes associated with the BRAC move to Bethesda, can be better assessed.*

Attached to this memo are a 12-hour turning movement count (TMC) at Jones Bridge Road and Spring Valley Drive, and a 48-hour tube count (TC) along Jones Bridge Road between Spring Valley Drive and Connecticut Avenue. The TMC was conducted on 4/23/14. The TC was conducted on 4/23-24/14.

Notable findings from the TC include:

- 1) ADT –The last count SHA conducted was in 2008 at which time the ADT was calculated to be 18,240. Since then SHA had been calculating new ADT's on an annual basis using a regional growth factor that did not reflect the impact of BRAC on the immediate vicinity. The SHA "grown" ADT for 2012 was 18,254.

The 24-hour volume of 26,198 when adjusted for month and day of week indicates a **current ADT of approximately 23,580, an increase of 29%**. Clearly, the SHA estimates failed to reflect actual conditions. Because we do not have annual counts we cannot know whether the 30% growth in ADT from 18,240 to 23,580 was relatively linear or in a series of distinct spikes.

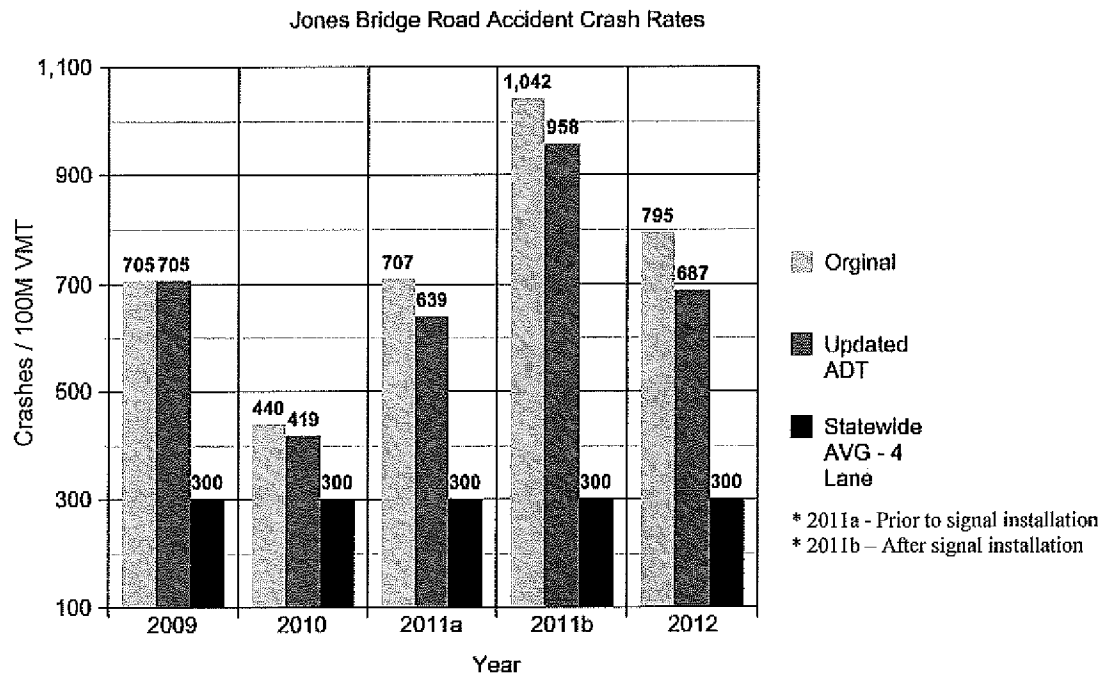
- 2) Expanded Peak Hour – although there may be one hour when the demand to travel is heaviest along Jones Bridge Road, because the traffic signal at Connecticut Avenue regulates how much traffic can move along Jones Bridge Road during any one hour, there is no individual hour where the volume is significantly higher. Rather, traffic volumes along EB Jones Bridge Road peak out and are steady at or near capacity from 2pm to 6pm.

- *The expected improvement in traffic conditions should be clearly documented and reconciled with current and forecast traffic conditions.*

SHA modeling previously provided showed significant reductions in delays along Jones Bridge Road with all of the improvements at this location. This modeling was done using volumes generated from older counts that did not reflect dramatic increases in traffic as a result of BRAC. New modeling has not been conducted, but it may be reasonably conferred that average delays will be even worse based on the most recent counts and that impacts will continue to begin earlier and stretch later.

Beyond the reduction in delays, by providing primary access for the community and allowing the closure of the median at Spring Valley Drive, the Platt Ridge Road project will address all of the safety/operational concerns at Spring Valley Drive previously outlined in our March 25, 2014 correspondence, copied as follows for reference:

- At present, residents turning left from Spring Valley onto Jones Bridge Road traverse four lanes of traffic, two in each direction. Eastbound Jones Bridge Road widens east of the intersection.
- After completion of the State's improvements this same traffic, turning left onto the main road, will have to traverse two westbound lanes and weave through four eastbound traffic lanes without any separate lane to pull into, in order to make a right turn onto Connecticut Avenue from a fifth eastbound lane at the intersection. If traffic is queued from Connecticut Avenue, it is very likely that some left turning traffic from the community will be caught stopped in the main line through lanes thus creating a potential for collisions that needs to be avoided.
- Crosswalks are often blocked forcing pedestrians to either walk between queued vehicles or in the travel lanes.
- Motorists tend to take unwise and aggressive chances when attempting to squeeze through the intersection (in this case at Spring Valley) when a queue is blocking them.
- Closely spaced signalized intersections increase the potential for some types of collisions. Because the signals at Spring Valley Road and Connecticut Avenue are so close, motorists often focus on the far signal's indications instead of the nearer one sometimes running the near signal's red indication. Anecdotal reports from the neighborhood indicate this is occurring in the EB direction as motorists try to "make" the signal at Connecticut.
- This section of Jones Bridge Road has historically had a significantly higher crash rate than the state-wide average for similar type roadways. As shown on the graph below, when adjusted for the increase in BRAC traffic, the crash rate for 100M VMT has not changed significantly and continues to be well above the average after the installation of the signal at Spring Valley Drive. The addition of conflict points (i.e., more lanes through the intersection in the proposed SHA intersection improvements) will also increase the potential for crashes.



Limits- Platt Ridge Drive to MD 185

- Motorists coming from the north and from I-495 and turning west onto Jones Bridge Road now have their own lane to facilitate this movement and may not be anticipating having to stop almost immediately after they turn at Spring Valley at a red signal increasing a potential for rear-end collisions.
- *Please provide calculations showing how much that longer queue (the current one mile peak hour queue) would be reduced.*

Traffic analysis software is used to calculate queue lengths. This software works well when volumes are below capacity and queues from one signal do not extend through an adjacent signal. Unfortunately that is the situation along Jones Bridge Road and there is no good way to calibrate the models to reflect the current up-to-a-mile queues with the existing volumes and lane configurations. Rather, the model generated a queue of 1,100'. What the models can do fairly well is calculate the queue lengths once the intersection improvements are made and it is operating under capacity. Therefore, the "after" queue length of 750' should be fairly accurate. If so inclined, one could calculate the difference between the current queue length of 5,280' and the projected length of 750' by subtraction and assume the reduction would be approximately 4,500'.