

**ITEM #7  
12/16/04 and**



**MEMORANDUM**

**DATE:** December 10, 2004

**TO:** Montgomery County Planning Board

**VIA:** Rose Krasnow, Chief  
Development Review Division

Cathy Conlon, Acting Supervisor  
Development Review Division

**FROM:** Richard A. Weaver, Coordinator (301) 495-4544  
Development Review Division

**REVIEW TYPE:** Preliminary Plan of Subdivision

**APPLYING FOR:** Preliminary Plan approval of one hundred eighty four (184) lots, ninety two (92) one family detached and ninety two (92) one family attached units including twenty three (23) MPDU's

**PROJECT NAME:** Casey Property at Mill Creek  
**CASE NO.** 1-02022

**REVIEW BASIS:** Chapter 50, Montgomery County Subdivision Regulations

**ZONE:** R-90 (MPDU Option)

**LOCATION:** Located at the southern terminus of Amity Drive, south of Ridge Road

**MASTER PLAN:** Shady Grove Sector Plan

**APPLICANT:** Oxbridge Development at Washington Grove, L.C.  
**ENGINEER:** Dewberry  
**ATTORNEY:** Linowes and Blocher

**FILING DATE:** September 14, 2001

**HEARING DATES:** December 16, 2004 and December 23, 2004

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**Staff Recommendation:** Approval, subject to the following conditions:

- 1) Approval under this preliminary plan is limited to the following:
  - a. Phase I – fifty-three (53) one family detached and twelve (12) one family attached residential units, including nine (9) MPDU’s.
  - b. Phase II - twenty three (23) one family detached and sixty-six (66) one family attached units, including eleven (11) MPDU’s
  - c. Phase III – sixteen (16) one family detached and fourteen (14) one family attached units, including three (3) MPDU’s
  
- 2) To satisfy LATR of the first 65 building permits, provide for the following off-site transportation improvements:
  - a. Install or provide funding to the Montgomery County Department of Public Transportation and Transportation (DPWT) to install the non-automobile transportation infrastructure amenities listed below prior to release of the first building permit:
    - Two bus shelters
    - Two sets of electronic signing for real-time transit information
    - 1,560 liner feet of off-site sidewalks and or bike path
    - Two bike lockers that are equivalent to one vehicular trip per locker
  
  - b. Provide for the future modification of the traffic signal operation at the intersection of Shady Grove Road and Epsilon Drive/Tupelo Drive. The modification includes the following:
    - Reconfigure the left-most lane now used for left turn and through movements to also permit a second right-turn movement to southbound Shady Grove Road permitted only during the weekday morning peak period (6:30 to 9:30 a.m.).
  
    - Install the following to limit right-turns on red from the inside eastbound approach lane

- a. A variable message sign(s) to indicate to motorists when right turns are permitted from the left-most eastbound approach lane.
  - b. Install the appropriate sign(s) to prohibit right-turns-on-red from the left-most eastbound approach lane.
- Change the traffic signal timing on the Epsilon Drive-Tupelo Drive approaches from concurrent eastbound-westbound movements to split phasing (i.e., when the eastbound movements have a green signal indication, while the westbound traffic is stopped with a red signal indication, and vice versa).
  - Prior to release of the first building permit, the following is needed to assure that traffic signal modification would be implemented to accommodate future increased traffic volumes:
    - Prepare plans and submit them to DPWT for review.
    - Post a bond to fund the modifications to the traffic signal operation in an amount as agreed to by DPWT.
- c. Prior to release of the first building permit, construct the extension of Amity Drive westward from its current terminus to the eastern stream buffer as follows:
- Dedicate 70 ft. of right-of-way for and construct this segment that is in accordance with DPWT's primary residential street standards and includes a five-foot sidewalk on the south side, an eight-foot bike path on the north side, and other cross-section design features/amenities.
  - Include along this segment the necessary vehicular and pedestrian access and provide a parking area for the master planned local park on the south side of Amity Drive.
- 3) To satisfy LATR, prior to release of the 66<sup>th</sup> building permit, provide the following transportation improvements:
- a. Provide for the construction of the westward extension of master-planned Amity Drive and its connection to the terminus of master-planned Crabbs Branch Way (i.e., from its terminus north of Shady Grove Road and northward under the existing I-370 bridge). The Amity Drive and Crabbs Branch Way extensions must be under construction prior to release if the 66<sup>th</sup> building permit or be funded in MCDPWT's CIP by December 23, 2008. Under construction means all construction contracts are let and all bonds are posted with the Montgomery County Department Permitting Service.

- b. Extend Amity Drive segment from the eastern stream buffer to the master-planned extension of Crabbs Branch Way as follows:
- Where approved by staff, use an environmentally sensitive reduced width primary residential street cross-section across the eastern and western stream buffer crossings.
  - Provide adequate traffic calming measures such as proposed traffic islands before and after the eastern and western stream buffer crossings. These measures are needed to discourage non-local traffic from using master-planned extensions of Amity Drive and Crabbs Branch Way as an alternative route between Shady Grove Road and Washington Grove Lane.
  - Provide along this segment the vehicular and pedestrian access and a parking area for the master-planned local park on the south side of Amity Drive.
  - Coordinate with prospective applicant(s) of the adjoining property west of the subject site regarding, 1) the alignment of Amity Drive master-planned extension approaching Crabbs Branch Way Extended, and 2) the transition and cross-sectional delineation of Crabbs Branch Way as an industrial roadway compared with Amity Drive as a primary residential street.
- 4) Enter into a traffic mitigation agreement that provides for effective transportation demand management with the Planning Board and DPWT to participate with the Greater Shady Grove Transportation Management District (TMD). The TMD's trip reduction goal is to achieve and maintain the commuting mode share goals of the Greater Shady Grove TMD of 25 percent non-auto drivers for the residents (and 12 percent non-auto drivers for workers) in the peak hours. DPWT is anticipating implementation of the Greater Shady Grove TMD and Share-A-Ride District within the time frame of this development.
- 5) Provide for the necessary right-of-way for the Inter County Connector (ICC) as follows:
- a. Record a plat of reservation for the right-of-way needed for the State Highway Administration (SHA) ICC according to their November 2004 plans for an interchange with the Shady Grove Metrorail Station Access Road including two stormwater management areas. The right-of-way should be held in reservation until the earlier of either:
    - September 1, 2005; or
    - A final Record of Decision is issued the Federal Highway Administration (FHWA) and that Record of Decision does not include the Reservation Area, or any portion thereof, within the final ICC alignment.

- b. If FWHA issues a final Record of Decision that includes the Reservation Area applicant shall either coordinate with SHA to negotiate a shared stormwater facility and thereby not require alteration of lots or submit a revised preliminary plan locating all dwelling units (including MPDU's), roadways, stormwater management ponds, public area and other related infrastructure outside of the Reservation Area and show dedicated ICC right of way on final record plat.
- 6) Record a "plat of reservation" for a period not to exceed 24 months (December 23, 2006) to include the area identified for a "proposed elementary school" (8.53 acres) as shown on the preliminary plan for Phase II.
- 7) Compliance with the conditions of approval for the preliminary forest conservation plan. The applicant must satisfy all conditions prior to recording of plat(s) or MCDPS issuance of sediment and erosion control permits.
- 8) At the time of site plan approval, applicant to submit a noise analysis for technical staff review and approval that delineates the location of the existing and 20-year future, 60 and 65 Ldn dBA noise contours and the methods to minimize exterior and interior noise levels if the analysis indicates the need for mitigation.
- 9) The applicant shall dedicate all road rights-of-way shown on the approved preliminary plan to the full width mandated by the Shady Grove Sector Plan unless otherwise designated on the preliminary plan.
- 10) The applicant shall construct all road rights-of-way shown on the approved preliminary plan to the full width mandated by the Shady Grove Sector Plan and to the design standards imposed by all applicable road codes. Only those roads (or portions thereof) expressly designated on the preliminary plan, "To Be Constructed By \_\_\_\_\_" are excluded from this condition.
- 11) Record plat to reflect a Category I easement over all areas of stream valley buffers and forest conservation that are not dedicated to Parks.
- 12) Record plat to reflect common ingress/egress and utility easements over all shared driveways.
- 14) Record plat to reference the Common Open Space Covenant recorded at Liber 28045 Folio 578 ("Covenant"). Applicant shall provide verification to Commission staff prior to release of final building permit that Applicant's recorded HOA Documents incorporate by reference the Covenant.
- 15) Within 24 months of the preliminary plan approval date (prior to expiration of the reservation plats for the school site) applicant to dedicate to MNCPPC the area shown on the plan identified as the Legacy Open Space Natural Area totaling approximately 12 acres.

- 16) Dedication of the delineated open space areas to M-NCPPC for use as parkland and protection of the valuable natural resources including: 1) the designated area located south of Amity Drive and east of the stream crossing in the Phase I Section of the plan to be used as a neighborhood park and, 2) the stream valley that lies between the developed portions of the property and along the south side of the site surrounding and including the streams and wetland areas. Dedication not to include any stormwater management ponds.
- 17) Dedicated land other than Legacy Open Space to be conveyed in concert with Condition #5 above pending resolution of ICC dedication boundaries. Dedication to Parks to be free of any trash and unnatural debris with the boundaries adequately marked and signed to delineate between parkland and private properties. Location and design of boundary markers and signs to be approved by M-NCPPC staff.
- 18) Applicant to construct within the dedicated neighborhood park, in the location as agreed by Applicant and M-NCPPC staff, the following recreation facilities to be constructed to park standards and specifications:
  - Multi-Age Playground with minimum size of 100' x 100'
  - Picnic Area with shelters and tables
  - Adequate Parking for active recreation and picnic areas
  - Basketball/Multipurpose Court (if no school is constructed)
 Location and design of recreation facilities and parking to be approved by M-NCPPC staff. Engineering and design plans, acceptable to M-NCPPC staff, to be prepared for the site by Applicant by time of Site Plan and are subject to staff approval.
- 19) Applicant to provide natural surface trails within the dedicated open space and sufficient access to the trail system from the communities adjacent to the parkland. Trail locations to be determined by time of Site Plan and be coordinated with and acceptable to M-NCPPC staff. Trails to be constructed to park standards and specifications.
- 20) Compliance with the conditions of approval of the MCDPS stormwater management approval dated May 4, 2004.
- 21) No recordation of plats until Site Plan signature set approval **and** final stormwater management approval by MCDPS.
- 22) Compliance with conditions of MCDPWT letter dated February 15, 2002 and as revised December 6, 2004, unless otherwise amended.
- 23) No clearing, grading or recording of plats prior to signature set approval.
- 24) Final approval of the number and location of dwelling units, sidewalks, bikepaths and recreational amenities will be determined at site plan(s).

- 25) A landscape and lighting plan must be submitted as part of each future site plan application for review and approval by technical staff.
- 26) Final number of MPDU's/TDR's as per condition #24 above to be determined at the time of site plan.
- 27) The Adequate Public Facility (APF) review for the preliminary plan will remain valid for sixty-one (61) months from the date of mailing of the Planning Board opinion.
- 28) Other necessary easements.

**SITE DESCRIPTION and SURROUNDING AREA:**

The Subject Property is within the Shady Grove Sector Plan area and is zoned R-90. The land area of the property totals 65.59 acres. Ridge Road and the Town of Washington Grove "Town" bound the site to the north. Amity Drive terminates at the eastern border of the site. A number of homes on Bounding Bend Court directly abut the eastern property line. Existing homes along Brown Street frame the western border of the property along with undeveloped industrial-zoned property. The southern portions of the site have a master plan ICC right-of-way traversing through it.

Currently the northwestern and central portions of the site are idle agricultural lands. The northeastern portion and the extreme southern portion of the site are forested. Two stream valleys tributaries to Mill Creek cross the site and are for the most part forested. Numerous specimen sized and other significant trees are found on the property both within and out of the stream valleys.

**PROJECT DESCRIPTION**

The application proposes a total of 184 units divided between 92 attached and 92 detached residential lots. The plan utilizes the MPDU option provision under Section 59-C-1.6 of the Montgomery County Zoning Ordinance. Although this option permits an increase in density above the total number of dwelling units permitted by the standard method, the application does not take advantage of allowance. The plan is at a density of 3.10 dwelling units per gross acre; below the allowable density of 4.39 dwelling units per gross acre. Site Plan approval procedures under Section 59-D-3 must be followed once the Planning Board approves a preliminary plan application.

The plan has been split into three separate phases to accommodate a number of development options and overriding public needs on the site. The phases and options are discussed below.

## **Phasing**

**NOTE:** *At the request of the applicant Phase I of this plan was officially noticed as a stand alone project to allow the Council PHED Committee time to comprehensively review the location, on Phase II, of an elementary school for anticipated development surrounding the Shady Grove Metro. Staff was reluctant to proceed with Phase I without Phases II and III due to concerns about losing the ability to acquire the Legacy Open Space area shown on the plan. As such the official notice for the application was revised and two hearing dates have been established to consider all three phases.*

*Should the Planning Board wish to move forward only with Phase I at this time, it is staff's recommendation that the 12 acres identified as Legacy Open Space be dedicated as "Public Use Area", which will allow more flexibility for future uses for this acreage.*

### Phase I

Phase I is comprised of fifty three one family detached and twelve one family attached units (9 MPDU's) and is approximately 22 acres in size including the adjacent stream valley. Staff has worked with the Town and applicant to provide a predominantly one family detached mix of units for this phase that staff believes to be compatible with the Town. Twelve townhomes including nine MPDU's will be located on the extension of Amity Drive. A landscape buffer of evergreens is proposed to provide screening along the Ridge Road edge.

Further preliminary review of the compatibility issues resulted in the reduction of a one lot to the rear of the homes on Bounding Bend Court and a reduction in lots to the rear of the existing homes at the turn in Ridge Road in the northernmost portion of the Subject Property. The applicant was also successful in revising grading to save a specimen tree in this area. Phase I also includes a local Park and a picnic area; the improvements of which are discussed in the conditions of approval. Staff anticipates further review of all remaining compatibility issues that are more appropriately addressed when the detailed site plan is submitted.

### Phase II

Residential development in Phase II consists of a maximum of twenty-three (23) detached and sixty-six (66) attached residential units, including eleven (11) MPDU's. Phase II also includes a dedicated Legacy Open Space parcel totaling approximately 12.0 acres, which is adjacent to the Town of Washington Grove.

As a result of the ongoing Shady Grove Sector Plan discussion, the plans include an option to reserve an 8.5 acre elementary school site. The Montgomery County Public Schools have reviewed the proposed school site and find it to be adequate with the caveat that the alignment of Amity Drive/Crabbs Branch Way will need to be shifted to the south to meet their operational requirements. The school site will be placed on a plat of reservation for a period not



to exceed 24 months from the Planning Board hearing. It is not known at this time if the dedication for the ICC right-of-way will require re-configuration of lots or changes to unit count. The applicant may be able to negotiate certain elements of the dedication with the SHA (i.e., shared stormwater management) that will avoid changes to the preliminary plan. If not, staff is recommending that the preliminary plan be revised by Planning Board action.

### Phase III

Residential Development in Phase III is limited to a maximum of sixteen (16) detached and fourteen (14) attached residential units, including 3 MPDU's. This portion of the site is also impacted by the November 2004 ICC alignment study. The final number of units will be determined once the State Highway Administration makes a decision on the need for the dedication area shown within the study. Again, it is not known at this time if the dedication for the ICC right-of-way will require re-configuration of lots or changes to unit count. The applicant may be able to negotiate certain elements of the dedication with the SHA (i.e., shared stormwater management) that will avoid changes to the preliminary plan. If not, staff is recommending that the preliminary plan be revised by Planning Board action.

### LEGACY OPEN SPACE

The Planning Board approved the addition of part of the property for the above-referenced plan to the Legacy Open Space (LOS) program on February 7, 2002. The 13-acre open field adjacent to Ridge Road was determined to provide a valuable buffer to the significant heritage resource that is the Town of Washington Grove. The entire Town has been designated a National Register historic site and the meadow enhances the environmental setting of this heritage resource by maintaining the town's rural character. The site was added to Legacy Open Space as a Heritage Resource (Class II) with protection recommended through negotiations with the developer as part of the development review process. Legacy Open Space staff is fully in support of the proposed preliminary plan.

The meadow on this Casey Property was determined to be significant according to several Legacy Open Space criteria:

- The property has countywide and national significance in terms of its association with the Town of Washington Grove, a heritage resource of national import with exceptional architectural character and rural viewsapes.
- Because of its association with Washington Grove, the site contributes to the Legacy program's heritage theme of the Rail Community Cluster, of which the Town is part.
- If preserved as open space, the site would serve as a protective buffer of the significant heritage resource that is Washington Grove. Over 57% of the Town is preserved as forest today, and the preservation of this open field would preserve a rural viewscape on the last remaining unprotected side of the Town.

Legacy Open Space staff has reviewed the Preliminary Plan at several stages and the Town of Washington Grove has been an active participant in negotiations with the applicant. The current plan proposes dedication to the Commission of 12 acres as the Legacy Open Space resource, including approximately 10.5 acres of the designated open field and approximately 1.5 acres of a forested hedgerow adjacent to the field. The Town negotiated with the applicant and reached a compromise whereby houses are proposed on 3 acres of the field in the northeast corner but the forested hedgerow would be saved to preserve the existing natural edge to the field. The current plan preserves approximately a 50-70 foot width along the entire length of the hedgerow on all phased versions of the plan.

Once the site is dedicated to the Commission, Legacy staff will work with appropriate staff across the agency and conduct public outreach to create a management plan that will address maintenance and public access issues for the site. Issues are anticipated to include the location and type of trails, native meadow grass enhancement and maintenance, forest management for the hedgerow, and control of non-native invasive plant species.

### **COMMUNITY BASED PLANNING – MASTER PLAN**

Preliminary Plan No. 1-02022, Casey at Mill Creek, is consistent with the Planning Board's Draft of the Shady Grove Sector Plan (2004) and previous master and sector plans. The proposed development will be developed in three phases: Phase I, which is in northeastern area of the site, will be developed with one family detached and attached dwellings, a local park and stormwater management facility. Phase II will include a dedicated Legacy Open Space land, which is adjacent to the Town of Washington Grove, and residential development and/or an elementary school. Additional residential development will comprise Phase III, which is adjacent to the Inter-County Connector (ICC) right-of-way, on the southern portion of the site. This preliminary plan establishes a reservation for an elementary school that will serve the future school needs for the Shady Grove Planning area. It also establishes a reservation for the Inter-County Connector.

The Planning Board's Draft of the Shady Grove Sector Plan (July 2004) recognizes that schools contribute in defining and serving communities. The Casey at Mill Creek property is recommended for an elementary school site because of its location in the community and its relationship to the dedicated Legacy Open Space land. The Plan recommends:

- Designating the Casey at Mill Creek South property as the preferred site for an elementary school.
- Designing the elementary school's layout to encourage walking as well as accommodate school buses and parking areas. Provide walkway connections from all sides of the surrounding community.
- Designing the school's architecture as a civic structure that enhances and complements the surrounding community. (p.86-See attachment)

The Board's Draft Plan also acknowledges the historic and cultural significance of the proposed Legacy Open Space land:

- Protect as much of the 13-acre Ridge Road Meadow on the Casey at Mill Creek property as possible through the development review process, balancing site constraints and developer interests. It has been identified as a Class II Heritage site in the Legacy Open Space Functional Plan and provides a historic setting and open space buffer for Washington Grove. It should offer passive recreational opportunities including trails and nature observation. As much as possible of the meadow should eventually be acquired through dedication. (p.84-See attachment)

The Board's Draft Plan also recommends extending the bikeway route along Crabbs Branch Way through the proposed development at Casey at Mill Creek to connect with Washington Grove's bikeway system (p.84).

### Background

#### Shady Grove Transit Area (1977) Sector Plan

The proposed Casey at Mill Creek development adheres to the 1977 Sector Plan recommendations, which states: "The cluster option should be exercised so as to gain flexibility in orienting homes away from the outer beltway. The Town of Washington Grove should be consulted as development plans are approved for this area to ensure that the unique identity of that Town is retained" (p.99-*See attachment*). The dedicated 12-acre Legacy Open Space ensures the protection of the Town of Washington Grove and the use of the R-90 MPDU option achieves flexibility in design of the development.

The Shady Grove Transit Area (1977) Sector Plan recommended two elementary schools: Blueberry Hill Elementary School and Amity Drive Elementary School. Amity Drive School was not developed because Montgomery County Public Schools (MCPS) in 1982 indicated that there was no need to acquire land for an elementary school. Mill Creek residential community was developed instead without a school. The Blueberry Hill site was dedicated as a park/school site but never developed with a school.

#### 1985 Gaithersburg Vicinity Master Plan

The Approved and Adopted (1985) Gaithersburg Vicinity Master Plan makes no specific recommendations for a school site regarding the Casey at Mill Creek property. Also, the Approved and Adopted Land Use Map does not show a school site in this area. The airpark, Shady Grove west, Smokey Glen area and Oakmont community were the four study areas that the 1985 Plan made specific land use recommendations. Also, the 1985 Plan noted that Blueberry Hill Park would be utilized for recreational purposes because of a greater demand than schools (p.90-*See attachment*). Therefore, the 1985 Master Plan does not specifically recommend a school site on Casey at Mill Creek property or on Blueberry Hill Park.

The 1985 Plan states that demographic projections from the Board of Education indicated that school-age population was decreasing throughout the 1980s. The number of school sites was "significantly reduced" and Charlene Elementary, east of Goshen Road; Emory Grove

Elementary, east of MD 124 and near Emory Grove Road; Muncaster Junior High, on Midcounty Highway; Stewarttown Junior High, located on Centerway School Road were declared surplus (p.89). MCPS decision not to acquire the Mill Creek South area for an elementary school is indicative of the reduced need for school sites.

## **ENVIRONMENTAL**

### **Forest Conservation**

There are 29-acres of existing forest on the property. The development is proposing to utilize an optional method of development and therefore must comply with Section 22A-12(f) of the Montgomery County code. This section of the code requires developments utilizing an optional method of development to either retain or plant a certain percentage of forest onsite. For this particular plan, the appropriate threshold is the conservation threshold, which is 13.12 acres.

The plan proposes to remove 12 acres of forest and retain approximately 17 acres of forest. The preliminary forest conservation indicates that the proposed plan retains more forest than is necessary to meet the forest conservation threshold and there are no forest planting requirements. In addition, there are unforested stream buffers areas that could be used for onsite planting areas if necessary in the future.

### **Environmental Guidelines**

The site includes stream buffers and wetlands. These areas will be protected by Category I forest conservation easements. The environmental buffers around all wetlands are a minimum of 40 feet. This is 15 feet greater than the wetland buffer required by the Maryland Department of Environment. All stream buffers are minimum of 125 feet from the top of the stream bank. Both the wetland and stream buffers are consistent with the environmental buffers identified in the Environmental Guidelines for Use IV watersheds. The only encroachment into stream valley buffers is for necessary infrastructure such as stormwater management outfalls and necessary road connections. All stream crossings will be designed using environmental sensitive methods.

### **Noise**

The property is located near the future ICC. When the State Highway Administration (SHA) conducted their noise analysis for the ICC they did not measure existing noise levels on the subject property nor will SHA provide noise mitigation for the future occupants. It is SHA policy to provide noise mitigation for existing developments when constructing new roads and developers to provide the noise mitigation for the future developments. Therefore, it is necessary for the applicant to prepare and submit a noise analysis with future site plans. The future site plans must identify the means to mitigate future noise levels to acceptable interior and exterior levels. M-NCPPC discourages residential units within 150 feet of the ICC. The preliminary plan submitted does not have any residential units within 150 feet area of the ICC. This separation is the first, and staff's preferable, method for noise mitigation.

## TRANSPORTATION

### Master Plan Roadways and Bikeways

According to the *Gaithersburg Vicinity Master Plan*, the nearby roadways and bikeways are functionally classified as follows:

1. Amity Drive is classified as an east-west primary residential street, P-6, with a 70-foot right-of-way width between Crabbs Branch Way Extended and Washington Grove Lane.
2. Crabbs Branch Way is classified as a four-lane north-south industrial road, I-6; with an 80-foot right-of-way width and 8-foot hiker-biker trail on the west side or a shared use path, SP-53, in the *Countywide Bikeway Functional Master Plan*.
3. Intercounty Connector (ICC) is classified as an east-west six-lane freeway (F-9) with a minimum 300-foot right-of-way width. The interchange of the ICC with the Shady Grove Metrorail Station Access Road is indicated as a dashed circle in the *Master Plan*.
4. Shady Grove Metrorail Station Access Road is classified as a four-lane north-south controlled major highway, M-94, with a 150-foot right-of-way.
5. Epsilon Drive is classified a north-south primary residential street, P-18, with a 70-foot right-of-way between Amity Drive and Shady Grove Road.
6. Shady Grove Road is classified as a six-lane east-west controlled major highway, M-42, with a 150-foot right-of-way and a Class I or II bikeway, P-45, or bike lanes, BL-30, in the *Countywide Bikeway Functional Master Plan*.
7. Previously “Existing MD 124” or now Washington Grove Lane is classified an east-west primary residential street, P-5, with a 70-foot right-of-way.

### Status of the Intercounty Connector

As part of its preparation of the Draft Environmental Impact Statement (DEIS) dated November 2004, for the proposed ICC, SHA has included engineering mapping for the roadway, which is proposed as a limited-access east-west highway intended to link areas between I-270 and I-95/US 1, through central/eastern Montgomery and western Prince George’s Counties, including an interchange with Shady Grove Metrorail Station Access Road to the south of the subject property.

The ICC planning process has concurrence on two alternative alignments, selected through the Alternatives Retained for Detailed Study (ARDS), called Corridor 1 and Corridor 2. Corridor 1 is the southern alignment that generally follows the ICC alignment incorporated in the area master plans and runs along the south side of the subject property. The Corridor 2 is the alignment that diverts to the north, east of Georgia Avenue. It is noted that the ICC Corridor 2 alignment is not represented in any area master plans.

The area for Phase III includes the now-expired Reservation Plat No. 576-90 (i.e., first approved on June 1989 and recorded on July 1989) to reflect the master-planned ICC interchange with the Shady Grove Metrorail Station Access Road at that time. The area south of Phase I bordered the now-expired Reservation Plat No. 574-10 (i.e., approved on October 1986 and recorded in November 1996) to reflect the master-planned ICC right-of-way east of this interchange.

According to the SHA's November 2004 plans (Attachment No. 1), even less right-of-way is needed for the interchange within the Phase III area, but additional right-of-way within the Phase I area is now required to the east for storm water management. Provide for the future acquisition of the necessary right-of-way as described in Recommendation No. 1.

#### Future Trail Connection Through the Site's Northern Area

The alignment of a future trail connection should be coordinated with M-NCPPC's Park Planning and Resource Analysis staff, the Town of Washington Grove, and the Montgomery County Public Schools (MCPS) with the specific alignment to be determined at site plan. The trail starts from Amity Drive Extended along the east side of the proposed elementary school site, through the Legacy Open Space, into the Town of Washington Grove corporate limits, and to the Washington Grove Marc Station.

#### *Master-Planned School Site*

The December 2003, Shady Grove Public Hearing Draft Sector Plan included an elementary school site within the designated area proposed for Phase II. The applicant had agreed to place this area in reservation for future dedication for 24 months.

#### *Pedestrian Facilities*

Five-foot sidewalks are being provided along Amity Drive. Four-foot sidewalks are being provided along all the reduced width tertiary residential streets except where no houses front along them or for environmental reasons. Transit service is not available along Amity Drive or connecting Epsilon Drive between Washington Grove Lane and Shady Grove Road. With the future extension of Amity Drive to extended Crabbs Branch Way, transit service can more readily be provided along extended Crabbs Branch Way to extended Amity Drive into the existing Mill Creek community.

#### **Relevant Recent Transportation Project**

DPWT's Capital Improvements Program (CIP) Project No. 509967 was completed February 2004 and widened Shady Grove Road from four to six lanes between Epsilon Drive/Tupelo Drive and Muncaster Mill Road (MD 115). Relevant to the APF review, a third northbound through lane was constructed at the intersection of Shady Grove Road and Epsilon Drive/Tupelo Drive.

*Traffic Calming Measures along Amity Drive Extended*

Amity Drive Extended (to Crabbs Branch Way Extended) should be designed to discourage non-local traffic using Amity Drive as an alternative route between Shady Grove Road and Washington Grove Lane and reflect its surrounding residential character. Instead of a straight-line connection between its existing terminus and Crabbs Branch Way, traffic calming measures should include an alignment with gentle curves and traffic islands. Where the 70-foot-right-of-way Amity Drive Extended connects with 80-foot-right-of-way Crabbs Branch Way, a traffic circle should be considered in lieu of an intersection design.

*Site-Generated Traffic*

The number of peak-hour vehicular trips during the weekday morning peak period and evening peak period (4:00 to 7:00 p.m.) is given below for the worse-case scenario for each phase:

1. Phase I for the subject preliminary plan.
2. Phase II for the projected residential development if the MCPS elementary school and the Legacy Open Space are not acquired for public use.
3. Phase III for the projected residential development if SHA decides not to acquire part of or the entire area south of Amity Drive Extended for the master-planned interchange of the Intercounty Connector and Shady Grove Metrorail Station Access Road. The land area represents the latest SHA design with a tighter design that required less right-of-way.

The number of peak-hour trips generated by each phase and each combination of phases is as follows:

| Phase   | Single Family Housing Units |          |       | Peak-Hour Trips |          |
|---|-----------------------------|----------|-------|-----------------|----------|
|   | Detached                    | Attached | Total | Morning         | Evening  |
| <b>Land Use Options for Individual Phases</b>               |                             |          |       |                 |          |
| Phase I– Max # of Housing Units                             | 53                          | 12       | 65    | 76              | 102      |
| Phase II– Max # of Housing Units                            | 23                          | 66       | 89    | 33              | 44       |
| Phase II– Elementary School                                 | N/A                         | N/A      | N/A   | 290             | (Closed) |
| Phase III– Max # of Housing Units                           | 16                          | 14       | 30    | 23              | 31       |
| <b>Land Use Options for Different Combination of Phases</b> |                             |          |       |                 |          |
| Only Phase I- Housing                                       | 53                          | 12       | 65    | 76              | 102      |
| Only Phases I & II- Housing                                 | 76                          | 78       | 154   | 109             | 147      |
| Ph. I- Housing + Ph. II- School                             | N/A                         | N/A      | N/A   | 366             | 102      |
| Ph. I+III-Housing + Ph. II-School                           | 69                          | 26       | 95    | 389             | 133      |
| Only Phases I & III- Housing                                | 69                          | 26       | 95    | 99              | 133      |
| Phases I, II, & III– All Housing                            | 92                          | 92       | 184   | 132             | 178      |

The site-generated traffic by the elementary school can only be estimated when the land is acquired and when the school's boundary are established. The residential areas within the boundary would determine the number of children living within walking distance versus those requiring busing. In lieu of having this data, the traffic generated by the proposed elementary school site was estimated based on actual 2003 data for the nearby South Lake Elementary School with 517 students and located on the northeast side of Lakeforest Mall.

### **Local Area Transportation Review Standards and Submitted Traffic Studies**

LATR is being analyzed under the standards in the *FY 2002 AGP* and the July 2002 *LATR Guidelines* because the preliminary plan was submitted and complete before the current LATR procedures were approved and adopted on July 2004. The CLV/congestion standard is 1,525 for intersections within the Derwood Policy Area, rather than the reduced congestion standards under the *FY 2005 AGP*. With both the entire development and Phase I only generating over 50 peak-hour trips during the weekday morning peak period (considered then from 7:00 to 9:00 a.m.) and the evening peak period (considered then from 4:00 to 6:00 p.m.), traffic studies were required and submitted to satisfy LATR.

A traffic study for the entire 2001 development was first submitted for the Pre-Preliminary Plan No. 7-02004 and was dated August 2001. A traffic study for the entire 2002 development was submitted for the preliminary plan and was dated February 2002. The February 2002 traffic study was updated in December 2002 to analyze the peak-hour trips generated by 100 single-family detached units and 95 townhouses.

When the developer of land located on the west side of the Crabbs Branch Way extension withdrew their plan application, the Crabbs Branch Way extension construction and connection to Amity Drive Extension was no longer be a second vehicular access point in the short-term. Therefore, the Phase I traffic study dated September 2003 amended the analysis to only the site-generated traffic from the Phase I residential development - 57 single-family detached units and 23 single-family attached units. Between the time the amended traffic study was prepared and now, the current plan reduced the number of single-family attached and detached units. As a result, the Phase I traffic study dated September 2003 reflects a more conservative traffic analysis.

### **Local Area Transportation Review for Phases I, II, and III**

Based on results of the traffic study dated December 2002, the critical lane volume (CLV) values at three of the nearby intersections exceeded the CLV/congestion standard of 1,525 for Derwood Policy Area during the weekday morning peak hour. LATR would be satisfied with the improvements as described in Recommendations No. 3 and 4 at the following intersections:

1. Shady Grove Road and Epsilon Drive/Tupelo Drive: The improvements described in Recommendation No. 3 would mitigate the impact of site-generated peak-hour trips for Phase I only. Although still exceeding the 1,525 congestion standard, the CLV value in



the total-with connection traffic condition is less than the CLV value in the background traffic condition during the weekday morning peak period.

The improvements described in Recommendation No. 4 would be needed to satisfy LATR for the additional traffic generated by Phases II and III by the connecting Amity Drive Extended with Crabbs Branch Way Extended. This connection provides an alternative travel route in lieu of Epsilon Drive to Shady Grove Road. Although still exceeding the 1,525 congestion standard, the redistribution of traffic to Amity Drive Extended and Crabbs Branch Way Extended reduces the congestion and mitigated the traffic impact of the site-generated peak-hour trips.

2. Midcounty Highway and Washington Grove Lane: All of the site-generated trips were in the *non*-critical movements during the morning peak hour. Thus, the CLV value in the total traffic condition is not increased, but was *equal* to the CLV value in the background traffic condition.
3. Midcounty Highway and Shady Grove Road: The few site-generated trips were in the critical (or peak) through movement along southbound Shady Grove Road during the morning peak hour. However, these site-generated trips are a small number compared with the large number of existing and background trips. When distributed among three through lanes, the CLV value in the total traffic condition only increases by *one* from the CLV value background traffic condition.

In LATR section of the *AGP*:

If an applicant is providing or participating in one or more intersection improvements to satisfy LATR, that applicant will be considered to have met LATR for any other intersection where the site-generated trips results in a CLV increase of less than five through another intersection.

Therefore, with a CLV increase of one, no improvement would be required to satisfy LATR at this intersection.

The CLV values at the following intersections have less than the congestion standard of 1,525:

1. Amity Drive and Epsilon Drive
2. Washington Grove Lane and Amity Drive
3. Shady Grove Road and Crabbs Branch Way (with additional proposed southbound approach lanes)

#### Local Area Transportation Review for Proposed Phase I Only

The Phase I traffic study also considered the proposed non-automobile transportation amenities described in Recommendation No. 3a. The number of site-generated vehicular peak-hour trips during the morning and evening peak periods could be reduced as follows:

| Non-Auto Amenity       | Number or Linear feet | Equivalent Vehicular Trips | Reduced Vehicular Trips |
|------------------------|-----------------------|----------------------------|-------------------------|
| Bus Shelters           | 2                     | 10 per Shelter             | 20                      |
| Real-Time Transit Info | 2                     | 10 per Electronic Sign     | 20                      |
| Off-Site Sidewalks     | 1,560                 | 1 per 130 Linear feet      | 12                      |
| Bike Lockers           | 2                     | 1 per Locker               | 2                       |
| Total                  |                       |                            | 54                      |

The reduction of 54 vehicular trips from the calculated number of site-generated trips results in only the intersection of Shady Grove Road and Epsilon Drive / Tupelo Drive exceeding its CLV congestion standard. The intersection improvements as described in Recommendation No. 3b mitigate the site-generated traffic because the CLV value in the total improved traffic condition (or 1,715) is less than the CLV value in the background traffic condition (or 1,759) during the weekday morning peak hour.

| Intersection                              | Weekday Peak Hour | Traffic Condition |            |       |                |
|---|-------------------|-------------------|------------|-------|----------------|
|   |                   | Existing          | Background | Total | Total Improved |
| Shady Grove Road & Epsilon / Tupelo Drive | Morning           | 1,746             | 1,759      | 1,766 | 1,715          |
|   | Evening           | 1,732             | 1,249*     | 1,250 | 1,250          |

\*=The CLV value is reduced with the extra northeast through lane on Shady Grove Road that was constructed under DPWT's CIP Project No. 509967 and completed in February 2004.

#### Policy Area Transportation Review/Staging Ceiling Condition

As of June 30, 2004, the Derwood Policy Area has a remaining capacity of 2,039 housing units in the transportation staging ceiling under the *FY 2004 Annual Growth Policy*.

Attachments