

Maryland-National Capital Park and Planning Commission
 Prince George's County Planning Department
 Development Review Division
 301-952-3530

Note: Staff reports can be accessed at www.mnccppc.org/pgco/planning/plan.htm

Comment [COMMENT1]: WHEN INSERTING INFORMATION AT THE @ SIGN REMEMBER TO USE INDENT FOR SECOND LINE - NOT TAB. ALSO, IT WILL LOOK LIKE THE TEXT IS GOING WACKO, BUT DON'T WORRY - IT IS FINE.

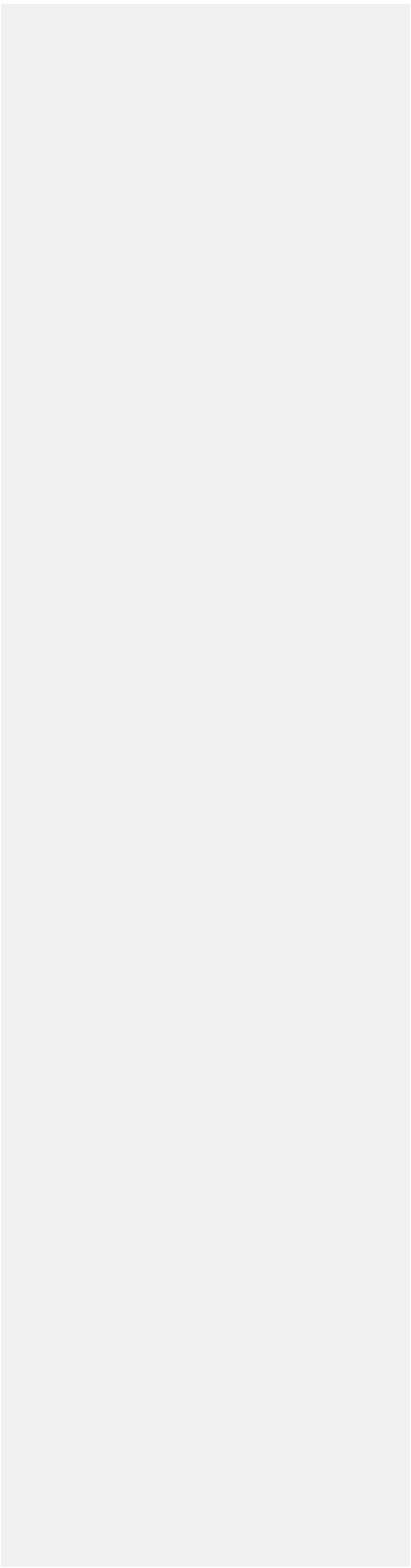
PRELIMINARY PLAN

4-02016

Application	General Data
Project Name: BALK HILL Location: One-half mile north of intersection of Campus Way North and Lottsford Road. Applicant/Address: Rocky Gorge Communities 7611 Little River Turnpike, Suite #101E Annandale, VA 22003	Date Accepted 02/28/02
	Planning Board Action Limit 05/08/02
	Tax Map & Grid 060/D-01
	Plan Acreage 180.0
	Zone R-S
	Lots 326
	Parcels 13
	Planning Area 73
	Council District 05
	Municipality N/A
	200-Scale Base Map 204NE08

Purpose of Application	Notice Dates
RESIDENTIAL SUBDIVISION	Adjoining Property Owners (CB-15-1998) N/A
	Previous Parties of Record (CB-13-1994) N/A
	Sign(s) Posted on Site 06/26/02
	Variance(s): Adjoining Property Owners N/A
Staff Recommendation	
Staff Reviewer: Del Balzo	
APPROVAL	APPROVAL WITH CONDITIONS
DISAPPROVAL	DISCUSSION

	X		
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THE MARYLAND-NATIONAL CAPITAL
PARK AND PLANNING COMMISSION

PRINCE GEORGE'S COUNTY PLANNING BOARD

STAFF REPORT

SUBJECT: Preliminary Plan of Subdivision 4-02016
Balk Hill

OVERVIEW

The subject property consists of approximately 183 acres of land in the R-S Zone. The property is identified as Parcel 53, located on Tax Map 60, Grid F-1 and F-2. It is undeveloped, densely wooded and severely undulating. Several streams traverse the property and a large portion of the property is in the Patuxent River Primary Management Area (PMA). The applicant proposes to develop the site with 326 lots for single-family detached homes. A large portion of land is proposed for dedication to M-NCPPC for public park purposes in accordance previous Basic Plan and Comprehensive Design Plan approvals.

The original Basic Plan approvals (A-9635-C and A-9638-C and the SMA CR-71-1990) rezoned the property to R-S. Another Basic Plan, A-9637-C, also recommended rezoning the property to R-S. This Basic Plan was incorporated into a Sectional Map Amendment, CR-71-1990. On April 11, 1988, the Prince Georges County District Council approved Zoning Map Amendment A-9635-C and the accompanying Basic Plan for the subject site (Zoning Ordinance No. 21-1988) for approximately 84 acres of land in the southeast portion of Balk Hill with two conditions and five considerations. On April 11, 1988, the Prince Georges County District Council approved Zoning Map Amendment A-9638-C and accompanying Basic Plan for the subject site (Zoning Ordinance No. 22-1988) for approximately 36 acres of land in the northwest portion of Balk Hill with one condition and five considerations. On July 24, 1990, the District Council adopted Sectional Map Amendment (CR-71-1990) for the Largo-Lottsford area of Prince Georges County. The area covered by Basic Plan Amendment A-9637 was incorporated into the Sectional Map Amendment (CDZ Amendment 3) with three conditions and six considerations.

The application in its current form is vastly different from the preliminary plan originally submitted. Major revisions to the lotting pattern, lot sizes, roadway configuration, park dedication, and environmental preservation have been made. Given these changes, the current preliminary plan is far superior to the original plan. Nearly 100 lots have been deleted from the original submission and lot sizes have increased dramatically. Additionally, the land available for park dedication has increased to now be in conformance with zoning and comprehensive design plan approvals. While some additional revisions are necessary to bring the plan into complete conformance with prior approvals, staff supports the current application, subject to these revisions.

SETTING

The property is located along both sides of the proposed St. Josephs Drive and on the north side of the proposed Campus Way and is approximately one-half mile north of the existing Campus Way/Lottsford Road intersection. It is bordered on the west by the Town of Glenarden and on the north, east and south by existing subdivisions in the Largo-Lottsford area. The site has road frontage and is accessed via Campus Way North and St. Josephs Drive. To the north are the residential communities of Ladova Heights (R-80 and R-R), Bellehaven Estates (R-S), and Enterprise Forest (R-80). To the southwest is undeveloped land (I-3). To

the southeast is Tartan South (R-S). To the east is Collington Subdivision (R-R). To the west is vacant property (M-X-T).

FINDINGS AND REASONS FOR STAFF RECOMMENDATION

1. Environmental Issues There are extensive areas of woodlands, streams, wetlands, 100-year floodplain, steep slopes, and severe slopes on the property. The streams and wetlands are associated with tributaries to Bald Hill Branch, which is part of the Patuxent River watershed. According to the Prince George's County Soil Survey, the soils found on the property include Collington fine sandy loam, Adelphia fine sandy loam, Shrewsbury fine sandy loam, Ochlockonee sandy loam, and in small areas, Mixed Alluvial land. The Collington, Adelphia and Ochlockonee soils do not present any problems for development. The Shrewsbury and Mixed Alluvial land soils have limitations with respect to seasonally high water tables and flood hazard. According to information from the Department of Environmental Resources dated November 1, 2001, the sewer and water service categories are S-4 and W-4. According to information obtained from the Maryland Department of Natural Resources, Natural Heritage Program, publication entitled "Ecologically Significant Areas in Anne Arundel and Prince George's Counties," December 1997, there are no rare, threatened, or endangered species found to occur in the vicinity of this property. Campus Way North, a planned arterial highway, will be a future noise source. Marlboro clay does not occur in the area and there are no scenic or historic roads in the vicinity of this property.

Summary of Related Cases and Environmental Conditions

Basic plans A-9635, A-9637, and A-9638 were approved to rezone the property to R-S. These approvals contain conditions that require the numerous environmental features on this site to be protected. CDP-0201 contains numerous conditions to ensure the conditions of the basic plans have been met. The text in **bold** indicates the approved condition text from PGCPB No. 02-93 for the Conceptual Development Plan.

Condition 1(a): Low impact development shall be used to the degree feasible for the design of the stormwater management system by utilizing a combination of rain gardens, stormwater management ponds, and other techniques approved by the Department of Environmental Resources.

Comment: The Department of Environmental Resources is reviewing the stormwater management plan concept at this time. There are some issues associated with the level of detail on the plans currently submitted. These issues are being dealt with through the recommended conditions of approval on this case. The Environmental Planning Section will coordinate with the Department of Environmental Resources during the Specific Design Plan phase of this development to fulfill this condition.

Condition 1(b): The proposed lots immediately east of the stream valley shall be designed as large lots with maximum preservation of existing features. The access road for these lots shall be designed as an open-section road with a reduced width, no sidewalks, etc., if approved by the Department of Public Works and Transportation and allowed by the Subdivision Regulations.

Comment: The revised preliminary plan indicates larger lots that preserve much of the existing features in this area. Design of the road, sidewalks and conformance to the Subdivision Regulations shall be evaluated at the Specific Design Plan phase of this development.

Condition 1(o): The Forest Stand Delineation shall be revised to:

- (1) Include the location of all the specimen trees on the site and a table indicating their species, size and condition and add the symbol used to the legend.**
- (2) Change the name of the streams in the legend from ■drainage swales■ to ■streams■.**
- (3) Show all of the existing site features accurately including all of the areas of steep slopes based on the existing topography.**

Comment: The Forest Stand Delineation (FSD) has been revised to satisfy conditions 2 & 3. Condition 1 has not been fulfilled. Prior to signature approval of the preliminary plan, the FSD needs to be revised to include the location of all the specimen trees on the site and a table indicating their species, size and condition and to add the symbol used to the legend.

Conditions 1(p), 1(q), 2(a), 2(b) and 3 relate to the Tree Conservation Plan, noise issues, impacts to the PMA, and stormwater management and will be addressed fully later in this report.

Condition 1(r): A conceptual grading plan shall be submitted for the area east of the large ravine that is accessed through park property. The conceptual grading plan shall show a configuration of a maximum of nine lots, in a configuration that preserves the steep slopes to the fullest extent possible, minimizes the use of impervious surfaces, allows woodland conservation on lots within conservation easements, and does not consume more land area than that currently shown on the PMA Conceptual Grading Exhibit that show 14 lots.

Comment: A conceptual grading plan has been submitted and the preliminary plan has been revised to satisfy this condition.

Woodland Conservation

This site is subject to the provisions of the Woodland Conservation Ordinance because it is more than 40,000 square feet in size and contains more than 10,000 square feet of woodland. A Tree Conservation Plan (TCP) and Forest Stand Delineation (FSD) are required to satisfy the requirements of the Woodland Conservation Ordinance. There are several conditions of approval from the CDP that must be addressed on the preliminary plan and associated Type I Tree Conservation Plan.

Condition 1.p. states: The Type I Tree Conservation Plan shall be revised to:

- 1. Be in conformance with the Woodland Conservation Ordinance to preserve priority woodlands, have a correct worksheet, and show how all the requirements are being met.**

2. **Include the location of all the specimen trees on the site and a table indicating their species, size, condition and proposed disposition.**
3. **Show all of the existing site features correctly including wetlands and streams.**
4. **Show the preservation of the entire 50-foot-wide perimeter buffer in its entirety for all areas shown on the CDP. The proposed 75-foot-wide buffer along Campus Way shall be heavily landscaped and, if the stocking levels meet the requirements of the Woodland Conservation Ordinance, this area may be counted toward meeting the conservation requirement.**

The revised TCP I submitted with this application has satisfied Condition 3; however, the remaining conditions have not been addressed. In addition, the woodland conservation worksheet indicates that 94 acres of woodland exist on this site, however, staff has calculated that roughly 121 acres of woodland exist on the subject property. The woodland conservation worksheet must be revised to reflect the correct amount of existing woodlands. The TCP I shows preservation within the 75-foot buffer along Campus Way. This area will be cleared for the construction of a noise berm and landscape amenities and as such cannot be counted toward meeting the requirements as woodland preservation. The TCP I also does not show the entire 50-foot preservation buffer, as shown on CDP-0201 and required by condition 1.p., as being preserved. In some areas where this buffer is shown, it will make the lots unuseable. These lots may need to be redesigned so the 50-foot buffer does not encumber any lot so as to make it unbuildable.

The revised TCP I woodland conservation worksheet has counted the 20-acre portion that will be dedicated to the Parks Department as previously dedicated. The 20 acres must be removed from this section of the woodland conservation worksheet as it has not yet been dedicated. The TCP I must also be revised to approximate the clearing for the future park facilities. The woodland conservation worksheet will need to be revised accordingly. The TCP I has also shown preservation within areas that will be used for stormwater management ponds. Areas used as woodland preservation cannot be shown where future stormwater management ponds will exist. Prior to signature approval of the preliminary plan, the TCP I needs to be revised to correct these deficiencies.

Patuxent River Primary Management Area

This site is within the Patuxent River watershed and the Patuxent River Primary Management Area (PMA) must be indicated on the plan. The PMA on this site includes 50-foot stream buffers, 100-year floodplain, nontidal wetlands adjacent to streams, 25-foot wetland buffers, and severe slopes adjacent to the stream. Highly erodible soils do not exist on this site, so slopes from 15 to 25 percent are not required to be shown on the plan. Condition 1.p. of PGCPB No. 02-93 requires that the PMA be shown correctly. The revised preliminary plan and TCP I show that in some areas the wetland buffers or stream buffers are not shown as part of the PMA. These features must be shown as within the PMA.

This development proposes impacts to the PMA. A letter of justification is required outlining each impact and how the proposed design has resulted in the preservation of the PMA to the fullest extent possible. This information was not submitted; however, staff finds that the intent of preservation of the PMA to the fullest extent possible has been met and recommends that the Planning Board approve the plan with conditions. During subsequent reviews of this project, the PMA will be

preserved as shown on the plan recommended for approval by the Planning Board. In addition, at time of final plat, the undisturbed portions of the PMA shall be placed in a delineated conservation easement.

Prior to signature approval of the preliminary plan, the TCP I should be revised to show the PMA boundary as defined by Sec. 24-101 of the Subdivision Regulations. Each element of the PMA must be indicated with a separate line. The PMA line will encompass all of the environmental features within the PMA and their associated buffers. The PMA should be shown as a smooth line so it can be recorded with metes and bounds in a conservation easement. The PMA impacts should be limited to those shown on the Type I Tree Conservation Plan submitted for this review, or as revised per the approved conditions.

At the time of final plat, a conservation easement should be described by bearings and distances. The conservation easement will contain the 50-foot-wide buffers along the northern and southern property lines and all of the Patuxent River PMA except for impacts approved by the Planning Board. The easement will be reviewed by the Environmental Planning Section prior to signature approval. An appropriate note should appear on the final plat.

Condition 2(b) states:

A conceptual grading plan shall be submitted for portions of the Campus Way North road construction and the road crossing proposed over the tributary to the east of St. Josephs Drive. If the construction of Campus Way North and the proposed road crossing result in the retention of less than 350 linear feet of the stream, this area may be lotted out. If the construction of the two roads results in the ability to retain 350 or more linear feet of the stream, then the PMA shall be preserved in its entirety in this area except for the necessary impacts for road construction.

Comment: This condition has not been fully addressed on the TCP. The road construction as shown would result in the preservation of approximately 500 linear feet of the stream in question and as such requires the preservation of the PMA in its entirety except for the necessary road impacts. The TCP shows impacts to the PMA from proposed grading for lots. Prior to signature approval of the preliminary plan, the TCP needs to be revised to show the preservation of the PMA in its entirety along the rear of lots 6 through 10 on Street T and 10 through 15 on Street U.

Condition 4 states:

At time of preliminary plan review, the feasibility of the lot layout and sizes adjacent to the PMA shall be reviewed in detail. A conceptual grading plan using two-foot contours shall be submitted for review.

A conceptual grading plan was submitted; however, it did not address the necessary grading for the five to seven stormwater management ponds that will be constructed throughout the site. In addition, the conceptual grading plan ignored the previously approved condition on the CDP that required the 50-foot-wide buffer to be preserved in its entirety, and it ignored other conditions related to the preservation of the PMA. As such, this conceptual grading plan provided insufficient information with regard to how many of the lots adjacent to the PMA would preserve the PMA as conditioned in the CDP. Therefore, at time of review of the Specific Design Plan, the actual house types and

grading schemes need to be shown on the SDP and the TCP, and the PMA impacts will be limited to those shown on the Type I Tree Conservation Plan submitted for this review, or as revised per the approved conditions.

Condition 2(a) relates to noise and states:

A plan shall show the location of the unmitigated 65 dBA Ldn noise contour for projected traffic from Campus Way North. Noise mitigation measures as needed shall be shown conceptually on the Preliminary Plan. As part of the Specific Design Plan review, the SDP shall show the location of the unmitigated 65 dBA Ldn, and shall provide detailed information regarding how noise levels will be mitigated to 65 dBA Ldn or less on the exterior and 45 dBA Ldn or less interior of proposed residential units.

Comment: The 65 dBA Ldn noise contour has not been shown on the preliminary plan, which is standard information on a preliminary plan impacted by noise. Prior to signature approval of the preliminary plan, it should be revised to indicate the location of the 65 dBA Ldn noise contour. As part of the Specific Design Plan submission, information should be included that addresses how noise will be mitigated within the 65 dBA Ldn noise contour to 65 dBA Ldn or less in outdoor activity areas and 45 dBA Ldn or less in interior areas.

Condition 3 states:

Prior to approval of the preliminary plan, the proposed Stormwater Management Concept Approval plan shall be submitted to the Planning Department for review, even if it has already been submitted to the Department of Environmental Resources. After comment by Planning Department staff it shall be submitted to the Department of Environmental Resources for review and approval. The approved Stormwater Management Concept Approval Letter shall be obtained prior to signature approval on the preliminary plan.

Comment: A stormwater management plan has been submitted to the Planning Department and to the Department of Environmental Resources, but the plan was rejected by DER. A revised stormwater management plan must be submitted. To satisfy Condition 3, a Stormwater Management Concept Plan needs to be approved by the Department of Environmental Resources and accepted by the Planning Department as meeting the design requirements of the proposed development prior to signature approval of the preliminary plan. To the extent possible, any proposed stormwater management ponds or bioretention areas should be used for reforestation and afforestation at stocking levels that meet the requirements of the Woodland Conservation Ordinance. Prior to approval of the Type II TCP, evidence that DER has approved the planting plan should be submitted to the Subdivision Section.

2. Community Planning The 2000 *Interim General Plan* placed the property in the Developing Tier. The *Largo-Lottsford and Vicinity Master Plan* (1990) recommends residential land use at a Low Suburban density. The master plan (page 70) contains guidelines which encourage setbacks, open space, berming, landscaping and fencing to protect residential areas from any impacts associated with the proximity to incompatible nonresidential uses and major roadways. Another guideline

encourages residential structures to be designed in harmonious relationship to one another and to the terrain, and to be situated to create interesting spaces.

Two park symbols (floating) are shown on the property. One symbol is in the southeast corner and the second symbol straddles the western boundary line of the property. The master plan shows two trails extending through the property from Campus Way North and connecting to two PMA preservation zone areas.

A portion of the property (67 acres) was rezoned to the R-S Zone (A-9637-C) in conjunction with the Largo-Lottsford SMA (Amendment # 3 in CR-71-1990) in 1990. The balance of the property was retained in the R-S Zone. The R-S Zone was approved by the Council in 1988 through zoning applications A-9635-C and A-9638-C. All three applications were approved with conditions.

The proposal provides for open space buffers between the development and Campus Way North and St. Josephs Drive. This open space provides for the development setbacks as addressed in the master plan guideline previously mentioned in the memorandum. Its treatment (landscaping, berming, etc.) will need to be assessed at the next level of review. Further, the revised plan provides for a more interesting layout of the residential development than the earlier version.

3. Parks and Recreation The subject subdivision is located within the area of the approved Comprehensive Design Plan CDP-0201; all recommended conditions of approval are applicable to the Preliminary Plan. The plans are in general conformance with the requirements of Basic Plans A-9635-C and A-9638-C as approved and amended and the approved Master Plan Amendment and adopted Sectional Map Amendment for Largo-Lottsford, Planning Area 73 (CR-70-1990 and CR-71-1990) as they pertain to public parks and recreation.

The applicant proposes a dedication of 27 acres of parkland as show on attached Exhibit ■A. The parkland is located on the east of the property and comprises 20 acres for active recreation and 7 acres in the Primary Management Area (PMA). Although, the area designated for active recreation is outside of PMA, the topography of the site will require grading for the construction of ballfields. The applicant has agreed to grade a portion of the dedicated parkland, as shown on attached Exhibit ■A.

A small portion of the parkland dedicated as part of the Tartan South subdivision is proposed for road access to the eastern portion of development. The Tartan South Subdivision had been platted and Parcel F (8.6 acres) had been dedicated for parkland. The applicant proposes a replatting of this section of the Tartan South Subdivision to accommodate access to the eastern portion of planned development and to the expanded park. The new layout will affect the recreational facilities planned on the parkland that was dedicated as part of the Tartan South subdivision and will require relocation of these recreation facilities.

The applicant has agreed to construct an eight-foot-wide asphalt trail along the stream valley extending either from St. Josephs Drive or Campus Way North to the eastern end of the dedicated parkland as recommended in the *Adopted and Approved Largo-Lottsford Master Plan*.

Staff believes that dedication of 27 acres for parkland; the improved access to the enlarged park; the proposed grading on dedicated parkland as shown on attached Exhibit ■A; and the construction of the master plan trail on parkland will satisfy master plan recommendations pertaining to parks and recreation for the planned community.

4. Trails The Adopted and Approved Largo-Lottsford Master Plan, and the previous Basic Plan and CDP approvals, require several trail improvements, including:

- a. An eight-foot-wide, asphalt, hiker-biker trail along the subject property's entire frontage of the east side of Campus Way North. (This is consistent with the approval for the adjoining Tartan South preliminary plan 4-97027).
- b. An eight-foot-wide, asphalt, master plan trail connection on the subject property running from Campus Way North towards the west side of the existing high school on Ardmore Road. The trail proposed along St. Josephs Drive will provide this planned connection and allow bicycle and pedestrian access to the north.
- c. A master plan trail on the subject site connecting to the parkland and planned trail system to the northeast. Previously approved CDPs have shown a proposed trail running towards the northeast portion of the subject site, either along the stream valley or along roadways.

To maximize the usefulness and attractiveness of the trail and to take advantage of the scenic qualities of the site, staff recommends that the master plan trail be located along the stream valley extending either from St. Josephs Drive or Campus Way North to the M-NCPPC parkland. This trail should be located within a public use easement on HOA land and on M-NCPPC parkland (for the eastern segment). This trail should also be a minimum of eight feet wide, asphalt, and shall be constructed by the applicant. The exact location and timing of the trail should be determined at the time of specific design plan. However, the portion of the trail on HOA land should be constructed prior to the issuance of building permits for any of the lots adjacent to the trail location. The provision of an attractive trail head along either St. Josephs Drive or Campus Way is also encouraged.

To accommodate multiuse, all other internal HOA trails should be six feet wide and asphalt.

As indicated on CDP 0201, all internal roads should have standard sidewalks on both sides. Where master plan trails are recommended along roads (recommendations 1 & 2 above), the trail should be constructed in place of the standard sidewalk on that side of the road with a standard sidewalk still being constructed on the opposite side.

All trails and sidewalks must be ADA compatible and free of above-ground utilities and street trees.

All trails should be assured of dry passage. If wet areas must be traversed, suitable structures should be constructed.

5. Transportation The applicant prepared a traffic impact study, dated March 2002, generally prepared in accordance with the methodologies in the *Guidelines for the Analysis of the Traffic Impact of Development Proposals*. The study has been referred to the county Department of Public Works and Transportation (DPW&T) and the State Highway Administration (SHA), and comments from both agencies were fully reviewed and made a part of the Planning Board's record at the time of the Comprehensive Design Plan. The Transportation Planning Section has reviewed the application and the study, and the findings and recommendations outlined below are based upon a review of all materials, consistent with the *Guidelines*.

An industrial property to the southwest of the subject property is also known by the name ■Balk Hill■; that property has filed an application for a rezoning to the M-X-T zone. Also, the subject property includes a Comprehensive Design Plan (CDP) which was approved by the Planning Board. The traffic study filed for the subject case is identical to the one filed for the rezoning and the CDP cases; as such, it fully accounts for the development of the subject plan through the subdivision process and the development of the adjacent property under a mixed-use zone.

Summary of Traffic Impact Study

The applicant has prepared a traffic impact study in support of the application using new counts taken in October 2001. The traffic impact study prepared and submitted on behalf of the applicant reviewed the following intersections:

MD 202/I-95 SB on-ramp
MD 202/I-95 NB on-ramp (unsignalized)
MD 202/McCormick Drive/St. Josephs Drive
MD 202/Lottsford Road
MD 202/Technology Way
MD 202/Lake Arbor Way/Arena Drive
Lottsford Road/Campus Way
Lottsford Road/Lottsford Vista Road

This area was studied extensively by transportation planning staff during the MD 202 corridor study. This study was a part of the Planning Department's FY 1997 work program and was completed in 1997. The study originally began in support of a sectional map amendment generally including properties within an area bounded by MD 202, the Capital Beltway, Lake Arbor Way and the proposed alignment of Campus Way. During the course of the study, it evolved into a visioning and implementation study. Much of the direction of the study during its duration was the result of collaborative discussions within a series of study group meetings, with the study group composed of technical staff, citizen representatives and development interests. From a transportation perspective, the MD 202 corridor study involved a comprehensive study of transportation in the MD 202 corridor. This comprehensive study included:

- Traffic analyses of intersections within a study area along MD 202 adjacent to the properties forming the focus of the study.
- Consideration of the development of the study area properties along with the development of other undeveloped, zoned properties in the area.
- Identification of the transportation facilities which would be needed in the future to provide adequate transportation facilities.
- Development of a plan for staging necessary transportation improvements to occur coincidentally with development on the subject property and other undeveloped zoned properties in the area.

The traffic analysis indicated that the transportation network identified in the 1990 Largo-Lottsford Master Plan, as modified by a 1996 amendment to the plan adding a special-use interchange at I-95

and Arena Drive, was required to serve a buildout level exceeding five million square feet within the MD 202 corridor study area. The planning group, after considering the transportation facility requirements for several development scenarios and the likely development patterns which could occur, indicated their support for a cap of 2.7 million square feet within the study area properties.

An important conclusion of the MD 202 corridor study is that the cost of the needed future transportation improvements in the area should be shared by government and private developers. The study indicated that further review would be needed to determine the appropriate costs to be borne by private developers and a means of dividing those costs among the various properties. The major improvements considered to be necessary for future development, up to the development cap, are:

- A. Four lanes (each direction) along MD 202
- B. Extension of Campus Way over the Beltway to Brightseat Road
- C. Full-time operations at I-95/Arena Drive interchange
- D. Overpass and partial interchange at MD 202 and St. Josephs Drive/McCormick Drive

Another important conclusion was that the comprehensive study of transportation staging done as part of the MD 202 corridor study would be considered part of the empirical evidence in support of development applications in the area for a period of ten years. As this study is currently five years old, it will provide a suitable basis for the transportation recommendations for the subject application.

With the development of the subject property and using the MD 202 corridor study as a basis, the traffic consultant has determined that adequate transportation facilities in the area can be attained. The study recommends that the applicant pay a pro rata share toward improvements along MD 202 and construct, to full section, on-site portions of St. Josephs Drive and Campus Way. The methodology is based upon needed adequacy improvements to MD 202 being funded approximately 18 percent by the applicant.

Staff Analysis of Traffic Study

Existing conditions in the vicinity of the subject property are summarized as follows:

EXISTING CONDITIONS				
Intersection	Critical Lane Volume (AM & PM)		Level of Service (LOS, AM & PM)	
MD 202/I-95 SB on-ramp	862	1,475		A
MD 202/I-95 NB on-ramp	34.8*	14.6*	--	--
MD 202/McCormick Drive/St. Josephs Drive	1,462	1,381	E	D
MD 202/Lottsford Road	1,267	1,192	C	C
MD 202/Technology Way	1,013	1,255	B	C

MD 202/Lake Arbor Way/Arena Drive	1,306	1,089	D	B
Lottsford Road/Campus Way	+999*	78.5*	--	--
Lottsford Road/Lottsford Vista Road	25.9*	378.5*	--	--
*In analyzing unsignalized intersections, average vehicle delay for various movements through the intersection is measured in seconds of vehicle delay. The numbers shown indicate the greatest average delay for any movement within the intersection. According to the <i>Guidelines</i> , an average delay exceeding 50.0 seconds indicates inadequate traffic operations. Delays of +999 are outside the range of the procedures, and should be interpreted as excessive.				

Under existing conditions, the analysis indicates operational issues at the two existing signalized intersections along MD 202. Also, issues are noted at two unsignalized intersections along Lottsford Road.

A review of background operating conditions in the area was conducted by the applicant. However, the methodology used appears to be based on growth factors alone, instead of consideration of growth factors and approved development, which is the more conventional method required by the *Guidelines*. It is important to note that the original MD 202 corridor study explicitly considered approved background developments in the area, and analyses were done based on this data. It would have been better had the study followed a methodology more like this, although staff would add that many of the developments considered in the 1997 study are significantly built out. Given this consideration, staff does not believe that the conclusions of this traffic analysis would have differed significantly had the preferred method been used. Background traffic conditions are summarized below:

BACKGROUND CONDITIONS				
Intersection	Critical Lane Volume (AM & PM)		Level of Service (LOS, AM & PM)	
MD 202/I-95 SB on-ramp	909	1,558	A	E
MD 202/I-95 NB on-ramp	41.7*	15.7*	--	--
MD 202/McCormick Drive/St. Josephs Drive	1,550	1,462	E	E
MD 202/Lottsford Road	1,356	1,272	D	C
MD 202/Technology Way	1,101	1,335	B	D
MD 202/Lake Arbor Way/Arena Drive	1,395	1,169	D	C
Lottsford Road/Campus Way	+999*	78.5*	--	--
Lottsford Road/Lottsford Vista Road	25.9*	378.5*	--	--
*In analyzing unsignalized intersections, average vehicle delay for various movements through the intersection is measured in seconds of vehicle delay. The numbers shown indicate the greatest average delay for any movement within the intersection. According to the <i>Guidelines</i> , an average delay exceeding 50.0 seconds indicates inadequate traffic operations. Delays of +999 are outside the range of the procedures, and should be interpreted as excessive.				

According to the traffic study, the area known as Balk Hill is proposed to contain up to 261,360 square feet of R&D space and 833 single-family detached residences, with 433 within the subject

property and 400 within the mixed-use proposal. This is very different from the current proposals for the rezoning and the subject plans, as is shown in the following table:

Site Trip Generation Comparison of Traffic Study and Current Rezoning/Subdiv. Proposals						
	Traffic Study			Proposals		
Use	Quantity	AM Trips	PM Trips	Quantity	AM Trips	PM Trips
Residential: Single-Family Detached	833	625	750	719 (326 in subdiv.; 393 in mixed-use)	539	647
R&D	261,360 sq feet	315	296	0 sq feet	0	0
General Office	0 sq feet	0	0	328,480 sq feet	657	608
Retail	0 sq feet	0	0	20,000 sq feet	61	96
TOTAL		940	1,044		1,257	1,351
Difference: Proposals vs Traffic Study		--	--		+317	+307

The study was accepted for review and referred to the operating agencies prior to all applications being available. To be fair, the CDP was modified in accordance with staff comments during its review, the subdivision has been revised accordingly, and the total trip yield in the area covered by this preliminary plan has decreased.

Staff is in agreement with the trip distributions assumed in the traffic study. The trip assignments are another question, however. The development termed ■Balk Hill I■ in the traffic study (which is the CDP/subdivision under current review) has access to Lottsford Road via Campus Way and to Ardwick- Ardmore Road via St. Josephs Drive. Assuming that ■Balk Hill I■ occurs first (due to its more advanced point in the development review process), the following trip assignment is being used by staff:

Balk Hill I (initial)

25 percent south on I-95	100 percent via Campus Way to Lottsford Road
10 percent inside Beltway	40 percent via Campus Way to Lottsford Road
	60 percent via St. Josephs Drive to Ardwick-Ardmore Road
25 percent north on I-95	30 percent via Campus Way to Lottsford Road
	70 percent via St. Josephs Drive to Ardwick-Ardmore Road
5 percent south Lottsford Road	100 percent via Campus Way to Lottsford Road
15 percent east	40 percent via Campus Way to Lottsford Road
	60 percent via St. Josephs Drive to Ardwick-Ardmore Road
20 percent south on MD 202	100 percent via Campus Way to Lottsford Road

The development termed ■Balk Hill II■ includes separate distributions for residential and commercial uses (under the mixed-use rezoning application). This development will be able to access St. Josephs Drive north or south, and also Campus Way. Furthermore, once St. Josephs Drive is completed between Balk Hill I and MD 202, traffic from that development would be expected to reassign itself.

The study did not adequately consider this; therefore the following assignments are being considered by staff:

Balk Hill I (ultimate)

25 percent south on I-95	70 percent via St. Josephs Drive to MD 202 30 percent via Campus Way to Lottsford Road
10 percent inside Beltway	50 percent via St. Josephs Drive to MD 202 50 percent via St. Josephs Drive to Ardwick-Ardmore Road
25 percent north on I-95	40 percent via St. Josephs Drive to MD 202 60 percent via St. Josephs Drive to Ardwick-Ardmore Road
5 percent south Lottsford Road	100 percent via St. Josephs Drive to MD 202
15 percent east	40 percent via Campus Way to Lottsford Road 60 percent via St. Josephs Drive to Ardwick-Ardmore Road
20 percent south on MD 202	100 percent via St. Josephs Drive to MD 202

Balk Hill II (residential)

25 percent south on I-95	90 percent via St. Josephs Drive to MD 202 10 percent via Campus Way to Lottsford Road
10 percent inside Beltway	70 percent via St. Josephs Drive to MD 202 30 percent via St. Josephs Drive to Ardwick-Ardmore Road
25 percent north on I-95	60 percent via St. Josephs Drive to MD 202 40 percent via St. Josephs Drive to Ardwick-Ardmore Road
5 percent south Lottsford Road	100 percent via St. Josephs Drive to MD 202
15 percent east	80 percent via Campus Way to Lottsford Road 20 percent via St. Josephs Drive to Ardwick-Ardmore Road
20 percent south on MD 202	100 percent via St. Josephs Drive to MD 202

Balk Hill II (commercial)

20 percent south on I-95	100 percent via St. Josephs Drive to MD 202
10 percent inside Beltway	90 percent via St. Josephs Drive to MD 202 10 percent via St. Josephs Drive to Ardwick-Ardmore Road
20 percent north on I-95	90 percent via St. Josephs Drive to MD 202 10 percent via St. Josephs Drive to Ardwick-Ardmore Road
20 percent east	40 percent via Campus Way to Lottsford Road 40 percent via St. Josephs Drive to MD 202 20 percent via St. Josephs Drive to Ardwick-Ardmore Road
30 percent south on MD 202	100 percent via St. Josephs Drive to MD 202

With the revised trip generation per the actual proposals and the trip assignments as described above, the following results are obtained:

TOTAL TRAFFIC CONDITIONS				
Intersection	Critical Lane Volume (AM & PM)		Level of Service (LOS, AM & PM)	
MD 202/I-95 SB on-ramp	1,073	1,747	B	F
MD 202/I-95 NB on-ramp	49.6*	19.9*	--	--

MD 202/McCormick Drive/St. Josephs Drive	2,232	1,817	F	F
MD 202/Lottsford Road	1,439	1,344	D	D
MD 202/Technology Way	1,179	1,412	C	D
MD 202/Lake Arbor Way/Arena Drive	1,446	1,226	D	C
Lottsford Road/Campus Way	+999*	+999*	--	--
Lottsford Road/Lottsford Vista Road	53.9*	+999*	--	--

*In analyzing unsignalized intersections, average vehicle delay for various movements through the intersection is measured in seconds of vehicle delay. The numbers shown indicate the greatest average delay for any movement within the intersection. According to the *Guidelines*, an average delay exceeding 50.0 seconds indicates inadequate traffic operations. Delays of +999 are outside the range of the procedures, and should be interpreted as excessive.

Several inadequacies are noted in the traffic study and the table above:

1. MD 202/I-95 SB On-Ramp: The traffic study recommends the addition of an eastbound through lane along MD 202. This improvement would result in the following operating conditions: AM critical lane volume of 866 (LOS A); PM critical lane volume of 1,375 (LOS D). This is acceptable for adequacy.
2. MD 202/McCormick Drive/St. Josephs Drive: The traffic study recommends the addition of an additional through lane each way along MD 202 and a second eastbound left-turn lane. This improvement would result in the following operating conditions: AM critical lane volume of 1,718 (LOS F); PM critical lane volume of 1,550 (LOS E). This is **not** acceptable for adequacy, and this requires further discussion below in consideration of the MD 202 corridor study.
3. Lottsford Road/Campus Way: Other parties have bonded a traffic signal at this location, but it has not yet been installed. Also, the county is constructing the second half of the planned arterial facility at this location. Both improvements should be considered part of background for the purpose of analyzing the subject development. With a signal in place and the lane configuration under construction, the intersection would operate as follows: AM, critical lane volume of 1,037 (LOS B); PM, critical lane volume of 1,275 (LOS C). This is acceptable for adequacy.
4. Lottsford Road/Lottsford Vista Road: The applicant proposes performing a signal warrant study at this location, with installation if warranted. With a signal in place and the current lane configuration, the intersection would operate as follows: AM critical lane volume of 1,084 (LOS B); PM critical lane volume of 1,148 (LOS B). This is acceptable for adequacy.

The traffic study includes a recommendation to pay a pro rata share for improvements along MD 202. This has arisen from a conclusion of the MD 202 corridor study, which indicated the appropriateness of a cost-sharing methodology for the purpose of funding regional improvements needed for the whole area. However, the study has not even considered two of the four major improvements (and a major cost component of a third).

The MD 202 corridor study determined that a number of improvements were needed in the area. Appendix D of the traffic study, along with the body of the report, contains cost information which should be helpful in estimating the costs of the improvements:

1. Four lanes (each direction) along MD 202: Needed widening within I-95/MD 202 interchange estimated at \$375,000. Along MD 202 between Arena Drive and I-95, at \$500 per linear foot and 7,500 feet, cost is estimated at \$3,750,000. Total cost: \$4.125 million.
2. Extension of Campus Way over the Beltway to Brightseat Road: New road construction over 7,000 feet at \$900 per linear foot, or \$6,300,000. Beltway overpass estimated at \$6,700,000. Total cost: \$13 million.
3. Full-time operations at I-95/Arena Drive interchange: State's Option 1 has an estimated cost of \$18 million. It was determined that FHWA will not approve low-cost improvements (i.e., less than \$1 million) for opening the interchange to full-time traffic.
4. Overpass and partial interchange at MD 202 and St. Josephs Drive/McCormick Drive: Estimated in traffic study at \$10 million.
5. All four major improvements have a total cost of \$45.1 million.

The traffic study indicates that this applicant is funding approximately \$7.1 million in road improvement costs, including a direct fair share payment of \$400,000 toward the MD 202 widening. However, this figure includes the construction of St. Josephs Drive, which was assumed to be constructed under Subtitle 23 of the County Code and not an improvement which was assumed to provide regional capacity for development. Excluding the \$3.8 million cost of the St. Josephs Drive construction, staff must determine whether \$3.3 million is a fair amount for the subject property to pay toward road improvements in the area. This number represents about 7.32 percent of the cost of area road improvements.

The MD 202 corridor study assumed land uses on five area properties with a total peak-hour trip impact of 4,900 peak-hour trips (the average of AM and PM peak-hour trips). This included a 200-room hotel on the Rouse property, 149 residences on the Leonnig property, and 450 residences on the Balk Hill property. The study also assumed a maximum of 2.7 million square feet of commercial space (a mix of general office and R&D space) on the Rouse, Balk Hill, Addison-King, and Campus Way properties. The subject property would have an impact of 1,336 peak-hour trips (the average of AM and PM peak-hour trips), which is 27.27 percent of the projected trips to be generated by new land uses in the area. This percentage represents an upper limit on the cost responsibility of the subject property, since the MD 202 corridor study assumes that the cost of area road improvements would be shared by government and private developers.

The MD 202 corridor study provides a reasonable estimate of the degree to which developers in the area should incur major costs versus government. Throughout the MD 202 corridor analyses, the MD 202/McCormick Drive/St. Josephs Drive intersection proved to be the critical intersection in terms of establishing capacity for development in the study area. Figure 9 of the transportation study indicates that an average of 6,315 peak-hour vehicles from development in the study area would use this intersection. Similarly, Figure 10 indicates that an average of 15,740 peak-hour vehicles, in total, would use this intersection. However, it is important to recall that these trips are based upon

full buildout per approved zoning; in fact, the study participants, which included representatives of all five study area properties, agreed to a cap of 2.7 million square feet of commercial space. This cap serves to reduce the peak-hour impact of the properties by approximately 1,535 trips at the critical intersection. This leaves an average of 4,780 vehicles from study area development at the critical intersection, with a total of 14,205 vehicles using the intersection. This suggests that traffic generated within the study area is 33.65 percent of the total traffic, and staff would reason that developers in the area should be responsible for the same percentage of the costs of the regional transportation improvements.

Given that the subject property (the CDP and the mixed-use portions of Balk Hill) generates 27.27 percent of the trip impact, the Balk Hill development should be responsible for (33.65 percent) x (27.27 percent) or 9.17 percent of the costs. Given the total price tag of \$45.1 million, this applicant should fund improvements or pay toward improvements a total of \$4.14 million. Given that \$2.9 million of this amount is contained within the extension of Campus Way, this leaves \$1.24 million that is required to fulfill the requirements for this proposal.

In order to fund this amount, the applicant should pay (\$1.24 million)/(1,336 peak-hour trips), or \$928.20 per peak-hour trip (the average of AM and PM peak-hour trips) in addition to constructing the extension of Campus Way (and, needless to say, the extension of St. Josephs Drive). By type of development, this would be:

- Residential: \$765.75 per residence
- General office: \$1.79 per square foot
- Retail: \$3.64 per square foot

An outstanding issue at this time concerns the Campus Way/St. Josephs Drive intersection and the possible need for traffic controls at that location. It is unlikely that the subject development alone would trigger the need for costlier controls such as signalization, but staff has requested that the mixed-use portion should study that intersection for potential signal warrants at the time of preliminary plan of subdivision. It is premature to study this intersection now; there is little knowledge of the final street layout in the area of the intersection nor the potential uses in the area.

As noted earlier, the traffic study has been referred to DPW&T and SHA. Comments have been received from both agencies, and are summarized below:

DPW&T: The referral indicates a general dissatisfaction with the study. Staff has addressed DPW&T's objections to the methodology used to analyze background traffic. With a particular concern of the redevelopment of the nearby arena site, staff has not been provided a concept for the redevelopment or its staging.

SHA: This memorandum also suggests some dissatisfaction with the recommendations in the traffic study. In particular, SHA did object to the recommendation that Balk Hill only funds approximately 18 percent of the cost of needed improvements along MD 202 adjacent to the site. The Planning Department recommendations have increased this \$400,000 payment to \$1,240,000. Much of this payment is attributable to the development in the mixed-use proposal, and this is fair since the impact of that proposal (versus the subject subdivision) on MD 202 will be much greater and much more direct.

Plan Comments

Based on the review of the plan submitted and in consideration of issues raised at the time of CDP review, staff has the following comments:

1. Campus Way is an arterial facility with a right-of-way of 120 feet. The preliminary plan shows adequate right-of-way for this facility. No individual lot shows driveway access to this facility, and that is appropriate.
2. St. Josephs Drive is a collector facility with a right-of-way of 80 feet. While driveway access is permissible to St. Josephs Drive, a collector serves more traffic and higher-speed traffic than a normal residential street. There are 24 lots within the subdivision which appear to have frontage on St. Josephs Drive, and these lots should have driveways that will allow a turn-around capability, redirect access, or in some way would allow vehicles on these lots to leave without having to back onto St. Josephs Drive. The preliminary plan provides adequate right-of-way for this facility.
3. Most internal streets are adequately sized. However, the preliminary plan should be revised to show a 60-foot right-of-way street along Street S between St. Josephs Drive and Street U. The Neighborhood Traffic Management Program, which is operated by DPW&T, suggests that an average daily traffic volume of 600 is the maximum desirable traffic volume for a standard secondary residential street (50-foot right-of-way). The average single-family residence generates nine vehicle trips per day, meaning that a secondary residential street should serve a maximum of 67 single-family detached residences; Any more, vehicular conflicts increase to the point that a wider pavement width or an operational change becomes necessary.
4. A portion of the development utilizes an existing platted street within Tartan South, which has a platted width of 50 feet. It appears that this street section will be replatted as a 60-foot street, which is acceptable.

Conclusions

There are three issues which must be considered in staff's recommendation:

- a. The applicant's transportation finding is based, in part, upon the use of a pro rata share in obtaining adequacy in the area. Notwithstanding the language in the Subdivision Ordinance, the MD 202 corridor study was approved with a recommendation stating that ■We (the planning group) recommend that a fair share funding allocations be determined on a case by case basis.●
- b. The applicant's transportation finding is based, in part, upon improvements not being entirely developer funded, consistent with the recommendation that ■The overall cost of identified road improvements must be shared by the public and private sectors.●
- c. The applicant's transportation finding is made in spite of the fact that at-grade staged improvements at the MD 202/McCormick Drive/St. Josephs Drive intersection do not provide adequacy under a LOS D standard. However, the traffic analysis for the MD 202

corridor study was based upon a comprehensive set of improvements being in place. Lacking that full set of improvements, there could be localized inadequacies. Recognizing this issue, the study included a recommendation that states that, as long as development proposals are consistent with the MD 202 corridor study, no further comprehensive traffic studies or staging plans would be required for the development of individual properties. As an adequacy finding is, at its basis, a staging plan, this recommendation suggests that consistency with the MD 202 corridor study, from the aspect of appropriately funding needed transportation improvements, is sufficient to show adequacy.

For these reasons, the transportation staff believes that the MD 202 corridor study, with its focus on enabling development of the area, including the subject property, provides the appropriate basis for recommending approval of the subject application. Based on the totality of the preceding findings, adequate transportation facilities would exist to serve the proposed subdivision as required under Section 24-124 of the Prince George's County Code if the application is approved with the five transportation-related conditions included in this report.

6. Schools The Growth Policy and Public Facilities Planning Section has reviewed the subdivision plans for adequacy of public facilities in accordance with Section 24-122.02 of the Subdivision Regulations and the *Adequate Public Facilities Regulations for Schools* (CR-23-2001).

Impact on Affected Public School Clusters

Affected School Clusters #	Dwelling Units	Pupil Yield Factor	Subdivision Enrollment	Actual Enrollment	Completion Enrollment	Wait Enrollment	Cumulative Enrollment	Total Enrollment	State-Rated Capacity	Percent Capacity	Funded School
Elementary School Cluster 2	434 sfd	0.24	104.16	7114	224	36	6.96	7485.12	6435	116.32%	Lake Arbor
Middle School Cluster 2	434 sfd	0.06	26.04	4397	201	189	6.19	4819.23	3648	132.11%	East Central
High School Cluster 2	434 sfd	0.12	52.08	12045	412	377	12.36	12898.44	10811	119.31%	Frederick Douglass addn.

Source: Prince George's County Planning Department, M-NCPPC, January 2002

The affected elementary, middle and high school cluster percent capacities are greater than 105 percent. Lake Arbor is the funded school in the affected elementary school cluster. East Central is the funded school in the affected middle school cluster. The Frederick Douglass addition is the funded school in the affected high school cluster. Based on this information, staff finds that the subdivision may be approved subject to conditions, including a three-year waiting period.

7. Fire and Rescue●The Growth Policy and Public Facilities Planning Section has reviewed the subdivision plans for adequacy of public fire and rescue facilities.
 - a. The existing fire engine at Kentland Fire Station, Company 46, located at 10400 Campus Way South, has a service response time of 5.25 minutes, which is within the 5.25-minute response time guideline for Block A Lots 1-15; Block C Lots 1-20, Lots 29-31, and Lot 135; Block D Lots 72-79, and Lots 128-130; Block F Lots 32-35. All other lots are beyond.
 - b. The existing ambulance at Kentland Fire Station, Company 46, has a service response time of 6.25 minutes, which is within the 6.25-minute response time guideline for Block A Lots 1-26; Block B Lots 1-25, and Lots 4169; Block C Lots 1-64, and Lots 68-135; Block D Lots 1-130; Block E Lots 1-36. Block F Lots 1-36. All other lots are beyond.
 - c. The existing paramedic at Kentland Fire Station, Company 46, has a service response time of 6.50 minutes, which is within the 7.25-minute response time guideline.

These findings are in conformance with the *Adopted and Approved Public Safety Master Plan 1990* and the *Guidelines For The Analysis Of Development Impact On Fire and Rescue Facilities*. To alleviate the negative impact on fire and rescue services due to the inadequate service discussed above, the Fire Department requires that all residential structures be fully sprinklered in accordance with National Fire Protection Association Standard 13D and all applicable Prince George's County laws. Since this is a matter of law, no condition is required.
8. Police Facilities●The proposed development is within the service area for District II-Bowie. In accordance with Section 24-122.1(c) of the Subdivision Regulations, existing county police facilities will be adequate to serve the proposed Balk Hill development. This police facility will adequately serve the population generated by the proposed subdivision.
9. Health Department●The Health Department reviewed the application and offered minimal comments; the property will be served by public water and sewer. A raze permit will be required prior to demolition of any structures. Any hazardous materials located in the structures must be removed and properly stored or discarded prior to demolition.
10. Stormwater Management●The Department of Environmental Resources (DER), Development Services Division, has determined that on-site stormwater management is required. The applicant has made several attempts to secure approval of a Stormwater Management Concept Plan, but to date, all have been denied. To ensure that development of this site does not result in on-site or downstream flooding, a Stormwater Management Concept Plan must be approved prior to signature approval of this preliminary plan. Development must be in accordance with this approved plan.
11. Public Utility Easement●The preliminary plan does not include the required 10-foot-wide public utility easement. Prior to signature approval, this easement must be shown along all public rights-of-way. The easement will be included on the final plat.
12. Zoning and Comprehensive Design Plan Conformance●The lotting pattern, road configuration and park dedication on the proposed preliminary plan are generally in conformance with the approved Zoning Map Amendments and Comprehensive Design Plan. Several revisions are necessary to bring the plans into complete conformance. These revisions are included as conditions in the

recommendation section of this report. Development of this site will need to be in conformance with all previous approvals.

RECOMMENDATION

APPROVAL, subject to the following conditions:

1. Prior to signature approval of the preliminary plan:
 - a. The FSD shall be revised to include the location of all the specimen trees on the site and a table indicating their species, size and condition and to add the symbol used to the legend.
 - b. The TCP I shall be revised to:
 - i. Indicate the correct amount of existing woodlands on the woodland conservation worksheet.
 - ii. Show the entire 50-foot perimeter as shown on CDP-0201 as preserved; lots shall be redesigned or eliminated so the 50-foot buffer is preserved in its entirety.
 - iii. Remove the areas of woodland preservation within the 75-foot noise berm.
 - iv. Remove the 20 acres of previously dedicated land from the woodland conservation worksheet, indicate the future clearing for the park facilities, and count preserved areas outside the floodplain toward meeting the requirements.
 - v. Remove areas of woodland preservation where stormwater management ponds will exist.
 - vi. Provide a table of all existing specimen trees and include a table indicating their species, size, condition and proposed disposition.
 - vii. Show all of the existing site features correctly including wetlands and streams.
 - viii. Show a limit of disturbance.
 - ix. Show the signature and date of approval of a qualified professional.
 - x. Show the PMA boundary as defined by Section 24-101 of the Subdivision Regulations; each element of the PMA must be indicated with a separate line; show the preservation of the PMA in its entirety along the rear of Lots 6 through 10 on Street T and 10 through 15 on Street U; the PMA line will encompass all of the environmental features within the PMA and their associated buffers; the PMA shall be shown as a line that can easily be recorded with metes and bounds in a conservation easement; and the PMA impacts shall be limited to those shown on the Type I Tree Conservation Plan submitted with this review, or as revised per the approved conditions.

- c. A Stormwater Management Concept Plan shall be approved by the Department of Environmental Resources.
2. A conservation easement shall be described by bearings and distances on the final plat. The conservation easement shall contain the 50-foot-wide buffers along the northern and southern property lines and all of the Patuxent River Primary Management Area except for impacts approved by the Planning Board. The easement shall be reviewed by the Environmental Planning Section prior to signature approval.
3. The following note shall be placed on the final plat:

Conservation easements described on this plat are areas where the installation of structures and roads and the removal of vegetation is prohibited without prior written consent from the M-NCPPC Planning Director or designee. The removal of hazardous trees, limbs, branches, or trunks is permitted.
4. At time of review of the Specific Design Plan, the actual house types and grading schemes shall be shown on the SDP and the TCP, and the PMA impacts shall be limited to those shown on the Type I Tree Conservation Plan submitted with this review, or as revised per the approved conditions.
5. Prior to signature approval of the preliminary plan, it shall be revised to indicate the location of the 65 dBA Ldn noise contour. As part of the Specific Design Plan submission, information shall be included that addresses how noise will be mitigated within the 65 dBA Ldn noise contour to 65 dBA Ldn or less in outdoor activity areas and 45 dBA Ldn or less in interior areas.
6. Prior to signature approval of the preliminary plan, a Stormwater Management Concept Plan shall be accepted by the Planning Department as meeting the design requirements of the proposed development, and subsequently be approved by the Department of Environmental Resources. To the extent possible, any proposed stormwater management ponds or bioretention areas shall be used for reforestation and afforestation at stocking levels that meet the requirements of the Woodland Conservation Ordinance. Prior to approval of the Type II TCP, evidence that DER has approved the planting plan shall be submitted.
7. The following roadways shall be constructed by the applicant:
 - a. The construction of Campus Way as an arterial facility within the limits of the subject property.
 - b. The construction of St. Josephs Drive as a collector facility within the limits of the subject property.
8. The applicant will provide an additional eastbound through lane along MD 202 through the I-95 interchange and additional eastbound and westbound through lanes along MD 202 between the I-95 interchange and Lottsford Road. Additionally, the applicant will provide a second eastbound left-turn lane along MD 202 at the McCormick Drive/St. Josephs Drive intersection. These improvements will be either directly provided by the applicant, or will be funded by the applicant by payment of a fee, not to exceed \$1.24 million (in 2002 dollars) for the entire Balk Hill property.

Under the subject application, the applicant shall pay to Prince George's County the following pro rata share of costs for improvements to MD 202:

- a. A fee calculated as $\$765.75/\text{residence} \times (\text{Engineering News-Record Highway Construction Cost Index at time of payment}) / \text{Engineering News-Record Highway Construction Cost Index for March 2002}$.
9. At the time of final plat approval, the applicant shall dedicate the following rights-of-way as shown on the submitted plan:
 - a. Campus Way, an arterial facility with a right-of-way of 120 feet.
 - b. St. Josephs Drive, a collector facility with a right-of-way of 80 feet.
 10. The preliminary plan shall be revised to show a 60-foot right-of-way street along Street S between St. Josephs Drive and Street U.
 11. At the time of specific design plan, the transportation staff shall review all lots along St. Josephs Drive for access. Each lot should direct access away from St. Josephs Drive or provide driveways with a turnaround capability in order to minimize the need for vehicles accessing these lots to back onto St. Josephs Drive.
 12. Prior to the issuance of the 163rd building permit, the applicant, his heirs, successors and/or assignees shall construct the following trails shown on the approved Comprehensive Design Plan (CDP 0201):
 - a. The eight-foot-wide, asphalt, hiker-biker trail shown along the subject property's entire frontage on the east side of Campus Way North.
 - b. The eight-foot-wide, asphalt, hiker-biker trail shown along St. Josephs Drive to provide for the master plan trail connection from Campus Way North towards the west side of the existing high school on Ardmore Road.
 - c. The master plan trail located along the stream valley extending either from St. Josephs Drive or Campus Way North to and through the M-NCPPC parkland. This trail shall be located within a public use easement on HOA land and on M-NCPPC parkland (for the eastern segment). This trail shall also be a minimum of eight feet wide and asphalted. An attractive trail head shall be provided along either St. Josephs Drive or Campus Way.
 13. All other internal, HOA trails shall be six feet wide and asphalted.
 14. As indicated on the CDP, all internal roads (except for the large lots east of the stream valley) shall have standard sidewalks on both sides. Where master plan trails are recommended along roads, the trail shall be constructed in place of the standard sidewalk on that side of the road, with a standard sidewalk still being constructed on the opposite side.
 15. All trails and sidewalks shall comply with applicable ADA standards and be free of above- ground utilities and street trees.

16. All trails shall be assured of dry passage. If wet areas must be traversed, suitable structures shall be constructed.
17. No building permits shall be issued for this subdivision until the percent capacity, as adjusted pursuant to the school regulations, at all the affected school clusters are less than or equal to 105 percent or three years have elapsed since the time of the approval of the preliminary plan of subdivision; or pursuant to the terms of an executed school facilities agreement whereby the subdivision applicant, to avoid a waiting period, agrees with the County Executive and County Council to construct or secure funding for construction of all or part of a school to advance capacity.
18. Prior to signature approval, the preliminary plan shall be revised to graphically depict the 10-foot-wide public utility easement. The easement shall be shown on the final plat.
19. Development of this site shall be in conformance with an approved Stormwater Management Concept Plan.
20. Development shall be in conformance with A-9635-C, A-9637-C, A-9638-C, and CDP 0201, or any approved revisions thereto.
21. Dedication to the Commission of 27± acres as shown on Department of Parks and Recreation Exhibit ■A,• subject to the following:
 - A. An original, special warranty deed for the property to be conveyed, (signed by the WSSC Assessment Supervisor) shall be submitted to the Subdivision Section of the Development Review Division, The Maryland-National Capital Park and Planning Commission (M-NCPPC), along with the Final Plat.
 - B. The M-NCPPC shall be held harmless for the cost of public improvements associated with land to be conveyed, including but not limited to, sewer extensions, adjacent road improvements, drains, sidewalks, curbs and gutters, and front-foot benefit charges prior to and subsequent to Final Plat.
 - C. The boundaries and acreage of land to be conveyed to the M-NCPPC shall be indicated on all development plans and permits, which include such property.
 - D. The land to be conveyed shall not be disturbed or filled in any way without the prior written consent of the Department of Parks and Recreation (DPR). If the land is to be disturbed, the DPR shall require that a performance bond be posted to warrant restoration, repair or improvements made necessary or required by the M-NCPPC development approval process. The bond or other suitable financial guarantee (suitability to be judged by the General Counsel's Office, M-NCPPC) shall be submitted to the DPR within two weeks prior to applying for grading permits.
 - E. Stormdrain outfalls shall be designed to avoid adverse impacts on land to be conveyed to or owned by M-NCPPC. If the outfalls require drainage improvements on adjacent land to be conveyed to or owned by M-NCPPC, DPR shall review and approve the location and design of these facilities. DPR may require a performance bond and easement agreement prior to issuance of grading permits.

- G All waste matter of any kind shall be removed from the property to be conveyed. DPR shall inspect the site and verify that it is in acceptable condition for conveyance, prior to Final Plat approval.
- H. No stormwater management facilities, or tree conservation or utility easements shall be proposed on lands owned by or to be conveyed to M-NCPPC without the prior written consent of DPR. DPR shall review and approve the location and/or design of these features. If such proposals are approved by DPR, a performance bond and an easement agreement may be required prior to the issuance of grading permits.
22. Subject to the approval of the Commission, the Planning Board authorizes the Executive Director to dispose of 0.06 acres of park property as shown on attached Exhibit ■A.●
23. Prior to signature approval of the preliminary plan, the applicant shall prepare deeds and plats showing the property to be exchange with M-NCPPC at Tartan South Subdivision to provide access to the expanded park. The deeds shall be recorded prior to approval of the final plat of subdivision. The Department of Parks and Recreation shall review and approve those plats prior to recordation.
24. The applicant shall prepare deeds for the properties to be exchanged and submit them to the Department of Parks and Recreation for their review at least four weeks prior to submission of the final plat of subdivision. Any cost for public improvements including WSSC front-foot benefit charges associated with the property to be conveyed to M-NCPPC shall be paid by the applicant. A title report shall accompany the deed for the land to be conveyed to M-NCPPC. Following approval by DPR, the deed for the property to be conveyed to M-NCPPC shall be submitted to the Subdivision Section along with the Final Plat of Subdivision. Upon receipt of a recorded deed, DPR staff will take necessary actions to convey the 0.06 acre of parkland to the applicant. The applicant shall record the deeds in land records of Prince George's County.
25. Prior to signature approval of the preliminary plan, the applicant shall submit a new plan for the development of the recreation facilities in Balk Hill Community Park to DPR. Following approval by the DPR, the applicant shall revise the SDP- 9702, for Tartan South and the related RFA recorded in Liber 13925 Folio 733 to reflect those changes.
26. The recreational facilities shall be designed and constructed in accordance with the applicable standards in the *Parks and Recreation Facilities Guidelines*.
27. Prior to signature approval of the preliminary plan, the concept-grading plan for parkland shall be reviewed and approved by DPR staff. The grading on parkland shall be completed prior to 50 percent of applications for building permit for the lots east of St. Josephs Drive.
28. Prior to submission of final plat of subdivision, the applicant shall enter into Recreational Facilities Agreements (RFA) for the construction and grading on dedicated parkland.
29. The applicant shall construct an eight-foot-wide, asphalt, hiker-biker trail in the stream valley within the Balk Hill development as shown on DPR Exhibit ■A.● All trails shall be constructed to assured of dry passage. If wet areas must be traversed, suitable structures shall be constructed. The trail shall be constructed in the phase with the development; no building permits shall be issued for the lots

directly adjacent to the trail until the trail is under construction. The trail shall be completed prior to issuance of the 163rd building permit.

30. The applicant shall submit a performance bond, letter of credit or other suitable financial guarantee to DPR to secure the grading and construction of the recreational facilities on park property, in an amount to be determined by the DPR, at least two weeks prior to applying for building permits.