

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](http://www.mnccppc.org/pgco/planning/plan.htm)*

## PRELIMINARY PLAN

**4-01103**

Application	General Data
Project Name:  <b>Bowie Property</b>  Location:  West side of Largo Road, approximately 2,500 feet south of its intersection with MD 202 & MD 193.  Applicant/Address:  Ridgeley Builders, Inc. 2200 Defense Highway, Suite #101 Crofton, MD 21114	Date Accepted 12/28/01
	Planning Board Action Limit 05/23/02
	Tax Map & Grid 076/B-04
	Plan Acreage 26.54
	Zone R-R
	Lots 50
	Parcels 4
	Planning Area 79
	Council District 06
	Municipality N/A
	200-Scale Base Map 203SE11

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	02/26/02
		Variance(s): Adjoining Property Owners	N/A
Staff Recommendation		Staff Reviewer: Del Balzo	
APPROVAL	APPROVAL WITH CONDITIONS	DISAPPROVAL	DISCUSSION
	X		

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.

THE MARYLAND-NATIONAL CAPITAL  
PARK AND PLANNING COMMISSION

PRINCE GEORGE'S COUNTY PLANNING BOARD

STAFF REPORT

SUBJECT: Preliminary Plan of Subdivision 4-01103  
Bowie Property Cluster, Lots 1 - 50

OVERVIEW

The subject property consists of approximately 26.54 acres of land in the R-R Zone. It is currently identified as Parcels 27 and 34, Tax Map 76, Grid B-4. The property is partially wooded; some areas have been farmed. A large, single-family home is on the site (Parcel 27) and is proposed to remain. The applicant proposes to subdivide the property into 50 lots for single-family detached housing and 2 parcels for stormwater management and homeowners open space. Minimum lot sizes of 10,000 square feet are proposed under the Cluster Subdivision provisions of Section 24-137 of the Subdivision Regulations.

Access is provided from MD 202 at its intersection with Water Fowl Way. The applicant proposes a public street system connecting to MD 202.

SETTING

The property is located on the west side of Largo Road (MD 202), approximately 2,500 feet south of its intersection with Watkins Park Road (MD 193). Townhomes in the Perrywood subdivision are to the east, across MD 202 in the R-S Zone. Single-family detached homes, developed under cluster provisions, are to the north and west in the Ramblewood Subdivision in the R-R Zone. A single-family home on a large parcel abuts the property to the south. The University of Maryland Experimental Farm is farther to the south.

FINDINGS AND REASONS FOR STAFF RECOMMENDATION

1. Cluster Development Data as proposed by Applicant

Zone	R-R
Gross Tract Area	26.54 acres
Area with Slopes Greater than 25%	0.33 acres
Area within Preliminary 100-year Floodplain	0.00 acres
Cluster Net Tract Area	26.21 acres
Minimum Lot Size Permitted	10,000 sq.ft.
Minimum Lot Size Proposed	10,125 sq.ft.
Number of Lots Permitted	52
Number of Lots Proposed	50
Flag lots proposed	0
Cluster Open Space Required	10.24 acres

2/3 of Required Open Space to be Located Outside of the 100-Year Floodplain and Stormwater Management Facilities	7.12 acres
Cluster Open Space Proposed Outside of the 100-Year Floodplain and Stormwater Management Facilities	8.92 acres
Cluster Open Space Provided	10.43 acres
Mandatory Dedication Required	1.33 acres
Mandatory Dedication Proposed	Fee-in-lieu
Total Open Space Required (Cluster plus Mandatory Dedication)	10.24 acres
Total Open Space Provided	10.43 acres
Open Space to be Conveyed to Homeowners' Association	10.43 acres
Open Space to be Conveyed to M-NCPPC	0 acres
Open Space to be Conveyed to Prince George's County	0 acres
Slopes Exceeding 25% in grade	0.33 acres
25% of Steep Slopes	0.0825 acres
Area of Steep Slopes to be Disturbed	0 acres
Area of Nontidal Wetlands and Waters of the U.S.	0.92 acres

Modification in Dimensional Standards Permitted in Cluster		Standard in Zone	Modification Allowed Proposed	
27-443.2(c)	Net Lot Coverage	25%	30%	30%
27-442(d)	Lot Width at Bldg. Line	80'	75'	75'
	Lot Frontage Along Street Line	70'	50'	50'
	Lot Frontage Along Cul-de-sac	60'	50'	50'

2. **Cluster Findings.** The design for the proposed cluster subdivision meets the purposes and criteria for approval of cluster developments in the R-R Zone found in Subtitles 27-Zoning and 24-Subdivision of the Prince George's County Code. The following findings are required in accordance with Section 24-137 of the Subdivision Regulations:

- a. **Individual lots, streets, buildings and parking areas will be designed and situated in conformance with the provisions for woodland conservation and tree preservation set forth in Subtitle 25 of the Prince George's County Code,**

**and in order to minimize alteration of the historic resources or natural site features to be preserved.**

Comment : Woodland and tree conservation on the subject property will occur at the site's perimeter in the homeowners open space. This approach is supported by the Environmental Planning Section and will provide a degree of buffering between the subject and adjoining properties. The overall layout of individual lots, streets, buildings and parking areas has been designed and situated so as to minimize alteration of the remaining woodland natural site features to be preserved.

- b. Cluster open space intended for a recreational or public use, conservation purposes, or as a buffer for a historic resource is appropriate, given its size, shape, topography and location, and is suitable for the particular purposes it is to serve on the site.**

Comment: The cluster open space is intended for both conservation and recreational purposes and is suitable. Although generally behind the proposed lots, there is access to the open space from the proposed street. The open space parcel will benefit the development by permanently securing an undeveloped perimeter and by allowing all interior lots to back to open space. This will enhance the living area environment.

- c. Cluster open space will include irreplaceable natural features located on the tract (such as, but not limited to, stream beds, significant stands of trees, steep slopes, individual trees of significant size, and rock outcroppings).**

Comment: The proposed plan includes preservation of some of the larger trees on the property in the vicinity of the large existing home. However, the grading plan shows that many of these trees are proposed to be removed. This is further discussed in the Environmental Issues finding of this report. Saving these trees is the crux of the applicant's cluster justification, and yet the proposal is to remove many of them. All of these large specimen trees must be saved or the cluster is not justified.

- d. Cluster open space intended for recreational or public use will be easily accessible to pedestrians; and the means of access will meet the needs of the physically handicapped and elderly.**

Comment : The cluster open space originally was hidden behind all of the lots. The original proposal included 52 lots. Staff recommended that the applicant eliminate two of these lots, creating a wider view into the open space from the entrance road and allowing for future pedestrian access. The applicant agreed to this and removed the two lots. Now, the open space is not only more visible to the majority of the subdivision, it is more accessible as well.

- e. Cluster open space intended for scenic value will achieve this purpose through the retention of irreplaceable natural features described above; or where such natural features do not exist, such techniques as berms planted with trees and**

**the use of landscaping material may be required to eliminate visual monotony of the landscape.**

Comment: The cluster open space is mostly cleared. The large specimen trees must be preserved. These provide scenic value to the open space.

- f. Diversity and originality of lot layout and individual building design, orientation, and location will achieve the best possible relationship between development and the land.**

Comment: The property is a large square. It includes a large house with stately trees. The layout allows for the preservation of these trees and also provides opportunity for on-site recreational activities, be they passive or active, allowing the open space to be enjoyed by most of the homeowners. This is the best possible relationship between the development and the land. A conventional layout could lot out much of the open space.

- g. Individual lots, buildings, parking areas, and streets will be arranged, designed, situated, and oriented so as to harmoniously relate to surrounding properties, to improve the view from dwellings, and to lessen the area devoted to motor vehicle access and circulation.**

Comment: With a few exceptions, the individual lots and buildings are arranged and oriented so that they will face each other and back-up to open space. The proposed road layout does provide for a minimum of pavement area devoted to motor vehicle access and circulation. There are no parking areas proposed. Individual lots, buildings and streets are arranged, designed, situated and oriented so as to harmoniously relate to surrounding properties, to improve the view from dwellings, and to lessen the area devoted to motor vehicle access and circulation. As noted previously, the open space is incorporated into the subdivision and not simply hidden behind lots.

- h. Individual lots, buildings, parking areas, and streets will be so situated and oriented as to avoid the adverse effects of shadows, noise, and traffic on, and afford privacy to, the residents of this site.**

Comment: This property abuts the west side of Largo Road. The *Adopted and Approved Master for the Subregion VI Study Area* indicates that Largo Road between the Capital Beltway and Pennsylvania Avenue (MD 4) is classified as an expressway. The proposed right-of-way is 200 feet in width and is proposed to have 4 lanes.

Section 24-121(a)(4) states: ■Residential lots adjacent to existing or planned roadways of arterial classification shall be platted with a minimum depth of one hundred and fifty (150) feet.● A 150-foot lot depth is therefore required for lots along Largo Road. The narrowest lot depth along Largo Road is 195 feet if the 50 foot-wide landscape buffer is included.

Based on a classification of ~~an~~ expressway, modeling performed by the Environmental Planning Section projects that the 65 dBA Ldn noise contour will occur approximately 1,159 feet from the centerline of the roadway. This noise contour is based on the ultimate road design and service flow for this road and does not consider topography. The unmitigated 65 dBA noise contour has been indicated on the preliminary plan.

The location of the 65 dBA contour presents a substantial intrusion of noise onto the site, and results in the need for mitigation. The conceptual site plan has proposed some berming along Largo Road. Because this is an application for a cluster, a Detailed Site Plan will be required. At time of Detailed Site Plan, a Phase II Noise Study will be required to provide recommendations for noise mitigation measures necessary to reduce the exterior noise levels in outdoor living areas to 65 dBA or less, and to reduce interior noise levels to 45 dBA or less. A Phase II Noise Study is not required at this time because sufficient space has been left adjacent to Largo Road to provide noise mitigation measures in the future.

As part of the submission of an application for the Detailed Site Plan, a Phase II Noise Study should be provided that includes the provision of noise mitigation measures that reduce exterior noise in outdoor activity areas to 65 dBA or less and interior noise to 45 dBA or less. The Detailed Site Plan should show the necessary site features for mitigation.

- i. **Not more than one-fourth (1/4) of any of the land having slopes greater than twenty five percent (25%) will be removed or altered, and then only when the slopes are isolated, small, or otherwise occur as insignificant knolls, so that the design of the development or cluster open space will not be adversely affected.**

Comment: None of the steep slopes are impacted. All will remain intact.

- j. **Appropriate landscape screening techniques will be employed at each entrance to the subdivision and along adjoining existing streets, so as to assure the compatibility of the appearance of the cluster subdivision with that of surrounding existing and planned residential development not approved for cluster development, and to provide an attractive appearance from streets. Individual lots shall also be appropriately landscaped in such a manner as to provide an attractive appearance.**

Comment: This issue is best dealt with at the detailed site plan stage. At this time, the applicant proposes to berm or fence the frontage along MD 202 as a noise barrier. The details of the frontage appearance will be determined at detailed site plan if this application is approved. The lots near the entrance have a larger appearance (in conformance with Section 24-137(d) of the Subdivision Regulations) and the rears will be buffered from streets.

- 3. Environmental Issues and Impacts to the Primary Management Area A review of the information available indicates that a stream, with associated nontidal wetlands, is located on the southwest corner of the property. After it leaves the property, it joins a larger

tributary, with associated nontidal wetlands and 100-year floodplain which is offset 150 to 200 feet from the western property line. The on-site stream is located in an incised channel, with pockets of steep and severe slopes adjacent to the stream. The site is located in the Western Branch subwatershed, which is a tributary to the Patuxent River. Trees on the largely cleared site are limited to the area buffering the stream contiguous with a hedgerow effect along the western boundary and a grove of trees surrounding the existing house.

The soils found to occur on this property, according to the Prince George's County Soil Survey, include the Adelphia, Collington, and Shrewsbury series. The Adelphia soils are in hydrologic Class B, but may exhibit seasonally high water table and impeded drainage. The Collington soils pose no special problems for development. The Shrewsbury soils are in hydrologic soils class D, and may exhibit a high water table and poor drainage. None of the soils are considered to be erodible.

There are no rare, threatened, or endangered species located in the vicinity of this property based on information provided by the Maryland Department of Natural Resources, Natural Heritage Program. No historic or scenic roads are affected by this proposal. The sewer and water service categories are S-4C and W-3.

#### Environmental Review

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 the perennial stream, 50-foot stream buffer, nontidal wetlands adjacent to the perennial stream, the 25-foot wetland buffer, and severe slopes adjacent to the stream.

A 50-foot-wide stream buffer has been labeled on the north side of the stream in the southwest corner of the site. A label has been added to indicate the Primary Management Area on the plans, but the line type used to delineate the Primary Management Area (PMA) has not been included in the legend. This line should be correctly labeled as the Primary Management Area (PMA). Prior to signature approval, the preliminary plan and Tree Conservation Plan need to be revised to include the line delineating the PMA boundary in the legend.

The site contains natural features which are required to be protected under Section 24-130 of the Subdivision Regulations. The stormwater management pond has been moved so that no disturbance to the PMA is proposed by the construction of the pond.

A Letter of Justification, dated February 25, 2002, was submitted, stating how the proposed design protects the PMA to the fullest extent possible, indicating that the only disturbance required was for the placement of an outfall from the stormwater management pond to the stream. But the letter indicates that a 15-foot-wide unwooded clear zone is required from the toe of the embankment, rather than the 25-foot-wide clear zone generally required by the Soil Conservation District (SCD). The plan also fails to show the 25-foot-wide clear zone at the foot of an embankment, but indicates a 15-foot non-woody buffer which may result in encroachment and clearing within the PMA if a 25-foot-wide unwooded clear zone is required. Prior to signature approval of the preliminary plan, the TCPI and conceptual site plan need to be revised to provide a 25-foot-wide clear zone between the delineated PMA

and the toe of the embankment, unless a smaller distance is determined to be appropriate by the Soil Conservation District. The setback from the toe of the embankment should be correctly labeled as ■required unwooded clear zone from the toe of the embankment.■

An approved Stormwater Management Concept Plan has been submitted for the plan, and a Stormwater Management Concept Approval Letter has been received. The Stormwater Management Concept Approval is conceptual in nature, and locational revisions that reduce the impacts to the PMA can be made without jeopardizing the approval of the stormwater concept.

This site is subject to the provisions of the Woodland Conservation Ordinance because it is larger than 40,000 square feet in size and contains more than 10,000 square feet of woodlands. A Tree Conservation Plan (TCP) and Forest Stand Delineation (FSD) are required.

A revised FSD was submitted which included the location of soils and steep and severe slopes (i.e., slopes 15 to 25 percent and slopes 25 percent and greater), as requested. The soils on the site are in the Adelphia, Collington and Shrewsbury series. The Adelphia and Collington series pose few difficulties to development. Shrewsbury soils are in hydrologic soils group D, and may be subject to high water table, poor drainage, and seepage. A small area of Shrewsbury soils is located in the northeast corner of the site. No structures are proposed in the area of the Shrewsbury soils. Areas of Shrewsbury soils have been placed into the cluster open space where potential development difficulties will be minimized.

The FSD and TCPI have been revised to show the location of ■individual trees of significant size■ which were planted as landscaping for the existing house on the property. Although these trees are not considered ■woodlands,■ identification was requested to determine if any qualified as ■specimen trees,■ and information was requested regarding size, species, location, and condition.

A table labeled ■specimen trees■ was added to the FSD Plan which included 34 individual trees. Not all trees listed within the table qualify as specimen trees as identified in the Woodland Conservation Technical Manual, which identifies specimen trees as either 30-inches in diameter at breast height or 75 percent of the county champion, whichever is smaller. The FSD also does not include any information regarding condition. Prior to signature approval of the preliminary plan, the FSD shall be revised to label the table of ■Specimen Trees■ as ■Trees of Significant Size,■ indicate which of the trees qualifies as a specimen tree in accordance with the Woodland Conservation Technical Manual, and indicate the condition of individual trees.

The Tree Conservation Plan (TCPI/01/02) has been reviewed. Based on existing woodlands of 1.64 acres, the woodland conservation threshold for this site is 2.34 acres (15 percent of the Net Tract) plus an additional 0.48 acre due to removal of woodland, for a total minimum requirement of 4.22 acres.

The TCPI proposes to meet the Woodland Conservation Ordinance requirements with 1.40 acres of on-site preservation and 2.98 acres of on-site reforestation/afforestation, for a total of 4.38 acres, a quantity which exceed the requirement by 0.16 acre. TCPI/0102 proposes the retention of on-site priority woodlands for the most part; however, afforestation has not



been proposed in the unwooded portions of the PMA, which is a priority area for woodland conservation. Conservation of woodlands in contiguous blocks is also a priority. Afforestation adjacent to the PMA, especially in areas south of the delineating PMA, where Tree #7 can be incorporated into the WCA is recommended. This can be done instead of some of the afforestation along Largo Road which is not a priority area. Prior to signature approval, the TCPI needs to be revised to afforest areas of the PMA that are unwooded, and to maximize afforestation areas contiguous to the PMA to incorporate specimen and significant trees to the extent possible.

Reforestation Area A and Reforestation Area B are not now forested. Afforestation rather than reforestation is the appropriate term for planting in this area. Woodland conservation is also not appropriate within a public utility easement, which is generally required adjacent to public rights-of-way. Prior to signature approval, the TCPI shall be revised to indicate that Reforestation Area A and Reforestation Area B are afforestation areas. Areas of woodland conservation located within public utility easements shall be credited as woodland conservation.

Afforestation Area 1 is indicated adjacent to Largo Road (MD 202), which also acts as a 50-foot-wide landscape buffer. Woodland conservation cannot be credited for areas located within a public utility easement. Prior to signature approval, the TCPI shall be revised to remove woodland conservation from the area of the public utility easement in Afforestation Area 1. All credited woodland conservation areas shall have a minimum width of 35 feet.

The TCPI does not address the preservation or protection of specimen trees located on the site. A table listing the specimen trees, similar to that required on the FSD, which should include the proposed disposition of each specimen tree, shall be provided. The critical root zone for each specimen tree, as defined by the Woodland Conservation Technical Manual, should be delineated on the TCPI. Prior to signature approval, the TCPI should be revised to include a table of significant and specimen trees, including species, size, condition, and proposed disposition. The critical root zone of all specimen trees located within 50 feet of the limit of disturbance shall also be shown.

The Conceptual Site Plan shows that a considerable number of specimen trees located within the environs of the existing house are proposed to be removed. Specimen trees, even if not located within areas delineated as woodlands, are a priority preservation and enhancement through reforestation or afforestation. These specimen trees also constitute a significant natural feature of the site. Because the majority of the site is open agricultural field, significant trees should be retained as justification for use of the Optional Cluster Approach. This will be discussed further under the discussion of cluster development criteria. The TCPI needs to be revised to treat identified specimen trees as priority areas for preservation of significant natural features to the maximum extent possible. At time of DSP and TCPII, specimen trees on the site should be preserved and protected to the maximum extent possible. This may include but not be limited to the following: relocation of lots; adjustment to lot lines; and adjustment to architectural footprints. The TCPII shall demonstrate that disturbance has been minimized in the critical root zone of trees to be retained. The TCPII shall include a Significant/Specimen Tree Management Plan to address best management practices to maintain and promote the viability of the significant trees retained.

4. Community Planning•The 2000 *Interim General Plan* places this property in the Developing Tier. The 1994 *Subregion VI Master Plan* recommends residential land uses at the Low Suburban density. The 1994 Sectional Map Amendment placed the property in the R-R Zone. The proposed subdivision is in conformance with the master plan recommendations.

An *objective* of the Circulation and Transportation Chapter in the master plan is to use buffers between transportation facilities and incompatible adjacent land uses. MD 202 is a proposed four-lane divided expressway with a maximum right-of-way of 200 feet. *Guideline 11* in the master plan (page 184) urges all development adjacent to major thoroughfares to preserve and provide landscaped open space between structures and the highway. Suggested buffer techniques include orientation of dwellings away from the road, requiring greater setbacks, and using landscaping and fencing to lessen negative impacts.

The adjacent Ramblewood subdivision has established an approximate 50-foot-wide bermed and landscaped buffer strip, similar to the setback strip proposed in this application. At the time of detailed site plan review, it would be appropriate to continue this established buffer treatment by providing the same type of landscaped berming along the MD 202 frontage. This will be examined in conjunction with the buffer required for noise abatement.

5. Parks and Recreation•The proposed subdivision is subject to the mandatory park dedication requirements of Section 24-134 of the Subdivision Regulations. Because it is a cluster subdivision with open space that provides an opportunity for on-site recreation, staff recommends the Planning Board require the applicant to provide on-site recreational facilities. In this case, there are many opportunities to enhance the livability of the subdivision with such facilities. However, an excess of on-site facilities could detract from the serenity of the neighborhood if these facilities are designed for active recreation. A system of passive recreation facilities such as walking paths and sitting areas, enhanced with landscaping and trees, would best fit this property. The exact makeup of these facilities should be determined at the time of detailed site plan.
6. Trails•The 1985 *Equestrian Addendum to the Adopted and Approved Countywide Trails Plan* and the Adopted and Approved Subregion VI Master Plan designate Largo Road (MD 202) as a Class III Bikeway and recommends appropriate signage. In cases along state rights-of-way, the Planning Board has typically required the applicant to provide the installation of one ■Share the Road With a Bike■ sign. Staff recommends this sign be required in this case. Staff notes, however, that in all cases involving signs within state rights-of-way, the state may decline the sign. If the state ultimately declines the sign, the condition would be void.

If road improvements are required along MD 202, the wide, asphalt shoulders along the property's frontage should be preserved. These wide shoulders currently serve as the bikeway along MD 202.

Standard sidewalks are recommended along one side of all internal roads. All internal HOA trails shall be six feet wide, asphalt, and ADA compatible.

7. Transportation No traffic study was requested of the applicant but traffic counts were required. However, the applicant decided to submit a traffic study dated January 2002 with traffic counts taken during June 2001 and January 2002. The findings and recommendations outlined below are based upon a review of these and other relevant materials and analyses conducted by the staff of the Transportation Planning Section, consistent with the *Guidelines for the Analysis of the Traffic Impact of Development Proposals*. The traffic counts were referred to the county Department of Public Works and Transportation (DPW&T) and the State Highway Administration (SHA). DPW&T comments were received in time for inclusion with this memorandum and are attached. SHA comments will be added to the record if received prior to the hearing.

Staff Analysis of Traffic Impacts

The traffic study examined the site impact at four intersections in the area:

MD 202/White House Road (signalized)  
MD 202/MD 193 (signalized)  
MD 202/Water Fowl Way/site entrance (unsignalized)  
MD 202/Black Swan Drive/Hancock Drive (signalized)

The transportation staff has fully reviewed the traffic study as submitted by the applicant. The existing conditions at the study intersections are summarized below:

EXISTING CONDITIONS				
Intersection	Critical Lane Volume (AM & PM)		Level of Service (LOS, AM & PM)	
MD 202 and White House Road	1,139	1,010	B	B
MD 202 and MD 193	1,012	890	B	A
MD 202 and Water Fowl Way/site entrance	52.3*	66.0*	--	--
MD 202 and Black Swan Drive/Hancock Drive	818	749	A	A
*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 vehicle delay exceeding 50 seconds indicates inadequate traffic operations. Delays of +999 are outside the range of the procedures, and should be interpreted as excessive.				

Under existing traffic, the three signalized intersections under study operate acceptably during both peak hours. The *Guidelines* identify signalized intersections operating at LOS E or F during any peak hour as unacceptable. Also, the *Guidelines* identify unsignalized intersections having delays exceeding 50 seconds in any movement as unacceptable, and under that criterion the existing intersection of MD 202/Water Fowl Way operates unacceptably as it is currently configured.

The traffic study shows approved development in the area. Rather than using the background development from another traffic study, staff would have preferred that the applicant have re-examined that study area to determine applicable development. Four of the developments cited have little or no impact on the critical intersections. Staff has taken the step of adding unbuilt developments to the south of the subject property along MD 202, as should have been done. The included developments are Collington Estates, 48 residences; Rustic Ridge, 149 residences; and Brock Hills, 34 residences. Regional traffic growth of two percent per year is shown along MD 202. Background conditions are summarized below:

BACKGROUND CONDITIONS				
Intersection	Critical Lane Volume (AM & PM)		Level of Service (LOS, AM & PM)	
MD 202 and White House Road	1,358	1,229	D	C
MD 202 and MD 193	1,295	1,126	C	B
MD 202 and Water Fowl Way/site entrance	75.5*	104.9*	--	--
MD 202 and Black Swan Drive/Hancock Drive	943	886	A	A
*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 vehicle delay exceeding 50 seconds indicates inadequate traffic operations. Delays of +999 are outside the range of the procedures, and should be interpreted as excessive.				

The site is proposed for development as a residential subdivision. The site is proposed to be developed with 50 single-family detached residences, with access from a new street to be built opposite existing Water Fowl Way along MD 202. The site trip generation would be 38 AM peak hour trips (8 in, 30 out) and 45 PM peak hour trips (30 in, 15 out).

The site trip distribution shown in the traffic study is reasonable, but given that there is a funded interchange at the Beltway and Ritchie Marlboro Road, the distribution should have considered that 18 percent of site traffic would go west onto White House Road toward the Beltway. Using the trip distribution and assignment described above, we obtain the following results under total traffic:

TOTAL TRAFFIC CONDITIONS				
Intersection	Critical Lane Volume (AM & PM)		Level of Service (LOS, AM & PM)	
MD 202 and White House Road	1,365	1,240	D	C
MD 202 and MD 193	1,306	1,137	D	B
MD 202 and Water Fowl Way/site entrance	882.8*	305.0*	--	--
MD 202 and Black Swan Drive/Hancock Drive	956	899	A	A
*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 vehicle delay exceeding 50 seconds indicates inadequate traffic operations. Delays of +999 are outside the range of the procedures, and should be interpreted as excessive.				

Under the analysis done, no inadequacy has been identified at the three signalized intersections within the study area. The Prince George's County Planning Board, in the *Guidelines for the Analysis of the Traffic Impact of Development Proposals* has defined

vehicle delay in any movement exceeding 50.0 seconds as an unacceptable operating condition at unsignalized intersections. The proposed site access at the current MD 202/Water Fowl Way intersection, which is unsignalized, operates unacceptably during both peak hours with the development of the subject property, with vehicle delay exceeding 50.0 seconds in both peak hours for minor street left-turn movements from either the east or west.

In response to such a finding, the Planning Board has generally recommended that the applicant provide a traffic signal warrant study and install the signal if it is deemed warranted by the appropriate operating agency. The warrant study is, in itself, a more detailed study of the adequacy of the existing unsignalized intersection. This area has been recently studied, and as a result a traffic signal was recently installed at the MD 202/Black Swan Drive/Hancock Drive intersection. Additional problems may exist at the MD 202/Water Fowl Way intersection with the development of this site. A traffic signal warrant study should be prepared by this applicant in response to the inadequacy noted. This should occur prior to the time of Detailed Site Plan review.

However, if the applicant can obtain written agreement from SHA that, due to gaps in traffic produced by the signal at the adjacent MD 202/Black Swan Drive/Hancock Drive intersection, the subject intersection would operate acceptably with the development of the subject property without signalization, transportation staff would waive the requirement for a new study. In the event that a signal warrant study were to be waived for this reason, the adequacy finding made by the Planning Board would not be compromised; such a determination by SHA would be a final assurance that sufficient capacity exists, and that the access to the site would be safe. As long as the applicant is responsible for any improvements identified as necessary for safe access by SHA, or which would be identified in a warrant study if one is done, the staff believes that the critical intersection will operate acceptably in both peak hours.

#### Plan Comments

MD 202 is a master plan expressway facility. It appears that sufficient dedication exists along MD 202, and no further dedication is required by this plan.

The *Subregion VI Master Plan* shows a primary roadway along the southern boundary of the subject property. The text of the plan, however, does not discuss this roadway in any detail, nor is it numbered or identified as are a number of other primary streets within the plan area. It appears that this roadway was shown on the plan as a means of establishing the point at which the subject property would gain access to be MD 202. A study identifying combined access points along MD 202 was done several years prior to approval of the master plan.

Since the access point shown on the subject plan is consistent with the recommendations of that study, staff believes that the access and circulation plan associated with this subdivision is acceptable, and need not be modified. However, once in the subdivision, the entrance streets are oddly configured. At the time of detailed site plan review, consideration should be given to reconfiguring the point where ■Drive A• meets the entrance road so that a ■T• intersection may be created.

Based these 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 transportation related conditions included in this report.

8. 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 #	Dwell- ing Units	Pupil Yield Factor	Subdivi- sion Enroll- ment	Actual Enroll- ment	Comple- tion Enroll- ment	Wait Enroll- ment	Cumulativ e Enrollmen t	State Rated Capacity	Percent Capacity	Funded School
Elementary School Cluster 4	50	0.24	12.48	5264	263	591	6130.48	4594	133.45%	Rosaryville, Marlton
Middle School Cluster 2	50	0.06	3.12	4,397	201	189	4790.20	3,648	131.31%	East Central
High School Cluster 2	50	0.12	6.24	12,045	412	377	12840.24	10,811	118.77%	F. Douglass addn.

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

The affected elementary, middle, and high school clusters percent capacities are greater than 105 percent. Rosaryville and Marlton Elementary are the Funded Schools 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. Therefore this subdivision can be approved with a three-year waiting period.

9. Fire and Rescue The Growth Policy and Public Facilities Planning Section has reviewed the subdivision plans for adequacy of public facilities and concluded the following.
  - a. The existing fire engine service 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 guidelines for Lots 1-6, 27-35, 49 and 50. All other lots are beyond.
  - b. The existing ambulance service at Kentland Fire Station, Company 46, has a service response time of 5.59 minutes, which is within the 6.25-minute response time guidelines.
  - c. The existing paramedic service at Kentland Fire Station, Company 46, has a service response time of 5.59 minutes, which is within the 7.25-minute response time guidelines.

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*. 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. Therefore, no condition is necessary.

10. Police Facilities•The proposed development is within the police service area for District II-Bowie. In accordance with Section 24-122.1(c) of the Subdivision Regulations of Prince George's County, existing county police facilities will be adequate to serve the proposed Bowie Property Cluster development. This police facility will adequately serve the population generated by the proposed subdivision.

11. Health Department•The Health Department reviewed the application and offered several comments. First, the existing house is served by a private well and septic system. It may continue to use these systems until they fail or are disturbed by grading. Once abandoned, the systems will need to be pumped, backfilled and sealed.

Additionally, any hazardous waste found in the buildings being razed will need to be removed and discarded properly prior to approval of the final plat. The applicant should consult the Health Department for further information.

12. Stormwater Management•The Department of Environmental Resources (DER), Development Services Division, has determined that on-site stormwater management is not required. A Stormwater Management Concept Plan, #29260-2001-00, was approved with conditions on October 23, 2001, to ensure that development of this site does not result in on-site or downstream flooding. This approval is valid through June 30, 2004. Development must be in accordance with this approved plan.

13. Public Utility Easement•The preliminary plan depicts the required 10-foot-wide public utility easement along all public streets. This easement will be included on the final plat.

14. Open Space Design•Parcel ■A• ends in a very narrow point behind proposed Lots 11 and 12. It is very near the open space in Ramblewood, but it does not abut it. This could lead to maintenance problems and become an attractive nuisance as children may attempt to ■cut through■ this small opening to get to the other open space. At the time of detailed site plan review, consideration should be given to extending Lots 12 and/or 11 to eliminate this potential problem.

## RECOMMENDATION

APPROVAL, subject to the following conditions:

1. Prior to signature approval of the preliminary plan:
  - a. The preliminary plan and Tree Conservation Plan shall be revised to include the line delineating the PMA boundary in the legend.



- b. The TCPI and Conceptual Site Plan shall be revised to provide a 25-foot-wide clear zone between the delineated PMA and the toe of the embankment, unless a smaller distance is determined to be appropriate by the Soil Conservation District. The setback from the toe of the embankment shall be correctly labeled as required unwooded clear zone from the toe of the embankment.
  - c. The FSD shall be revised to label the table of Specimen Trees as Trees of Significant Size, indicate which of the trees qualifies as a specimen tree in accordance with the Woodland Conservation Technical Manual, and indicate the condition of individual trees.
  - d. The TCPI shall be revised to afforest areas of the PMA that are unwooded, and to maximize afforestation areas contiguous to the PMA to incorporate specimen and significant trees to the extent possible.
  - e. The TCPI shall be revised to indicate that Reforestation Area A and Reforestation Area B are afforestation areas. Areas of woodland conservation located within public utility easements shall be credited as woodland conservation.
  - f. The TCPI shall be revised to remove woodland conservation from the area of the public utility easement in Afforestation Area 1. All credited woodland conservation areas shall have a minimum width of 35 feet.
  - g. The TCPI shall be revised to include a table of significant and specimen trees, including species, size, condition, and proposed disposition. The critical root zone of all specimen trees located within 50 feet of the limit of disturbance shall also be shown.
  - h. The TCPI shall be revised to treat identified specimen trees as priority areas for preservation of significant natural features to the maximum extent possible.
2. A detailed site plan shall be approved prior to approval of a final plat.
3. At time of Detailed Site Plan and Type II Tree Conservation Plan review:
- a. Disturbance to the PMA shall be limited to disturbances proposed by a Letter of Justification dated February 25, 2002, from The Tech Group to The Maryland-National Capital Park and Planning Commission (Morgan to Del Balzo) justifying disturbance of 0.003 acres of the PMA.
  - b. Specimen trees on the site shall be preserved and protected to the maximum extent possible. This may include but not be limited to the following: relocation of lots; adjustment to lot lines; and adjustment to architectural footprints. The TCPII shall demonstrate that disturbance has been minimized in the critical root zone of trees to be retained. The TCPII shall include a Significant/ Specimen Tree Management Plan to address best management practices to maintain and promote the viability of the significant trees retained.

- c. The landscape plan shall be coordinated with the technical stormwater management plan and the TCPII to provide attractive landscaping for the stormwater management pond, and the coordination of the residential screening requirement with woodland conservation requirements.
  - d. A Phase II Noise Study shall be provided that includes the provision of noise mitigation measures that reduce exterior noise in outdoor activity areas to 65 dBA or less and interior noise to 45 dBA or less. The detailed site plan shall show the necessary site features for mitigation.
- 4. At the time of detailed site plan, consideration shall be given to the following:
  - a. Reconfiguring the point where ■Drive A• meets the entrance road so that a ■T• intersection may be created. If a ■T• intersection cannot be achieved, the existing configuration shall suffice.
  - b. The use of standard sidewalks along at least one side of all internal roads. All internal, HOA trails shall be six feet wide, asphalt, and ADA compatible.
  - c. The preservation of the wide asphalt shoulders along MD 202 if road improvements are required along MD 202. These wide shoulders currently serve as the bikeway along MD 202.
  - d. The possibility of extending Lots 11 and/or 12 so that the open space provided by Parcel ■A• does not end in so narrow a fashion.
- 5. No building permits shall be issued for this subdivision until the percentage capacity at all the affected school clusters are less than or equal to 105 percent or 3 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 where by 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.
- 6. Prior to the approval of the Detailed Site Plan on the subject property, the applicant, his heirs, successors and/or assignees, shall submit an acceptable traffic signal warrant study to SHA and, if necessary, DPW&T for the intersection of MD 202 and Water Fowl Way. The applicant should utilize a new 12-hour count, and should analyze signal warrants under total future traffic as well as existing traffic at the direction of SHA. If the signal or other needed improvements at that intersection are deemed warranted by SHA at that time, the applicant shall bond the signal or other improvements prior to the release of any building permits within the subject property, and install the warranted improvements at a time when directed by the appropriate permitting agency. The study may be waived in either of the following situations:
  - a. A determination, in writing, by SHA that sufficient recent studies at that location have been conducted.

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- b. A determination, in writing, by SHA that, due to gaps in traffic produced by the signal at the adjacent MD 202/Black Swan Drive/Hancock Drive intersection, the subject intersection would operate acceptably with the development of the subject property without signalization.
- 7. Development shall be in conformance with the approved Stormwater Management Concept Plan, Concept #29260-2001-00, or any revisions thereto.
- 8. Prior to the issuance of a building permit, the applicant, the applicant's heirs, successors, and/or assignees shall provide the installation of one "Share the Road with a Bike" sign in accordance with state requirements, and upon state approval, along Largo Road (MD 202). If the state declines the sign, this condition shall be void.
- 9. Prior to approval of the final plat, the applicant shall demonstrate to the Health Department's satisfaction that either no hazardous materials exist on site, or that they were removed and discarded appropriately.

STAFF RECOMMENDS APPROVAL OF TYPE I TREE CONSERVATION PLAN I/01/02