



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

Preliminary Plan 4-04138

Application	General Data
Project Name: POTOMAC RIDGE II	Date Accepted: 09/22/04
	Planning Board Action Limit: 02/23/05
	Plan Acreage: 109.69
Location: West side of Indian Head Highway, between Palmer Road and Kerby Hill Road.	Zone: R-R & R-80
	Lots: 140
	Parcels: 7
Applicant/Address: Route 210 Associates, L.C. 12500 Fairlakes Circle, Suite #400 Fairfax, VA. 22033-3804	Planning Area: 80
	Tier: Developing
	Council District: 08
	Municipality: N/A
	200-Scale Base Map: 211/2SE01
Purpose of Application	Notice Dates
RESIDENTIAL SUBDIVISION	Adjoining Property Owners Previous Parties of Record Registered Associations: (CB-58-2003) 07/12/2004
	Sign(s) Posted on Site and Notice of Hearing Mailed: 01/11/05

Staff Recommendation		Staff Reviewer: Whitney Chellis	
APPROVAL	APPROVAL WITH CONDITIONS	DISAPPROVAL	DISCUSSION
		X	

THE MARYLAND-NATIONAL CAPITAL
PARK AND PLANNING COMMISSION

PRINCE GEORGE'S COUNTY PLANNING BOARD

STAFF REPORT

SUBJECT: Preliminary Plan of Subdivision 4-04138
Potomac Ridge II Lots 1-140, and Parcels A-G

OVERVIEW

The subject property is located on Tax Map 113 in Grid F-2 and is known as part of Parcel 98, Parcel 101 and Parcel 577. The property is approximately 109.69 acres and zoned R-80 (29.88 acres) and R-R (79.81 acres). The property is improved with two single-family dwelling units and several accessory structures that are to be razed. The applicant is proposing to subdivide the property into 140 lots and 7 parcels for the construction of single-family dwelling units. The applicant has proposed 81 lots in the R-R Zone and 59 lots in the R-80 Zone, utilizing conventional standards for development. Parcels A thru D, F and G total 18.53 acres and are to be conveyed to a homeowners association (HOA). These parcels are primarily encumbered by floodplain, wetlands and steep and severe slopes and will contain required woodland conservation. Parcel G is proposed to be conveyed to M-NCPPC for the fulfillment of the mandatory dedication of parkland requirement and totals 13.69 acres. The applicant was advised in October 2004 that this area is not appropriate for public parkland and should be conveyed to the HOA, as discussed further below and in Finding 4 of this staff report.

The property has frontage on MD 210 to the east and Oxon Hill Road to the west. The primary access is via MD 210. This development is an extension of the Potomac Ridge I subdivision to the west, approved for 95 lots pursuant to Preliminary Plan 4-02104. The part of Parcel 98 included in this preliminary plan was identified as Outparcel A on Preliminary Plan 4-02104. Outparcel A is currently a residue acreage parcel of land never having been the subject of a record plat. At the time of review of Preliminary Plan 4-02104, that property, as well as the area subject to this preliminary plan, was contained in an application for rezoning (A-9949) and was approximately 154.88 acres. The application was a request to rezone these properties to M-X-T and proposed a mixed-use development with 600,000 square feet of retail commercial oriented toward Indian Head Highway and up to 400,000 square feet of flexible-office/light industrial space. That case has been withdrawn.

At the writing of this staff report there are three issues that are unresolved, and as such, staff is compelled to recommend disapproval of the preliminary plan. These issues were originally discussed with the applicant on October 8, 2004, at the Subdivision Review Committee meeting, where the applicant was advised that these issues were substantive to the review of the case and could individually jeopardize a favorable recommendation:

1. **Stormwater management**—On October 8, 2004, the applicant was advised that the approval of the conceptual stormwater management plan was essential to ensure that the development of this property does not result in on-site or downstream flooding. Because of a significant amount of impervious surfaces, soil issues, and extensive grading for the development of this property, on-site stormwater management ponds will be required. To ensure that the layout proposed is compatible

with the necessary stormwater management facilities, an approved concept stormwater management plan is needed for review. The sizing, location and grading for these facilities may affect the Type I Tree Conservation Plan and the lot configuration of the preliminary plan. At the writing of this staff report the Department of Environmental Resources advised staff that the applicant had not obtained this approval. Without this approval staff cannot recommend approval of the preliminary plan.

2. **Recreational facilities**—On October 8, 2004, staff requested that the applicant submit a recreational facilities plan that would demonstrate conformance to the requirements of mandatory dedication of parkland set forth in Section 24-135 of the Subdivision Regulations. Specifically, it was required that the applicant construct a pedestrian trail to the existing Henson Creek Trail just to the south and construct adequate on-site private recreational facilities. The preliminary plan presented by the applicant proposes the conveyance of 13 acres to M-NCPPC for the fulfillment of this mandatory requirement. The applicant was advised that the land proposed to be conveyed was not appropriate for public park purposes. It is almost entirely encumbered by floodplain and wetlands and required reforestation for tree conservation requirements. A recreational facilities plan has not been submitted. The applicant was advised that the preliminary plan did not provide adequate recreational amenities as required pursuant to Section 24-135 of the Subdivision Regulations, and in order to do so strategic revisions to the preliminary plan could be required, as discussed further in Finding 4 of this report.
3. **MD 210 access and circulation**—On October 8, 2004, the applicant was advised by the State Highway Administration (SHA) and Transportation Planning Section that access to MD 210 is restricted. In addition, if access were to be granted, additional right-of-way for the construction of a service road along MD 210 may be required along the property's frontage. As a result, additional right-of-way greater than that currently proposed would be required and could have a significant impact on the number and location of proposed lots in the vicinity of MD 210. Because of significant noise impacts on the property, adequate homeowners open space areas between the lots and the MD 210 right-of-way are essential. The applicant met with SHA on February 1, 2005, to work out the details of their request to access MD 210. It is staff's understanding that SHA will require additional right-of-way for the construction of a service road that will substantively affect the layout of the lots abutting MD 210. SHA does not recommend approval of the preliminary plan as proposed.

Each of these issues is the subject of review at the time of a preliminary plan of subdivision and affects the health, safety and welfare of the future residents and the surrounding community. Stormwater management, adequate area and location to accommodate recreational facilities, and adequate access and on-site transportation circulation are intrinsic to the review of the preliminary plan of subdivision and not other subsequent reviews.

SETTING

The subject property is located on the east side of Oxon Hill Road and on the west side of Indian Head Highway between Palmer Road and Livingston Road. To the northwest is the Fort Foote Elementary School; to the north is the Brooke Manor Subdivision, developed with single-family dwelling units. To the south is the Tor-Bryan Estates Subdivision developed with single-family dwelling units. The property has frontage on Oxon Hill Road to the west. The community is generally developed with single-family dwelling units.

FINDINGS AND REASONS FOR STAFF RECOMMENDATION

1. **Development Data Summary**—The following information relates to the subject preliminary plan application and the proposed development.

	EXISTING	PROPOSED
Zone	R-80 (29.88 acres) R-R (79.81 acres)	R-80 (29.88 acres) R-R (79.81 acres)
Use(s)	Residential	Single-family residential
Acreage	109.69	109.69
Lots	0	140
Parcels	3	7
Dwelling Units:		
Detached	2 (to be razed)	140 (new)

2. **Environmental**—Approximately one-half of the site is wooded. A review of the information available indicates that streams, wetlands, and 100-year floodplain associated with Henson Creek in the Potomac Watershed occur on this property. According to the *Prince George's County Soil Survey* the principal soils on the site are in the Adelphia, Aura, Beltsville, Bibb, Butlertown, Collington, Keyport, Magnolia, Matapeake, Mattapex, Ochlockonee, Sassafras and Shrewsbury soils series. A significant area of fill is located on the site. Indian Head Highway is the nearest source of traffic-generated noise. The proposed use is not expected to be a noise generator. 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 adopted and approved Subregion VII master plan refers to “clay beds of the Patapsco Formation” (page 33), which are subject to slide, slump or flow. The map showing “Landslide Susceptibility in Prince George's County, Maryland,” a document prepared by the U.S. Geological Survey, indicates an area of medium to high susceptibility to land sliding associated with Potomac Group sediments on the subject property. The Patapsco Formation is a geologic unit within the Potomac Group.

The Type I tree conservation plan shows extensive grading of steep and severe slopes. The plan also proposes creating slopes in excess of 3:1 on residential lots. Because of the presence of Potomac Group sediments, a geotechnical report regarding stability of existing and proposed slopes is required for review of the proposed development for conformance with Section 24-131 of the Subdivision Regulations. No part of any 1.5 safety factor line may be on a lot. All 1.5 safety factor lines require a minimum 25-foot building restriction line in conformance with Section 24-131(a)(1) of the Subdivision Regulations.

A detailed geotechnical study was submitted for review. The study includes a map showing the locations of boreholes, logs of boreholes, laboratory test results from samples, cross-sections analyzed, discussion of the methods used to evaluate slope stability, results of the analyses, and recommendations for mitigation. Neither the TCPI nor the preliminary plan show existing conditions 1.5 safety factor lines or proposed conditions 1.5 safety factor lines; however, the areas of concern can be deduced from the report. The report does quite clearly identify areas where slope stability remains a significant issue and mitigation is unresolved at this time.

Five cross-sections were analyzed. Cross-sections A, B and C indicate no slope stability problems in the northern portion of the site. Cross-section D analyzed under existing conditions showed areas where slope stability was lower than 1.5; however, an analysis using the proposed grading shown on the TCPI indicates that no unstable areas would remain. The analysis of cross-section E indicates that slope stability is a significant problem when examined under existing conditions and utilizing the proposed grading shown on the TCPI.

The area near Street H and Street D including Lots 18-30, Block E, requires further evaluation. At a meeting with the applicant and geotechnical engineers on January 21, 2005, staff concluded that modifications to the grading for the cul-de-sac for proposed Street D could mitigate all existing areas of potential slope failure. The proposed remedies would not affect the overall lot layout of the subdivision or circulation patterns within the subdivision; however, there may be a loss of lots and an increase in the size of the HOA parcel.

Indian Head Highway is the nearest traffic-generated noise source. The noise model used by the Environmental Planning Section predicts that the 65dBA noise contour is about 397 feet from the centerline of Indian Head Highway. The noise model used by the Environmental Planning Section contains assumptions that are not appropriate for this site because they are based on a noise model that does not include significant changes in elevation. In particular, the noise model assumes no topographic relief. The rise in elevation of the property from Indian Head Highway will result in an increase in noise levels and the 65 dBA Ldn noise contour will exist farther into the site. Additionally, the noise model used by the Environmental Planning Section does not address potential noise impacts above ground level.

For residential uses, outdoor activity areas must have noise levels of 65 dBA Ldn or less to be in conformance with the state noise standards. The outdoor activity areas on the impacted lots are the areas within 40 feet of the rears of the affected houses. A Phase II noise study was required for the review of the applicant's proposed berming along MD 210 in order to mitigate noise impacts on Lots 1-6, Block C, and Lots 1-11, Block A.

The preliminary plan and Type I tree conservation plan show the unmitigated ground-level 65 dBA Ldn noise contour approximately 463 feet from the centerline of Indian Head Highway. The noise study further analyzes the site with a hypothetical sound berm. The study concludes that the installation of a berm in the center of proposed Lots 1-11, Block A, and proposed Lots 1-6, Block C, or the construction of a sound wall adjacent to the right-of-way for Indian Head Highway can shift the ground-level 65 dBA Ldn noise contour closer to Indian Head Highway and provide minimum 40-foot-deep outdoor activity areas in the rear of each lot. Lots 1-11, Block A, and Lot 1, Block C, have frontage on MD 210 to the east, while fronting on internal streets to the subdivision. The rears of these lots are oriented to MD 210. Lots 2-6, Block C, have intervening HOA land between the rear lot line and MD 210.

All constructed noise barriers should be on land dedicated to the homeowners association (HOA), and not on individual lots, to ensure the long-term maintenance of the noise barrier to benefit the entire community. Additionally, the responsibility of the noise wall should be the responsibility of the HOA. To address the issues associated with providing noise attenuation measures on individual lots, the applicant has submitted an exhibit that would utilize lot size averaging (LSA) for Lots 1-11, Block A. This would allow the lots to be reduced to 15,000 square feet in size and place the remaining lot area, abutting MD 210, within an HOA open space parcel. The open space parcel could then be utilized to construct the necessary noise attenuation. This exhibit proposal to utilize LSA was faxed to staff on January 24, 2005. The exhibit did not include a justification for the use of LSA and

is not reflective of the SHA recommendation for right-of-way dedication along MD 210. While staff generally supports the concept, adequate justification has not been presented as required by Section 24-121 of the Subdivision Regulations for the use of LSA, nor were Lots 1-6, Block C, included in this proposal.

Both ground-level and upper-level interior noise impacts can easily be mitigated with the use of proper building materials that will ensure that the interiors of all affected structures will attain the state standard of 45 dBA Ldn.

A significant area of Class III fill is located on the site. This fill was placed after the *Prince George's County Soil Survey* was published and is located in the eastern portion of the subject property. The nature of this fill is unknown. The area of fill must be shown on the FSD.

Conceptual final grades are shown on the TCPI; however, it is not clear if the material within the Class III fill is going to be entirely removed and transported to another property, partially removed, or reused on-site. This issue was discussed in detail during the review of Preliminary 4-02104, Potomac Ridge I, to the west.

The property is subject to the requirements of the Prince George's County Woodland Conservation and Tree Preservation Ordinance because the property is larger than 40,000 square feet in area and contains more than 10,000 square feet of woodland. A Type I tree conservation plan is required.

A Type I Tree conservation plan, TCPI/61/02, was approved for the portion of the property that was the subject of 4-02104 and needs to be revised to include the additional acreage that is included in this application. A Type II tree conservation plan, TCPII/102/03, was approved for the area of 4-02104 and will need to be revised in the future to include only that portion of 4-02104 that is not part of the current application. A Type II tree conservation plan, TCPII/180/03, was approved for Parcel 101 as part of the permit for the construction of a sanitary sewer and will need to be revised in the future to include all of the additional property in the current application.

The revised Type I tree conservation plan, TCPI/61/02-01, has been reviewed and was found to require additional revisions. The worksheet correctly includes the clearing approved by TCPII/180/03 and TCPII/102/03. The worksheet includes the entire acreage shown for Preliminary Plan 4-02104 and the additional acreage included in the subject application. As noted earlier, the plan needs to be redesigned to provide the noise berm in a different location than shown on the plans and have the grading revised in the southern portion of the site to mitigate slope stability issues. These changes will reduce the woodland conservation areas shown on Lots 1-11, Block A, and Lots 1-4, Block C, but may increase woodland conservation along the southern property line. Of the 59 specimen trees identified, only 16 are proposed for removal.

The plan proposes to meet the woodland conservation threshold of 28.91 acres on-site and all additional requirements by providing off-site conservation for a total woodland conservation requirement of 55.02 acres. Overall the plan proposes to preserve most of the woodlands within sensitive environmental features and preserves additional woodlands that serve to provide buffering and screening from Indian Head Highway.

The adopted and approved Subregion VII master plan shows an area of conditional reserve on the site. The Subdivision Ordinance provides for the protection of streams, stream buffers, wetlands, wetland buffers, 100-year floodplain, adjacent areas of slopes in excess of 25 percent, and adjacent

areas of slopes between 15 and 25 percent with highly erodible soils. These areas compose the expanded buffer on the site. The plan shows streams, wetlands and floodplain on the site. The Prince George's County Department of Environmental Resources has approved the 100-year floodplain for existing channel conditions. The U.S. Army Corps of Engineers and the Maryland Department of the Environment have approved the wetlands delineation. All sensitive environmental features required by Section 24-130 of the Subdivision Regulations are adequately shown on the preliminary plan and the Type I tree conservation plan.

The plan proposes impacts to stream buffers and wetland buffers. A variation request indicating six individual impacts was submitted with the application. Each impact is depicted on a map on 8.5- by 11-inch paper and notes the quantity of impact proposed for each individual impact. Some of the impacts illustrated were approved with the approval of 4-02104, PGCPB Resolution No. 03-65 on May 8, 2003.

All disturbance not essential to the development of the site as a whole is prohibited within stream and wetland buffers without the approval of a variation request. Essential development includes such features as public utility lines (including sewer and stormwater outfalls), road crossings, and so forth, which are mandated for public health and safety; nonessential activities are those, such as grading for lots, stormwater management ponds, parking areas, and so forth, which do not relate directly to public health, safety or welfare. Impacts for essential development features require variations to the Subdivision Regulations.

Six requests, in conformance with Section 24-113 of the Subdivision Regulations, for impacts to sensitive environmental features have been submitted. Requests #1, #3 and #5 are for the construction of a sanitary sewer on the site to serve all of the Potomac Ridge subdivision and the National Harbor Project. Requests #2, #4 and #6 are for internal streets to serve the subdivision.

Staff notes that the proposed sanitary sewer within the expanded stream buffers has been reviewed in great detail by all permit agencies as part of a CIP improvement to serve a much larger community than the lots proposed by this subdivision. Additionally, the property has several streams and extensive areas of severe slopes and highly erodible soils that create a proportionately high area of expanded stream buffers.

Section 24-130 of the Subdivision Regulations restricts impacts to these buffers unless the Planning Board grants a variation to the Subdivision Regulations in accordance with Section 24-113. Even if approved by the Planning Board, the applicant will need to obtain federal and state permits prior to the issuance of any grading permit. Each variation is described individually below. However, for purposes of discussion relating to Section 24-113(a) of the Subdivision Regulations, the impacts were discussed collectively.

Section 24-113(a) of the Subdivision Regulations sets forth the required findings for approval of variation requests. Section 24-113(a) reads:

Where the Planning Board finds that extraordinary hardship or practical difficulties may result from strict compliance with this Subtitle and/or that the purposes of this Subtitle may be served to a greater extent by an alternative proposal, it may approve variations from these Subdivision Regulations so that substantial justice may be done and the public interest secured, provided that such variation shall not have the effect of nullifying the intent and purpose of this Subtitle; and further provided that the Planning Board shall not approve variations unless it shall make findings based upon

evidence presented to it in each specific case that:

Comment: The approval of the applicant's request does not have the effect of nullifying the intent and purpose of the Subdivision Regulations. In fact, strict compliance with the requirements of Section 24-130 could result in practical difficulties to the applicant that could result in the applicant not being able to develop this property.

- (1) The granting of the variation will not be detrimental to the public safety, health, or injurious to other property;**

Comment: The installation of a sanitary sewer as described by impacts #1, #3 and #5 is required to provide for public safety, health and welfare. The street construction addressed in impacts #2, #4 and #6 is required to provide access for emergency vehicles and safe travel. All designs of these types of facilities are reviewed by the appropriate agency to ensure compliance with other regulations. These regulations require that the designs are not injurious to other property.

- (2) The Conditions on which the variation is based are unique to the property for which the variation is sought and are not applicable generally to other properties;**

Comment: The only available sanitary sewer mains to serve development of this property are wholly within expanded stream buffers. Many other properties can connect to existing sanitary sewer lines without requiring a variance; however, that option is not available for this particular site. The Washington Suburban Sanitary Commission determines the number and placement of sanitary sewer connections. The property contains many stream valleys that dissect the land into developable pods and one relatively large area that cannot be served by a public street without a stream crossing.

- (3) The variation does not constitute a violation of any other applicable law, ordinance, or regulation;**

Comment: The installation of sanitary sewer connections and road construction is required by other regulations. Because the applicant will have to obtain permits from other local, state and federal agencies as required by their regulations, the approval of this variation request would not constitute a violation of other applicable laws. The alignment of the sanitary sewer has been reviewed and approved by all permitting agencies.

- (4) Because of the particular physical surroundings, shape, or topographical conditions of the specific property involved, a particular hardship to the owner would result, as distinguished from a mere inconvenience, if strict letter of these regulations is carried out;**

Comment: The property has several streams and extensive areas of severe slopes and highly erodible soils that create a proportionately high area of expanded stream buffers. The denial of impacts #1, #3 and #5 would result in the loss of not only all lots within the Potomac Ridge Subdivision but would also impact other areas of approved development. The denial of impacts #2, #4 and #6 would result in the loss of all 39 lots in the southeastern portion of the site.

Neither a stormwater management concept approval letter nor an approved plan was submitted with this application. Because a significant amount of impervious surfaces are proposed and on-site ponds may be required, a copy of the approved concept plan is needed for review. The sizing and

location of these ponds may affect the Type I tree conservation plan and the lot configuration of the preliminary plan. Without this information, the Environmental Planning Section cannot recommend approval. The Environmental Planning Section does not recommend approval of 4-04138 and TCPI/61/02-01 because information necessary to review the woodland conservation concept and the proposed lot layout has not been provided.

Water and Sewer Categories

The water and sewer service categories for Parcels 101 and 577 are W-4 and S-4, and W-3 and S-3 for part of Parcel 98, according to water and sewer maps obtained from the Department of Environmental Resources dated June 2003, and will therefore be served by public systems.

3. **Community Planning**—The subject property is located within the limits of the 1981 Master Plan for Subregion VII, Planning Area 80 in the Forte Foote Community. The master plan land use recommendation for the property is suburban residential at a density of up to 3.5 dwelling units per acre. The 1984 Subregion VII Sectional Map Amendment (SMA) retained this site in the R-R and R-80 Zones. The preliminary plan is consistent with the recommendations of the master plan and subsequent SMA.

The 2002 General Plan locates the property in the Developing Tier. One of the visions for the Developing Tier is to maintain a pattern of low- to moderate-density suburban residential communities that are increasingly transit serviceable. The proposed preliminary plan is not inconsistent with this recommendation.

4. **Parks and Recreation**—The applicant was advised in a memorandum of October 7, 2004, from the Department of Parks and Recreational (DPR) recommending that the preliminary plan should be revised to provide sufficient private on-site recreational facilities and a trail connection to the Henson Creek Stream Valley Park to the south.

The preliminary plan submitted for review proposed two small recreational areas and mandatory dedication of parkland (13.69 acres). The applicant was advised at the October 8, 2004, Subdivision Review Committee (SRC) meeting that the proposed dedication to M-NCPPC of Parcel E (13.69 acres) was not acceptable for the fulfillment of mandatory dedication of parkland, a requirement of Section 24-135(b) of the Subdivision Regulations. Staff advised the applicant that Parcel E was not appropriate land for dedication because it is almost entirely encumbered by the applicant's requirement for woodland conservation, includes a stormwater management facility necessary to support development of this subdivision, is almost entirely encumbered by floodplain and primary management area (PMA), and is located abutting MD 210.

DPR, in its memorandum of October 7, 2004 (Asan to Chellis), requested that the required on-site recreational facilities be provided in "appropriate and developable areas" and that a trail connection to the Henson Creek Stream Valley Park to the south be provided. On October 8, 2004, DPR requested that the applicant provide a proposed recreational facilities package that could be evaluated by staff. The proposed recreational facilities package should demonstrate conformance to the DPR recommendation and Section 24-135(b) of the Subdivision Regulations.

The plan proposed is not consistent with the DPR recommendation and does not conform to Section 24-135(b) of the Subdivision Regulations for the fulfillment of the requirements of mandatory dedication of parkland. The applicant has proposed two on-site recreational facilities areas that are

not sufficient. The recreational facility area proposed on Parcel F is located at the bottom of a slope, at the outfall location for the stormwater management facility, behind Lot 2 and the stormwater management facility. The second facility is located on Parcel G, between Lots 19 and 20, Block E. Both of these facilities are generally located along the southern boundary of the site and are not centrally located within the development. They are not appropriate to provide meaningful recreational facilities for the entire subdivision, an estimated 425 residences.

The applicant again was advised of this deficiency in the plan in a meeting on January 21, 2005. At the meeting the applicant indicated that they could provide an internal trail system, and while this new proposal conceptually may be acceptable to staff, no specific proposal for evaluation was provided. A trail system through his site could be difficult to implement due to environmental features and the lotting pattern. It would be important to ensure the safety and privacy of all the residents, while preserving the integrity of the primary management areas (PMA).

On October 8, 2004, DPR requested a recreational facilities package proposal that would incorporate SRC recommendations or an alternative proposal by the applicant, which has not been provided to date. The applicant was advised on that date that failure to provide all of the necessary information for review could result in an unfavorable recommendation to the Planning Board. The proposed recreational facilities package does not conform to the requirements of Section 24-135(b) of the Subdivision Regulations.

5. **Trails**—The adopted and approved Subregion VII Master Plan and the 1985 equestrian addendum to the adopted and approved Countywide Trails Plan identify one master plan trail issue that impacts the subject site. Oxon Hill Road is designated as a master plan bicycle/trail corridor. DPW&T is currently studying different alternatives for the improvement of this road. Comprehensive bicycle and pedestrian facilities will be provided along this road through this project. Currently under consideration are in-road bike lanes and wide sidewalks. Staff recommends the provision of “share the road with a bike” signage and a standard sidewalk along the subject site’s frontage of Oxon Hill Road. This will accommodate pedestrians and alert motorists to the possibility of on-road bicycle traffic. Comprehensive bicycle and pedestrian facilities will be provided for the entire corridor through a future DPW&T capital improvement project. However, the recommended improvements will help to accommodate nonmotorized traffic until the comprehensive facilities are completed.

The existing M-NCPPC Henson Creek Trail is immediately to the south of the subject site on the adjoining M-NCPPC parkland. This stream valley trail currently runs from Oxon Hill Road to Temple Hills Road. The trail goes under MD 210 in the vicinity of the subject site. The Adopted and Approved Subregion VII Master Plan, the 1985 Equestrian Addendum to the Adopted and Approved Countywide Trails Plan, and the Heights master plan recommend the extension of the trail from Temple Hills Road to the Branch Avenue Metro. This extension will further enhance the usefulness of the trail both as a recreational facility and a transportation facility for some trips to Metro. Staff recommends the provision of a trail connection from the subject site to the existing stream valley trail. This connection will link the residents of Potomac Ridge to the existing recreational facility and also provide opportunities for making some trips by walking or bicycling. This connection could be located from the end of Street D, go through HOA Parcel E, and to the existing trail just south of the property line. The trail would go around stormwater management pond 2 and could possibly utilize the stormwater management access road.

SIDEWALK CONNECTIVITY:

The existing subdivisions both to the north and south of the subject site have sidewalks along both sides of all internal roads. Sidewalks were also recommended along both sides of the internal roads for Potomac Ridge I, including Street D that connects to the subject site. Staff recommends the provision of sidewalks on both sides of all internal roads on the subject site, unless modified by DPW&T. It should also be noted that Potomac Ridge I allows for a future trail connection to the adjacent Fort Foote Elementary School, if desired by the community and BOE.

6. **Transportation**—The Transportation Planning Section has reviewed the subdivision application referenced above. The subject property consists of approximately 109.69 acres of land in the R-R and the R-80 Zones. The property is located on the west side of MD 210 between Kerby Hill Road and Palmer Road/Livingston Road. The applicant proposes a residential subdivision consisting of 140 single-family detached residences.

The applicant has submitted a traffic study dated August 2004. The findings and recommendations outlined below are based upon a review of these 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.” Comments from the county’s Department of Public Works and Transportation (DPW&T) and the State Highway Administration (SHA) are attached.

Growth Policy—Service Level Standards

The subject property is located within the developing tier, as defined in the General Plan for Prince George’s County. As such, the subject property is evaluated according to the following standards:

Links and signalized intersections: Level-of-service (LOS) D, with signalized intersections operating at a critical lane volume (CLV) of 1,450 or better. Mitigation, as defined by Section 24-124(a)(6) of the Subdivision Ordinance, is permitted at signalized intersections subject to meeting the geographical criteria in the guidelines.

Unsignalized intersections: The *Highway Capacity Manual* procedure for unsignalized intersections is not a true test of adequacy but rather an indicator that further operational studies need to be conducted. Vehicle delay in any movement exceeding 50.0 seconds is deemed to be an unacceptable operating condition at unsignalized intersections. 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 (or other less costly warranted traffic controls) if deemed warranted by the appropriate operating agency.

Staff Analysis of Traffic Impacts

The applicant has prepared a traffic impact study in support of the application using new counts taken in November 2003. With the development of the subject property, the traffic consultant has determined that adequate transportation facilities in the area can be attained with off-site transportation improvements that are identified in the study. The traffic impact study prepared and submitted on behalf of the applicant analyzed the following intersections:

MD 210/Kerby Hill Road/Livingston Road
MD 210/Palmer Road/Livingston Road
Oxon Hill Road/site entrance (planned/unsignalized)

The following conditions exist at the critical intersections:

EXISTING TRAFFIC CONDITIONS				
Intersection	Critical Lane Volume (AM & PM)		Level of Service (AM & PM)	
MD 210/Kerby Hill Road/Livingston Road	1,707	1,814	F	F
MD 210/Palmer Road/Livingston Road	1,722	1,869	F	F
Oxon Hill Road/site entrance	planned		--	--
*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 vehicle delay exceeding 50.0 seconds indicates inadequate traffic operations.				

The area of background development includes several approved but unbuilt properties in the vicinity of the subject property. Also, background conditions also assume through traffic growth of 2.0 percent annually in the area. There are no programmed improvements in the county's Capital Improvement Plan (CIP); the state's Consolidated Transportation Program (CTP) includes a funded park-and-ride lot south of the site along MD 210. SHA did not comment on the trip reduction attributable to that lot. Background conditions are summarized below:

BACKGROUND TRAFFIC CONDITIONS				
Intersection	Critical Lane Volume (AM & PM)		Level of Service (AM & PM)	
MD 210/Kerby Hill Road/Livingston Road	1,850	1,971	F	F
MD 210/Palmer Road/Livingston Road	1,897	2,020	F	F
Oxon Hill Road/site entrance	planned		--	--
*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 vehicle delay exceeding 50.0 seconds indicates inadequate traffic operations.				

The site is a proposed residential subdivision of 140 single family detached residences. The resulting site trip generation would be 105 AM peak-hour trips (21 in, 84 out) and 126 PM peak-hour trips (84 in, 42 out).

The site is proposed to be served by a right-in, right-out entrance (i.e., no median break) along MD 210. It is noted that the study assumes that about 85 percent of traffic leaving the subdivision and 70 percent of traffic entering the subdivision would use the MD 210 entrance, with the remainder using streets within the adjacent Potomac Ridge subdivision for access back to Oxon Hill Road. With site traffic, the following operating conditions were determined:

TOTAL TRAFFIC CONDITIONS				
Intersection	Critical Lane Volume (AM & PM)		Level of Service (AM & PM)	
MD 210/Kerby Hill Road/Livingston Road	1,871	1,994	F	F
MD 210/Palmer Road/Livingston Road	1,963	2,026	F	F
Oxon Hill Road/site entrance	22.1*	17.0*	--	--
*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 vehicle delay exceeding 50.0 seconds indicates inadequate traffic operations.				

The traffic analysis identifies severe inadequacies at the MD 210/Kerby Hill/Livingston and the MD 210/Palmer/Livingston intersections. In response to the inadequacy at these intersections, the applicant has proffered mitigation. This intersection is eligible for mitigation under the fourth criterion in the "Guidelines for Mitigation Action" (approved as CR-29-1994). The applicant recommends the improvements described below to mitigate the impact of the applicant's development in accordance with the provisions of Sec. 24-124(a)(6). The improvements include:

MD 210/Kerby Hill Road/Livingston Road:

1. The addition of a fourth westbound lane along Kerby Hill Road, to result in double left-turn lanes, a shared through/left-turn lane, and an exclusive right-turn lane on that approach.
2. The addition of a third left-turn lane along Livingston Road, to result in triple left-turn lanes, an exclusive through lane, and an exclusive left-turn lane on that approach.

MD 210/Palmer Road/Livingston Road:

1. The addition of a third lane along Livingston Road, to result in double left-turn lanes and a shared through/right-turn lane on that approach.
2. The addition of a third lane along Palmer Road, to result in an exclusive left-turn lane, an exclusive through lane, and an exclusive right-turn lane on that approach.

The applicant has not indicated what roadway improvements would be needed to achieve the LOS D standard in both peak hours, and has not provided any justification for the use of Section 24-124(a)(6) in lieu of meeting the standard.

The impact of the mitigation actions at these intersections is summarized as follows:

IMPACT OF MITIGATION				
Intersection	LOS and CLV (AM & PM)		CLV Difference (AM & PM)	
MD 210/Kerby Hill Road/Livingston Road				
Background Conditions	F/1850	F/1971		
Total Traffic Conditions	F/1871	F/1994	+21	+23
Total Traffic Conditions w/Mitigation	F/1726	F/1793	-145	-201

IMPACT OF MITIGATION				
Intersection	LOS and CLV (AM & PM)		CLV Difference (AM & PM)	
MD 210/Palmer Road/Livingston Road				
Background Conditions	F/1897	F/2020		
Total Traffic Conditions	F/1963	F/2026	+66	+6
Total Traffic Conditions w/Mitigation	F/1802	F/1790	-161	-236

As the CLV is greater than 1,813 during both peak hours at both intersections, the proposed mitigation action must mitigate at least 100 percent of the trips generated by the subject property during each peak hour and bring the CLV to no greater than 1,813. The above table indicates that the proposed mitigation action would mitigate at least 100 percent of site-generated trips during both peak hours at each intersection, while reducing the computed CLV to no greater than 1,813 during each. Therefore, the proposed mitigation actions at MD 210 and Kerby Hill Road/Livingston Road and the proposed mitigation at MD 210 and Palmer Road/Livingston Road meet the requirements of Section 24-124(a)(6)(B)(i) of the Subdivision Ordinance in considering traffic impacts.

The mitigation plan was reviewed by DPW&T and SHA. Comments from both agencies were received. SHA agreed that the mitigation was acceptable. DPW&T did not raise objection to the mitigation that was proposed. SHA agreed to the mitigation improvements as proffered in the traffic study.

Each agency included comments regarding site access. DPW&T suggested that SHA would not approve access onto MD 210 and that Oxon Hill Road needed further study as a result. SHA has indicated that the access point onto MD 210 would be approved, however, and this minimizes the need for further study along Oxon Hill Road.

Plan Issues

Access to the site and circulation within the site is a major issue associated with the development of this site. At the Subdivision Review Committee meeting of October 8, 2004, transportation staff indicated that access onto MD 210 could not be shown and that the circulation plan for the site would need to be significantly changed. This recommendation was based upon the master plan recommendation for MD 210 as an expressway/freeway facility. Since the Subdivision Review Committee meeting, the following has occurred:

1. SHA has indicated that the subject property has a right of access to MD 210. This right was granted when MD 210 was transferred from the federal government to SHA.
2. SHA intends to grant temporary right-in right-out access to MD 210. This access is temporary in that at such time that SHA constructs a limited access grade-separated freeway along MD 210, with the potential for service roads between interchanges, that access would be redirected onto a service road.
3. On February 1, 2005, a meeting occurred between the applicant, SHA, and transportation staff regarding access. According to the final environmental impact study (FEIS) for the MD 210 multimodal access study dated June 2004, there appeared to be no provision made for a service road in the area of the subject property. At that meeting, it was clarified that the selected alternate could include a service road to the north with the Kerby Hill Road ramps connecting to it, while directing a service road to the south to Livingston Road, although considered within the scope of the alternate, appeared to have severe environmental impacts upon the Henson Creek stream valley that would require a new review in that immediate area. However, no alignment for a service road nor a typical section including a service road in the area of this site is shown in the FEIS.

At that meeting, it was agreed that the applicant would conceptually design a typical section for MD 210 with a service road in front of the subject property. SHA agreed to expedite the review of this design and provide concurrence on the conceptual design and the right-of-way requirements for this design to transportation staff in order to accommodate the approaching hearing date. There is a possibility that all improvements along MD 210 can be accommodated within the right-of-way being proposed for dedication on the current plan. However, until SHA has reviewed a cross-section incorporating a service road and determined the right-of-way needs along the frontage of the subject property, the transportation staff does not believe that the requirements of the master plan are met with this proposal.

It was discussed at that meeting, and agreed by the applicant, that a disclosure of the potential change in access be made to homebuyers within the subject development. Once a plan is ultimately available for approval, a disclosure condition, enforceable as a note on the plat and as a separate disclosure to homebuyers, should be included.

Provided that the MD 210 access issues are resolved, other comments made at the Subdivision Review Committee regarding site layout are no longer applicable. The current plan as submitted would then be acceptable.

Transportation Staff Conclusions

Based on the preceding findings, the Transportation Planning Section concludes that the submitted plan is not in compliance with the master plan recommendations for MD 210. At this writing, needed information to ensure compliance with the master plan and with the access requirements of the State Highway Administration in granting access to MD 210 are under development by the applicant and/or under review by the State Highway Administration. It is recognized that the review could affect right-of-way needs along MD 210 and could result in changes to the lotting pattern of the subdivision as well as other elements of the review. It is anticipated that additional information will be received shortly and that the Transportation Planning Section recommendation may change upon receipt of that information. But until all requested information is received, that Section cannot recommend approval of the subject application.

7. **Schools**—The Historic Preservation and Public Facilities Planning Section has reviewed this subdivision plan for impact on school facilities in accordance with Section 24-122.02 of the Subdivision Regulations and CB-30-2003 and CR-23-2003 and concluded the following:

Impact on Affected Public School Clusters

Affected School Clusters #	Elementary School Cluster 6	Middle School Cluster 3	High School Cluster 3
Dwelling Units	145 sfd	145 sfd	145 sfd
Pupil Yield Factor	0.24	0.06	0.12
Subdivision Enrollment	34.80	8.70	17.40
Actual Enrollment	4,433	4,689	8,654
Completion Enrollment	156.96	86.22	158.07
Cumulative Enrollment	30.24	83.52	167.04
Total Enrollment	4,655	4,867.44	8,996.51
State-Rated Capacity	4,512	5,114	7,752
Percent Capacity	103.17	95.18	116.05

Source: Prince George's County Planning Department, M-NCPPC, December 2003

These figures are correct on the day the referral memo was written. They are subject to change under the provisions of CB-30-2003 and CR-23-2003. Other projects that are approved prior to the public hearing on this project will cause changes to these figures. The numbers shown in the resolution will be the ones that apply to this project.

County Council bill CB-31-2003 establishes a school facilities surcharge in the amounts of \$7,000 per dwelling if a building is located between I-495 and the District of Columbia; \$7,000 per dwelling if the building is included within a basic plan or conceptual site plan that abuts on existing or planned mass transit rail station site operated by the Washington Metropolitan Area Transit Authority; or \$12,000 per dwelling for all other buildings.

The school surcharge may be used for the construction of additional or expanded school facilities and renovations to existing school buildings or other systemic changes.

The Historic Preservation and Public Facilities Planning Section staff finds that this project meets the adequate public facilities policies for school facilities contained in Section 24-122.02, CB-30-2003 and CB-31-2003, and CR-23-2003.

8. **Fire and Rescue**—The Historic Preservation and Public Facilities Planning Section has reviewed this subdivision plan for adequacy of fire and rescue facilities and concluded the following:
- The existing fire engine service at Oxon Hill Fire Station, Company 21, located at 7600 Livingston Road, has a service travel time of 4.09 minutes, which is within the 5.25-minute travel time guideline.

- b. The existing ambulance service at Oxon Hill Fire Station, Company 21, located at 7600 Livingston Road, has a service travel time of 4.09 minutes, which is within the 6.25-minute travel time guideline.
- c. The existing paramedic service at Allentown Road Fire Station, Company 47, located at 10900 Fort Washington Road, has a service travel time of 6.36 minutes, which is within the 7.25-minute travel time guideline.

The proposed subdivision will be within the adequate coverage area of the nearest existing fire/rescue facilities for fire engine, ambulance and paramedic services.

The above findings are in conformance with the standards and guidelines contained in the *Approved Public Safety Master Plan* (1990) and the “Guidelines for the Analysis of Development Impact on Fire and Rescue Facilities.”

- 9. **Police Facilities**—The proposed development is within the service area for Police District IV-Oxon Hill. The Planning Board’s current test for police adequacy applicable to the subject application is based on a standard for square footage in police stations relative to the number of sworn duty staff assigned. The standard is 115 square feet per officer. As of January 2, 2004, the county had 823 sworn staff and a total of 101,303 square feet of station space. Based on available space, there is capacity for an additional 57 sworn personnel. This police facility will adequately serve the population generated by the proposed subdivision.
- 10. **Health Department**—The Health Department notes that any abandoned well or septic system should be delineated on the preliminary plan. These facilities should be properly abandoned and backfilled and/or sealed in accordance with COMAR 26.04.04 by a licensed well driller or witnessed by a representative of the Health Department.
- 11. **Stormwater Management**—The Department of Environmental Resources (DER), Development Services Division, has determined that on-site stormwater management is required. A stormwater management concept plan has been submitted but not yet approved. On October 8, 2004, at the Subdivision Review Committee meeting, staff requested that the applicant submit an approved stormwater management concept approval letter and the approved plan. At the writing of this staff report the applicant has not obtained the necessary approvals from the Department of Environmental Resources.

Because a significant amount of impervious surfaces are proposed and on-site ponds may be required, a copy of the approved concept plan is needed for review. The layout and lotting pattern may be impacted by the stormwater management concept approval. The applicant was advised that this approval was required prior to the Planning Board hearing and failure to obtain the approval could result in an unfavorable recommendation to the Planning Board. The sizing and location of these ponds may affect the Type I tree conservation plan and lotting pattern. An approved stormwater management plan is essential to ensure that development of this site does not result in on-site or downstream flooding.

- 13. **Historic**—The Planning Board has determined that the possible existence of slave quarters and slave graves on certain properties must be considered in the review of development applications, and that potential means for preservation of these resources should be considered. Review of Historic Preservation office files indicates that there may be archeological resources of the antebellum period

in the area of the subject site. The Brook families are documented to have been living in the area pre-Civil War and it is possible that this property may have been a part of their land holdings. It is possible the site was actively farmed, and it is also possible that there were slave dwellings and slave burials on this property. Documentary and archeological investigation should be required to determine whether there exists physical evidence of slave dwellings or burials.

Prior to any disturbance occurring on this property, the applicant should submit a Phase I archeological investigation to the Planning Department staff for review and concurrence, and if determined to be needed, a Phase II and Phase III investigation. If necessary, the final plat should provide for the avoidance and preservation of the resources in place and should provide appropriate plat notes ensuring the mitigation of any adverse effect upon these resources. All investigations must be conducted by a qualified archaeologist and must follow *The Standards and Guidelines for Archeological Investigations in Maryland* (Schaffer and Cole, 1994) and must be presented in a report following the same guidelines.

RECOMMENDATION:

DISAPPROVAL OF PRELIMINARY PLAN 4-04138 AND TCPI/61/02-01 DUE TO STORMWATER MANAGEMENT, RECREATIONAL FACILITIES, AND MD 210 ISSUES.