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Preliminary Plan 4-05058

Application	General Data
Project Name: BANAN FOREST Location: North side of Edison Lane, approximately 550 feet east of its intersection with Cheltenham Avenue. Applicant/Address: Shelby Homes, LLC. 16916 Queen Anne Bridge Road Bowie, MD. 20716	Date Accepted: 09/26/05
	Planning Board Action Limit: 2/28/05
	Plan Acreage: 10.00
	Zone: R-R
	Lots: 19
	Parcels: 0
	Planning Area: 81A
	Tier: Developing
	Council District: 09
	Municipality: N/A
	200-Scale Base Map: 212SE08

Purpose of Application	Notice Dates
SINGLE-FAMILY RESIDENTIAL SUBDIVISION	Adjoining Property Owners Previous Parties of Record Registered Associations: 06/25/05 (CB-58-2003)
	Sign(s) Posted on Site and Notice of Hearing Mailed: 11/08/05

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 4-05058
Banan Forest Lots 1-19

OVERVIEW

The subject property is located on Tax Map 117 in Grid C-3 and is known as Parcel 123. The property is an acreage parcel never having been the subject of a record plat of subdivision. Parcel 123 is vacant, approximately 10 acres in size, and is zoned R-R. The applicant is proposing to subdivide the property into 19 lots for the construction of single-family dwelling units in conformance with the conventional standards of the R-R Zone.

The property was the subject of Preliminary Plan 4-04177, which was withdrawn by the applicant on April 25, 2005. In 2005 the development of this property was subject to CB-89-2004, which established the adequacy of fire/rescue and police response times. The response times for this development were not adequate and staff was compelled to recommend disapproval of the preliminary plan of subdivision. Prior to the scheduled April 28, 2005, Planning Board hearing, the applicant withdrew the application.

Subsequent to the withdrawal of the previous preliminary plan, CB-56-2005 and CR-78-2005 were adopted establishing new standards for the adequacy of police and fire response times. The development of this property is subject to the new standards as discussed further in Findings 8 and 9 of this report.

The preliminary plan proposed with this application is identical to the previous application. As with the previous application, staff supports the subdivision of the land as proposed. The applicant has proposed to dedicate and construct a 50-foot-wide public right-of-way extending north from Edison Lane to serve all of the proposed lots. All of the lots proposed exceed the minimum 20,000 square-foot lot size, frontage, and lot width required in the R-R Zone.

The Cheltenham Forest Cluster subdivision (WWW64@37) is abutting to the west. That property was subdivided in 1967 and the abutting lots in that subdivision are 10,000 square feet in lot size. The Cheltenham Forest subdivision (NLP 119@81) is abutting to the east. That property was subdivided in 1984 and the abutting lots in that subdivision are between 21,261 and 20,000 square feet in lot size. To the north is an open space parcel owned by the Cheltenham Forest Cluster homeowners association.

SETTING

The property is located on the north side of Edison Lane, approximately 550 feet east of its intersection with Cheltenham Avenue. The surrounding properties are zoned R-R and are generally developed with single-family dwelling units. The property is southeast of Andrews Air Force Base.

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-R	R-R
Use(s)	Single-family dwellings	Single-family dwellings
Acreage	10	10
Lots	19	19
Outlots	0	0
Parcels	1	0
Dwelling Units:		
Detached	0	19

2. **Environmental**—The Environmental Planning Section has reviewed the Preliminary Plan of Subdivision for Banan Forest, 4-05058, and the Type I Tree Conservation Plan, TCPI/102/04, accepted for processing on September 26, 2005. The Environmental Planning Section recommends approval of 4-05058 and TCPI/102/04, subject to the conditions noted at the end of this memorandum.

The Environmental Planning Section previously reviewed Preliminary Plan 4-04177 and TCPI/102/04; however, these applications were withdrawn before being heard by the Planning Board. The proposal is for 19 lots in the R-R Zone.

The site is mostly wooded. There are no streams, wetlands or 100-year floodplain on the property. Stormwater run-off from the property eventually reaches Piscataway Creek in the Potomac River watershed. According to information obtained from the Maryland Department of Natural Resources, Natural Heritage Program publication entitled “Ecologically Significant Areas in Anne Arundel and Prince George’s Counties,” December 1997, there are no rare, threatened, or endangered species found to occur in the vicinity of this property. There are no nearby sources of traffic-generated noise. The proposed use is not expected to be a noise generator.

There are no designated scenic and historic roads in the vicinity of this property. According to the “Prince George’s County Soil Survey,” the principal soils on the site are in the Sassafras and Westphalia series. According to available information, Marlboro clay does not occur in the vicinity. This property is located in the Developing Tier as reflected in the approved General Plan.

Based on the most recent air installation compatible use zone study released to the public in August 1998 by Andrews Air Force Base, aircraft generated noise is significant. The study indicates that the noise threshold is within the 65-70 dBA (Ldn) noise contour. This noise level is above state-acceptable noise level for residential land uses. It will not be possible to mitigate noise in the outdoor activity areas; however, the use of proper construction materials must be used to ensure that the noise inside the residential structures does not exceed 45dBA. A certification by a professional engineer with competency in acoustical analysis should be placed on the building permits stating that building shells of structures have been designed to reduce interior noise levels to 45 dBA or less. In addition, staff recommends that a note be placed on the final plat advising perspective owners of the possible noise levels due to military aircraft overflights is above the Maryland-designated acceptable noise levels for residential uses.

An approved natural resources inventory, NRI-032-05, was submitted with the application. There are no stream, wetlands or 100-year floodplain on the property. The FSD indicates three forest stands totaling 10.00 acres and nine specimen trees.

According to the Green Infrastructure Plan, most of the property is within an evaluation area. Flanking the property on the east and west are designated gaps in the green infrastructure network that have been developed and cannot be reasonably filled in the future. Based upon this analysis, there are no priority woodlands on site.

This property is subject to the provisions of the Prince George's County Woodland Conservation Ordinance because the gross tract area is in excess of 40,000 square feet and there are more than 10,000 square feet of existing woodland on-site.

The Type I Tree Conservation Plan, TCPI/102/04, has been reviewed. The plan proposes clearing 8.78 acres of the existing 10.00 acres of woodland. The woodland conservation requirement has been correctly calculated as 4.79 acres. The plan proposes to meet the requirement by providing 4.79 acres of off-site woodland conservation and retain 3.99 acres on-site but not part of any requirement. The applicant intends to preserve woodland to the extent possible; however, staff is aware that the grading necessary to create positive drainage on this site could make that difficult.

The TCP appropriately provides adequate clearing around all proposed structures and for a 40-foot cleared outdoor activity area at the rear of each proposed structure. Because of the lot sizes and lack of priority woodlands, on-site conservation is not recommended because it would unnecessarily encumber small lots without providing the benefits envisioned by the Woodland Conservation Ordinance; however, some retention of existing trees will be an asset. More woodland conservation cannot be accomplished on site because the site is extremely flat and must be graded to provide positive drainage as required by the building code.

According to the "Prince George's County Soil Survey," the principal soils on the site are in the Sassafras and Westphalia series. Westphalia soils are in the B-hydric series and are highly erodible. Sassafras soils pose no special problems for development. This information is provided for the applicant's benefit. No further action is needed as it relates to this preliminary plan of subdivision review. A soils report may be required by the Prince George's County Department of Environmental Resources during the permit process review.

The Environmental Planning Section recommends approval of TCPI/102/04.

Water and Sewer Categories

The water and sewer service categories are W-3 and S-3 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 Subregion V Master Plan, Planning Area 81A, in the Clinton Community. The master plan recommends suburban living areas within this community, with low-density subdivisions with densities of 1.6 to 3.3 dwelling units per acre. The 1993 sectional map amendment for Subregion V retained this property in the R-R Zone, providing for the densities envisioned by the plan. The proposed subdivision is consistent with the land use recommendations of the master plan.

The property is south of Andrews Air Force Base and will be subject to noise due to airport operations. The master plan recommends notice to potential homeowners and mitigation of noise levels in excess of state standards. The staff recommendation section of this report provides appropriate conditions to notify future homeowners that this subdivision has been identified as possibly having noise levels that exceed 65 dBA Ldn due to military aircraft overflights, and requires certification from a professional engineer with competency in acoustical analysis demonstrating that the design and construction of building shells will attenuate noise to interior noise levels of 45 dBA (Ldn) or less.

The 2002 General Plan locates this property in the Developing Tier. One of the visions of the plan for the Developing Tier is to maintain a pattern of low- to moderate-density land uses and reinforce existing suburban residential neighborhoods. The proposed preliminary plan is consistent in land use and density with the surrounding existing neighborhoods and is consistent with the recommendations of the General Plan.

4. **Parks and Recreation**—In accordance with Section 24-134 of the Subdivision Regulations, the Park Planning and Development Division recommends that the applicant pay a fee-in-lieu of parkland dedication because the land available for dedication is unsuitable due to its size and location. Because of the small size of the subdivision, staff is not recommending that on-site recreational facilities be required. Therefore, the establishment of a homeowner's association, the creation of common open space parcels, and the associated fees will not be required.
5. **Trails**—There are no master plan trails issues identified in the adopted and approved Subregion V Master Plan. Roads in the vicinity of the subject site have sidewalks along both sides. Edison Lane has sidewalks on both sides where frontage improvements have been made. Staff recommends a standard sidewalk along the subject site's frontage of Edison Lane and along one side of the internal cul-de-sac.
6. **Transportation**—The Transportation Planning Section has reviewed the subdivision application and determined that a traffic study was not warranted by the size of the proposed development. Staff did request a traffic count from the applicant, and a March 2005 count for the intersection of MD 223 and Old Alexandria Ferry Road was provided. Therefore, the findings and recommendations outlined below are based upon a review of 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 site is 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.

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 transportation staff is basing its findings on the traffic impacts at one critical intersection, which is signalized. The traffic generated by the proposed preliminary plan would impact the intersection of MD 223 and Old Alexandria Ferry Road. The critical intersection is not programmed for improvement with 100 percent construction funding within the next six years in the current Maryland Department of Transportation Consolidated Transportation Program or the Prince George's County Capital Improvement Program.

Staff conducted field observations during April 2005. Field observations indicated that during the AM peak-hour westbound right turning vehicles on MD 223 are sometimes not able to turn freely. Therefore, the right turn lane does not act as a free-flow right turn lane. If all of the AM westbound right turns are counted the intersection operates unacceptably during the AM peak hour.

Existing Conditions		
Intersection	Critical Lane Volume AM & PM	Level of Service AM & PM
MD 223/Old Alexandria Ferry Road	1,762 1,371	F D

The guidelines identify signalized intersections operating at LOS D with a critical lane volume of 1,450 or better during both peak hours as acceptable. The AM peak hour CLV and LOS cited above is the assumption that the westbound AM through traffic will block westbound to northbound AM right turns at the intersection, resulting in queues and poor LOS. The PM peak LOS is acceptable under existing conditions.

The transportation staff has reviewed approved development and assumed a three percent annual growth rate for through traffic along MD 223 and Dangerfield Road. Background traffic includes the recently approved Bellefonte property (4-04069) in the northeast quadrant of MD 223 and Old Alexandria Ferry Road and Chesterfield Estates (4-03062) located on the west side of Dangerfield Road. Background conditions are summarized below:

Background Conditions		
Intersection	Critical Lane Volume AM & PM	Level of Service AM & PM
MD 223/Old Alexandria Ferry Road	1,993 1,563	F E

Under background conditions both the AM and PM peak-hour levels of service are above acceptable standards for the developing tier as defined in the guidelines.

The site is proposed for development as a residential subdivision of 19 lots. The proposed development would generate 14 AM (3 in, 11 out) and 17 PM (11 in, 6 out) peak-hour vehicle trips as determined using the *Guidelines for the Analysis of the Traffic Impact of Development Proposals* (Revised September 2002). Staff assumes these trips are distributed as follows:

- 20%—East along MD 223
- 25%—West along MD 223
- 30%—South along Old Alexandria Ferry Road
- 20%—North along Dangerfield Road
- 5%—North along Commo Road

Given these assumptions, we obtain the following results under total traffic:

Total Traffic Conditions				
Intersection	Critical Lane Volume AM & PM		Level of Service AM & PM	
MD 223/Old Alexandria Ferry Road	1,996	1,565	F	E
MD 223/Old Alexandria Ferry Road**	1,074	1,446	B	D

**This requires lengthening the westbound right turn lane to remove the westbound right turns from the through lane during the AM peak hour, and re-striping the east leg of the intersection. It also requires restriping the northbound turn lanes to provide separate left-turn, through, and right-turn lanes.

Based on the staff's review of transportation adequacy issues in the area, the transportation staff notes that the intersection of MD 223/Old Alexandria Ferry Road would operate acceptably during the AM and PM peak hours with the proposed improvements.

The dedication of right-of-way on Edison Lane and Rama Court is shown correctly on the submitted site plan at 60 feet and 50 feet respectively, staff has no further comments on the preliminary plan.

Based on the preceding findings, the Transportation Planning Section finds that adequate transportation facilities exist to service the proposed subdivision as required under Section 24-124 of the Prince George's County Code if the application is approved with conditions.

7. **Schools**—The Historic Preservation and Public Facilities Planning Section has reviewed this preliminary plan for the 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:

Finding

Impact on Affected Public School Clusters

Affected School Clusters #	Elementary School Cluster 5	Middle School Cluster 3	High School Cluster 3
Dwelling Units	19 sfd	19 sfd	19 sfd
Pupil Yield Factor	0.24	0.06	0.12
Subdivision Enrollment	4.56	1.14	2.28
Actual Enrollment	4,206	4,688	8,866
Completion Enrollment	112.80	69.06	136.68
Cumulative Enrollment	99.36	41.40	82.80
Total Enrollment	4,422.72	4,799.60	9,087.76
State Rated Capacity	4,215	5,114	7,752
Percent Capacity	104.93	93.85	117.23

Source: Prince George's County Planning Department, M-NCPPC, December 2004

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 of approval 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 interstate highway 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. Council bill CB-31-2003 allows for these surcharges to be adjusted for inflation and the current amounts are \$7,412 and 12,706 to be paid at the time of issuance of each building permit.

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 services in accordance with Section 24-122.01(d) and Section 24-122.01(e)(B)(E) of the Zoning Ordinance.

The Prince George's County Planning Department has determined that this preliminary plan is within the required seven-minute response time for the first due fire station, Clinton Company 25, using the Seven-Minute Travel Times and Fire Station Locations Map provided by the Prince George's County Fire Department.

The Fire Chief has reported that the current staff complement of the Fire Department is 685 (98.99 percent), which is within the staff standard of 657 (or 95 percent) of authorized strength of 692 as stated in CD-56-2005.

The Fire Chief has reported by letter, dated 08/01/05 that the department has adequate equipment to meet the standards stated in CB-56-2005.

9. **Police Facilities**—The Prince George's County Planning Department has determined that this preliminary plan is located in Police District V. The response standard is 10 minutes for emergency calls and 25 minutes for nonemergency calls. The times are based on a rolling average for the proceeding 12 months.

Reporting Cycle	Date	Emergency Calls	Nonemergency
Acceptance Date	08/05/05-09/05/05	13.00	23.00
Cycle 1	09/05/05-10/05/05	12.00	22.00
Cycle 2	10/05/05-11/05/05	12.00	22.00
Cycle 3	11/05/05-12/05/05	To be provided 12/08/05	To be provided 12/08/05

The response time standards of 10 minutes for emergency calls for police was not met on the date of acceptance or within the following three monthly cycles. In accordance with Section 24-122.01

of the Subdivision Regulations, Preliminary Plan 4-05058 fails to meet the standards for police emergency response time. The Planning Board may not approve a preliminary plan until a mitigation plan between the applicant and the county is entered into and filed with the Planning Board in accordance with the County Council adopted “Guidelines for the Mitigation of Adequate Public Facilities for Public Safety Infrastructure.”

The Police Chief has reported that the current staff complement of the Police Department is 1,302 sworn officers and 43 student officers in the academy, for a total of 1,345 (95 percent) personnel, which is within the standard of 1,278 officers (or 90 percent) of the authorized strength of 1,420, as stated in CB-56-2005.

The applicant may enter into a mitigation plan with the county and file such plan with the Planning Board. The Planning Board may not approve this preliminary plan until a mitigation plan is submitted and accepted by the county or during the 90-day CB-55 provision for retesting, the applicant meets the average yearly response times for the district.

In accordance with CR-78-2005, the applicant has agreed to enter into a mitigation agreement and has chosen to pay solely the mitigation fee. At the writing of this staff report, one additional opportunity exists for the emergency police response time to be evaluated within the three monthly cycles of response time reports since the acceptance of this application (CB-56-2005). The November 2005 response time averages will be available on December 6, 2005, and will be provided at the public hearing. If the response time for emergency calls is found to be adequate, the applicant will not be required to enter into a mitigation agreement.

10. **Health Department**—The Health Department has no comment.
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, 41027-2004-00, has been approved with conditions to ensure that development of this site does not result in on-site or downstream flooding. Development must be in accordance with this approved plan. The approved DER stormwater management required for this site does not include the construction of a pond. Therefore, a homeowner’s parcel to contain a facility is not necessary, nor any maintenance responsibility. The approved stormwater management concept letter and plan, CSD 41027-2004, shows the use of dry wells for each lot, piping of excess run-off into an existing stormdrain system, and the provision of a 100-year overflow path. The approval number is shown on the preliminary plan.
12. **Historic**—The Historic Preservation and Public Facilities Planning Section has reviewed the application and does not recommend a Phase I archeological survey.

RECOMMENDATION

APPROVAL, subject to the following conditions:

1. Prior to the issuance of permits, a Type II tree conservation plan shall be approved.
2. Development of this site shall be in conformance with the stormwater management concept plan, 41027-2004-00, and any subsequent revisions.
3. Prior to approval of the final plat of subdivision, the applicant, his heirs, successors and or assignees shall pay a fee-in-lieu of parkland dedication.

4. Prior to the issuance of any building permits within the subject property, the following road improvements shall have full financial assurances, have been permitted for construction, and have an agreed-upon timetable for construction with SHA and/or DPW&T:
 - a. Lengthen the westbound right turn lane on MD 223 to completely remove the westbound right turns from the through lane. This also will involve some restripping along the MD 223 east leg of the intersection.
 - b. Restripe the northbound turn lanes on Dangerfield Road to provide separate left-turn, through, and right-turn lanes.
5. The applicant and the applicant's heirs, successors, and/or assignees shall provide the following unless modified by DPW&T:
 - a. A standard sidewalk along the subject site's entire frontage of Edison Lane.
 - b. A standard sidewalk along one side of Rama Court.
6. Prior to the approval of building permits, a certification by a professional engineer with competency in acoustical analysis shall be placed on the building permits stating that building shells of structures have been designed to reduce interior noise levels to 45 dBA or less.
7. The following note shall be placed on the final plat:

“Properties within this subdivision have been identified as possibly having noise levels that exceed 65 dBA Ldn due to military aircraft overflights. This level of noise is above the Maryland-designated acceptable noise level for residential uses.”
8. The following note shall be placed on the final plat of subdivision:

“Development is subject to restrictions shown on the approved Type I Tree Conservation Plan (TCPI/102/04), or as modified by the Type II tree conservation plan, and precludes any disturbance or installation of any structure within specific areas. Failure to comply will mean a violation of an approved tree conservation plan and will make the owner subject to mitigation under the Woodland Conservation/Tree Preservation Policy.”
9. Prior to the issuance of a grading permit for the development, A public safety mitigation fee shall be paid in the amount of \$71,820 (\$3,780 x 19 dwelling units). Notwithstanding the number of dwelling units and the total fee payments noted in this condition, the final number of dwelling units shall be as approved by the Planning Board and the total fee payment shall be determined by multiplying the total dwelling unit number by the per unit factor noted above. The per unit factor of \$3,780 is subject to adjustment on an annual basis in accordance with the percentage change in the Consumer Price Index for all urban consumers. The actual fee to be paid will depend upon the year the grading permit is issued.

STAFF RECOMMENDS APPROVAL OF THE TYPE I TREE CONSERVATION PLAN TCPI/102/04.