The 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.mncppc.org/pgco/planning/plan.htm.

Preliminary Plan 4-04088

Application	General Data		
Project Name:	Date Accepted:	11/4/04	
REACHING HEARTS INTERNATIONAL	Planning Board Action Limit:	4/07/05	
	Plan Acreage:	17.08	
Location:	Zone:	R-A	
North of Brooklyn Bridge Road, approximately 500 feet west of Burtons Lane in Laurel.	Lots:	0	
	Parcel:	1	
Reaching Hearts International, Inc. P.O. Box 10600 Silver Spring, MD. 20914	Planning Area:	60	
	Tier:	Developing	
	Council District:	01	
	Municipality:	N/A	
	200-Scale Base Map:	221NE5&6	

Purpose of Application	Notice Dates
SUBDIVISION FOR AN INSTITUTIONAL USE	Adjoining Property Owners Previous Parties of Record Registered Associations: (CB-58-2003) 9/30/04
	Sign(s) Posted on Site and Notice of Hearing Mailed: 3/01/05

Staff Recommendatio	n	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 4-04088

Reaching Hearts International, Parcel A

OVER VIEW

The property is located on Tax Map 2, Grid B-3, and is known as Parcels 11 and 28. These are acreage parcels never having been the subject of a record plat. Existing Parcel 11 (10.03) is located along the western edge of the property abutting the Montgomery County line. Parcel 11 has a 16-foot stem along the southern property line to the property's street frontage on the west side of Brooklyn Bridge Road. Parcel 28 (7.04 acres) has approximately $295\pm$ feet of frontage on Brooklyn Bridge Road. The applicant is proposing to subdivide the property into one parcel, Parcel A (17.08 acres), for the construction of a 28,000-square-foot, 730-seat church facility.

At the writing of the staff report there are two outstanding issues that compel staff to recommend disapproval of the preliminary plan of subdivision and the companion Type I Tree Conservation Plan for Parcel A. The first issue is due to the existing water and sewer service categories of the property, as it relates to the proposed nonresidential use. The property, Parcel A, is made up of existing Parcels 11 and 28. These existing parcels are located in two water and sewer service categories. Parcel 11 and part of Parcel 28 is located in water and sewer service Category 5 (13.67 \pm acres). The remainder of Parcel 28 (3.4 \pm acres) is located in water and sewer service category 3, where public systems are available. Therefore, the majority (13.67 \pm acres) of proposed Parcel A is located in water and sewer service Category 5.

Specifically, Section 2.1.3 of the ten-year water and sewer service plan defines Category 5 as follows:

"Category 5. Future Community Service. This category consists of land inside the Sewer Envelope that should not be developed until adequate public facilities are available to serve the proposed development. Properties in Category 5 require a redesignation to Category 4 prior to the development review process. Small residential developments may be approved for the use of interim individual systems in certain circumstances."

Apparently, in recognition that the development review process for the preliminary plan of subdivision could not be approved for the property (Parcel A) due to the 13.67± acres of the property in Category 5, the applicant filed a request in the 2003 April Cycle of Amendments to the county's ten-year water and sewer plan to change the 13.67 acres of this property from Category 5 to 4. This request was filed prior to the filing of the subject preliminary plan of subdivision for this property. On July 30, 2003, the County Council denied that request. The applicant then filed a petition in the Circuit Court to compel the County Council to approve the request. That request was denied (CAE03-19538) on January 31, 2005.

On November 4, 2004, after the applicant had filed the request in Circuit Court, a preliminary plan of subdivision was accepted for processing for the subdivision of Parcel A, as proposed. On November 19, 2004, in the Subdivision Review Committee meeting the applicant was advised that prior to the Planning Board's approval of this case, the applicant must obtain a revision to the water and sewer service Category from 5 to 4 (13.64 acres) or staff would be compel to recommend disapproval of the application to the Planning Board for Parcel A, as proposed.

One of the purposes of the Subdivision Regulations (Section 24-122.01(b)(1)) states that the location of the property within the appropriate service area of the ten-year water and sewerage plan is deemed sufficient evidence of the immediate or planned availability of public water and sewerage for preliminary plan approval. In this case the "property" is proposed Parcel A, and because the ten-year water and sewer service plan requires that the portion of the property located in Category 5 must be designated in Category 4 prior to the development review process.

The applicant, in a letter dated March 9, 2005 (Antonetti to Green), agues that the "Planning Board has approved other preliminary plans which create lots which enjoy split System Area classification. Most notably, a preliminary plan of subdivision immediately contiguous to the southwest property line of [the] subject site was approved by the Planning Board which created at least two lots that retained a split systems area classification... and created 6 lots of which lots numbered 1 and 2 were created with a split systems area category (i.e., Systems Area '3' and '6'). This clearly demonstrates that the placement of a property's systems area line does not necessarily determine the placement of a lot line during preliminary subdivision."

Staff would agree with the applicant in that the placement of a lot line is not required to be consistent with the water and sewer service category line designation. To the contrary, the ability through the subdivision process of an application to propose a lot line consistent with the water and sewer service category is a matter of convenience to create a lot or parcel wholly within one service area category for the development of a property.

That notwithstanding, the issues in this case, which are not shared by the case abutting to the south referenced by the applicant, are that the subject property contains property in water and sewer service Category 5 and is a nonresidential use. The property to the south is and was at the time of approval of the preliminary plan (4-95104) located in Category 6 (private systems) and 3 (public systems). Moreover, the other issue that distinguishes the subject application from the case referenced by the applicant is that the applicant is this case is unable to avail themselves of the relief provided in Section 2.1.3. of the ten-year water and sewer service plan. Relief from strict compliance to the plan is not available in this case because the applicant is proposing a nonresidential use. Relief from strict compliance with the water and sewer service plan is available only to "small residential developments [that] may be approved for the use of interim individual systems."

In the case referenced by the applicant, the Planning Board (PGCPB Resolution 95-412) found that:

"The rear portion of the property is in Water and Sewer Category 6 and the portion along the street frontage is in Category 3. The entire property is to be developed utilizing private well and septic systems. The applicant obtained an Interim System Approval from DER, Programs and Planning Division, in order to utilize individual systems for Lots 1 and 2 (located along the site's frontage) even though these lots are located within the portion of the property that is designated for public systems."

The applicant in the referenced case obtained a waiver from the strict compliance to the ten-year water and sewer service plan pursuant to Section 2.1.3., for a "small residential development." The case

presented by the applicant has no standing in the staff evaluation of the subject application and diverges on significant facts.

The second issue that compels staff to recommend disapproval of the preliminary plan is the inability of staff to find conformance with Section 24-124 of the Subdivision Regulations for the requirement of adequate transportation facilities, as discussed further in Finding 7 of this report.

The property delineation also includes a parcel identified on Tax Map 2, Grid B-3, as Parcel 6. Staff requested that the applicant submit a deed for the property demonstrating an accurate delineation of what was represented on the preliminary plan of subdivision. The applicant submitted a deed dated February 24, 2002 (Liber 18641 Folio 313), that demonstrates that Parcel 6 does not exist, that the area of Parcel 6 is part of Parcel 11, and the area of the site therefore abut Parcels 2, 12 and 13 to the northeast, which was not previously recognized. Once this was brought to the attention of the applicant, a notice was sent by the applicant to those abutting property owners. In addition, staff requested that the applicant make personal contact with those property owners prior to the Planning Board hearing.

Staff would note that the property is located within 2,500 feet of a drinking water reservoir and therefore is subject to a maximum lot coverage of 10 percent pursuant to CB-83-2004. Conformance to this regulation will be appropriately evaluated at the time of permit review.

SETTING

The property is located on the north side of Brooklyn Bridge Road approximately 500 feet west of Burtons Lane in Laurel. The surrounding properties to the northwest and southwest are zoned R-A, are generally rural in character, and are developed with large lot single-family dwellings. The properties to the east, across Brooklyn Bridge Road, are zoned R-R and generally developed with single-family dwelling units. The property is abutting the Montgomery County line and is within 2,500 feet of the Rocky Gorge Reservoir, a drinking water reservoir, to the northwest.

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-A	R-A
Use(s)	Single-family Dwelling	Church/School
		730 seats of 28,000 square feet total
Acreage	17.08	17.08
Parcels	2	1
Dwelling Units:		
Detached	1	1-to remain as parsonage

2. **Water and Sewer Categories**—The Department of Environmental Resources, Environmental Services Division, notes that the 2001 Water and Sewer Plan designates this property in water and sewer service Category 3 for the front third (3.4 acres) of the property and water and sewer service Category 5 for the remainder (13.68 acres) of the property. The Environmental Services Division states that a water and sewer service category change must be obtained before the subdivision can be approved.

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3. **Environmental**—The Environmental Planning Section has not previously reviewed plans for this property. The property comprises two parcels (11 and 28). The site has an existing single-family detached dwelling with driveway and stable to the northwest of the house. The subject proposal is for the construction of a new church facility with associated parking and stormwater management facilities.

The site is bisected from north to south by an existing 20-foot-wide Continental Gas pipeline easement that is to remain. Based on year 2000 air photos the site is approximately 50 percent wooded; there is a nonvegetated stream channel with connected wetlands and areas of severe slopes in the northeast portion of the site. There are no areas of 100-year floodplain. According to the Maryland Department of Natural Resources Natural Heritage Program staff, the site contains forest interior dwelling species (FIDS) habitat in relation to the Rocky Gorge Reservoir to the north of the site; and a threatened plant species, Halbred-leaved Greenbriar (Smilax psuedochina), has been reported in the vicinity of the property.

Three soil types associated with the site include Brinklow, Blocktown and Glenelg. Blocktown soils have slopes of 25 to 45 percent associated with them. Glenelg soils have a K-factor of 0.32, and the other two soils have K-factors at 0.28 or less. Based on available information Marlboro clays are not found at this site. The property is in the Rocky Gorge Reservoir watershed and the Patuxent River basin. There are no significant noise generators or scenic or historic roads in vicinity of the site. The property is in the Subregion I Planning Area and the Developing Tier of the 2002 adopted General Plan.

A revised forest stand delineation (FSD) plan has been submitted and reviewed. Revisions to the plan are necessary in order for it to meet the requirements of the Prince George's County Woodland Conservation Ordinance and the Tree Preservation Technical Manual and Policy Document.

Three forest stands (Stands A-C) have been identified at the site. Stand A totals 6.96 acres and is a hardwood forest dominated by yellow poplar. This stand contains 22 of 25 total specimen trees associated with the site. Stand B totals 1.22 acres; it is dominated by Virginia pine and no specimen trees are located in this stand. Stand C totals 0.59 acres and has co-dominant tree species, Virginia pine and red maple. All three stands have had a forest structure analysis performed to determine each stand's structure value. All three stands have a "good" forest structure value associated with them. Stand A's value is in the upper range of a Priority 2-rated forest and Stands B and C are in the mid-range of a Priority 2-rated forest. Stand A has FIDS habitat associated with it in relation to large contiguous woodland associated with the reservoir.

The State Forest Conservation Technical Manual describes priority retention areas as, "Contiguous forest is either 100 acres or larger, or is 300 feet or more in width and connects to forest area located off-site which is 100 acres or more."

The Woodland Conservation Policy Document for Prince George's County states that, "The following areas shall have priority for consideration as preservation and enhancement through reforestation or afforestation:

"Large contiguous wooded areas that connect the largest undeveloped or most vegetated tracts on land within or adjacent to the property and diverse forest stands in wooded areas."

Priority 1 woodlands on the subject property include the forest interior woodland habitat and its 300-foot-wide buffer. The preservation of FIDS habitat is also addressed by the Patuxent River

Primary Management Area Preservation Area as defined in Section 24-101(b)(10) of the Subdivision Ordinance as follows:

- (10) Patuxent River Primary Management Area Preservation Area: A buffer established or preserved along perennial streams within the Patuxent River watershed excluding the area within the Chesapeake Bay Critical Area Overlay Zones, which as a minimum includes:
 - (A) All perennial streams and a minimum of 50 feet of preserved or established vegetation on the side of the bank;
 - (B) The one-hundred year floodplain;
 - (C) All wetlands adjacent to the perennial stream or the one-hundred (100) year floodplain;
 - (D) All areas having slopes of twenty-five percent (25%) or greater abutting or adjoining the perennial stream, the one-hundred (100) year floodplain or stream-side wetlands:
 - (E) All area having highly erodible soils on slopes of fifteen percent (15%) or greater abutting the perennial stream, the one-hundred year floodplain or stream-side wetlands:
 - (F) Specific areas or rare or sensitive wildlife habitat, as determined by the Planning Board.

FIDS habitat is a sensitive wildlife habitat area, and its delineation along with the 300-foot-wide buffer on the FSD plan is necessary for an accurate delineation of the PMA on the TCPI and preliminary plan.

The FSD plan also does not identify all the existing natural features at the site with a corresponding symbol in the legend. The plan should identify the wetlands, steep slopes, the centerline of the intermittent stream, the location of the soils associated with the site, and the legend should be expanded to include a corresponding symbol for each natural feature. The boundaries of all the soil series on the site are not on the plan (limits of the Blocktown series are not shown). There is a note on the plan stating that soils information is not available for this part of the county; however, the TCPI contains soils information in General Note #9 that should also be included on the FSD plan within all soils boundaries.

The plan also does not have a statement regarding the amount of existing woodlands to the closest one-hundredth of an acre. All three forest stands should be identified on the plan to the closest one-hundredth of an acre. Twenty-five specimen trees have been located at the site; however, the specimen tree table does not include information as to how these trees were located (field located or surveyed). The plan does not have a revision box.

The site is subject to the provisions of the 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 woodlands on-site. A revised Type I Tree Conservation Plan (TCPI) has been submitted.

This 17.08-acre site in the R-A Zone has a woodland conservation threshold (WCT) of 50 percent, or 8.54 acres. The site has 8.55 acres of existing woodland. The applicant has proposed no clearing of the existing woodland. The site's woodland conservation requirement is 8.54 acres. This requirement is proposed to be met on-site, with 8.55 acres of woodland preservation.

Further revisions to the TCPI are necessary to meet the requirements of the Woodland Conservation Ordinance. Several items of general information and existing site features required on a TCP have not been provided. These include expanding the legend to show the locations of natural features such as wetlands, steep slopes (slopes between 15 and 25 percent associated with highly erodible soil) and severe slopes (slopes 25 percent in grade or steeper), and the centerline of the stream with corresponding symbols on the plan. Specific information regarding the qualified professional who prepared the plan (business address and telephone number, signature and credentials) must be shown on the plan. Provide a revision box to note all revisions made to the TCP with a brief description of the revision, the date, and the initials of the person making the revision. The FSD indicates a total of 25 specimen trees associated with the site. In a table format, provide information in columns including a statement as to the method of location (field or survey located), the tree number, size, species, condition, proposed disposition, comments, and/or special preservation treatments recommended. Also, revise the plan to show the specimen trees on the plan.

Several aspects regarding woodland conservation information must be addressed on the TCPI in the form of revisions. Two TCPI notes must be modified; in Standard Note # 4 add the phrase after the word "Board" to read "or designee." In the same note add the following two sentences: "The woodlands cleared in conflict with an approved plan shall be mitigated on a 1:1 basis. In addition, the Woodland Conservation replacement requirements (½:1, 2:1, and/or 1:1) shall be calculated for the woodland clearing above that reflected on the approved TCP." Also add Optional TCP Note #6 to read: "Plans for stormwater management are contained in Conceptual Stormdrain Plan # (insert the DER plan number). It is understood that conceptual design plans for stormwater management will be approved prior to the approval of Preliminary Plan 4-04088." A note below the General Notes states that the net tract is 16.96 acres. This error needs to be corrected or justification provided for the reduction in the net tract and the worksheet revised accordingly.

The 0.42-acre woodland preservation area contains areas that are less than 35 feet wide. These areas cannot be counted toward meeting the requirements and should be taken out of the shaded area and labeled as "Woodland Preserved, Not Counted" with an appropriate acreage provided. The remaining woodland conservation requirement should then be met in the open area west of the Colonial Gas pipeline through afforestation. A portion of the gas pipeline easement is within a proposed woodland preservation area. These utility easement areas cannot be counted toward a site's woodland conservation requirement.

The Subdivision Ordinance provides for the protection of streams, 50-foot stream buffers, wetlands, 25-foot wetland buffers, 100-year floodplain, and adjacent areas of slopes between 15 and 25 percent on highly erodible soils. When a property is located within the Patuxent River watershed these features and any special habitat areas compose the Patuxent River Primary Management Areas (PMA) that is to be protected to the "fullest extent possible." In order to evaluate the protection afforded the PMA, these features must be accurately identified on the TCPI and the preliminary plan. It appears the PMA will not be impacted by the proposed development; however, these features associated with the site, including the extent of the FIDS habitat area, must be shown on the plan as within the PMA with a corresponding symbol in the

legend. The PMA boundaries should be drawn to include the area of FIDS habitat and the 300-foot-wide buffer.

The area of woodland that exists to the west of the Colonial pipeline easement is, in its entirety, FIDS habitat and buffer. In addition, this woodland provides water quality benefits to the reservoir. This woodland is also being used to meet the site's woodland conservation requirements. For these reasons, the entire area to the west of the pipeline easement should be placed in a conservation easement to afford it permanent protection.

A copy of a wetlands study has been submitted. The study was prepared in January 2003 and sent to the U.S. Army Corps of Engineers for their review and jurisdictional determination. The submittal of wetlands-related information included the Corps' jurisdictional determination dated March 2003. In the March 2003 correspondence from the Corps, the wetlands delineation in the study was determined to be accurate after Corps staff conducted a field visit. A wetlands delineation map with the study shows one area of wetlands located in the northeast portion of the site. This wetland area is connected to a stream channel. In the Corps' March 2003 correspondence, it was noted wetlands under the jurisdiction of the Maryland Department of the Environment may also be located on the site.

The delineated wetlands are located in a proposed woodland preservation area and impacts are not proposed in this development. Both the TCPI and preliminary plan show the general area of the wetlands; however, the extent of the wetlands is not clearly identified on either current plan with a corresponding symbol in the legend and the required 25-foot-wide wetlands buffer.

New information provided on March 14, 2005, by Community & Environmental Defense Service, represented to staff as consultants for the opposition, shows the possible location of wetlands on the property located in the southwest portion of the site and on the abutting Ronald F.J. Sine property. The latter property is also known as Lot 2 of Maiden's Fancy (VJ 182@63). The location of the wetland on an approved tree conservation plan (TCPII/03/00) for that property indicates that the wetland extends from the off-site property onto the subject property. This is sufficient evidence to require a re-evaluation of the site and a new wetland study to determine the extent of wetlands in the southwest portion of the site.

The area in question shows the construction of a parking lot on the TCPI, for which a variation was not requested. Prior to signature approval of the preliminary plan, a revised wetland study should be submitted that evaluates the southwest portion of the site for the presence of regulated wetlands. If wetlands are found in this area, all plans of development should be revised to show the presence of the wetland and a 25-foot-wide buffer. The TCPI should then be revised to eliminate all impacts to the wetland and its associated buffer. The Planning Board must approve a variation, pursuant to Section 24-113 of the Subdivision Regulations, for any disturbance of wetland, a protected area (Section 24-130).

In March 2003, the Maryland Department of Natural Resources (MDNR) was contacted for environmental review as to rare, threatened and endangered species. The result of MDNR's review included a request for the applicant to conduct a survey for Halbred-leaved Greenbriar. The survey was conducted and the conclusion was the delineated wetland area previously identified at the site was the only portion where the state-listed threatened plant species may grow. It was also noted the environmental indicators and conditions necessary to support the plant species were remotely present. No further information regarding the presence of the state-listed threatened plant species is necessary.

4. **Community Planning**—The property is located within the 1990 master plan for Subregion I, Planning Area 60 in the West Laurel Community. The master plan land use recommendation for the property is Estate Residential, in conformance with the R-A zoning of the property. The 1990 sectional map amendment for Subregion I retained this property in the R-A Zone, consistent with the recommendations of the master plan. The Zoning Ordinance establishes that an institutional use is permitted use in the R-A Zone and is not inconsistent with the recommendations of the master plan.

The 2002 General Plan locates this 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. Creating one parcel to develop an institutional use to support suburban residential communities is not inconsistent with the 2002 General Plan.

- 5. **Parks and Recreation**—In accordance with Section 24-134(a)(3)(B) of the Subdivision Regulations, the subdivision is exempt from the mandatory dedication of parkland requirement because the parcel is located within a residential zone and is greater than one acre in size.
- 6. **Trails**—The adopted and approved Subregion I master plan designates Brooklyn Bridge Road as a Class III Bikeway. This can be accommodated through the provision of bikeway signage that should be provided by the applicant.

Brooklyn Bridge Road is open section with no sidewalks in the immediate vicinity of the subject site. There are no connecting sidewalks along either side of the property. The nearby residential communities to the east of the subject site have sidewalks along some stretches of Brooklyn Bridge Road, but there is no existing sidewalk between the site and these communities. The applicant should provide a standard sidewalk along the subject site's entire frontage of Brooklyn Bridge Road, unless modified by DPW&T.

7. **Transportation**—The applicant proposes a one-lot subdivision for the development of church and educational facilities. Proposed Lot 1 is planned for a 730-seat church of 28,000 square feet.

The transportation staff determined that a traffic study detailing weekday and Saturday analyses was needed (the applicant has indicated that the main service would occur on Saturday, not Sunday, and this has been independently confirmed). In response, the applicant submitted a traffic study dated November 2004 that was referred for comment. A revised study dated February 2005 included a smaller proposal that forms the primary basis for this recommendation, and that study was also referred. 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*.

Growth Policy - Service Level Standards

The subject property is in 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 is required in the Developing Tier.

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.

The traffic study for this site examined the site impact at five intersections:

MD 198/Old Gunpowder Road/Bond Mill Road (signalized) Bond Mill Road/Brooklyn Bridge Road (unsignalized) MD 198/Riding Stable Road (unsignalized) MD 198/Sweitzer Lane Brooklyn Bridge Road/site entrance

The existing conditions at the study intersections are summarized below:

EXISTING TRAFFIC CONDITIONS							
Intersection	Critical Lane Volume (AM & PM & Saturday)			Level of Service (LOS, AM & PM & Sat.)			
MD 198 and Old Gunpowder Road/Bond Mill	1,290	1,127	862	С	В	A	
Road Bond Mill Road and Brooklyn Bridge Road	10.0*	11.1*	9.6*				
MD 198 and Riding Stable Road	16.8*	16.4*	13.1*				
MD 198 and Sweitzer Lane	1,205	1,285		C	C		
Brooklyn Bridge Road and site entrance	future						

*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, delay exceeding 50.0 seconds indicates inadequate traffic operations. Values shown as "+999" suggest that the parameters are beyond the normal range of the procedure, and should be interpreted as a severe inadequacy.

Two issues must be noted:

- a. At the time of scoping of the traffic study it was determined that the school could have an impact on weekdays at the MD 198/Sweitzer Lane intersection. While the impact of the church on weekends is certainly not insignificant, when doing weekend analyses of churches it has typically not been the practice to include extended study areas. Furthermore, most of the turning movements at this intersection are related to the adjacent employment park, and there is much less activity within the employment park on Saturdays.
- b. The MD 198/Riding Stable Road intersection is within Montgomery County. Furthermore, this analysis will show that this intersection fails under background traffic, primarily due to the impact of one major background development. This development has a condition to study signalization at this location.

There are no funded capital projects at this intersection in either the county Capital Improvement Program or the state Consolidated Transportation Program that would affect the critical intersections. There are, however, bonded improvements that are scheduled for construction at the MD 198/Sweitzer Lane intersection, and these improvements are included in the background network. The applicant's analysis included six nearby sites that would affect the intersection. With background growth added, the following results are obtained:

BACKGROUND TRAFFIC CONDITIONS							
Intersection	Critical Lane Volume (AM & PM & Saturday)			Level of Service (LOS, AM & PM & Sat.)			
MD 198 and Old Gunpowder Road/Bond Mill Road	1,430	1,229	1,023	D	С	В	
Bond Mill Road and Brooklyn Bridge Road	10.2*	11.3*	9.8*				
MD 198 and Riding Stable Road	54.9*	+999*	37.6*				
MD 198 and Sweitzer Lane	1,219	1,263		C	C		
Brooklyn Bridge Road and site entrance	future						

^{*}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, delay exceeding 50.0 seconds indicates inadequate traffic operations. Values shown as "+999" suggest that the parameters are beyond the normal range of the procedure, and should be interpreted as a severe inadequacy.

The traffic study provides an analysis of the potential trip generation of the site. The analysis raises a number of issues that needed to be discussed below:

- a. The trip generation for the church facility is based upon published rates that reflect the peak hour of adjacent street traffic. Therefore, it is inappropriate to reduce the rates by 70 percent to then reflect peak hours. The study states that two previous applications were considered to have lower rates of trip generation, but the resolution approving one of them (the First Baptist Church of Glenarden) is clear in stating the rate used and in observing that the range of churches studied were less than 30,000 square feet, which led to staff supporting a lower trip rate for much larger churches. Given that the subject church is within the range of the Institute of Transportation Engineers' (ITE) study, the direct ITE rates are supported for use.
- b. The trip generation for the private school shown in the traffic study is unacceptable:
 - (1) It is unclear how the elementary school and the middle school/junior high school rates were melded into one rate.
 - (2) The elementary school rates are based upon schools "where bus service is usually provided to students living beyond a specified distance from the school."
 - (3) In general, it would have been more useful to utilize the rates for private school—K–8, and that would be staff's preferred methodology.

- (4) The 90 percent reduction is inappropriate because students are frequently involved in after-school activities. The ITE Trip Generation Manual provides little comparison between the PM peak hour of the school versus the PM peak hour of adjacent street traffic. However, this comparison is available under the Private School—K–12 use, and the reduction is 70 percent.
- c. The direct use of the Saturday trip generation rate in the ITE manual for the church use is indefensible given that the traffic study states that the primary religious services occur on Saturday. As the Sunday rates for a church in the ITE manual reflect the day having the primary service, it would have been more appropriate to use the Sunday trip rates in this circumstance.

With the development of 28,000 square feet of church facilities, staff estimates trip generation of 20 AM (11 in and 9 out), 19 PM (10 in and 9 out), and 330 Saturday (165 in and 165 out) peak-hour vehicle trips. With the development of a 250-student private school, staff estimates trip generation of 225 AM (124 in and 101 out), 38 PM (18 in and 20 out), and 0 Saturday peak-hour vehicle trips.

The distribution and assignment steps in the traffic study are not consistent with standard processes. Given that the church is moving from a location in Montgomery County, it is agreed that the majority of trips to the site will be directed toward the west. Inexplicably, however, the study suggests a 15 percent discount for school trips to represent travel diverted from MD 198, but the figure showing the weekday assignment is unclear regarding this discount (that was unsupportable in any regard).

With the site added to the local roadway network using staff's assumptions, the following results are obtained:

TOTAL TRAFFIC CONDITIONS							
Intersection	Critical Lane Volume (AM & PM & Saturday)			Level of Service (LOS, AM & PM & Sat.)			
MD 198 and Old Gunpowder Road/Bond Mill Road	1,453	1,234	1,091	Е	С	В	
Bond Mill Road and Brooklyn Bridge Road	11.0*	11.6*	11.6*				
MD 198 and Riding Stable Road	425*	+999*	+999*				
MD 198 and Sweitzer Lane	1,230	1,266		C	C		
Brooklyn Bridge Road and site entrance	10.5*	10.0*	10.9*				

*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, delay exceeding 50.0 seconds indicates inadequate traffic operations. Values shown as "+999" suggest that the parameters are beyond the normal range of the procedure, and should be interpreted as a severe inadequacy.

Given these analyses, two intersections within the study area would operate unacceptably in one or both peak hours. Each of these intersections is discussed in a separate section below.

MD 198/Riding Stable Road

This intersection operates unacceptably as an unsignalized intersection. 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.

It is noted, however, that this intersection is within Montgomery County. The applicant also correctly notes that the Montgomery County Local Area Transportation Review (LATR) Guidelines direct that an unsignalized intersection is analyzed with the critical lane volume (CLV) method. Under this method of analysis, the intersection operates at LOS B, C, and A during the AM, PM, and Saturday peak hours, respectively.

The jurisdiction of the Prince George's County Planning Board to impose transportation conditions within an adjacent county is unclear. Furthermore, a Montgomery County development (the Fairland Golf Course Community) is required to study signalization at this location as a part of state highway access from the south at this location. For these reasons, the MD 198/Riding Stable Road intersection is presented for information only; however, staff will not recommend a condition at this location.

MD 198/Old Gunpowder Road/Bond Mill Road

Largely because the trip generation of the school was greatly underestimated during the AM peak hour, this intersection operates at LOS E during the AM peak hour; the applicant has not proposed corrective action at this location. There are two options for relieving the inadequacy:

- a. Physical improvements could be constructed at the intersection. This could involve a second eastbound left-turn lane or an additional lane on the southbound approach.
- b. The size of the school could be reduced to a point that the 1,450 CLV threshold would not be exceeded. If the proposed school enrollment were to be reduced to 215, the critical intersection would operate with a critical lane volume of exactly 1,450.

Given the late date at which the significant trip generation deficiencies were noted, the issues have not been discussed with the applicant to date. There are options noted herein, and there may be other options available as well. Until more is known, it is not possible for the transportation staff to determine that the MD 198/Old Gunpowder Road/Bond Mill Road intersection is adequate.

The site is not within or adjacent to any master plan transportation facilities. It is specifically noted that the plan reflects dedication of 30 feet from centerline along Brooklyn Bridge Road. While it appears that the prevailing right-of-way along Brooklyn Bridge Road is 70 feet, the dedication line is inconsistent; furthermore, the 70-foot functional standard of a commercial or industrial street would clearly not be applicable in this area because all of the adjacent zoning is residential. Rather, it appears that some older subdivisions dedicated 40 feet from centerline when Brooklyn Bridge Road was an arterial on a previous master plan, and newer subdivisions have reflected 30 feet from centerline after it was downgraded to a primary roadway on the current plan. Therefore, the dedication of 30 feet from centerline along Brooklyn Bridge Road is correct and appropriate.

As the adequacy finding is based upon a level of development that has been specified by the applicant, the subdivision should be capped accordingly on the corresponding trip impact. Uses

that would exceed the impact analyzed herein would require a new subdivision with a new analysis of the traffic impacts.

SHA and DPW&T both reviewed the traffic study. DPW&T had had no comments on either study submitted. SHA had several comments that are summarized below on the first submission (no comments on the second submission have been received to date):

- a. SHA raised concerns about the site trip generation. These were addressed through the staff review.
- b. SHA had concerns about the exclusion of a nearby development. That development was included in the second submission.
- c. SHA stated that the site would have negative impacts at the MD 198/Old Gunpowder Road/Bond Mill Road and the MD 198/Sweitzer Lane intersections. Staff's analysis has indicated that while the site's impacts to the MD 198/Sweitzer Lane intersection do not deteriorate service levels to the point of inadequacy, the development of the site would result in inadequate operations at the MD 198/Old Gunpowder Road/Bond Mill Road intersection.

The Planning Board has been presented with findings that suggest that the MD 198/Old Gunpowder Road/Bond Mill Road intersection would not meet the level-of-service standards with the addition of site traffic in at least one peak hour, and no improvements are programmed or proffered by the applicant that would result in improved future operations. There are several options for improving the intersection or reducing the impact of the site.

Transportation Staff Conclusions

Based on the preceding findings, the Transportation Planning Section concludes that a finding of adequate transportation facilities as required under Section 24-124 of the Prince George's County Code cannot be made at this time.

- 8. **Schools**—The Historic Preservation and Public Facilities Planning Section has reviewed this subdivision plan for impact of this application on school facilities in accordance with Section 24-122.02 of the Subdivision Regulations and CB-30-2003 and CR-23-2003 and concluded that the application is exempt from the review of school facilities because it is a commercial use.
- 9. **Fire and Rescue**—The Historic Preservation and Public Facilities Planning Section has reviewed this subdivision plan for the current test of adequacy of public facilities applicable to the subject application and concluded the following.
 - a. The existing fire engine service at Laurel Fire Station, Company 10, located at 7411 Cherry Lane, has a service travel time of 6.95 minutes, which is beyond the 3.25-minute travel time guideline.
 - b. The existing ambulance service at Laurel Rescue Squad, Company 49, located at 14910 Bowie Road, has a service travel time of 8.37 minutes, which is beyond the 4.25-minute travel time guideline.

- c. The existing paramedic service at Laurel Rescue Squad, Company 49, located at 14910 Bowie Road, has a service travel time of 8.37 minutes, which is beyond the 7.25-minute travel time guideline.
- d. The existing ladder truck service Beltsville Fire Station, Company 31 located at 4911 Prince George's Avenue, has a service travel time of 12.51 minutes, which is beyond the 4.25-minute travel time guideline.

In order to alleviate the negative impact on fire and rescue services due to the inadequate service discussed, an automatic fire suppression system should be provided in all new buildings proposed in this subdivision, unless the Prince George's County Fire/EMS Department determines that an alternative method of fire suppression is appropriate.

The site is located in the northwest corner of the county, southeast of the Rocky Gorge Reservoir. Access is extremely limited from Prince Georges County. The closest fire station is the Scaggsville Fire Station, Company 11, located on MD 216 to the west of its intersection with Columbia Pike. It has been determined that this property will be served by the fire department in Howard County under the mutual aid agreement.

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

- 10. **Police Facilities** The proposed development is within the service area for Police District VI-Beltsville. The Planning Board's current test for police adequacy applicable to this 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.
- 11. **Health Department**—The Health Department notes that raze permits are required for the removal of any structures. The existing dwelling is utilizing private sewer systems and is connected to existing water service. The recover field for the existing dwelling is to remain and should be identified on the preliminary plan.
- 12. **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, # 213119-2003-00, 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.
- 13. **Historic**—The Planning Board has identified that the possible existence of prehistoric archeological sites on certain properties must be considered in the review of development applications, and that potential means for preservation of these resources should be considered. The Historic Preservation and Public Facilities Planning Section notes that there is a moderate possibility for archeological sites on this property. Prehistoric archeological sites are known to exist in environmental settings similar to that in the project area. In addition, the project area is located ½ mile south and in the vicinity of the S. Carr residence as shown on the 1861 Martenet Map.

RECOMMENDATION:

DISSAPPROVAL OF PRELIMIARY PLAN 4-04088 AND TYPE I TREE CONSERVATION PLAN TCPI/91/04 DUE TO INADEQUATE TRANSPORTATION FACILITIES AS REQUIRED BY SECTION 24-124, AND INADEQUATE WATER AND SEWER SERVICE AS REQUIRED BY SECTION 24-122.01(b)(1)