

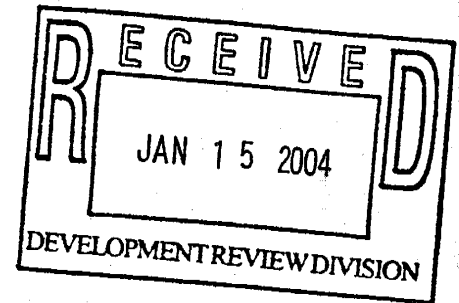
M-NCPPC



MONTGOMERY COUNTY DEPARTMENT OF PARK AND PLANNING

THE MARYLAND-NATIONAL CAPITAL
PARK AND PLANNING COMMISSION


8787 Georgia Avenue
Silver Spring, Maryland 20910-3760




January 14, 2004

MEMORANDUM

TO: Malcolm Shaneman, Supervisor
Development Review Division

VIA: Ronald C. Welke, Supervisor
Transportation Planning Division 

FROM: Cherian Eapen, Planner/Coordinator
Transportation Planning Division 
301-495-4525

SUBJECT: Preliminary Plan No. 1-03092
Sandy Spring Friends School
Norwood Road (MD 182), Sandy Spring
Patuxent (Rural) Policy Area

This memorandum presents Transportation Planning staff's Adequate Public Facilities (APF) Ordinance review of the above application related to the expansion of the existing Sandy Spring Friends School, in Sandy Spring, to accommodate an enrollment increase of approximately 180 students (for a total of 700 students), and to consolidate the existing 11 parcels belonging to the school into one lot. The parcels are zoned RE-2, and are located within the Patuxent (Rural) Policy Area.

RECOMMENDATIONS

Transportation Planning staff recommends the following conditions as part of the transportation-related requirements to approve this application:

1. Limit the increase in student enrollment at Sandy Spring Friends School to 182 students (for a total of 700 students).
2. Consistent with the Approved and Adopted Sandy Spring/Ashton Master Plan, dedicate adequate right-of-way along the school frontage of Norwood Road (MD 182) to provide 60 feet of right-of-way from the centerline.

3. In coordination with the Maryland State Highway Administration (SHA), and the Montgomery County Department of Public Works and Transportation (DPWT), construct a Class I bikeway along the east side of Norwood Road, along the school frontage.
4. In coordination with the SHA, the DPWT, and the Parks Department of the M-NCPPC, at the applicant's expense, design and construct at-grade improvements at the Norwood Road/Layhill Road/Ednor Road intersection to provide a westbound Ednor Road to northbound Norwood Road right turn lane.
5. In coordination with the SHA and the DPWT, relocate the existing main school access (to Norwood Road) to the south to align with Excaliber Lane, and provide access improvements at the main school driveway as required by the SHA.

DISCUSSION

Site Location, Access, Existing Pedestrian/Bikeway Facilities and Public Transit

The Sandy Spring Friends School is located along the east side of Norwood Road (MD 182) midway between its intersections with Ednor Road/Layhill Road and Dr. Bird Road. Access to the school will continue to be from Norwood Road.

All roads within the study area are two-lane roadways, and have posted speed limits ranging from 30 mph to 40 mph. The Norwood Road and Dr. Bird Road intersections with MD 108, as well as the Norwood Road/Layhill Road/Ednor Road intersection are traffic signal-controlled. To the south, the Norwood Road approach to Dr. Bird Road/Norwood Road is STOP sign-controlled.

Currently, there are Class I bikeway facilities along the west side of Norwood Road near its intersection with Dr. Bird Road, along the north side of Dr. Bird Road towards MD 108, and along the south side of Ednor Road (within Hampshire Greens) to New Hampshire Avenue (MD 650). The section of bikeway along the northern section of Norwood Road, towards MD 108, is currently being built. As part of this Preliminary Plan, Sandy Spring Friends School is proposing to construct a Class I bikeway along the east side of Norwood Road, along the school property frontage.

Dr. Bird Road, Norwood Road and MD 108, are serviced by the Metrobus system (Route Z2). In addition to the Sandy Spring Friends School, and several residential communities, the area has uses such as the Sandy Spring Friends House/Retirement Community/Nursing Home, the Woodlawn Manor Park and the Olney Theatre.

Master Plan Roadway and Pedestrian/Bikeway Facilities

The 1998 Approved and Adopted Sandy Spring/Ashton Master Plan describes the nearby master-planned roadways, pedestrian, and bikeway facilities as follows:

1. Norwood Road/Dr. Bird Road (MD 182), between Layhill Road (MD 182)/Ednor Road to the southeast and MD 108 to the northwest, as a master-planned open-section two-lane Major

Highway (M-60), except where shoulders and other improvements are needed to ensure safe travel conditions. A minimum right-of-way width of 120 feet is recommended for Norwood Road/Dr. Bird Road. The Master Plan recommends a Class I bikeway (PB-38) along this section of MD 182.

2. Norwood Road, between MD 108 to the north and Dr. Bird Road/Norwood Road (MD 182) to the south, as a master-planned two-lane Arterial (A-256) with a recommended minimum right-of-way width of 80 feet. The Master Plan recommends a local trail along Norwood Road to the south of MD 108 that connects to Friends House and Friends School. Additionally, a Class II bikeway (PB-67) is recommended between MD 108 and Dr. Bird Road. It should be noted that a Class I bikeway facility currently exists (or is being built) along this master-planned section of Norwood Road from its southern end at Dr. Bird Road to near MD 108.
3. Ednor Road, between MD 650 to the east and Norwood Road/Layhill Road to the west, as a master-planned two-lane Arterial (A-50) with a recommended minimum right-of-way width of 80 feet. Additionally, a Class I bikeway (PB-40) is recommended along Ednor Road between MD 650 and Norwood Road, a section of which is currently built (within Hampshire Greens to MD 650) along the south side of Ednor Road.
4. Olney-Sandy Spring Road (MD 108) as a master-planned east-west Arterial (A-92) between the Howard County line to the east and Dr. Bird Road to the west, with a minimum 80-foot right-of-way. Except where four lanes already exist, the Master Plan recommends no more than three lanes for MD 108, between MD 650 to the east and Norwood Road to the west, to preserve the rural character of the road and the character/scale of the Sandy Spring/Ashton village centers. The Master Plan also recommends sidewalks and regional trails along MD 108, with connections to the Rural Legacy Trail and the Northwest Branch Trail that connect to the Sandy Spring, Woodlawn Manor Park, and to the Northwest Branch Park. A Class I bikeway (PB-66) is recommended for MD 108, along its north side between MD 650 and Dr. Bird Road.

Local Area Transportation Review

A traffic study was required for the Sandy Spring Friends School Preliminary Plan, per the *Local Area Transportation Review (LATR) Guidelines*, since the school was estimated to generate more than 50 total peak-hour trips during weekday morning (6:30 a.m. – 9:30 a.m.) and evening (4:00 p.m. – 7:00 p.m.) peak-periods.

The consultant for the applicant submitted a traffic study (dated September 2, 2003) that determined the traffic-related impacts of the proposed increase in enrollment at the school on the nearby intersections during weekday morning and evening peak periods. Review of the traffic study indicated that the study complied with the requirements of the LATR Guidelines and the traffic study scope provided by the staff.

The trip generation estimates for the school were based on the operational characteristics of the existing school, data collected at the existing school, and at Bullis School. Based on these, it was

estimated that the proposed 182-student enrollment increase at Sandy Spring Friends School would generate approximately 149 peak-hour trips during the weekday morning peak-period and approximately 60 peak-hour trips during the weekday evening peak-period. A summary of the above is provided in Table 1.

TABLE 1
SUMMARY OF TRIP GENERATION
PROPOSED 182-STUDENT INCREASE IN ENROLLMENT
SANDY SPRING FRIENDS SCHOOL

Time Period	Trip Generation		
	In	Out	Total
Weekday Morning Peak-Hour	92	57	149
Weekday Evening Peak-Hour	29	31	60

Source: Sandy Spring Friends School Traffic Study

A summary of the Critical Lane Volume (CLV) analysis results for the study intersections for the weekday morning and evening peak hours during the respective peak periods as provided in the September 2003 traffic study is presented in Table 2.

TABLE 2
SUMMARY OF CAPACITY CALCULATIONS (CLV)
PROPOSED 182-STUDENT INCREASE IN ENROLLMENT
SANDY SPRING FRIENDS SCHOOL

Intersection	Traffic Conditions							
	Existing		Background		Total		Total w/Applicant Funded Imps	
	AM	PM	AM	PM	AM	PM	AM	PM
MD 108 and Dr. Bird Rd	852	916	1,000	1,012	1,008	1,017	--	--
MD 108 and Norwood Rd	1,082	982	1,168	1,110	1,196	1,121	--	--
Dr. Bird Rd and Norwood Rd	933	945	1,136	1,128	1,176	1,147	--	--
Norwood Rd and School Dr/Excalibur Ln	873	955	1,075	1,089	1,198	1,135	--	--
Norwood Rd and Layhill Rd/Ednor Rd	1,569	1,066	1,827	1,235	1,898	1,253	1,809	1,187

Source: Sandy Spring Friends School Traffic Study

Note: Applicable Congestion Standard: 1,525 (since study intersections straddle Olney Policy Area)

As shown in Table 2, under total traffic conditions, CLV values at the study intersections are either below the congestion standard of 1,525¹, or, with applicant-funded intersection improvements,

¹ The study intersections straddle Olney Policy Area, which has a higher congestion standard of 1,525 (compared to the Patuxent – Rural – Policy Area congestion standard of 1,450). Therefore, per LATR Guidelines, page 10, higher congestion standard apply to the intersections.

do not exceed the respective CLVs under Background Traffic Conditions. Therefore, the Preliminary Plan satisfies the LATR test.

Policy Area Transportation Review/Staging Ceilings

Rural policy areas such as the Patuxent Policy Area are not assigned any transportation staging ceilings. Therefore, the Sandy Spring Friends School Preliminary Plan is not required to meet the PATR test.

CE:RCW:gw

cc: Mary Goodman
Bill Gries
Jeff Riese
Greg Cooke
Pete Stone
Stephen G. Petersen, P.E.
Bob Simpson

mno to shaneman on ssfs.doc