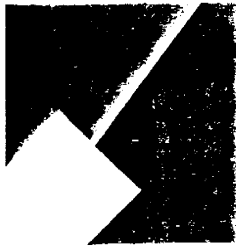


**ATTACHMENT 4  
TRANSPORTATION PLANNING MEMO**

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

February 13, 2004

**MEMORANDUM**

TO: Calvin Nelson, Senior Planner  
Community-Based Planning

VIA: Dan Hardy, Supervisor *DCH*  
Transportation Planning

FROM: Shahriar Etemadi, Coordinator  
Transportation Planning

SUBJECT: Mandatory Referral # MR-03603-MCPS-1 Northwood High School  
Kensington/Wheaton Policy area

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This memorandum is Transportation Planning staff's Adequate Public Facilities review of the subject application.

**RECOMMENDATION**

Transportation Planning staff offers the following comment as part of the transportation requirements related to the approval of the subject application.

1. Limit the enrollment to 1,600 students.
2. Coordinate with State Highway Administration and Department of Public Works and Transportation to investigate operational pedestrian access and safety improvements along University Boulevard between Arcola Avenue and Caddington Avenue.

**Local Area Transportation Review**

A traffic study was submitted to satisfy the Local Area Transportation Review requirements. The study indicates that all affected intersections in the area will operate within the congestion standard of 1650 Critical Lane Volume (CLV) for the Kensington/Wheaton policy area.

The existing trips from the site were used as the basis for projecting the future trips from the school. This is due to the similar characteristics of the existing use and the future school use. The distribution of site traffic was also based on the existing turning movements at the school.

The site trips were added to the existing and background traffic (traffic from approved but unbuilt developments) and assigned to three intersections in the study area. The Critical Lane Volume analysis of the three affected intersections are shown in the following table.

Intersections	Existing		Background		Total Future	
	AM	PM	AM	PM	AM	PM
University Blvd./Arcola Avenue	1,029	1,280	1,035	1,294	1,055	1,294
University Blvd./Northwood H.S Driveway	854	875	858	885	897	885
University Blvd./Gabel Street/Caddington Ave.	896	940	901	950	944	950

As shown in the above table, all intersections operate within 1650 CLV congestion standard and the staff has no objection to approval of this application as it meets all transportation requirements.

### Master Plan Recommendations

1. University Boulevard is a six-lane divided Major Highway with a 120-foot right-of-way and a Class III (on-road) bikeway
2. Arcola Avenue is a four-lane undivided Arterial road with an 80-foot right-of-way and a Class I (shared-use path) bikeway
3. Caddington Avenue is a two-lane Primary Residential street with a 70-foot right-of-way and a Class III (on-road) bikeway.

### Site Access, Circulation and Pedestrian facilities.

The site has one vehicular access point from University Boulevard. This is a stop sign controlled access with channelization to improve safety for vehicles turning in and out of the site. There is, and will be, a clockwise one-way loop around the campus for all vehicles entering the site. The Montgomery County Public Schools (MCPS) staff previously considered a change to the design of the site entrance. The entrance is currently designed in a way that vehicles entering and exiting the site pass each other to the right, a maneuver that is counter-intuitive.

MCPS considered separating the egress and ingress driveways and revising the direction of traffic on the internal circulation loop around the campus to counter-clockwise flow. These changes would be costly. The current condition, although counter-intuitive, provides safe and adequate access and circulation to parking lots located along the internal road.

Adequate sidewalks exist along University Boulevard, Arcola Avenue and Caddington Avenue. There are walking paths connecting the neighborhoods to the north and south to the school. The nearby intersections of University Boulevard with Caddington Avenue and Arcola Avenue have push-button controlled pedestrian signals for safe and easy crossings.

Additional improvements at the nearby intersections could be made to enhance the pedestrian safety. Operational improvements could include changing pedestrian signal phasing to increase crossing time and providing additional pedestrian signing and marking. These operational improvements should be investigated and pursued immediately. Other improvements might include physical treatments such as improving median refuge areas along University Boulevard, reducing the turning radius at intersections, and additional pedestrian signing and marking.

The MCPS staff recommends further review and monitoring of traffic conditions after school opens before reconsidering conceptual plans for potential access and circulation changes. Staff suggests that the MCPS also monitor pedestrian safety for a period of one year and return to the Planning Board if additional physical improvements for either vehicular or pedestrian access and safety are pursued.

#### **Policy Area Review/Staging Ceiling Analysis**

The site is located within the Kensington-Wheaton Policy Area, which has a remaining capacity of 2,770 jobs and 2,531 housing units, as of January 31, 2004.

SE:DKH:gw

mno to nelson re MR Northwood HS2





THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

**MEMORANDUM**

DATE: January 21, 2004

TO: Calvin Nelson, Community Based Planning

VIA: Mary Dolan, Environmental Planning 

FROM: Michael Zamore, Environmental Planning 

SUBJECT: Mandatory Referral No. 03603-MCPS-1  
Northwood High School modification

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The Environmental Planning staff has reviewed the Mandatory Referral referenced above. Staff has the following comments:

- Consider using locally sourced sustainable or renewable materials, recommended by the U.S. Green Building Council standards for Leadership in Energy and Environmental Design (LEED), where feasible in the construction of the building additions.
- The applicant must comply with stormwater and sediment control regulations of the Montgomery County Department of Permitting Services.

**Forest Conservation**

An existing Forest Conservation Plan approved in 1996 and modified in 2000 covers the property. The Planning Board previously approved construction in 2000 and environmental issues are not significantly affected by the proposed additions. This Mandatory Referral is exempt from Forest Conservation Plan (FCP) requirements because the proposal involves modifications to an existing developed property. A Tree Save Plan is not required because no forest or specimen trees will be removed. There are specimen trees on the property however, and efforts must be made to protect those that are near the limits of disturbance for the proposed construction.

**Water Quality**

The school is in the Upper Sligo Creek subwatershed of the Sligo Creek Watershed. Sligo Creek Watershed, a tributary to the Northwest Branch of the Anacostia River, is one of the County's most urbanized watersheds. It is also the location of extensive efforts to restore an

urban stream system, and an example of the successes that can be achieved in controlling urban stormwater runoff and re-establishing a viable biological community.

### **Stormwater Management**

There are no stormwater management facilities currently functioning on the school site. New stormwater facilities are required for areas that will be disturbed by the proposed building addition and ancillary paved areas. The Department of Permitting Services (DPS) has granted a waiver from quantity control and approved a concept plan for new quality control facilities for areas that will be disturbed by the proposed construction. Quality control measures include the use of structural sand filters to treat an area of paved parking equivalent to the new building additions.

### **Air Quality**

Parts of the building may contain asbestos material, given the age of the building. If such material is uncovered in the course of the planned work it should be abated in accordance with applicable regulations.

### **Leadership in Energy in Environmental Design (LEED)**

Staff encourages the use of sustainable building design in all public projects, in keeping with the work of LEED. As part of the proposed renovation and new additions, the applicant may be able to incorporate building materials that employ locally or regionally sourced materials, with sustainable or renewable technologies. MCPS is encouraged to pursue and use such materials, to the extent possible. Future projects of this sort could go further in promoting LEED or green building practices. Practices could include providing greater infiltration of stormwater runoff from added paving by using more pervious paving materials in areas where parking is not a necessity. Vegetated filter strips or bioswales could be added to increase infiltration and slow the rate of stormwater runoff between impervious surfaces and stormwater management facilities.

### **Noise Control**

The work onsite should not exceed the allowable noise levels for construction.