



August 31, 2004

**MEMORANDUM**

TO: Calvin Nelson, Planner  
Community-based Planning Division

FROM: *CB*  
Candy Bunnag, Environmental Planner  
County-wide Planning Division

SUBJECT: Special Protection Area (SPA) Combined Preliminary and Final Water Quality Plan for Banneker Middle School (associated with mandatory referral no. MR 04602-MCPS-1)

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**STAFF RECOMMENDATION**

Staff recommends approval of the Special Protection Area (SPA) combined preliminary and final water quality plan with the following conditions:

1. Total impervious cover will be no more than 5.14 acres, as shown on the proposed site plan dated March 2003.
2. Conformance to the conditions as stated in DPS' water quality plan approval letter dated August 27, 2004.

**DISCUSSION**

There are two items for Planning Board review for the Banneker Middle School project: the Special Protection Area (SPA) Combined Preliminary and Final Water Quality Plan and the mandatory referral.

This memorandum contains staff's review and recommendations on the SPA combined preliminary and final water quality plan for the proposed project.

**The Planning Board must act on the SPA water quality plan before it can act on the mandatory referral.**

### **Site Description**

The 19.96-acre site lies within the Upper Paint Branch Special Protection Area. The site is already developed as a middle school and has an existing site imperviousness of 25.8 %. There is no forest on the site. There are some trees throughout the site. The Fairland Farms Tributary originates near the southeastern corner of the site.

### **Proposed Project**

The proposed project consists of reconfiguring and reconstructing the driveways, bus loop, and parking lots of the middle school to improve circulation and safety for school-related traffic. The project area lies on the north side of the school site.

### **Review for Conformance to the Special Protection Area Requirements**

As part of the requirements of the Special Protection Area law, a SPA water quality plan must be reviewed in conjunction with a mandatory referral<sup>1</sup>. Under the provision of the law, the Montgomery County Department of Permitting Services (DPS) and the Planning Board have different responsibilities in the review of a water quality plan. DPS has reviewed and approved the elements of the preliminary water quality plan under its purview. The Planning Board responsibility is to determine if environmental buffer protection, SPA forest conservation and planting requirements, and site imperviousness limits have been satisfied.

**DPS has reviewed and conditionally approved the elements of the SPA water quality plan under its purview,**

### **Site Performance Goals**

As part of the water quality plan, several site performance goals were established for the site: minimize storm flow runoff increases, minimize sediment loading, and promote groundwater recharge.

### **Site Imperviousness**

The Upper Paint Branch SPA is the only SPA that has regulatory impervious surface restrictions for development projects. These are set forth in

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<sup>1</sup> Section 19-62 (c) of the Montgomery County Code states that “ before engaging in any land disturbing activity on publicly owned property in an area designated as a special protection area, the applying agency or department should prepare a combined preliminary and final water quality plan.”

the environmental overlay zone for the Upper Paint Branch SPA. On new development, there is a ten percent (10%) site imperviousness limit. There is also a provision for projects with existing impervious surfaces lawfully existing before July 1, 1997 that already exceed the 10 percent limit and are proposing to reconstruct features within the project area; such projects may maintain, but not increase, impervious surface coverage.

Section 59-C-18.152 (a)(1) of the Montgomery County Code states:

“Any development must not result in more than 10 percent impervious surface of the total land area under application for development.

“(A) Any impervious surface lawfully existing pursuant to a building permit issued before July 1, 1997 that exceeds the 10 percent restriction, may continue or be reconstructed under the development standards in effect when the building permit was issued.”

Staff believes that Section 59-C-18.152(a)(1)(A) of the environmental overlay zone applies to this project. That is, for the purposes of reviewing impervious surface coverage, the project should be classified as one that is undergoing reconstruction.

**To conform to the environmental overlay zone as a “reconstruction” project, the site imperviousness cannot be increased over what exists today. That is, there cannot be any net gain in impervious surfaces.**

With the proposed reconstruction of the driveways, bus loop, and parking lots, MCPS proposes to add 0.21 acre of new impervious surfaces and remove 0.22 acre of existing impervious surfaces. The project results in a slight reduction of impervious surfaces on the entire school site, from 5.15 acres to 5.14 acres (or, 25.8 % site imperviousness). Therefore, it conforms to the environmental overlay zone.

### **Environmental Buffers**

A small stream and its buffer lie near and on the southeastern side of the school site. The proposed project area is on the northern side of the site and is at least 100 feet from the stream and buffer.

### **Forest Conservation**

The proposed project is exempt from forest conservation requirements because it is a modification to existing developed property and there is no forest on the subject site (Section 22A-5(s) of the County Forest Conservation Law).

MCPS proposes to provide tree protection fencing for some of the trees

near the project area. None of the trees that are proposed to be removed or protected are large or of specimen size.

**Stormwater Management Concept**

A surface sand filter is required to provide stormwater management for the project area.

**Sediment and Erosion Control**

DPS is requiring the use of super silt fences and silt fences around the perimeters of disturbed areas.

**Monitoring of Best Management Practices**

DPS has determined that this project does not need to conduct any monitoring because the proposed project is relatively small and there is little opportunity for collecting meaningful data.

**ATTACHMENT B****DEPARTMENT OF PERMITTING SERVICES**

Douglas M. Duncan  
*County Executive*

August 27, 2004

Robert C. Hubbard  
*Director*

Mr. Matt Willems  
A. Morton Thomas and Associates, Inc.  
12750 Twinbrook Parkway  
Rockville, Maryland 20852

Re: **Preliminary/Final Water Quality Plan for  
Banneker Middle School**  
SM File #: 212351  
Tract Size/Zone: 19.96 Ac/R-200  
Tax Plate: KR-343  
Montg. Co. Grid: 32C04  
Watershed: Upper Paint Branch

**SPECIAL PROTECTION AREA**

Dear Mr. Willems:

Based on a review by the Department of Permitting Services Review Staff, the Preliminary/Final Water Quality Plan for the above mentioned site is conditionally approved. This approval is for the elements of the Preliminary/Final Water Quality Plan of which DPS has lead agency responsibility, and does not include limits on imperviousness or stream buffer encroachments.

**Site Description:** The site is an existing school located at the intersection of Old Columbia Pike and Perrywood Drive. The work that is proposed is for the modification of the parking areas and the bus loop.

**Stormwater Management:** Control of the channel protection storm is not required because the one-year post development peak discharge is less than 2.0 cubic feet per second. Quality control will be provided via the proposed surface sand filter.

**Sediment Control:** Due to the minimal amount of disturbance that is proposed, the use of super silt fence and silt fence will be acceptable for sediment control. An engineered sediment control plan is required for this development.

**Conditions of Approval:** The following condition must be addressed during the detailed sediment control/stormwater management plan stage. This list may not be all inclusive and may change based on available information at the detailed plan review stage.

1. To prevent groundwater problems, decrease the depth of dead storage (from 5' to 1') under the sand filter and provide a larger sand filter footprint.
2. Provide an outlet opening for the surface sand filter so that it will dewater within 12 hours (use III watershed).



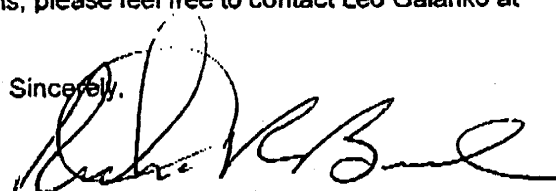
Mr. Matt Willems  
August 27, 2004  
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3. Prior to permanent vegetative stabilization, all disturbed areas must be topsoiled per the latest Montgomery County Standards and Specifications for Topsoiling.

This letter must appear on the sediment control/stormwater management plan at its initial submittal. Any divergence from the information provided to this office; or additional information received during the development process; or a change in an applicable Executive Regulation may constitute grounds to rescind or amend any approval actions taken, and to reevaluate the site for additional or amended stormwater management requirements. If there are subsequent additions or modifications to the development, a separate concept request shall be required.

If you have any questions regarding these actions, please feel free to contact Leo Galanko at (240)777-6242.

Sincerely,

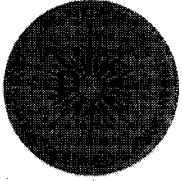


Richard R. Brush, Manager  
Water Resources Section  
Division of Land Development Services

RRB:dm:CN212351

cc: C. Bunnag  
L. Galanko  
D. Marshall  
SM File # 212351

Qn not required; Acres: 0.1  
Ql on-site ; Acres: 0.1



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION  
Montgomery County Department of Park and Planning

September 2, 2004

**MEMORANDUM**

TO: Calvin Nelson, Jr.  
Community-Based Planning Division

VIA: Daniel K. Hardy, Supervisor *for*  
Transportation Planning

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

SUBJECT: Mandatory Referral 04602-MCPS-1  
Benjamin Banneker Middle School Access Improvements  
Montgomery County Public Schools  
14800 Perrywood Drive, Burtonsville  
Fairland/White Oak Policy Area

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This memorandum presents Transportation Planning staff's Adequate Public Facilities (APF) review of the above Mandatory Referral regarding the proposed vehicular access improvements at Benjamin Banneker Middle School located at 14800 Perrywood Drive, within the Fairland/White Oak Policy Area, to enhance traffic circulation/operations related to parent/school bus drop-offs/pick-ups, as well as staff arrivals/departures and parking.

**RECOMMENDATIONS**

Transportation Planning staff has reviewed the subject plans and has no comments regarding the APF test for this Mandatory Referral.

## DISCUSSION

### Site Location, Access, Pedestrian Facilities, Parking and Public Transportation

The Benjamin Banneker Middle School is located within the southwest quadrant of Old Columbia Pike/Perrywood Drive intersection. The school has approximately 1,100 students and 100 professional/supporting staff members, and a current parking supply of approximately 110 spaces. It is anticipated that with the possible removal of existing portable classrooms in the future, the school will gain approximately 30 - 50 parking spaces. The school hours are 7:55 a.m. to 2:40 p.m.

Currently, access to Benjamin Banneker Middle School is facilitated via two full-movement driveways off Perrywood Drive, which are internally connected. The internal connections connect the school bus drop-off/pick-up in front of the school to the staff parking lot to its east and the parent drop-off/pick-up/staff parking area to its west. The proposed improvements at Benjamin Banneker Middle School will involve the reconfiguration of existing school access to create a separate school bus drop-off/pick-up loop with exclusive access driveway, a separate student drop-off/pick-up area with some staff parking via another exclusive driveway and a modified, separate staff parking lot with exclusive access driveway. In effect, the proposed plan will eliminate the connections between the bus drop-off/pick-up loop, student drop-off/pick-up loop and staff parking areas. The proposed separation of vehicular circulation at the school is anticipated to provide safe and efficient flow of buses, and parent, staff and visitor vehicles. Parent drop-off/pick-up vehicles will enter the school via the driveway proposed farthest from Old Columbia Pike, flow through the loop in a counterclockwise direction, and will exit out the same driveway. Buses will enter/exit via the proposed middle driveway and will also have a counterclockwise flow within the loop. Staff will enter/exit their parking lot via the driveway proposed closest to Old Columbia Pike.

Perrywood Drive is an open-section primary residential street approximately 20 feet wide, with a four-foot sidewalk along its south side, only between the eastern school driveway and Old Columbia Pike. The roadway is posted for a speed limit of 25 mph. School related parking currently occurs along the south side of Perrywood Drive along school frontage. Except for the school, land use along Perrywood Drive and its connecting streets are entirely residential. Perrywood Drive, to the northeast of the school intersects Old Columbia Pike at a two-way STOP-sign controlled intersection, with the Perrywood Drive approaches to the intersection controlled by STOP signs.



Old Columbia Pike is a north-south roadway along the west side of US 29 between Spencerville Road to the north and US 29 to the south, where it switches over to the east side of US 29. Except for a short section of the roadway between US 29 and East Randolph Road where it is classified arterial, the rest of the roadway is classified as a primary residential street. In the vicinity of the school, the roadway is approximately 26 feet wide, has an open section (no curbs) and minimal shoulder. The roadway has four-foot wide sidewalks along both sides to the north of Perrywood Drive and to only the east side south of Perrywood Drive. Parking is not permitted along Old Columbia Pike. The roadway has a posted speed limit of 35 mph. Metrobus route Z9 runs along Old Columbia Pike and has bus stops located along Old Columbia Pike just south of its intersection with Perrywood Drive. Crosswalks are present across Old Columbia Pike (to the south side of the intersection) and across Perrywood Drive (along the west side of the intersection).

#### Master Plan Roadways and Pedestrian/Bicycle Facilities

The 1997 Approved and Adopted Fairland Master Plan describes the nearby master-planned roadways, bikeway/pedestrian facilities as follows:

1. Old Columbia Pike, as a two-lane Primary (P-25) between Briggs Chaney Road to the south and Spencerville Road (MD 198) to the north, with a minimum right-of-way width of 70 feet, and with existing Class I/II bikeway (EB-13; or with Bike Lanes as BL-12 in the May 2004 Planning Board Draft of the *Countywide Bikeways Functional Master Plan* between Tech Road and Spencerville Road) and sidewalks between East Randolph Road and Spencerville Road. The Montgomery County Department of Public Works and Transportation (DPWT) recently completed its sidewalk construction projects (between Spencerville Road and East Randolph Road) along Old Columbia Pike.
2. Perrywood Drive, as a two-lane Primary (P-15) between Old Columbia Pike to the east and Cabin Creek Drive to the west, with a minimum right-of-way width of 70 feet.

#### Nearby Transportation Improvement Project

The Montgomery County DPWT's Capital Improvement Program (CIP) includes the following nearby project:

- CIP Project No. 509953; Old Columbia Pike – Phase III Roundabout: This project will construct a roundabout at the intersection of Old Columbia Pike and Perrywood Drive. The project is in final design and estimated to go into construction by June 2005. It is fully funded for construction.

### Local Area Transportation Review

The proposed vehicular access and safety enhancements at the school are physical improvements that will separate school bus drop-offs/pick-ups from those by parents, and provide a separate access point for staff. These improvements are anticipated to enhance access and traffic safety at the school and along Perrywood Drive and will not result in additional traffic at the school during the weekday morning (6:30 to 9:30 a.m.) and evening (4:00 to 7:00 p.m.) peak-periods. Therefore, this Mandatory Referral does not require a traffic study to satisfy the requirements of the Local Area Transportation Review Guidelines.

### Parking

Transportation Planning staff recognizes that school-related overflow parking currently occurs along Perrywood Drive along school frontage, and request that the school consider accommodating all of its parking on-site when additional parking become available on-site with the anticipated future removal of some of its modular classrooms.

### Policy Area Transportation Review/Staging Ceiling

The Benjamin Banneker Middle School is located within the Fairland/White Oak Policy Area, which had a remaining staging ceiling capacity of 1,939 additional jobs, as of June 30, 2004. The proposed vehicular access and safety improvements at the school are not anticipated to change staffing levels at the school. This Mandatory Referral therefore passes the Policy Area Transportation Review (PATR) test, subsequent to the application submittal. (It is noted that the PATR test had been eliminated under the FY 2005 AGP.)

CE:gw

cc: Mary Goodman  
Larry Cole  
Ray Trout, P.E.

mno to nelson re Banneker MS 04602-MCPS-1