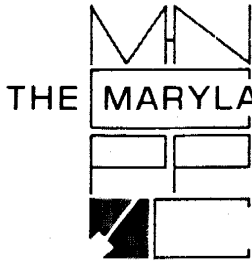


ATTACHMENT 5



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

8787 Georgia Avenue • Silver Spring, Maryland 20910-3760

November 9, 2004

MEMORANDUM:

TO: Nellie Maskal, Planner
Community-Based Planning Division

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

FROM: Ki H. Kim, Planner *KHK*
Transportation Planning

NOV 10 2004

SUBJECT: Mandatory Referral No. 04309-MCPS-1
Clarksburg/Damascus Elementary School, Clarksburg

This memorandum is Transportation Planning staff's review of the subject Mandatory Referral for the proposed new Clarksburg/Damascus Elementary School to be located in the southeast quadrant of the intersection of Clarksburg Road and future Snowden Farm Parkway in Clarksburg.

RECOMMENDATION

Based on our review of the site plan and the traffic study provided by the applicant, Transportation Planning staff recommends approval of this mandatory referral with the following comment:

Submit a Local Area Transportation Review study if the student enrollment of the Clarksburg/Damascus Elementary School exceeds the 740 students analyzed in the submitted traffic study for this application.

DISCUSSION

Access and Circulation

The site plan includes two access points, one to the school bus loading/unloading lot and the other to the staff/visitor parking lot, from future Burdette Forest Road. Burdette Forest Road, currently under construction by the Clarksburg Town Center, is a secondary

residential street consisting of a two-lane roadway with sidewalk on both sides within a 60-foot right-of-way. Burdette Forest Road is connected to Snowden Farm Parkway (A-305) that was recently completed as a two-lane arterial roadway within an 80-foot right-of-way. Both Snowden Farm Parkway and Clarksburg Road have an 8-foot bike path (Class I, a shared use path) and provide pedestrian connection to the school via the adjacent local park. Staff finds that the proposed access to the school and internal vehicular/pedestrian circulation system as shown on the site plan is adequate.

Local Area Transportation Review

The proposed new Clarksburg/Damascus Elementary School with the proposed capacity of 740 students would generate 59 morning and 44 evening peak hour trips, respectively, using the Institute of Transportation Engineers’ trip generation rates for an elementary school. As a requirement of the mandatory referral review and the Local Area Transportation Review Guidelines, the applicant is required to submit a traffic impact study. The following is a summary of the traffic analysis.

The congestion standard for the Clarksburg Policy Area is a critical lane volume (CLV) of 1,450. Based on the submitted traffic analysis, all analyzed intersections operate at an acceptable level within the congestion standard. With the future traffic volumes from the proposed school enrollment and projected roadway improvements to be provided by the area developers, the acceptable level of the traffic conditions at all analyzed intersections are projected to continue.

Results of Critical Lane Volume (CLV) Analysis

Location	Existing Condition		Background Condition		Total Future Condition	
	AM	PM	AM	PM	AM	PM
MD 355/Clarksburg Road	953	1061	1155	1343	1175	1357
Clarksburg Road/ Snowden Farm Parkway	896	801	959	959	987	985
Snowden Farm Parkway/Burdette Forest Road	n/a	n/a	n/a	n/a	497	504

KHK:kcw

mno to maskal re Clarksburg-Damascus ES.doc

ATTACHMENT 6



MONTGOMERY COUNTY DEPARTMENT OF PARK AND PLANNING

THE MARYLAND-NATIONAL CAPITAL
PARK AND PLANNING COMMISSION

8787 Georgia Avenue
Silver Spring, Maryland 20910-3760

MEMORANDUM

TO: Nellie Maskal, Community Based Planning
VIA: Mary Dolan, Environmental Planning *MD*
FROM: Michael Zamore, Environmental Planning *MZ*
DATE: November 2, 2004
SUBJECT: Mandatory Referral No. 04309-MCPS-1
Clarksburg/Damascus Elementary School #7

Water Quality Plan Recommendation

Staff recommends **approval** with the following condition:

- Compliance with the conditions of Montgomery County Department of Permitting Services' (MCDPS) approval for SPA stormwater management, and sediment and erosion control.

Mandatory Referral Comments

The Environmental Planning staff has reviewed the mandatory referral referenced above. Staff has the following comments:

1. The applicant should 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 proposed construction.
2. The applicant must comply with stormwater and sediment control regulations of the Montgomery County Department of Permitting Services.

FINAL WATER QUALITY PLAN FOR CLARKSBURG/DAMASCUS ELEMENTARY SCHOOL No. 7

Discussion

The proposed project is subject to the approval of a Preliminary and a Final Water Quality Plan (WQP) because it is entirely within the Clarksburg SPA. Under the SPA law, Montgomery

County Department of Permitting Services (MCDPS) and the Planning Board have different responsibilities in the review of a water quality plan. MCDPS reviews and conditionally approves elements of the final water quality plan such as stormwater management, sediment control, site performance goals, and BMP monitoring that are under its purview. The Planning Board determines whether the site imperviousness, stream buffer issues, environmental guidelines for special protection areas, and forest conservation requirements, have been satisfied.

A Preliminary Water Quality Plan (SM File # 212383) for the Clarksburg Town Center Development of which the school is a part, was submitted to MCDPS in the spring of 2004. By letter dated August 11, 2004, MCDPS deemed the proposal unacceptable. Failure to treat storm runoff along the frontage of Clarksburg Road between Station 18+25 and Station 29+00, and on the Town Center side from Station 29+00 to 35+14 was one reason for the disapproval. A revised Final Water Quality Plan that addressed these concerns was submitted. This was conditionally approved based on a review by MCDPS staff, by letter dated November 1, 2004. It should be noted that Montgomery County Public Schools (MCPS) received a Structural Fill Building Permit in early October, to place structural fill onto the foundation. This allowed MCPS to maintain the construction schedule necessary for the school to open, even while the WQP was at issue.

Environmental Staff is satisfied that environmental legislation and guidelines have been adhered to and we recommend approval of the Water Quality Plan with the condition that MCPS must comply with all conditions set by MCDPS in its approval of the part of the water quality plan under its purview.

Site Performance Goals

The following site performance goals that were established at the pre-application meeting will be met as specified in the Preliminary Water Quality Plan and further refined in the Final Water Quality Plan:

- Protect the streams and aquatic habitat.
- Protect seeps, springs and wetland areas.
- Minimize storm flow runoff increases.
- Minimize increases to ambient water temperatures.
- Minimize sediment loading.
- Minimize pollutant loading (nutrient, pesticides and other toxic substances).
- Maintain stream base flow.

Stormwater Management

Stormwater quantity control for the school site will be provided via underground detention. The structure will provide channel protection volume for the two-year storm with a maximum detention time of 12 hours as per state standards. Quality control will be provided via a combination of stormwater structures that include grass swales, surface sand filters, underground filtration structures, infiltration structures, and water quality inlets. Recharge will be provided in an infiltration trench along the Park side of the property. Flow from all areas

intended for vehicular use must be pretreated before entering infiltration and filtration structures. Water quality treatment must be provided for a minimum of one-inch over the proposed impervious area. The developer will dredge the King Pond to the depth requested by the Parks Department, as part of this water quality plan.

Conditions of Approval

As the applicant for mandatory referral, Montgomery County Public Schools is legally responsible for producing an approvable water quality plan for the site in keeping with SPA requirements. However, MCPS has a contractual agreement with Newland/Terrabrook Communities (the Developer) that stormwater management for the full build-out of the school site will be designed, permitted and constructed by the Developer. As such the Developer has accepted all conditions that must be addressed in the initial submission of the detailed sediment control/stormwater management plan. These conditions of approval are listed in MCDPS' letter of approval of November 1, 2004 (attached).

Water Quality

The project site is located within the Town Center Tributary of the Little Seneca Creek Watershed. The *Countywide Stream Protection Strategy* (CSPS) lists habitat conditions as 'good' and subwatershed/stream conditions as 'excellent'. Years of agricultural use have added fine sediment to the stream. Little Seneca Creek is classified as a Use IV-P waterway indicating its suitability as recreational trout waters and public water supply.

Site Imperviousness

The proposed project will add approximately 3.5 acres of impervious surface to the site. Although there are no imperviousness limitations within this part of the Clarksburg SPA, Environmental Planning staff evaluated all opportunities to reduce impervious surfaces as part of the review. Our review shows that the number of parking spaces, the bus loop and other impervious surface areas are not excessive.

MANDATORY REFERRAL COMMENTS

Background

The proposed school will be located on a 4.75-acre site just south of the intersection of Burnt Hill Road and Clarksburg Road (MD121) in the Clarksburg Town Center planned community. M-NCPPC parklands bound the site on three sides. The site is currently unimproved and is being graded concurrently with the adjoining parkland to accommodate school construction. Environmentally enhancing site designs that minimize site disturbance, preserve existing open space, and minimize stormwater runoff, will be incorporated. The Developer agreed to dedicate land to, and construct athletic fields for, the M-NCPPC as part of their approval. Use of these fields will be shared with the Clarksburg Elementary School.

Forest Conservation Law Compliance

The school site was dedicated through the Clarksburg Town Center Development project. The existing **approved** Natural Resource Inventory/Forest Stand Delineation (NRI/FSD) and the

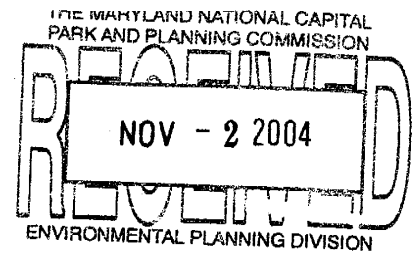
approved Forest Conservation Plan (FCP) for Town Center Development cover the school site. Separate FCP and NRI/FSD are therefore, not required.

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. Staff appreciates that energy conservation is proposed as a key design factor for the Clarksburg/Damascus Elementary School #7. In that regard, the configuration and orientation of the building, the selection of materials, and the mechanical/electrical systems utilized, reflect the importance and consideration placed on energy conservation. Plans are to design the new building to exceed ASHRAE 90.1-2001 energy requirements, BOCA Basic Energy Conservation codes, and Montgomery County energy conservation codes. The design will incorporate the ANSI/ASHRAE/IES Energy Efficient Design for New Buildings.

Energy design features to be incorporated into the project are:

- Air lock vestibule at entry;
- An efficient relationship of fenestration and building materials to produce an efficient building envelope;
- Double-glazed thermal break windows;
- Operable windows for natural ventilation in all classrooms;
- Solar loads controlled by the use of high performance, spectrally selective, insulating glass units;
- An HVAC system that is zoned with individual room thermostats and controlled by MCPS Energy Management Systems;
- Lighting and power electrical systems that will utilize energy conservation techniques;
- Plumbing systems that minimize the use of water, including domestic hot water requirements;
- Weather-tight windows and doors.



DEPARTMENT OF PERMITTING SERVICES

Douglas M. Duncan
County Executive

November 1, 2004

Robert C. Hubbard
Director

Mr. Jeffery Strulic, P. E.
Charles P. Johnson and Associates
1751 Elton Road
Silver Spring, MD 20903

Re: **Final Water Quality Plan for the Clarksburg
Town Center Elementary School Site**
SM File #: 212383
Preliminary Plan No.: 1-95042
Tract Size, Zone: 17 Ac., RMX 2
Tax Plate: EW
Watershed: Little Seneca Creek

SPECIAL PROTECTION AREA

Dear Mr. Strulic:

Based on a review by the Department of Permitting Services Review Staff, the Final Water Quality Plan (FWQP) for the above mentioned site is conditionally approved. This approval is for the elements of the 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 consists of 17 acres located on the south east corner of the intersection of Clarksburg Road and Piedmont Road. The proposed zoning of the site is RMX2. The development will consist of a school site with several athletic fields. This site is located in the Clarksburg Special Protection Area (SPA) of the Little Seneca Creek Watershed.

Stormwater Management: Water quantity control for this site will be provided via underground detention. The structure will provide channel protection volume for the one-year storm with a maximum detention time of 12 hours per state standards. Quality control will be provided via a combination of stormwater structures that include grass swales, surface sand filters, underground filtration structures, infiltration structures, and water quality inlets. Recharge will be provided in an infiltration trench along the Park side of the property. Areas that are intended for vehicular use are to be pretreated prior to entering filtration and infiltration structures. Water quality treatment must be provided for a minimum of one-inch over the proposed impervious area. As part of the water quality plan the developer will dredge the King Pond to the depth requested by The Parks Department.

Sediment Control: Redundant sediment control structures are to be used throughout the site. These are to include upland sediment traps that drain to secondary traps down grade, or when this is not practical sediment traps with forebays will be acceptable.



All sediment trapping structures are to be equipped with dewatering devices. Also, due to the sensitive nature of the watershed coupled with the large amount of proposed development, the use of flocculants or other measures to increase the effectiveness of sediment removal will be required in the detailed sediment control plan. The following features are to be incorporated into the sediment control concept for the final water quality plan:

1. The earth dikes that feed the sediment traps are to be constructed using trapezoidal channels to reduce flow rates.
2. The site grading shall be phased whenever possible to limit disturbance and immediate stabilization is to be emphasized.
3. Silt fence alone will not be allowed as a perimeter control. The use of super silt fence will be acceptable for small areas of disturbance.

Performance Goals: The performance goals that were established at the pre-application meeting are to be met as specified in the Preliminary Water Quality Plan and further refined in the Final Water Quality Plan. They are as follows:

1. Protect the streams and aquatic habitat.
2. Minimize storm flow run off increases.
3. Minimize increases to ambient water temperatures.
4. Minimize sediment loading.
5. Maintain stream base flows.
6. Protect springs, seeps and wetlands.
7. Minimize pollutant loading (nutrient, pesticides and other toxic substances).

Monitoring: BMP monitoring will not be required for this site.

Conditions of Approval: The following conditions must be addressed in the initial submission of the detailed sediment control/stormwater management plan. This list may not be all inclusive and may change based on available information at the time of the review:

1. The King Pond dredging will be part of the initial Stormwater Management/Sediment Control plan submission. The work will be bonded with the rest of the stormwater management structures to be constructed by Newland/Terrabrook Communities.
2. The underground filter structure for Clarksburg Road will be sized for one inch of rain fall over the entire roadway drainage area. If a Stormfilter is utilized, there will be enough filter openings to provide filtration for the entire roadway; however, only the number of cartridges necessary for the portion constructed by Newland/Terrabrook will be required at this time. Channel Protection Volume (Cpv) will not be required for this section of roadway.

Jeffery Strulic
November 1, 2004
Page 3.

3. Provide clear access to all stormwater management structures from a public right-of-way.
4. Infiltration (recharge) trench will need to have the cleanouts located within the paved pathway.
5. All underground storage structures will be not less than 48 inches in diameter.
6. All Grass channels must be installed on a two (2) percent slope.
7. All dead pools within the stormwater structures will not be counted into the required volume.
8. Proposed storm drain outfalls may not be relocated without Stormwater Management Plan Review concurrence.
9. Prior to permanent vegetative stabilization, all disturbed areas must be topsoiled per the latest Montgomery County Standards and Specifications for Topsoiling.
10. Provide level spreaders at all of the quantity pond outfalls.
11. Minimize the use of insecticides and fertilizers via an Integrated Pest Management Plan. A draft of this plan/document is to be submitted for approval at the detailed sediment control plan stage.
12. MCDPS reserves the right to require the developer to provide full time, third-party, on-site, sediment control inspection if the Department decides the goals of the Water Quality Plan are not being met.

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 Water Quality Plan requirements.

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:CN212383

cc: W. Witthans (MNCPPC-DR)
M. Pfefferle (MNCPPC-ER)
Leo Galanko (MCDPS)
M. Sommerfield (MCDEP)
SM File # 212383

Qn on-site 17 ac.
QI on-site 17 ac.
Recharge on site.