



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

MEMORANDUM

DATE: March 3, 2004

TO: Pamela Johnson, Community Based Planning

VIA: Mary Dolan, Environmental Planning *MD for MD*

FROM: Michael Zamore, Environmental Planning *MZ*

SUBJECT: Mandatory Referral No. 04301-MCPS-1
South Lake Elementary School modification

Environmental Planning staff has reviewed the Mandatory Referral referenced above. Staff recommends **approval** with the following comment:

- 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.

Forest Conservation

This Mandatory Referral has a single lot exemption from Forest Conservation Plan (FCP) requirements. Environmental issues are not significantly affected by the proposed additions. Critical root zones of existing trees offsite should not be impacted by the classroom addition. A Tree Save Plan is not required because no specimen or significant trees will be affected by the construction.

Water Quality

The school is in the Whetstone Run of the Middle Great Seneca Creek Watershed. There is good riparian buffer in the upper reaches of the watershed. The *Countywide Stream Protection Strategy* lists both stream and habitat conditions in that portion of the watershed as 'good'. Conditions degrade to 'fair' in the lower section below MD Route 355 where extensive clearing along ROW has adversely affected the Seneca Creek mainstem.

Impervious Area and Stormwater Management

The percentage of impervious area does not change substantially across the site due to the placement of the new building additions over existing asphalt. Southlake Elementary School has submitted an

application and supporting documentation for Stormwater Management Concept Review, to the Department of Permitting Services (DPS). That application proposes both quality and quantity control for the site. The drawings show that drainage from the site will be collected and treated within a precast storm filter treatment structure with an outlet and overflow into an underground storage facility. The applicants have asked DPS to grant them a reduction in storage requirements because of the cost and because the receiving waters for the site include Lake Whetstone.

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 has agreed to use items that conform with the LEED-NC 2.1 Checklist, improve water efficiency, and improve indoor environmental quality (see attached). 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.

SOUTH LAKE ELEMENTARY SCHOOL

Items Incorporated in Conformity to the LEED-NC 2.1 Checklist

SUSTAINABLE SITES

1. Design of sediment and erosion plan
2. Site not lower than 5 feet above 100 year floor plain
3. Site not on public parkland
4. Implementing a stormwater management plan and system
5. Reducing light pollution

WATER EFFICIENCY

1. No installation of landscape irrigation systems
2. Reduction of water consumption

ENERGY AND ATMOSPHERE

1. Use of commissioning procedures
2. Design complying with ASHRAE/IESNA 90.1-1999
3. Reduced energy costs by 20%

MATERIALS AND RESOURCES

1. Diverting 50% of construction, demolition and land clearing waste from landfill.
2. Use of 20% to 50% of building materials that are manufactured within 500 miles.
3. Maintaining 75% or 100% of existing building structure.

INDOOR ENVIRONMENTAL QUALITY

1. Meeting minimum requirements of ASHRAE 62-1999.
2. CO² monitoring
3. Ventilation system exceeding ASHRAE 129-1997 effectiveness of 0.9.
4. Use of adhesives and sealants with VOC content less than that required by SCAQMD Rule #1168.
5. Use of paints and coatings whose VOC chemical component limits exceed Green Seal Standard GS-11.
6. Carpet systems that meet or exceed Carpet and Rug Institute Green Label IAQ Test Program.
7. Use of wood and agrifiber products containing no added urea-formaldehyde resins.
8. Operable window and lighting control per classroom.
9. Providing individual controls for air-flow, temperature and lighting for 50% of occupants.
10. Installation of a permanent temperature/humidity monitoring system.
11. Natural daylighting achieving a daylight factor of 2%.

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