November 14, 2007

### MEMORANDUM-MANDATORY REFERRAL

TO:

Montgomery County Planning Board

VIA:

John A. Carter, Chief, Community-Based Planning Division,

Khalid Afzal, Team Leader, Georgia Avenue Corridor Team

FROM:

Kathleen A. Reilly, AICP, Planner Coordinator (301/495-4614)

Georgia Avenue Corridor Team

SUBJECT: Mandatory Referral No. 07501-MCPS-1: Strathmore Elementary School

Gymnasium Addition - 3200 Beaverwood Lane, Aspen Hill, R-150 Zone,

1994 Aspen Hill Master Plan

**RECOMMENDATION:** APPROVAL with the following comment:

1. Montgomery County Public Schools must provide a traffic study for any future building additions if the school's core capacity is increased above 434 students.

### INTRODUCTION

### **Project Summary**

The applicant, Montgomery County Public Schools (MCPS), has submitted the subject Mandatory Referral for a gymnasium addition to the existing Strathmore Elementary School in Aspen Hill. The gymnasium will provide indoor recreation for students and will be available to students and the community after school hours and on weekends.

### **Project Description**

The proposed gymnasium addition will consist of 6,790 square feet, and it will be approximately 25 feet in height. It will include: a lobby, restrooms, a gym teachers office, and storage rooms for recreational equipment. The gymnasium will accommodate basketball, volleyball, badminton, floor games, and other physical education activities.

The addition will be constructed in the space occupied by the existing asphalt paved play area along the eastern side of the school. Under this proposal, there are no changes to the existing pedestrian and vehicular circulation systems.

### **Subject Site**

Strathmore Elementary School is located at 3200 Beaverwood Lane. The school is located on the south side of Beaverwood Lane, approximately 35 feet west of its intersection with Birchtree Lane. The property contains 11.0 acres of R-150 zoned land. It is developed with a one-story elementary school which has 535 feet of frontage along Beaverwood Lane.

The site is relatively flat and contains approximately 2.78 acres of forest on-site along with numerous large and specimen trees. The trees and forest separate the school from adjacent single-family residential units along the property's eastern lot line. An athletic field is located behind the existing school building and at the rear of the property. Existing landscaping is located at the entrance to the school. Several large trees are found throughout the site.

There are two surface parking lots which contain a total of 55 parking spaces. A circular driveway, located in front of the school along Beaverwood Lane, provides the primary ingress and egress for the school. The subject site has been the location of an elementary school since 1960.

The surrounding neighborhood is a mix of residential and institutionally developed properties. The properties to the east are zoned R-150 and developed with single-family detached dwelling units. The Gate of Heaven Cemetery, zoned RE-2, abuts the subject site to the south. Across Beaverwood Lane and north of the school, the properties are zoned RT-12.5 and developed with the Rolling Spring townhouse development. The property to the west and abutting the school is the Strathmore Local Park, owned by the M-NCPPC, and zoned R-150.

### **ANALYSIS**

### Master Plan

The subject site is located in the Aspen Hill Planning Area and is governed by the Aspen Hill Master Plan (1994). The Master Plan makes no specific recommendations for this property. The Master Plan Land Use Map depicts a school on the site. The Community Facilities text in the Master Plan states the following with respect to public schools:

 "Support the retention of school sites and the modernization and utilization of the existing schools" (p. 170)

The proposed gymnasium is a compatible use with the surrounding residential neighborhood as this type of use is consistent with the functions and activities normally associated with a public elementary school. The proposed gymnasium addition is consistent with the Master Plan recommendation of modernizing existing schools in the Aspen Hill Planning Area.

### **Zoning Analysis**

The site is zoned R-150 and contains approximately 11.0 acres of land. The following chart depicts the requirements of the R-150 Zone. As submitted and shown on this chart, the proposed gymnasium addition will satisfy the requirements for the R-150 Zone.

<b>Development Standards</b>	Minimum Requirement	Provided
Net Lot Area	20,000 square feet	479,160 square feet/11.0 (acres)
Lot Width at Street Line	25 feet	535 feet
Setbacks		
Front	40 feet	335 feet
Side/Sum of Both Sides	12/25 feet	72 feet
Rear	30 feet	655 feet
Building Height	50 feet	25 feet

### **Environmental**

The Countywide Planning Division, Environmental Planning Section has reviewed the submitted mandatory referral application and offers the following comments.

<u>Forest Conservation</u> - There are approximately 2.78 acres of forest on-site but this property is exempt from the Forest Conservation law as it is a modification to an existing developed property.

A Tree Save Plan has been submitted which shows one specimen tree, a 30" DBH Pin Oak, impacted by development, and indicates tree preservation techniques. This tree will have 43 percent of its Critical Root Zone (CRZ) impacted by the development, and it is proposed to be retained through a combination of tree preservation techniques including root pruning, air spading, and soil amendments. These methods may not be sufficient to ensure retention of this tree due to the amount of critical root zone impacted. The Environmental Planning section believes that this tree can be retained, but a final decision should be made at time of construction based on root impacts.

<u>Environmental Guidelines</u> - There is a stream in the forest south of the existing soccer field and some possible wetlands in the same area. This plan proposes no grading or clearing within the area of environmental buffer.

The subject property is located in the Upper Turkey Branch subwatershed of the Rock Creek watershed. The *Countywide Stream Protection Strategy* (CSPS) assesses this tributary as having poor overall conditions. The subwatershed is designated as a Watershed Restoration Area where the CSPS recommends a comprehensive watershed restoration action plan to identify and implement stormwater retrofit and stream restoration projects.

<u>Stormwater Management</u> - The Department of Permitting Services has approved a Stormwater Management Concept Plan for this site.

# Leadership in Energy and Environmental Design

According to MCPS, the proposed addition will not be seeking Leadership in Energy and Environmental Design (LEED) certification. The following statement summarizes MCPS's position on LEED with respect to the proposed gymnasium addition. It is also included as Attachment 9.

Because this project's funding was established before July 2007, and this project is an addition to an existing school that is to remain as-is, MCPS will not be seeking U.S. Green Building Council LEED certification for this gymnasium addition. In keeping with MCPS's commitment to sustainable, environmentally appropriate design, the design of the gymnasium addition will incorporate many sustainable design strategies to maximize energy efficiency and minimize negative impact on the environment. Among those strategies are the following:

- The building envelope will be tight and well insulated, with thermally broken windows
  utilizing low e-glazing. The exterior walls will be masonry with insulated cavities, for
  maximum thermal performance and water-tightness. The roof will be a built-up
  Energy Star system for maximum durability and thermal performance.
- This Gymnasium will be heated and ventilated. The heating system for the addition will utilize gas-fired heaters. The heaters are nominally 80 percent efficient, which meets the minimum LEED requirement. Note: the heater specified has an 8:1 turndown ratio which offers good part load performance in the heating mode. Many other manufacturers only offer 2:1 (50-100 percent) capacity control.
- The addition will utilize energy saving light fixtures and bulbs.
- Exterior lighting will be shielded and 100 percent down lighting to provide site illumination for safety without contributing to light pollution in the night sky.
- Specification of closest or local materials will be maximized to lessen the amount of fuel needed to transport building materials to the site.
- A construction waste management/recycling plan will be required of the contractor to maximize recycling and make the most efficient use of construction waste. For instance, old masonry and concrete may be broken up on site to create RC-6 fill material that may be used as structural backfill. The topsoil for the playfields will be screened for user safety and better quality lawns. The stones may be used on-site for deep fill areas.

### **Transportation**

The Transportation Planning Section has reviewed the submitted application and offers the following comment:

 MCPS must provide a traffic study in the event any future building addition at the school would result in an increase in school's core capacity, which currently is at 434 students.

### CONCLUSION

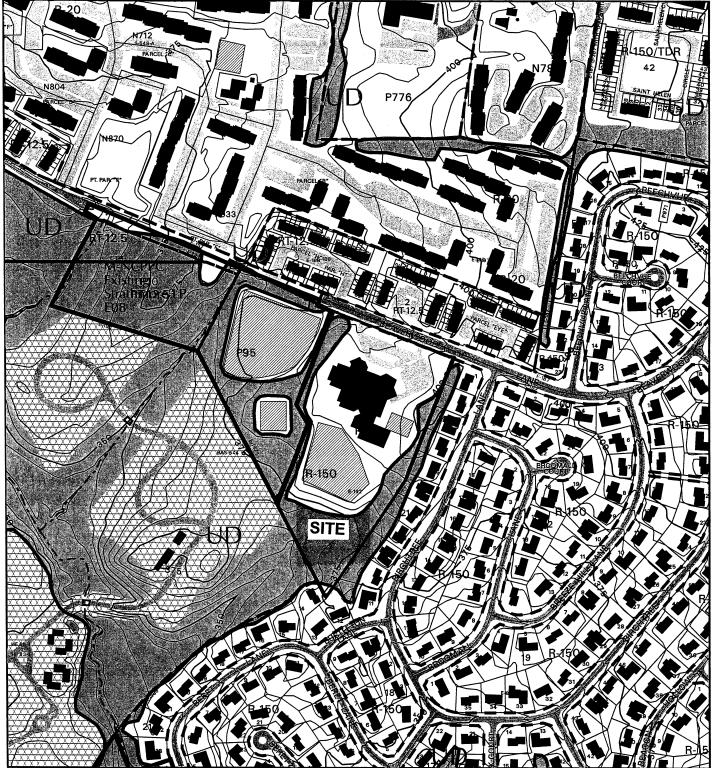
Based on information provided by the applicant and the analysis contained in this report, staff concludes that the Mandatory Referral meets the applicable standards and guidelines for the environment and meets the applicable guidelines for adequate public facilities as well the development standards for the R-150 Zone. Staff recommends approval of the submitted Mandatory Referral with the comment listed at the front of this report.

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### **Attachments**

- 1. Vicinity Map
- 2. Existing Site Plan
- 3. Proposed Site Plan
- 4. Existing Floor Plan
- 5. Proposed Floor Plan
- 6. Building Perspective
- 7. Building Elevations
- 8. Memorandum from Environmental Planning
- 9. MCPS Statement on LEED
- 10. Memorandum from Transportation Planning
- 11. Memorandum from Park Planning and Stewardship Division
- 12. Facility Advisory Committee

# STRATHMORE ELEMENTARY SCHOOL MANDATORY REFERRAL



Map compiled on November 13, 2007 at 9:41 AM | Site located on base sheet no - 218NW03

### NOTICE

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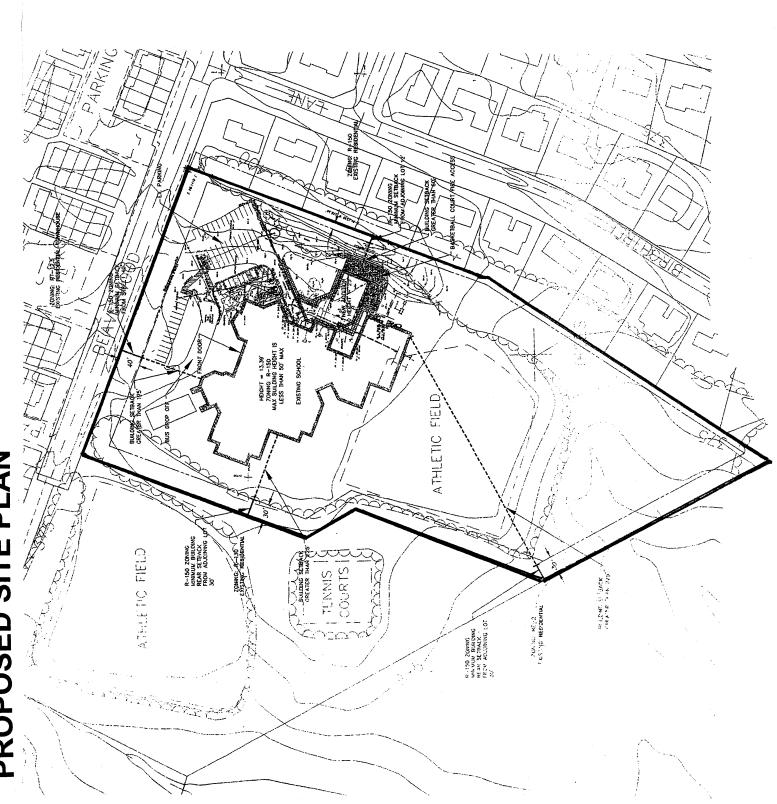
Property lines are compiled by adjusting the property lines to topography created from aerial photography and should not be interpreted as actual field surveys. Planimetric features were compiled from 1:14400 scale aerial photography using stereo photogrammetric methods.

This map is created from a variety of data sources, and may not reflect the most current conditions in any one location and may not be completely accurate or up to date. All map features are approximately within five feet of their true location. This map may not be the same as a map of the same are all plotted at an earlier time as the data is continuously updated. Use of this map, other than for general planning purposes is not recommended. - Copyright 1998

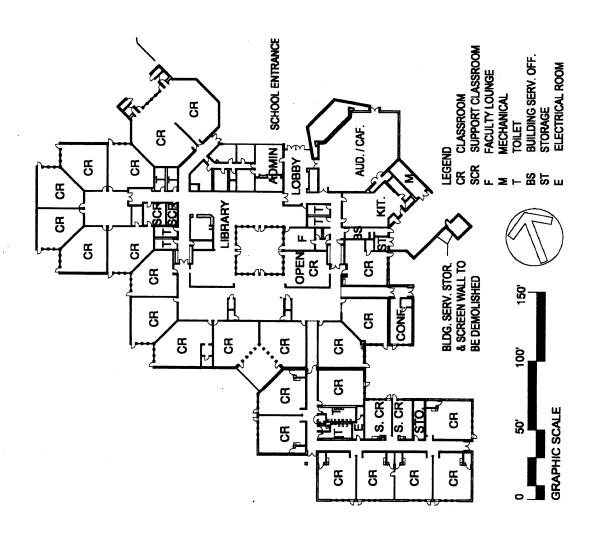




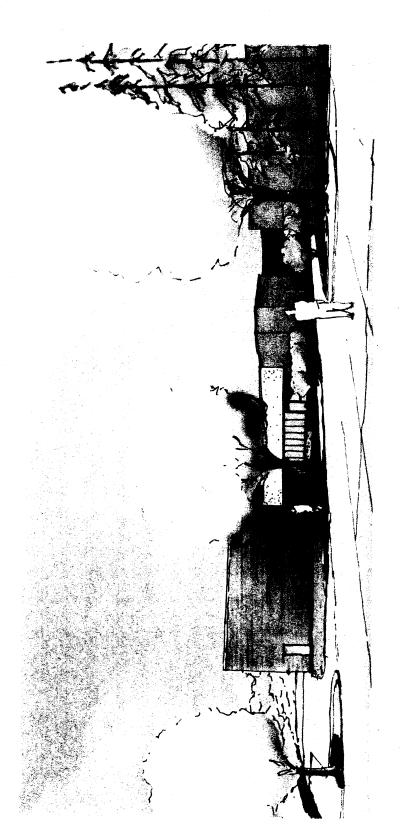
1 inch = 400 feet 1: 4800



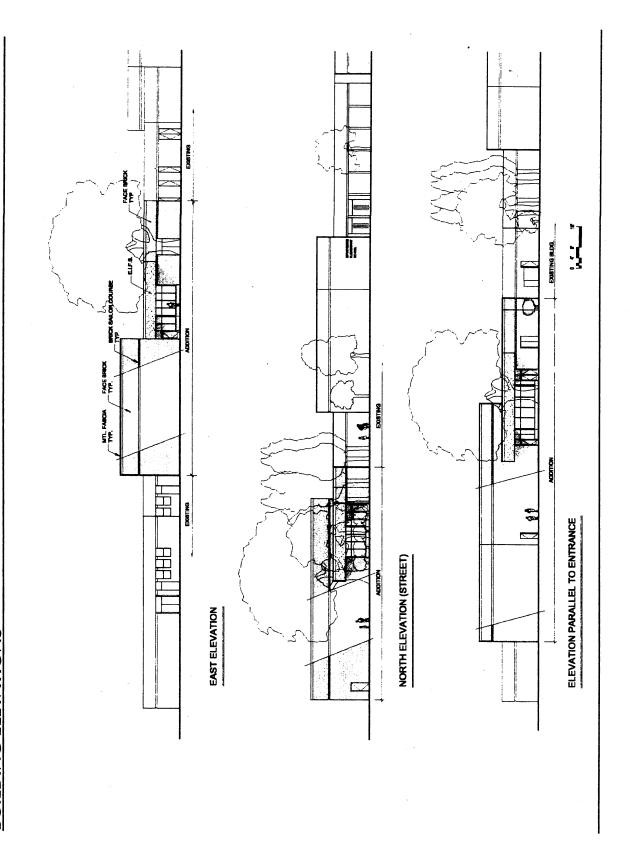
PROPOSED SITE PLAN



PROPOSED FLOOR PLAN



View Looking Toward Gym Entrance Lobby



**BUILDING ELEVATIONS** 



### **MEMORANDUM**

TO:

Kathy Reilly, Community Based Planning

VIA:

Stephen Federline, Supervisor, Environmental Planning

FROM:

Amy Lindsey, Environmental Planning

DATE:

November 15, 2007

SUBJECT:

Mandatory Referral No. 07501-MCPS-1

Strathmore Elementary School

### **RECOMMENDATION:**

Environmental Planning staff recommends transmittal of the Mandatory Referral.

### **BACKGROUND**

Strathmore Elementary School is a 10.79-acre existing school located in the Aspen Hill planning area on Beaverwood Road, adjacent to Strathmore Local Park. There is approximately 2.78 acres of forest onsite and numerous large and specimen trees. The trees and forest separate the school from adjacent residences and land uses but only one specimen tree will be affected by the proposed development. There is a stream and possible wetlands and associated environmental buffers on the property. The property is within the Rock Creek watershed: a Use I watershed. The proposed plan is to build a gymnasium addition and associated stormwater management infiltration trench.

### DISCUSSION

### **Environmental Guidelines**

There is a stream in the forest south of the existing soccer field and some possible wetlands in the same area. However, this plan proposes no grading or clearing within the area of environmental buffer.

### **Forest Conservation**

There is approximately 2.78 acres of forest on-site but this property is exempt from submitting a Forest Conservation Plan as per 42007125E (Modification of Existing Developed Property) approved on 1/18/2007. A Tree Save Plan was required to be submitted at time of Mandatory Referral.

# Tree Save

The applicant has submitted a Tree Save Plan which shows the one specimen tree impacted by development, 30" DBH Pin Oak, and tree preservation techniques. This tree will have 43% of its CRZ impacted by the development but is proposed to be retained through a combination of tree preservation techniques including root pruning, air spading, and soil amendments. These methods may not be sufficient to ensure retention of this tree due to the amount of critical root zone impacted. Environmental Planning believes that this tree can be retained but a final decision should be made at time of construction based on root impacts.

### **Stormwater Management**

A Stormwater Management Concept Plan was approved by the Department of Permitting Services in February 2007.

### Water Quality

The subject property is located in the Upper Turkey Branch subwatershed of the Rock Creek watershed. The Countywide Stream Protection Strategy (CSPS) assesses this tributary as having poor overall conditions. The subwatershed is designated an Watershed Restoration Area where the CSPS recommends a comprehensive watershed restoration action plan to identify and implement stormwater retrofit and stream restoration projects.

# Strathmore ES Gymnasium Addition - LEED Statement

Because this project's funding was established before July 2007; and this project is an addition to an existing school that is to remain as-is, MCPS will not be seeking US Green Building Council LEED certification for this gymnasium addition. However, the design of the gymnasium addition will incorporate many sustainable design strategies to maximize energy efficiency and minimize negative impact on the environment.

- 1) The building envelope will be tight and well insulated, with thermally broken windows utilizing low e-glazing. The exterior walls will be masonry w/ insulated cavities, for maximum thermal performance and water-tightness. The roof will be a built-up Energy Star system for maximum durability and thermal performance.
- 3) This Gymnasium will be heated and ventilated. The heating system for the addition will utilize high efficiency gas-fired heaters.
- 4) The addition will utilize energy saving light fixtures and bulbs. All appliances specified will be high efficiency.
- 5) Exterior lighting will be shielded and 100% down lighting to provide site illumination for safety without contributing to light pollution in the night sky.
- 6) Specification of closest or local materials will be maximized to lessen the amount of fuel needed to transport building materials to the site.
- 7) A construction waste management/recycling plan will be required of the contractor to maximize recycling and make the most efficient use of construction waste. For instance, old masonry and concrete may be broken up on site to create RC-6 fill material that may be used as structural backfill. Removed trees may be chipped on site and the wood chips used to stabilize construction paths. The topsoil for the playfields will be screened for user safety/better quality lawns and the stones may be used on-site for deep fill areas.



October 19, 2007

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### **MEMORANDUM**

TO:

Kathleen A. Reilly, Planner

Community-Based Planning Division

VIA:

Daniel K. Hardy, Supervisor

Transportation Planning

FROM:

Cherian Eapen, Planner/Coordinator

Transportation Planning

301-495-4525

SUBJECT:

Mandatory Referral 07501-MCPS-1

Strathmore Elementary School – Gymnasium Addition

Montgomery County Public Schools

3200 Beaverwood Lane

Aspen Hill Policy Area

This memorandum presents Transportation Planning staff's Adequate Public Facilities (APF) review of the subject mandatory referral to add a gymnasium at Strathmore Elementary School located at 3200 Beaverwood Lane in Silver Spring, within the Aspen Hill Policy Area.

### RECOMMENDATIONS

Based on our review of the subject mandatory referral, we recommend that the following be incorporated into Planning Board's comments to Montgomery County Public Schools (MCPS) regarding this mandatory referral's APF test:

MCPS must provide a traffic study in the event any future building addition at the school would result in an increase in school's core capacity, which currently is at 434 students.

### **DISCUSSION**

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

Strathmore Elementary School is located along Beaverwood Lane in the Aspen Hill area of Silver Spring, adjacent to the Strathmore Park and the Gate of Haven cemetery. The Rolling Spring townhouse community is located across from the school.

Beaverwood Lane is a two-lane primary residential street with sidewalks on both sides. It has a posted speed limit of 25 mph. The roadway extends south from Bel Pre Road, turns west south of Birchtree Lane (East), and terminates just west of the school at the entrance to the park and the Rolling Spring community. Parking is permitted along both sides of Beaverwood Lane. The extent of observed on-street parking did not appear to restrict two-way travel along the roadway. Adequate lead-in sidewalks currently exist to the school from Beaverwood Lane. Since no off-site modifications are being proposed as part of this mandatory referral, pedestrian accessibility to the school will not be affected.

Access to the school is facilitated via two driveways off Beaverwood Lane. The driveways facilitate a directional (counter-clockwise) circulation of school buses and cars at the school. Buses and cars enter the school via the western driveway and exit the school via the eastern driveway. A total of 19 regular buses and six special education buses service the school.

The school hours are 8:50 a.m. to 3:05 p.m. The school currently has an enrollment of approximately 406 students in Grades 3-5 and is staffed by 60 full-time/part-time staff members. The school parking lots are located to the front and east side of the school building, and has a total of approximately 48 parking spaces. As noted above, parking is also permitted along Beaverwood Lane to the front of the school.

RideOn Route 49 provides service along Bel Pre Road, and has a stop at the Bel Pre Road/Beaverwood Lane intersection, approximately 3,200 feet from the school.

### Proposed Mandatory Referral

This mandatory referral proposes addition of a gymnasium to the east side of the existing Strathmore Elementary School. The proposed gymnasium addition is not estimated to increase core capacity at the school.

### Master Plan Roads and Bikeway Facilities

The 1994 Approved and Adopted Aspen Hill Master Plan includes the following nearby master-planned transportation facilities:

 Beaverwood Lane, as a primary residential street (P-20) to the south of Bel Pre Road to about 150 feet west of Birchtree Lane (West), with a minimum right-of-way width of 70 feet and a paving width of 36 feet. A section of the master plan recommended Class III



November 13, 2007

TO:

Kathy Reilly, Community Based Planning Division - Department of Planning

VIA:

Lyn Coleman, Park Planning and Stewardship Division - Department of

FROM:

Mark Wallis, Park Planning and Stewardship Division - Department of Parks

SUBJECT:

Mandatory Referral: Strathmore Elementary School Gymnasium Addition

Staff from the Park Planning and Stewardship Division have reviewed the proposed gymnasium addition and found that there will be no impact to the adjacent Strathmore Local Park. The park shares parking with the school and the existing parking lot will be available during construction.

# Facility Advisory Committee

collaboration of Wanchul Lee Associates, P. C. Architects and the Facilities Advisory Committee in conjunction with the Montgomery County Public Schools. Valuable suggestions, concerns and directions were offered by the Committee staff of Montgomery County Public Schools. The design was based on the Educational Specifications prepared by The preliminary plans for the gymnasium addition to Strathmore Elementary School were developed through the that has culminated in this proposed design.

# **Committee Members**

Mr. Robert Dodd Ms. Delores Bryce	Chair/Principal Building Service Manager	Strathmore Elementary School Strathmore Elementary School
Ms. Marinda Evans Ms. Deborah Karish	Assistant Principal Media Specialist	Strathmore Elementary School Strathmore Elementary School
Ms. Christine Miller	PTA President	Strathmore Elementary School
Ms. Maria Prawirodihardjo	School Facilities Architect	Maryland State Department of Education
Mr. James Queen	PTA Vice President	Strathmore Elementary School
Ms. Kathy Reilly	M-NCPPC	Maryland-National Capital Park and
		Planning Commission
Mr. Steven Reeves	Project Manager	MCPS, Division of Construction
Mr. Michael Shpur	Architect	MCPS, Division of Construction
Mr. James C. Song	Director	MCPS, Division of Construction