



March 26, 2011

MEMORANDUM

TO: Montgomery County Planning Board

VIA: Glenn Kreger, Acting Chief, Area 2 Division *GK*
Khalid Afzal, Supervisor, East County Team, Area 2 Division *KA*

FROM: Luis R. Estrada Cepero, Planner Coordinator/Urban Designer (301/495-4641)
East County Team, Area 2 Division *LRE*

SUBJECT: Mandatory Referral No. 2011202-MCPS-1: Glenallan Elementary School
Modernization Project - 12520 Heurich Road, Silver Spring, R-90 Zone,
1989 Master Plan for the Communities of Kensington-Wheaton

RECOMMENDATION:

APPROVAL to transmit the following comments to Montgomery County Public Schools:

1. Improvements that will enhance accessibility and transportation operations at the school site, such as improvements to sidewalks, entry driveways, and pedestrian pathways, must be in place when the new school opens to students.
2. Any mandatory referral submission for future improvements at the school must include a traffic study if those improvements will increase the school's student core capacity beyond 740 students.

Project Summary

Montgomery County Public Schools (MCPS) has submitted a mandatory referral to modernize the existing Glenallan Elementary School. The project will consist of demolishing the existing school and constructing a new school on the same site, located at 12520 Heurich Road in Silver Spring.

This staff report reviews and makes recommendations for the Glenallan Elementary School Modernization only. The Planning Board must act on the related Forest Conservation Plan, which will be addressed in a separate staff report.

Project Description

The proposed building will contain approximately 98,700 square feet, including 3,800 square feet roughed-in for four future classrooms. It has been designed for an initial capacity of 631 students and 34 teaching stations, with a master-planned (core) capacity for 740 students (including the four future classrooms).

Glenallan Elementary School, built in 1966, is part the Downcounty Consortium. It is a single-story 47,600-square-foot building located in a triangular-shaped property of approximately 11.5 acres zoned R-90, at the southwest corner of the intersection of Heurich Road and Randolph Road in Silver Spring. The immediately surrounding neighborhood consists of single-family detached dwelling units, which are also zoned R-90. Brookside Gardens is located south of the school, along Glenallan Avenue.

There are 412 students currently enrolled in kindergarten through the 5th grades, exceeding the current building's capacity of 311 students. To meet demand, there are currently six portable classrooms in place. School hours are from 8:50 a.m. to 3:05 p.m. Faculty hours are from 8:15 a.m. to 3:45 p.m. The building is open for childcare every school day morning from 6:30 to 8:30 a.m., and afternoons from 3:05 to 6:30 p.m. In addition, there are after-school classes sponsored by the PTA from 3:15 p.m. to 4:15 p.m. Outside community groups, such as scouts, rent the building regularly for meetings. Except in the middle of the winter, the community uses the athletic fields during the week for practice from 3:15 p.m. until dark; on weekends the fields are used for games through most of the day. These after-school activities will continue once the modernization is completed.

No phasing of construction is planned since a holding school has been identified and classes will be relocated prior to the beginning of construction.

ANALYSIS

Master Plan

Glenallan Elementary School is within the area covered by the 1989 *Master Plan for the Communities of Kensington-Wheaton*. The Master Plan has no specific recommendations for this particular site, but its *Community Facilities Plan* chapter recognizes the need for quality education in its objectives and policies (p. 136), relying on the Approved Master Plan for Educational Facilities, the annual CIP, and the annual Growth Policy as statements of direction to establish needs in the area. This modernization is much needed and will be consistent with Master Plan recommendations for "providing the operating public school facilities necessary to sustain high quality educational programs."

Neighborhood Compatibility

Walkability - This project is located on the edge of an existing neighborhood with excellent pedestrian access. Most streets in close proximity to the school have sidewalks, and safe access will be increased by maintaining pedestrian paths from Randolph Road, Wallace Avenue and Heurich Road through the school grounds.

Building Scale - While the replacement building adds a substantial amount of space to the school's program, the efficient nesting of the building's massing on the property reduces its impact on the immediately surrounding residential neighborhood. The new building will also sit further back from Randolph Road and toward the existing woodlands on the east side of the property, allowing more space to contain the bus loop on site for student drop-off, and for parking space in front of the building. This front setback also places the more public

components of the program further away from single-family dwellings directly across from the school along Heurich Road. In addition, the layering of various materials on the building's facade will help to visually reduce its bulk.

Transportation - The on-site traffic circulation is designed to provide safe and adequate access to the school by pedestrians and maximize on-site stacking to minimize the overflow onto nearby streets.

Zoning Analysis

The site is zoned R-90. The following chart depicts the requirements of this zone. As submitted and shown on this chart, the new school will satisfy the requirements for the R-90 Zone.

Zoning Section	Development Standard	Required	Proposed
59-C-1.322 (a)	Minimum Lot Area	9000 sf (0.2066 acre)	500,108.85 sf (11.48 acres)
59-C-1.322 (b)	Minimum Lot Width		
	Lot Width	75 ft	913 ft (Heurich)
	Width at front building line	25 ft	885 ft (Heurich)
59-C-1.323	(a) Minimum Setback from street	30 ft	63 ft (Heurich)
	(b) Minimum Setback from Adj. Lot		
	(1) Side Yard		
	- Side (One Side)	8 ft	145 ft (R.O.W.)
	- Side (Sum of Two)	25 ft	N/A (R.O.W.)
	(2) Rear	25 ft	180 ft
59-C-1.327	Maximum Building Height	35 ft	32'-10"
59-C-1.328	Maximum % of lot area coverage	30%	10.68%
Parking Facility Setbacks			
59-E-2.81	Front	25 ft	30 ft
	Side (One Side)	8 ft	16 ft
	Side (Sum of Two)	18 ft	N/A (R.O.W.)

Environmental Analysis

Area 2 environmental planning staff recommends transmittal of the Mandatory Referral.

Site Description - The site slopes down from Randolph Road to the eastern corner on Heurich Road. There are 1.80 acres of high priority upland forest in one stand dominated by yellow poplars with black oaks, red maples, white pines, and hickory interspersed. All forest on the site is considered a high priority for retention. There are 30 significant (≥ 24 " diameter at breast height (DBH) trees and 14 specimen (≥ 30 " DBH) trees on-site. The property is within the Wheaton Park sub-watershed of the Northwest Branch watershed; a Use IV watershed. The *Countywide Stream Protection Strategy* (CSPS) identifies this sub-watershed as a Watershed Restoration Area.

Environmental Guidelines - The applicant submitted and received approval of a Natural Resources Inventory/Forest Stand Delineation (NRI/FSD), number 420100460, on December 10, 2010.

Forest Conservation - Forest conservation issues are covered in a separate regulatory memo to the Planning Board. In summary, this property is subject to the Chapter 22A, Montgomery County Forest Conservation Law, and a Forest Conservation Plan has been submitted for approval. There are 1.80 acres of existing forest, of which 0.20 acres will be removed and the remaining 1.60 acres of forest will be retained.

Sustainability - Montgomery County has a number of goals that work towards creating a sustainable community. These goals include reducing the carbon footprint of proposed development, promoting walkability, reducing urban heat island effect, and protecting air and water quality. Public projects should lead the way in promoting sustainability by becoming examples of the multiple benefits of sustainable development to future generations.

Carbon footprint - Carbon footprint analysis can be divided into three basic categories – embodied energy (energy utilized while constructing the building), transportation energy (energy associated with traffic to and from the building), and building energy emissions (energy emissions created as result of everyday building operations).

- *Embodied energy* - Locally-sourced and recycled material will be used to construct the new building, and a construction waste management plan will divert 75 percent of demolished materials from waste disposal.
- *Transportation energy* - This school is located at the edge of an existing neighborhood where many of the students are able to walk to school. Bus stops are located on both sides of Randolph Road and are served by five different Ride On and Metro bus routes.
- *Building energy emissions* - The proposed building orientation makes good use of daylighting, with windows shaded by light shelves on the south side. The light shelves bounce indirect light further into classrooms while reducing the heat load on the building. Translucent wall panels will also increase the use of natural daylight and reduce energy consumption. A vegetated roof will reduce energy use due to the insulating effects of the vegetation and planting medium. A geothermal field will be located under the playing field to further minimize energy requirements.

Urban Heat Island Effect - While the total tree cover over the parking lot is considerably less than 30 percent, this is due to the compact design and small median areas. The median areas are also shared with utilities and stormwater management, further reducing the amount of area available for planting. The school is using a vegetated roof, which will contribute to urban heat island reduction. Areas of the roof that cannot be vegetated will be covered with a light colored membrane to prevent build-up of heat on the roof.

Stormwater Management - A Stormwater Management concept plan was approved by the Department of Permitting Services (DPS) on August 17, 2010. The concept includes a 4" vegetated roof over approximately 55 percent of the building, microbioretention areas, and water quality swales.

Green Buildings - This project will need to comply with County Council Bill 17-06, Montgomery County Green Buildings Law. Although MCPS is seeking LEED (Leadership in Energy and Environmental Design) for Schools Silver Certification for this project, it may be able to attain Gold Certification.

Transportation Analysis

Area 2 transportation planning staff reviewed the Mandatory Referral traffic study for compliance with the requirements of the LATR/PAMR Guidelines and recommends approval with conditions.

The consultant for the applicant submitted a traffic study that presented traffic-related impacts of the proposed school with a core capacity of 740 students during the weekday morning and afternoon peak periods. Staff review of the above traffic study indicated that the study complied with the requirements of the LATR/PAMR Guidelines and the traffic study scope provided by the staff.

The proposed project satisfies the PAMR requirements of the APF. Capacity analysis presented in the traffic study indicated that the intersections would be below the applicable congestion standard for the Kensington-Wheaton Policy Area (1,600 CLV).

Parks Department

No part of the project will be located on or adjacent to Park property. Parks Department staff had no comments on the application.

Community Notification

The preliminary plans for the Glenallan Elementary School modernization project were developed based on educational specifications prepared by MCPS. A Facility Advisory Committee organized to provide input on the proposed plans included MCPS and school staff, the architectural design team, parents, representatives of local civic associations, and staff from the Montgomery County Department of Public Works and Transportation (DPWT) and the State Department of Education. The committee met four times over the course of the past year, on the following dates:

- January 22, 2010
- March 3, 2010
- March 24, 2010
- May 21, 2010

Plans were modified and evaluated in accordance with the suggestions and recommendations of the committee. The local PTA also reviewed the proposal.

After receiving the mandatory referral and Forest Conservation Plan applications, the Planning Department staff notified local citizen associations, adjoining and nearby property owners and other interested parties of the submittal and invited comments. Staff did not receive any comments or requests for information during the staff review of the proposal.

CONCLUSION

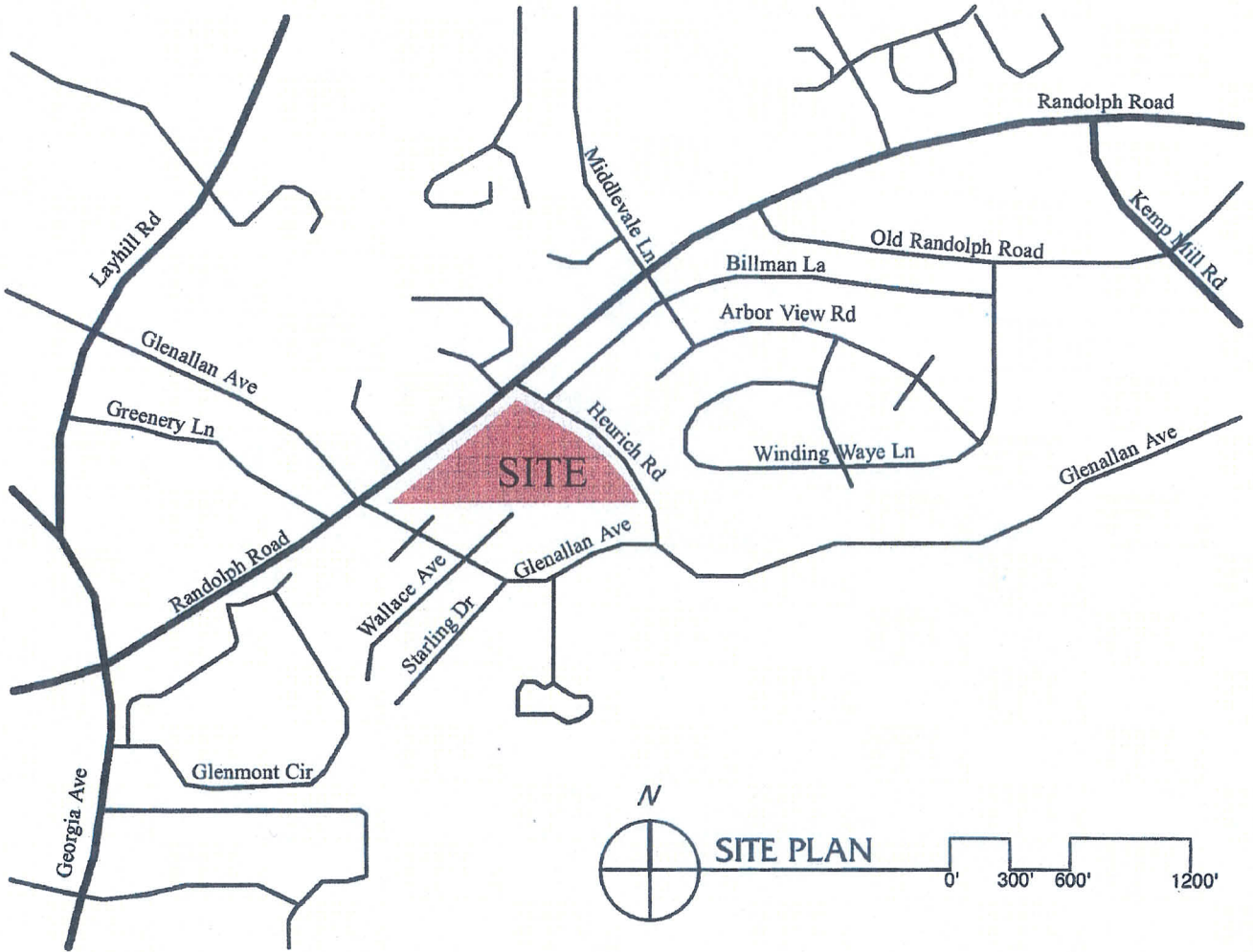
Based on information provided by the applicant and the analysis contained in this report, staff concludes that the proposed mandatory referral meets the applicable standards and guidelines for the environment, the Adequate Public Facilities Ordinance as well as the development standards for the R-90 Zone. Staff recommends approval of the mandatory referral with the comments listed at the front of this report.

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Glenallan ES

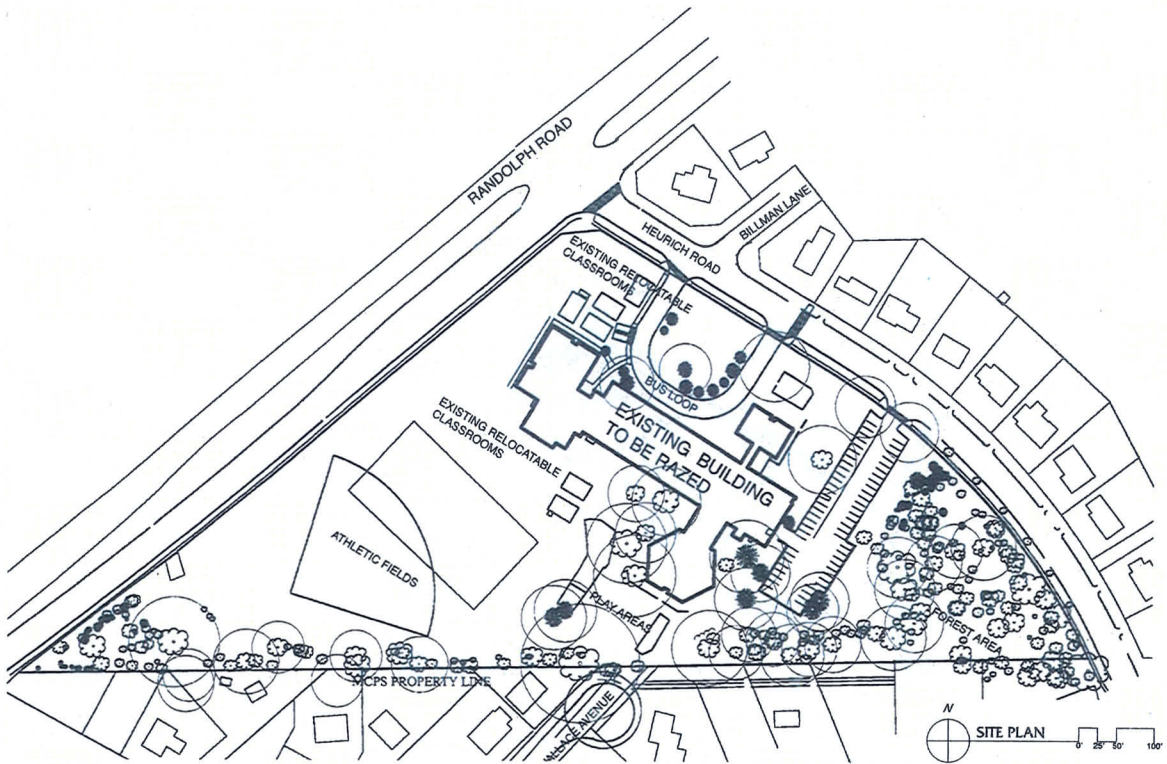
Attachments:

1. Vicinity Map
2. Existing and Proposed Site Plan
3. Proposed First and Second Floor Plans
4. Proposed Lower Floor Plan
5. Proposed Building Elevations

ATTACHMENT 1: VICINITY MAP

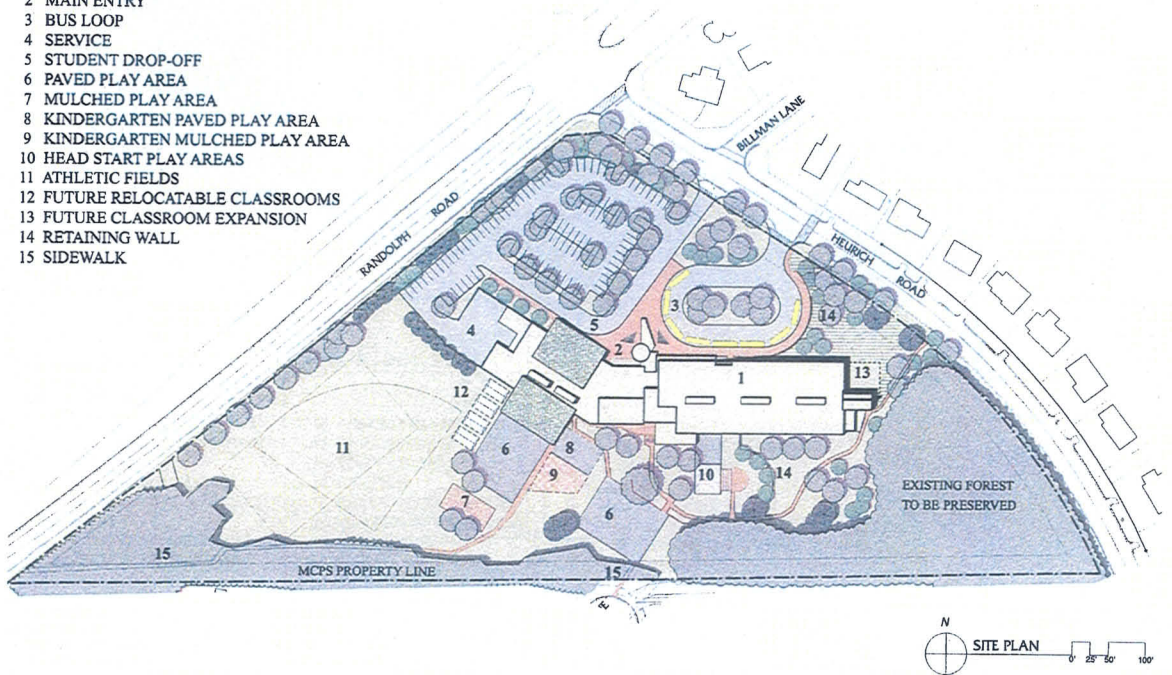


ATTACHMENT 2: EXISTING AND PROPOSED SITE PLAN

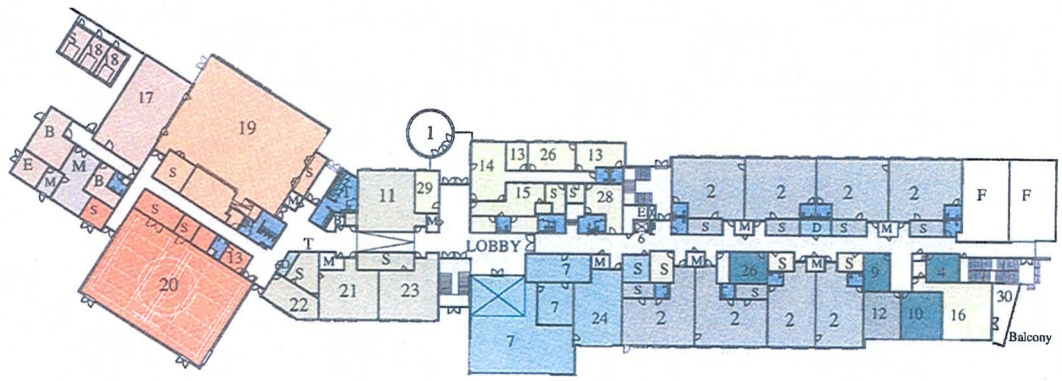


LEGEND

- 1 REPLACEMENT BUILDING
- 2 MAIN ENTRY
- 3 BUS LOOP
- 4 SERVICE
- 5 STUDENT DROP-OFF
- 6 PAVED PLAY AREA
- 7 MULCHED PLAY AREA
- 8 KINDERGARTEN PAVED PLAY AREA
- 9 KINDERGARTEN MULCHED PLAY AREA
- 10 HEAD START PLAY AREAS
- 11 ATHLETIC FIELDS
- 12 FUTURE RELOCATABLE CLASSROOMS
- 13 FUTURE CLASSROOM EXPANSION
- 14 RETAINING WALL
- 15 SIDEWALK



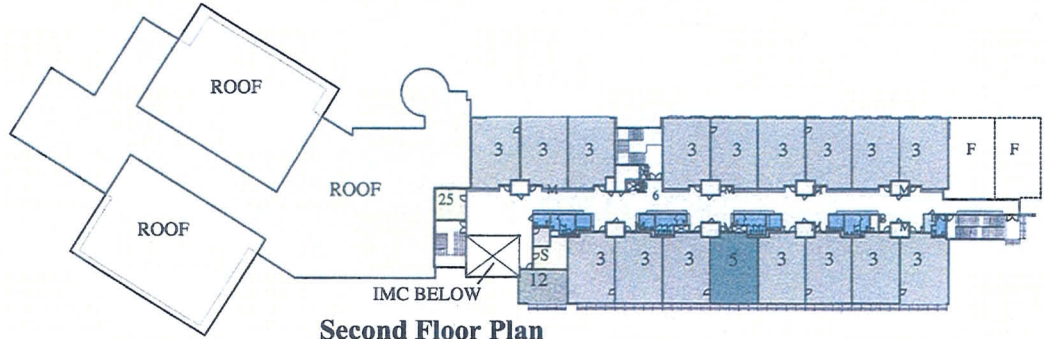
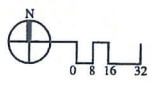
ATTACHMENT 3: PROPOSED FIRST AND SECOND FLOOR PLANS



First Floor Plan

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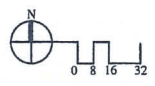
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| 1 CANOPY | 14 ADMINISTRATIVE SUITE | 26 TESTING CONFERENCE ROOM |
| 2 KINDERGARTEN CLASSROOM | 15 HEALTH SUITE | 27 STAFF DEVELOPMENT |
| 3 CLASSROOM | 16 STAFF LOUNGE | 28 WORK ROOM |
| 4 SPEECH/LANGUAGE ARTS | 17 KITCHEN | 29 COUNSELOR |
| 5 SPECIAL EDUCATION CLASSROOM | 18 RECYCLE/COMPACTOR | 30 BALCONY |
| 6 ELEVATOR | 19 MULTI-PURPOSE ROOM | |
| 7 INSTRUCTIONAL MEDIA CENTER | 20 GYMNASIUM | B BUILDING SERVICES |
| 8 READING/LANGUAGE ARTS | 21 MUSIC | T TOILETS |
| 9 THERAPY/SUPPORT | 22 INSTRUMENTAL MUSIC | M MECHANICAL ROOM |
| 10 RESOURCE | 23 ART | S STORAGE ROOM |
| 11 DUAL-PURPOSE ROOM | 24 COMPUTER LABORATORY | D DATA/COMMUNICATIONS |
| 12 E.S.O.L. | 25 SUPPORT STAFF OFFICES | E ELECTRICAL |
| 13 OFFICE | | F FUTURE CLASSROOMS |



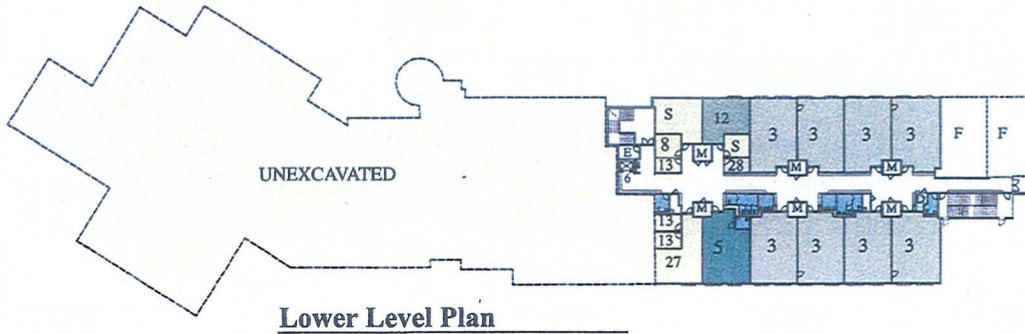
Second Floor Plan

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ATTACHMENT 4: PROPOSED LOWER FLOOR PLAN

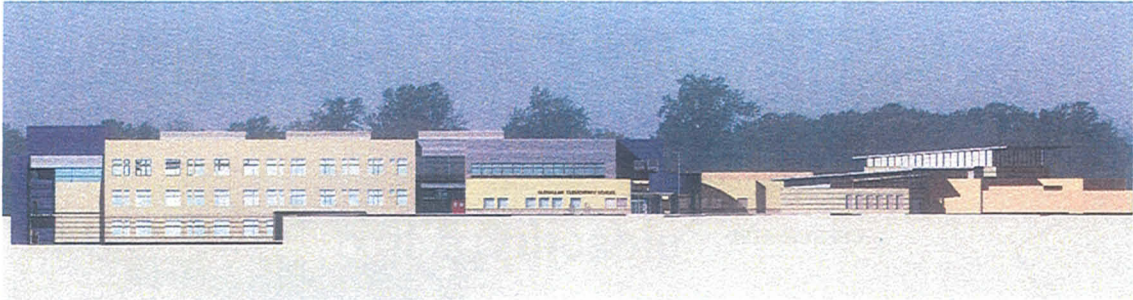


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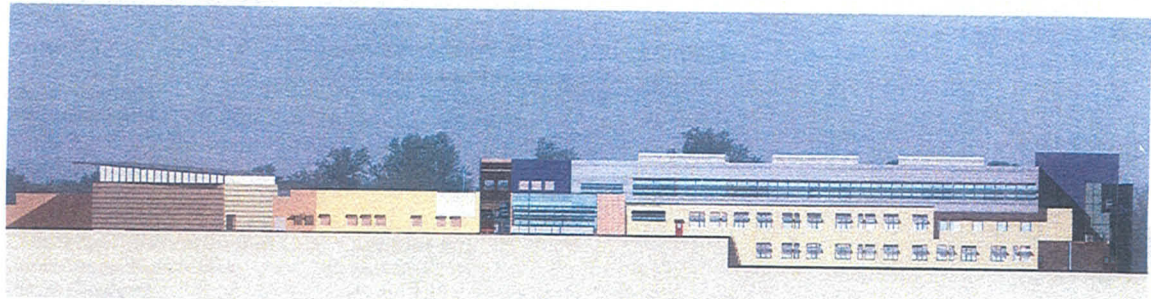
ATTACHMENT 5: PROPOSED BUILDING ELEVATIONS



NORTH ELEVATION



EAST ELEVATION



SOUTH ELEVATION



WEST ELEVATION