WOODLIN ELEMENTARY SCHOOL
ADDITION FEASIBILITY STUDY

Prepared for

Montgomery County Board of Education

October 2013

MOSELEY ARCHITECTS

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Woodlin Elementary School – Feasibility Study
Addition

2101 Luzerne Avenue.
Silver Spring, MD 20910

Montgomery County Board of Education

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I. Introduction

Introduction

Moseley Architects was selected to perform the Feasibility Study for the addition to Woodlin Elementary School under the direction of Montgomery County Public Schools (MCPS), Department of Facilities Management, Division of Construction, and the Woodlin Elementary School Feasibility Study participants.

Woodlin Elementary Feasibility Study Participants

The feasibility study participants reviewed, revised, and approved the conceptual design for the Woodlin Elementary School. The meetings occurred on February 6, 2013, February 20, 2011, March 20, 2013, and April 9, 2013. Meeting 3 scheduled for March 6, 2013 was cancelled as a result of inclement weather. The proposed design is a result of the participants' recommendations, suggestions, and guidance during the feasibility study process. Participants are as follows:

Mrs. Sarah Sirgo	Principal	Woodlin Elementary School
Ms. Laura Barrish	Teacher	Woodlin Elementary School
Mr. Troy Clarke	Assistant principal	Woodlin Elementary School
Ms. Teresa Fancony	Parent/Community	Woodlin Elementary School
Ms. Lisa Gerhardt	Parent/Community	Woodlin Elementary School
Ms. Sharon Jones	Teacher	Woodlin Elementary School
Ms. Linda S. Katz	Parent/Community	Woodlin Elementary School
Ms. Angelia Levy	PTA President	Woodlin Elementary School
Ms. Kellie Lorenzen	Parent/Community	Woodlin Elementary School
Mr. James Mannion	Neighbor	Woodlin Elementary School
Ms. Krista Middlebrooks	Parent/Community	Woodlin Elementary School
Ms. Liera Moriel	Parent/Community	Woodlin Elementary School
Ms. Julie Morris	Planner	Division of Long Range Planning - MCPS
Mr. Saeyin Oh	Project Manager	Division of Construction - MCPS
Ms. Melissa Polito	Parent/Community	Woodlin Elementary School
Ms. Erin Prange	Teacher	Woodlin Elementary School
Mr. Ron Sage	Teacher	Woodlin Elementary School

I. Introduction (continued)

Woodlin Elementary Feasibility Study Participants (Continued)

Ms. Anda Sage	Teacher	Woodlin Elementary school
Ms. Jenny Shanefelter	Parent/Community	Woodlin Elementary School
Ms. Carolyn Shelton	Parent/Community	Woodlin Elementary School
Mr. Michael Shpur	Architect	Division of Construction - MCPS
Ms. Christine Tilkens	Teacher	Woodlin Elementary School

Woodlin Elementary Feasibility Study Design Team

William T. Brown, AIA, REFP, LEED AP bd+c	Moseley Architects
Olivia Brookman, LEED AP	Moseley Architects
Shawn Benjaminson, PE, LEED AP bd+c	ADTEK Engineers (Civil)
Cindy Ponafala, PE	ADTEK Engineers (Structural)
Michael A. Weigand, PE, LEED AP	Weigand Associates Inc. (Mechanical, Electrical & Plumbing)

II. Executive Summary

Purpose

The purpose of this feasibility study is to explore alternatives and provide specific recommendations to Montgomery County Public Schools (MCPS) for the addition and minor alterations to the Woodlin Elementary School. The recommendations are to accommodate the educational needs of the school and comply with current Montgomery County Public Schools Educational Specifications.

History

Woodlin Elementary School is located in Silver Spring, Maryland. The original school was constructed in 1944. The first two classroom additions were built between 1954 and 1960. A gymnasium and additional classrooms were constructed in 1983. Another addition to the school was constructed in 1988 to accommodate increased enrollment. The existing building is approximately 60,278 gross square feet. Current capacity is 462 with current enrollment of 619. Capacity after the addition will be 635 with a 640 core capacity.

Methodology

A design team of architects and engineers has evaluated the school in order to develop alternative locations for the addition. The study is based on an analysis of the existing building and site conditions, meetings with the feasibility study participants, and review of the educational specifications prepared by the MCPS Staff for Woodlin Elementary School.

The study is based on the following;

- Consensus Workshops with the feasibility participants and MCPS Staff
  - There were five meetings
- Analysis of the existing physical plant
- Review of the existing available construction documents provided by MCPS
- Review of the Educational Specifications and Summary of Space Requirements provided by MCPS
- Research conducted by the design team

II. Executive Summary (Continued)

Overview

The Feasibility Study assesses the advantages, disadvantages and relative costs of various alternatives for developing the best means to meet the primary goals and objectives of the school staff, PTA, and MCPS Educational Specifications.

The goals and objectives include:

- Improve relationships of educational programs and administrative functions.
- Provide a two story facility with a condensed building footprint to maximize open space.
- Create an interior courtyard to provide daylighting to all teaching spaces and a safe outdoor learning space.
- The design team should be aware that the building will be modernized in the future.
- The architect should assess the feasibility of adding grooming rooms to existing LFI classrooms (rooms 5, 10, and 26). If the bathroom in room 10 is modified, it should be designed in such a way that it no longer connects to the computer lab next door.
- The current Art room (room 20) should be repurposed into a standard classroom at the completion of the addition.
- Depending on the location of the addition, new security gates to isolate the Gym and Multipurpose Room for after-hours use are desirable.
- It is desirable to provide a security vestibule at the main entrance and rework the main office so that the workroom and file room are contiguous with the rest of the Administration suite.
- No changes are proposed for the Woodlin Child Care building.
- The Instructional Data Assistant/interventions room 27 should be repurposed as a general storage closet at the completion of the addition.
- It is desirable to add a connecting door between the Principal's office and conference room.
- The current Staff Developer's office/pull-out room 28 should be repurposed as another general support staff office at the completion of the addition.
- The current Reading Specialist's room 21 should be repurposed as a third Small Instructional support room at the completion of the addition.
- The current Therapy/Support room 31 should be repurposed as storage at the completion of the addition.
- It is desirable to convert rooms 16, 17 and 18 into 2 Kindergarten classrooms and replace these standard classrooms in the addition.

II. Executive Summary (Continued)

Three options were developed by Moseley Architects to meet the programmatic requirements developed by the Montgomery County Public Schools. At the final meeting, Option 1 was selected by the participants as the preferred option based on how well it works with the site, existing conditions and the program requirements.

Options Considered

Option 1: One and two story scheme with the two-story portion massed around a central courtyard and the one story abutting the existing gymnasium and classroom wing. **(Preferred)**

- Line of sight at playfields is good.
- More open space for recess.
- There is space to locate portables during construction
- The symmetry of the addition works well with the existing building.
- A continuous doughnut circulation through the building is effective and affords good flow. There are 2 options of travel from one part of the school to another.
- Remoteness of noisy areas (music room and Instrumental music room)
- Support spaces well distributed in the addition

Option 2: Two story scheme with the two-story portion massed around the existing Gymnasium and the one story portion houses the programs for music, art and dual purpose.

- The specialty spaces (Art, Music & Dual Purpose) are centralized
- There is space to locate portables during construction
- The line of sight to playfields is affected but supervision can make it work.
- This scheme does not intrude on the fields as much as option 3.

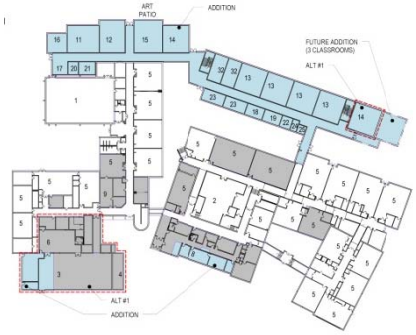
Option 3: One story addition and connects the existing building at 2 points providing a looping circulation path through the existing and new addition.

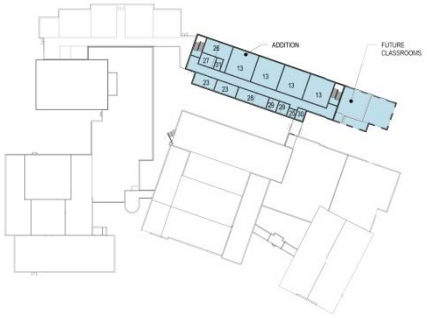
- Line of sight at playfields is good.
- Less open space in this option than in option A because this is a 1 story scheme.
- The symmetry of this addition works well with the existing building.
- Flow through the building is effective. There are two options of travel from one space to another.
- Centrally located specialty spaces with corridor buffers on all sides

II. Executive Summary (Continued)

Summary of Options

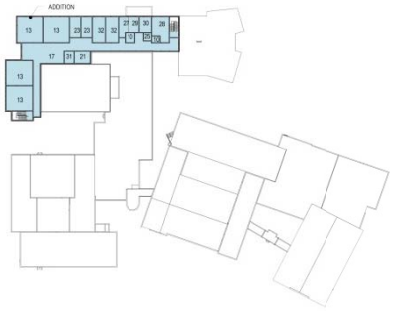
Option 1 (Preferred)





Existing = 60,278 SF
New Construction = 32,977 SF
Total (gross) = 93,255 SF

Option 2



Existing = 60,278 SF
New Construction = 34,976 SF
Total (gross) = 95,254 SF

Option 3

Existing = 60,278 SF
New Construction = 30,002 SF
Total (gross) = 90,280 SF

First Floor Plan

II. Executive Summary (continued)

Summary Table and Cost Comparison of Options 1, 2 & 3

Square Footage Comparison

Square Footage	Option 1 (Preferred)	Option 2	Option 3
Existing (no renovations)	60,278	60,278	60,278
New Addition Construction	29,417	31,416	26,442
Add Alternate (Multi-purpose/kitchen) includes 3560 of new construction	8,751	8,751	8,751
Renovation	12,269	12,269	12,269
Existing to Remain	42,818	42,818	42,818
Total Gross Square Feet	**93,255**	**95,254**	**90,280**
Cost Estimates	**$16,847,000**	**$17,488,000**	**$15,893,000**

Feasibility Study Cost Outline ($000's) Preferred Option 1

Construction Cost - Option 1(Preferred)	$ 13,795
Planning Cost	$ 1,601
Contingency and Related Costs	$ 1,451
Totals	**$ 16,847**

The cost estimate in this feasibility study is based on current construction market conditions for both building and site.

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III. Scope of Work and Study Objectives

Scope and Intent

The intent of this feasibility study is to explore alternatives and provide specific reecommendations. The finished project should meet all programmatic requirements, satisfy staff and community concerns and provide a cost effective and energy efficient facility to meet current and changing educational needs.

The scope of work includes analysis of the existing building and site to determine options for adding onto the school and improving the specified site problems. The options were developed according to the Educational Specifications.

Project Criteria – Methodology and Format

This feasibility study was developed per the following methodology;

- Evaluation of Woodlin Elementary School's existing site conditions and physical plant by a design team of architects and engineers.
- Meetings with MCPS Facilities/Planning Staff, Woodlin Elementary School Staff, PTA members, and community representatives to determine and clarify the study's objectives and goals.
- Development of several alternative options and studies for site improvements.

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IV. Existing Conditions

Vicinity Map

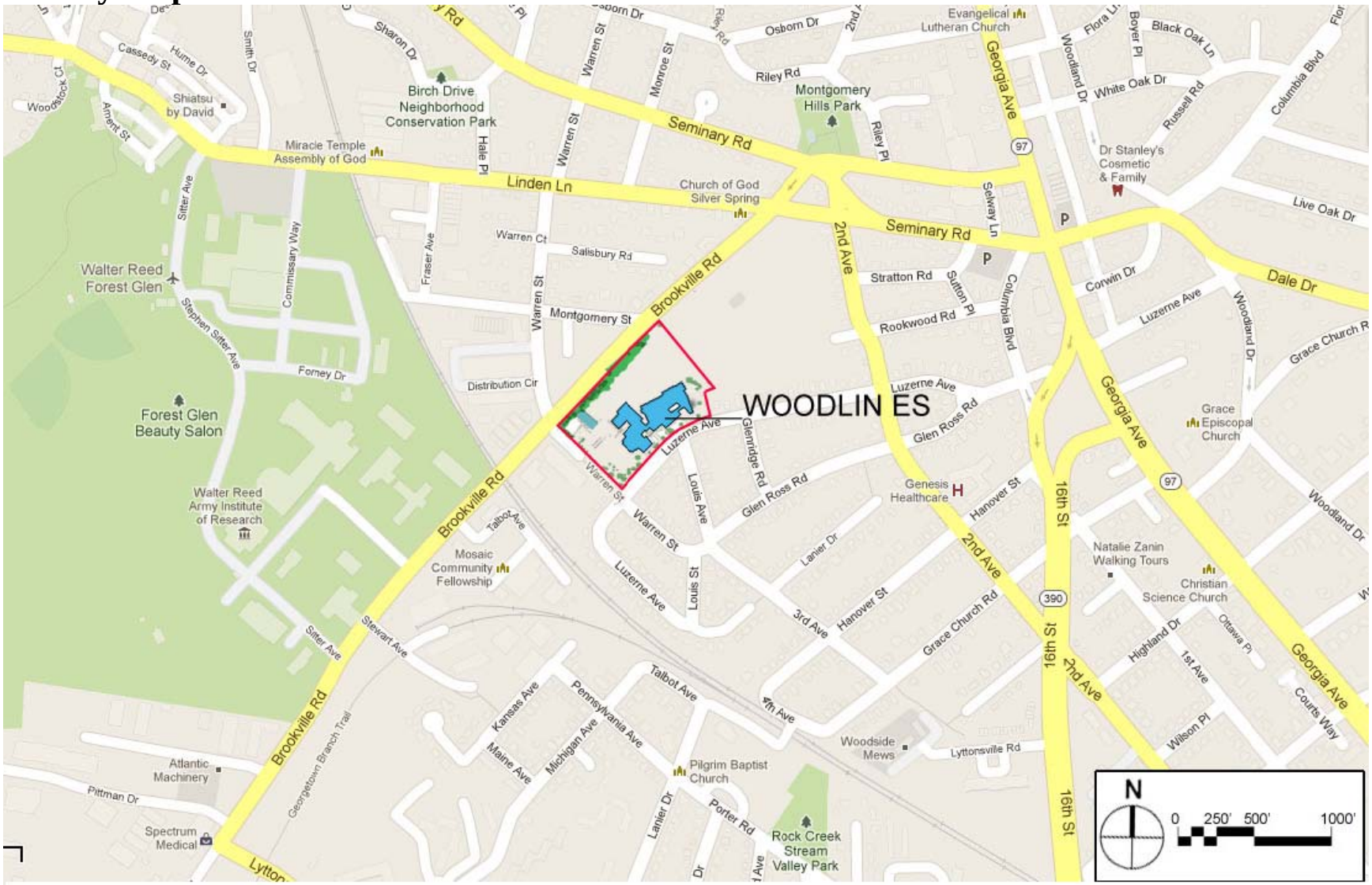
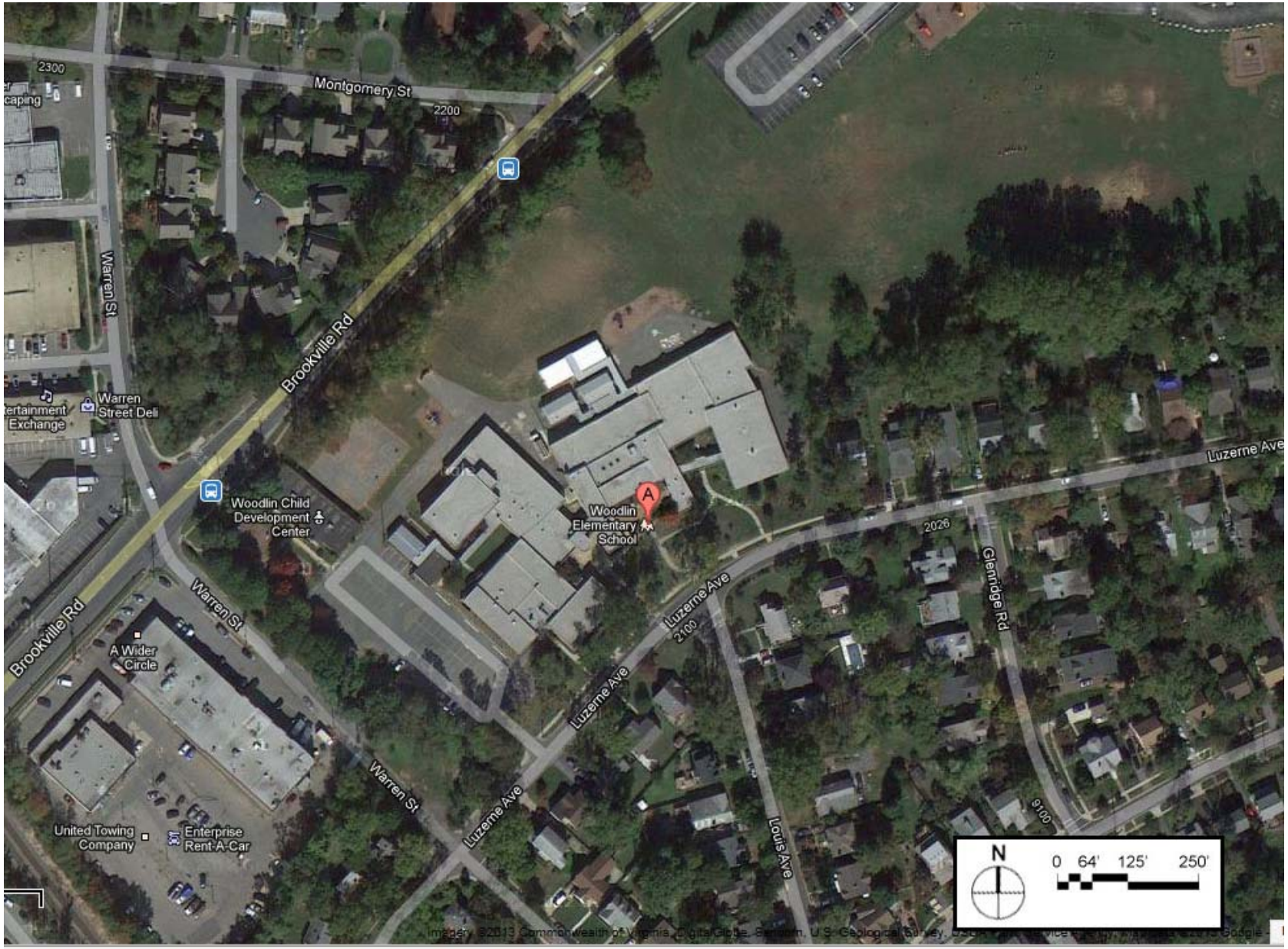


Image courtesy of Google

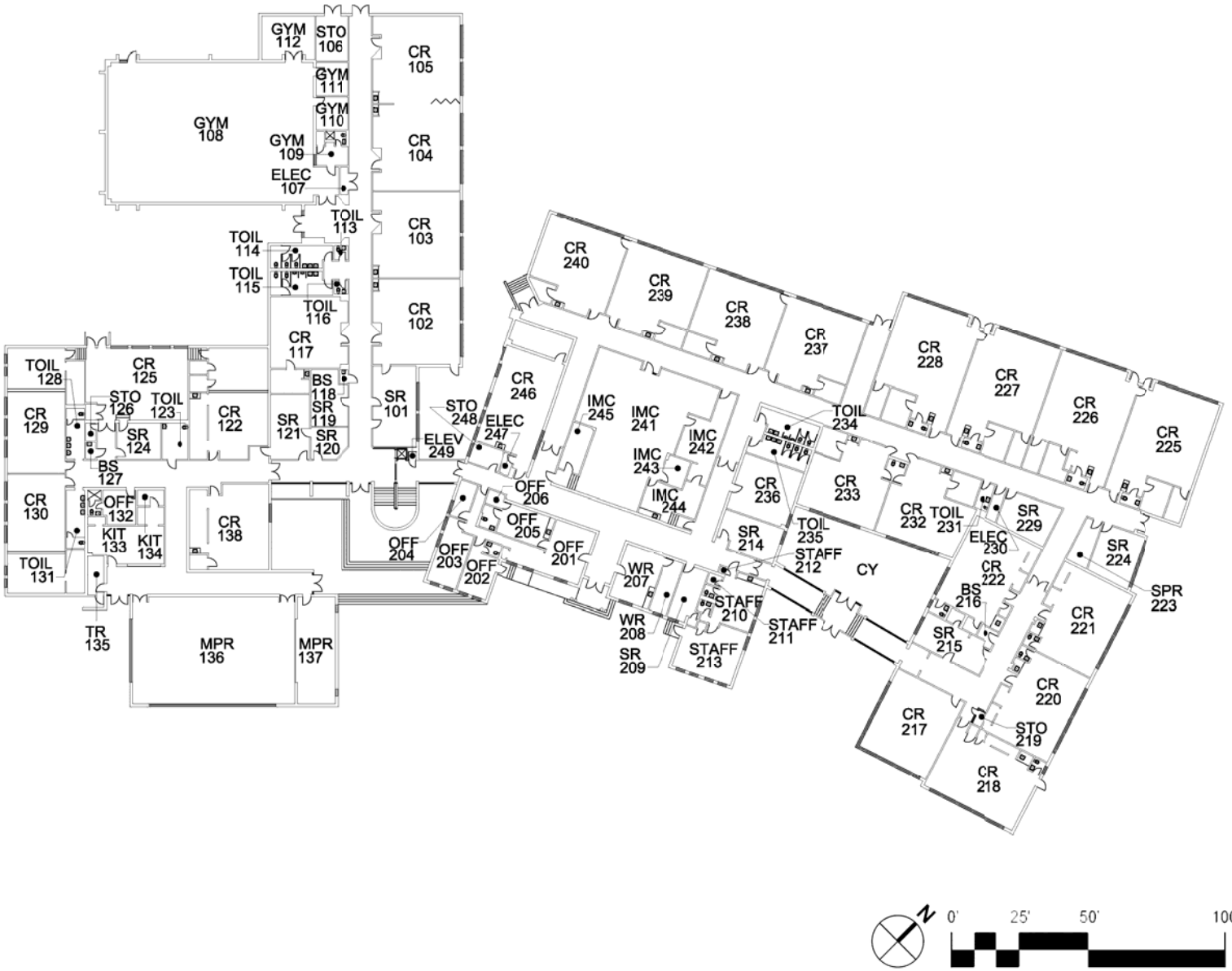
IV. Existing Conditions (Continued)

Aerial Site View



IV. Existing Conditions (Continued)

Existing Floor Plan



IV. Existing Conditions (Continued)

General Site Information

Woodlin Elementary School is situated on 10.4 acres owned by Montgomery County Public Schools and located at 2101 Luzerne Avenue, Silver Spring, Maryland 20910. The property is found on ADC Map book grids 5286-C9 and 5286-C10 and has tax account number 13-00953895. Per Maryland—National Capital Park and Planning Commission maps, the site is located within the North and West Silver Spring Master Plan, is zoned R-60, and is bounded by The Torah School of Greater Washington and The Yeshiva of Greater Washington to the northwest, single-family homes and Luzerne Avenue southeast, the Warren Street right-of-way to the southwest, and Brookville Road to the Northwest.

Based on the current Montgomery County Zoning Ordinance, dimensional regulations for the property will include the following:

Front setback – 25'
Side setback – 8' min / 18' total
Rear setback – 20'

Maximum Building Height – The height must not exceed 35 feet when measured to the highest point of roof surface regardless of roof type, or 30 feet to the mean height level between the eaves and ridge of a gable, hip, mansard, or gambrel roof, subject to the following: The height must not exceed 2 ½ stories or 30 or 35 feet, depending on the method of measurement, if other lots on the same side of the street and in the same block are occupied by buildings with a building height the same or less than this requirement. The height may be increased to either 3 stories or 40 feet if approved by the Planning Board in a site plan.

Maximum Lot Coverage – 35% (Maximum of net site area covered by buildings, including accessory buildings)

Woodlin Elementary School shares its 10.4 acres site with the Woodlin Child Development Center. There is a large hill just north of the building with a plateau on top with a ball field and parking. Both of these serve the adjacent Torah School of Greater Washington and The Yeshiva of Greater Washington. These schools are situated on property that is owned by MCPS, but leased to the private schools. In addition, there are several utility easements that encroach the site. These other amenities appear to use approximately 4.0 acres of the site. This leaves Woodlin Elementary School approximately 6.5 acres of usable space.

IV. Existing Conditions (Continued)

General

The existing building has evolved over the years from a single structure in 1944 to a campus of separate structures with connecting covered walks through the 1950s and 1960s to ultimately be incorporated into one large facility with infill projects in 1983 and 1988. Woodlin Elementary School shares the site with the Woodlin Child Development Center which is a separate facility providing before and after care for school age children ages 2 to 12.

- Existing building is one story and sprawls across site.
- The child care facility on site shares parking and drop off facilities with the school.
- Horizontal site expansion is restricted by the steep slope at the north-east side and the program play areas occupy the remaining adjacent site areas. These site restrictions present a vertical expansion as the only viable consideration.
- The existing building structural system consists of various vintages of construction types including clear span open web steel joist bearing on exterior masonry walls and intermediate steel beams that are not capable of supporting a second floor, and could not be used for vertical expansion. Therefore, the entire roof system would have to be removed and replaced with new construction. Furthermore, the remaining exterior walls and their foundations are not adequate to support the vertical expansion.
- This project will not pursue USGBC's LEED for Schools certification as this is an addition that does not double the size of the school nor will the renovations be over 50% of the floor areas.
- The existing floor plan layout does not lend itself to current programmatic relationships and the interior spaces ideally would be renovated to accommodate desired adjacencies anticipated for grade groupings such as Kindergarten.
- The location of the Administrative offices is configured such that it will require major modification to accommodate the current MCPS entry security sequence.
- The analysis and design efforts anticipate a future modernization of the entire building but, as it is approximately 25 years out, a master planning effort for the modernization is not required at this time.

IV. Existing Conditions (Continued)

Existing Building Analysis

The original Woodlin Elementary schoolhouse could be considered a historical structure; however, it is not listed as a historic property with MNCPPC. It is recommended that building's historical status be reviewed prior to designing improvements to this portion of the building.

It is also noted that the school will have an additional portable classroom installed during the summer of 2013.

Woodlin Elementary School – Aerial (Courtesy of Google Earth)

IV. Existing Conditions (Continued)

Site Analysis

Adjoining Streets, Pedestrian Access, and Vehicular Access

This site provides vehicular access to the right-of-way by Luzerne Avenue at the southeast portion of the site and pedestrian access from the intersection of Brookville Road and Warren Street at the east corner. The current site circulation is poor, with the existing configuration of the single parking lot insufficient to adequately support the existing school population.

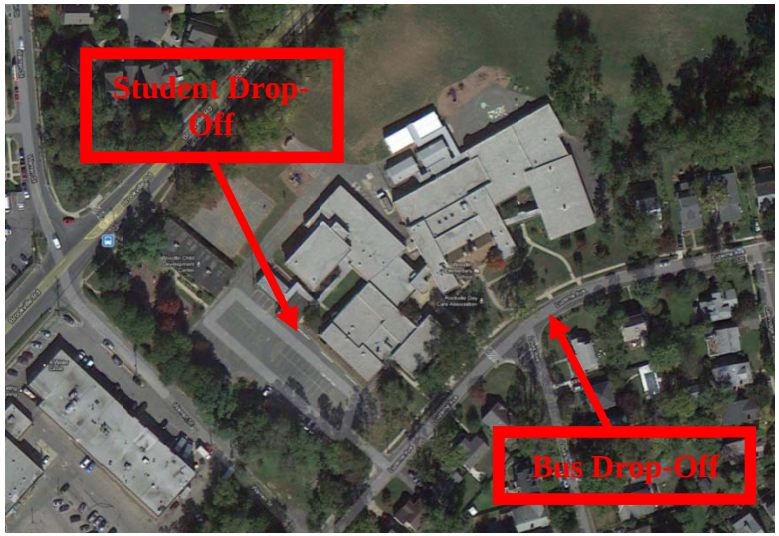
Bus Loop

Woodlin Elementary School does not have an on-site bus-loop. Instead busses queue along Luzerne Avenue. This practice is less than ideal. The afternoon pick up is of most concern as many cars fail to obey posted speed limit signs or proceed with caution as indicated by Woodlin staff. The school is currently served by seven (7) busses and two (2) special education busses. The curb along Luzerne Avenue provides approximately 230-foot of queuing space, adequate for approximately 5 buses. A two (2) foot wide strip of grass separates the sidewalk and adjacent curb. The width of the sidewalk does not meet the desired 12 foot width by MCPS and it is questionable if the grades are ADA compliant for bus drop-off. There is no designated loading space for accessible vehicle loading along the street.

It is believed that the two (2) special education busses pull into the parking lot for drop-off along the loading area; however, if the parking lot loading area is not accessible there are no other areas that could provide a safe and ADA compliant drop-off area. During the design process, the location of the addition should take into consideration the overall site improvements that will be undertaken during the future modernization that will include new parking lots, a separate bus drop-off loop, and a separate student drop-off loop. Current ADA compliance is also recommended for inclusion to site improvements.

IV. Existing Conditions (Continued)

Woodlin Elementary School – Bus queuing area



Woodlin Elementary School – Aerial (Courtesy of Google Earth)

Student Drop-off Loop

The student drop-off loop is located on the southwest side of the existing building utilizing the drive aisle of the parking lot on site as the drop-off loop. The student drop-off consists of a 135-foot queuing space and a 22-foot drive aisle that is insufficient for vehicles to pass. The queuing area is marked by striped pavement and surface mounted flexible delineator posts. The 18-foot site entrance is a possible bottleneck location causing congestion during the morning and afternoon drop-off/pick-up times. Additionally, the busses queued along Luzerne Avenue may make for a more confusing and congested situation. Further complicating the circulation of the parking lot and student drop-off is the Woodlin Child Development Center, as this is a separate building at the southwest corner of the school property that MCPS owns and leases to a private daycare company. The additional drop-off at this building congests the parking lot. New parking lot configurations should be explored during the design phase. This could include the possibility of adding an exclusive entrance and parking lot for the Woodlin Child Development Center; however, useable area in this portion of the site is limited and it may not be feasible. The student drop-off area should be evaluated for ADA compliance and upgrades are recommended for any non-conformance.

IV. Existing Conditions (Continued)

On-Site Parking

Currently, there is a single parking lot providing 68 parking spaces for staff and visitors, serving both Woodlin Elementary School and The Woodlin Child Development Center. The parking lot cannot support both facilities with the current number of parking spaces. It is not uncommon to find cars parked in all available unoccupied space including double parking in aisles, parking in no parking striped areas, and parking in fire lanes. It is recommended that 100 parking spaces be provided to accommodate Woodlin Elementary School per MCPS standards and separate additional parking be added to support the Woodlin Child Development Center or a sufficient number of spaces be added to one parking lot to support both facilities. A separate entrance and parking lot for the Daycare Center would decrease congestion by removing cars from the parking lot for the school and allowing segregated circulation for each independent facility.

The existing parking lot does not meet current ADA regulations; there are two (2) designated handicap spaces. Per current ADA guidelines, a parking lot providing 51 to 75 spaces must have three (3) designated handicap spaces (one (1) of which should be van accessible). These spaces do not appear to be in conformance with current ADA standards as there is no designated van space or proper signage. In addition, there is no crosswalk from the existing handicap spaces to the school. The daycare center should also have a designated assemble space.

Parking lot entrance (Courtesy of Google Earth)

Aerial (Courtesy of Google Earth)

IV. Existing Conditions (Continued)

On-Site Loading

The loading area is located on the southeast side of the existing building. The current configuration appears to be functional, but not ideal as it is not generally masked from traffic or residences along Luzerne Avenue. Adjacent to the loading area is the student drop-off area, which promotes access across the loading area to get to the main entrance of the school. While loading should not occur during the same hours as student drop-off, this could become problematic if a vehicle was parked here during drop-off or pick-up.

Loading area

Student drop-off

Sidewalk

While the sidewalks for the site appear to be in fair condition there are numerous ADA accessibility concerns. Although there is a ramp installed at the main entrance it is not ADA compliant, The longitudinal slope of the ramp is 12.1%, and has a cross slope of 3.9%. Additionally, the handrails are not continuous. The secondary entrance does not provide an ADA compliant ramp either; furthermore the entrance is lower than the surrounding area and may be susceptible to flooding. The Woodlin Child Development Center does not provide accessibility from the rear doors to the right-of-way.

IV. Existing Conditions (Continued)

Overall, the entire site has much room for improvement, including access to the two (2) amphitheaters and all benches, picnic tables, and soft and hard play areas. The benches and picnic tables themselves should also be in compliance with ADA.

Pedestrian access from the intersection of Brookville Road and Warren Street does not provide ADA access to the site from the right-of-way. Currently a set of stairs is the only link from the right-of way to the site. The pedestrian bridge that leads to one of the amphitheaters is missing railing making it unsafe and is not ADA compliant. In addition there is not a firm stable surface for wheelchair accessibility. There are a few locations where the sidewalk has settled and produced a change in elevation greater than acceptable by ADA regulations. Any new site development and existing areas that can be improved should be brought in compliance current ADA regulations. Per the regulation, ADA improvements must be included not to exceed 20% of the overall cost of the addition. The intent of this requirement is to bring a building and its site improvements into conformance when any major renovation occurs.

Unsafe pedestrian bridge

Back side of the Woodlin Child Development center

Stairs from intersection of Brookville Road

IV. Existing Conditions (Continued)

Fire Access

The existing site layout, while it met code at the time it was constructed, does not meet current fire access requirements. The entrance to the parking lot is 18-foot and fire code requires 20-foot. In addition maneuverability for a fire truck per code is not provided. Only two hydrants have been located for the site; one in the right-of-way of Luzerne Avenue and the second to the north adjacent to the north hard play surface. It is assumed that the fire trucks drive around the school from the parking lot and across the hard play surfaces to gain access to the north hydrant; this is not ideal or adequate. The north hard play surface does not provide adequate turnaround for fire trucks. At this time it appears that the locations of the portable classrooms have blocked access to the north hydrant. The Fire Department Connection (FDC) is located along the northeast side of the building and is not accessible by vehicle. In addition the FDC is not located near the main entrance to the school, which is required by current Fire Code.

The safety of students and staff is important and should be improved during the design process. The proposed addition may require redesigning the fire truck access. Several options are available; driveway access longer than 175-foot must provide a turnaround location and/or additional hydrants or relocation of the FDC. In addition, not all fire exits from the building have to provide accessible egress to the public right-of-way. A meeting with County Fire and Rescue personnel is suggested in order to determine what improvements will need to occur for any proposed building addition.

Site Topography

The site is divided by a steep hill segregating the upper position of the site to the lower part of the site. Topography for the portion of the site that the existing building occupies slopes in a northeast to southwest direction. There is some off-site drainage area that enters the site from the adjacent residences, as well as, drainage from Brookville Road.

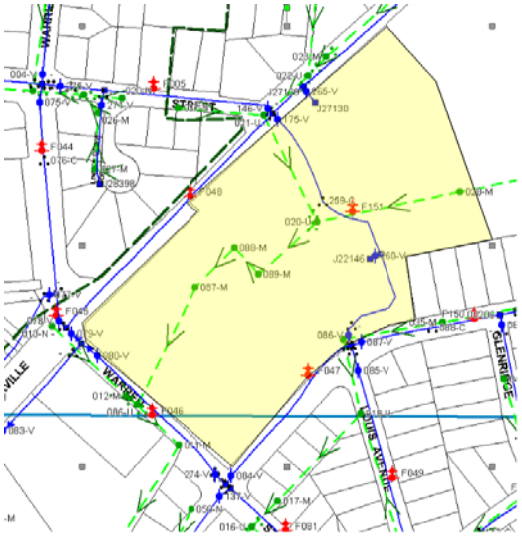
Vegetation

The site has a number of large trees along the property line adjacent to Brookville Road that are in good shape and should be preserved if possible. Refer to the approved NRI/FSD for further information on species and health of trees on the site. Upon review of the NRI/FSD off-site forest conservation options may need to be explored.

IV. Existing Conditions (Continued)

Water and Sewer

The site has both mainline WSSC water and sewer that cross the site around the existing building. Both mainlines are 8-inches and have easements in place to protect them. In order to provide the space needed for the proposed building addition, the mainline sewer in this vicinity will need to be relocated. This will result in a systems relocation with WSSC, which is typically a lengthy process that can take up to a year, as easements will need to be granted and abandoned.



Water and Sewer As-Builts – (Courtesy of WSSC)

The existing school is served by a 6-inch water service connection that is located along the northwest side of the building and connects to the 8-inch mainline water that is located on the site. The mechanical systems shall be evaluated to ensure that the proposed building addition can be handled by the existing service. With the number of site utility improvements that will need to occur for the project it is assumed that a new outside meter for the school addition will be required. The Woodlin Child Development center is served by a 2-inch water service connection that extends across the site along the south side of the property and connects to Luzerne Avenue. This connection could be impacted by the utility relocation and therefore should be considered for the proposed development.

IV. Existing Conditions (Continued)

As stated previously, it is likely that a second hydrant will be required per fire code requirements. This would likely need to be installed near the west corner of the building,

The school is currently served for sewer by a 6-inch sewer connection that exits the building near the northwest side of the school and flows to the on-site 8-inch mainline in that area. Since this line will need to be relocated with the mainline revision and the building addition, it is assumed that a WSSC on-site review will also be required.

The Woodlin Child Development Center currently has a 6-inch sewer that exits the building from the south and connects to the adjacent mainline sewer on site. This may need to be extended or relocated depending on the new configuration of the mainline sewer location that will need to occur for the building addition.

Gas, Electric and Telephone, Etc.

Per the survey provided by MCPS, as well as MCPS archive drawings, electric and telephone are all connected by overhead lines in the Luzerne Avenue right-of-way and enter the building at the main entrance. The electric is routed from the pole underground and connects to the building near the main entrance. A 2-inch gas line enters the site from Luzerne Avenue as well and connects to the gas meter located near the main entrance of the school.

The existing conditions of these are unknown. Any proposed upgrades to the existing building may require the consultation of a mechanical engineer and electrical engineer.

Storm Drainage and Stormwater Management

Based on the MCPS provided topography for the site, there appears to be a single oil-grit separator providing the only stormwater management measures for the site. An existing storm drainage network occupies the area behind the school and will need to be relocated to accommodate the proposed addition. This network includes approximately fourteen (14) inlets, five (5) off site inlets that serve Brookville Road and several roof leaders. The pipes in the network range in size from 12-inch to 36-inch. A section of the Brookville Road storm drain system ties into the on-site storm drain network and is of most concern. Coordination with Montgomery County Department of Transportation (MCDOT) will be required to gain approval to relocate the 36-inch pipe that is located directly where the proposed addition is projected. MCDOT could ask for an analysis of the storm drain system including off site contributions. A portion of the aforementioned storm drain network has an easement on the school site in the southern portion of the site.

IV. Existing Conditions (Continued)

During the design it is recommended to consider the future modernization and overall site improvements that will be undertaken including clearing of clogged inlets and addressing site ponding. The storm drain pipes should be placed in locations that will not impede any future additions. It is strongly suggested if relocation is part of the addition project that it be phased separately to avoid delays.

It can be anticipated that site improvements will be required to include Environmental Site Design (ESD) to the maximum extent practicable in order to treat all areas inside the limits of disturbance. If ESD efforts are exhausted and the site has still not been able to reach a hydrologic state of "woods in good condition," then structural practices may be permitted as determined by Montgomery County.

Potential ESD stormwater management practices for the site include both micro-scale practices and alternative surfaces. Micro-scale facilities could include the utilization of bio-swales and micro-bioretention facilities where available open space can be found, such as parking lot islands and around the athletic fields. Alternative surfaces would include vegetative roofing for building additions. Due to limitations of the soils as indicated below, permeable pavements should not be considered. However, if infiltration tests are conducted, MCDPS may allow permeable pavements to be used as long as the test results meet their guidelines.

Clogged inlet location: west side of the parking lot

Ponding on grassy area

IV. Existing Conditions (Continued)

Site Soils

Per the Soil Survey of Montgomery County, Maryland the predominant soils on the site are in the Glenelg-urban, Wheaton slit loam, and Urban Land series. According to the USDA, the depth to bedrock is usually greater than six and half (6.5) feet. In terms of hydrology, all on-site soil groups are characteristically known to provide poor drainage and slow infiltration. A majority of the site is indicated as hydrologic soil group 'D' per the USDA Soil Survey.

Floodplains, Stream Valley Buffers and Non-Tidal Wetlands

Initial investigations reveal that the site is located outside of mapped floodplain in Zone "X" as shown per FEMA Flood Insurance Rate Maps number 24031C0370D. Furthermore, according to the U.S. Fish and Wildlife Mapping services there are no nationally recognized wetlands located on or around the site.

It is noted that the previously mentioned storm drain has easements in the southern portion of the site. There is a channel at this location that has the potential to be a stream. Since an NRI/FSD has not yet been prepared for this site, it cannot be determined if there will be any impacts due to this.

IV. Existing Conditions (Continued)

Hard Surface Play Area

The overall condition of the surface is poor as ponding occurs during and after rain events in low lying areas. The north hard play area is very steep and not ideal for use as a play surface. In addition, this play area does not meet MCPS's slope standards. During the design phase it is recommended that the slope and drainage of the play surfaces be taken into consideration. The hard surface play area on the east side of the building is in very poor condition from years of tree roots pushing up on the pavement and is no longer in use by the school. It is recommended that this area be removed unless repurposed with the building addition improvements. Existing mulched areas and play equipment need to be brought into compliance with current ADA regulations.

100 meter dash surface in poor on condition

Ponding location: center hard play surface

east hard play surface

IV. Existing Conditions (Continued)

Structural

Existing drawings for the original structure were not available. The 1954 building addition consists of a steel frame structure with open web steel joists at 2'-0" on center, supported by structural steel beams, which are in turn supported by structural steel columns. Roof deck consists of ¾" tongue and groove wood sheathing. Structural steel columns are supported by a shallow spread footing foundation system. The first floor is a 4" concrete slab on grade reinforced with welded wire mesh. Roof structure was designed for a live load of 30 pounds per square foot.

Similarly the 1960 one story addition is a combination of load bearing masonry with steel columns as required for support of the roof structure. The roof structure consists of open web steel joists at spacing that vary from 3 to 4 feet on center. Roof deck consists of 2-1/2" perlite concrete over permanent high strength galvanized steel form deck. The perlite is reinforced with welded wire mesh. Foundations consist of shallow spread footing and continuous wall footing system. First floor consists of a 5" thick concrete slab on grade with welded wire fabric. There are utility distribution tunnels is several locations in this addition, providing a 3' by 3' clear tunnel space. The first floor over the tunnels consist of concrete slab on corrugated metal form deck reinforced with #3 bottom bars.

The 1983 addition is predominantly load bearing masonry construction with open web steel roof joists at 5'-0" on center and a cementitious roof deck. The foundation system consists of shallow continuous wall footings and a concrete slab on grade.

The one story 1988 addition is also load bearing masonry walls with open web steel joists on a shallow spread footing foundation system. The first floor slab is a 4" concrete slab on grade reinforced with welded wire fabric.

In general, the school is in very good condition from a structural point of view. Based on our observations, there was nothing apparent that would indicate there were any structural deficiencies or concerns. There were no cracks in the existing veneer that would typically be associated with settlement issues. There was one location at the bearing end of a steel lintel where cracks in the mortar joints were apparent. We recommend these joints be re-pointed to avoid water infiltration and future freeze thaw cycles.

IV. Existing Conditions (Continued)

We recommend that where mortar is missing from the joints, the joint be re-pointed, and that where the brick is cracked, it be caulked.

IV. Existing Conditions (Continued)

There were no major indicators of excessive water damage or recurring leaks that would impact the structural systems. There was one area where there were signs that the wall was in shade a lot of the time and walls were prone to moss and mold growth. However, mortar joints in this area appeared sound, and it did not appear that water infiltration had led to anything that would be considered a structural issue.

Otherwise, the existing school appears structurally sound and suitable for the proposed renovations.

Mechanical

The main source of air conditioning and heating in the building is a dual temperature hydronic piping system that feeds unit ventilators throughout the building. All ventilation appears to be by louvers attached to individual unit ventilators. The library and the office have standalone equipment. The cooling is provided by a 175 ton air cooled chiller which was installed in 2007 and looks to be in excellent condition. The heating is provided by 4-1,000 MBH condensing boilers that were also installed in 2007 and appear to be in excellent condition. The dual temperature pumps are 15 HP end suction-constant volume pumps where installed in 2007. All piping in the main mechanical room is in excellent condition, it was installed the same year as the boiler and chiller. The proposed expansion seems to be increasing the square footage of the building by over 18,000 square feet. This would mean an increase to the existing cooling capacity of 50 tons or 30% of the existing chiller size. Since the system is a constant flow system with 3-way valves it is unlikely the current hydronic system could be used without major modifications to the existing unit ventilator control valves and hydronic system.

IV. Existing Conditions (Continued)

The actual cooling and heating requirements at peak load cannot be determined by a feasibility study and there is no space to add additional HVAC equipment in the existing mechanical room. Since the boilers, chillers and pumps are new, it makes no sense to upsize them. It is recommended that the new addition will have to have its own air conditioning and heating system separate from the existing building dual temperature system.

The existing control system outside the mechanical room is pneumatic and none of the components connect to the MCPS network.

Any system used should have a dedicated outside air unit providing the entire addition with ventilation air. Depending on the system that is selected, the air conditioning and ventilation systems can go outside but a mechanical room will be required in the addition to house the pumps and boiler.

Plumbing

Plumbing fixtures for classroom toilet rooms and some adult toilet rooms in corridors were recently replaced. The water closets installed are 1.28 gpf flush valve floor mounted and the lavatories are vitreous china wall mounted two handle manual faucets.

Domestic hot water is supplied to various wings of the building with individual small water heaters located in each wing. Some larger distribution systems are equipped with recirculating systems and pumps. These water heaters will not be able to support the additional load of the proposed addition.

The domestic water, and sprinkler for the 1988 addition are supplied from a water service provided for that addition. It is anticipated that this service will be adequate for the new addition but the available flow and pressure will need to be analyzed as part of the design utilizing new flow test data at that time. New sanitary and storm drainage shall be installed in the new building in coordination with site utilities. New plumbing fixtures shall meet current MCPS standards for water consumption and operation. It is highly likely that the existing building will be required to be retrofitted with fire sprinkler coverage as part of the approval of the proposed addition.

The existing storm drainage system mostly consists of exterior downspouts and gutters spilling to underground piping or to splashblocks on grade. There are some areas such as the gymnasium where roof drains and internal storm drainage were provided.

The 1988 building addition has an automatic wet sprinkler system in accordance with the National Fire Protection Association (NFPA 13). The remainder of the existing building is unsprinklered.

IV. Existing Conditions (Continued)

Electrical

Existing Normal & Emergency Power Sources

The electrical service for the existing school is provided by PEPCO. The capacity of the existing service is 1600 Amps at 208Y/120V, 3-phase, 4-wire system which utilizes a 500 KVA outdoor pad-mounted transformer. The existing power company meter number is K23ALYS112U.

According to PEPCO, the maximum demand load, which happened during the summer for the prior 12-month record period, is 183.2 KW or 598.9 Amps (at 208V, 3-phase & 85% PF).

Therefore the existing electrical service and related power company transformer has spare capacity of approximately 250 KVA (or 700 Amps at 208V, 3-phase) available which appears to be insufficient for the load of proposed the 18,000 SF new addition plus ten classroom portables.

The existing electrical service is connected & distributed to the building via a 1600A switchboard located in the space behind the boiler room. All the feeder switches in this switchboard are used to feed the existing load in the building and there is no spare switch available left to feed the future load. The combined mechanical /electrical spare which houses the switchboard has no available space for any additional electrical equipment.

Fire Alarm System

Existing fire alarm in the building is from Fire-Lite/Honeywell. The existing control panel is an addressable type model #MS-9600LS located in a storage room next to the main entrance of the building. The existing fire alarm system in the building seems in a good condition and working properly. It appears that this fire alarm system is expandable and able to support proposed addition with the application of an expander/booster panel and additional power supplies.

Public Address System

The main control equipment for the existing public address system is located inside the main office. This system is from RAULAND (model #2490) and seems expandable and in a fair condition. There are spaces on the main control panel for installation of additional devices/switches for new PA zones if needed.

V. Common Elements Descriptions – For All Program Options

Site

The proposed building addition options are located in a manner that will eliminate direct access to the building's mechanical areas that currently exist. Relocation and/or alternative access should be considered. Also, it is recommended that the dumpsters be relocated, as the current location is not easily accessible.

Architectural

For the administration suite reconfiguration, the health suite shall remain as is and the rest of the spaces reconfigured around it. In order to achieve desired views from the general office into the health suite the main entrance and security vestibule will be relocated west of the existing entrance and adjacent to the health suite. The administration suite will be enlarged to provide additional square footage to meet the program.

The multi-purpose room and kitchen will be expanded as an add alternate and if picked a classroom absorbed into this renovation will be provided in the addition.

Structural

Options A and B consist of a one/partial two story classroom addition. Recommended framing systems, consistent with the preferences of Montgomery County is steel frame construction with masonry cavity exterior walls bypassing the steel frame. The roof framing would consist of open web steel joists at 5'-0" on center maximum with 1-1/2", 22 gage galvanized metal roof deck supported by structural steel beams. The floor system would consist of composite steel beams and girders with a concrete slab reinforced with welded wire fabric supported by composite metal deck. Both floor and roof structures would be supported by structural steel columns. We anticipate a shallow spread footing foundation system and continuous concrete wall footings, consistent with the existing construction. This will be verified by the geotechnical investigation. First floor will be a 5" concrete slab on grade reinforced with welded wire fabric. Footings for the addition will need to be stepped to match the existing bearing elevation of the footings at the interface with the existing foundation. In addition, depending on the height of the additions, some additional snow build up loads may result on the existing roof, and will need to be accommodated in the existing roof structure.

V. Common Elements Descriptions – For All Program Options (Continued)

Lateral stability for wind and earthquake loads will be provided by a combination of reinforced masonry shear walls and braced frames. Exterior masonry walls will be vertically reinforced to resist incident wind loads in accordance with code requirements.

Option C is a one story addition and roof framing and foundation systems would be similar to described above for Options A and B.

Structural renovation in the existing school will be as required to accommodate the proposed work in the Multi-purpose room, administration suite, and a few classrooms. Remediation of existing structure will be provided as required for proposed new mechanical units.

Mechanical

I. HVAC SYSTEM

It would be desirable to have the HVAC system for the new addition be served by extending the existing HVAC system from the original building but that is unlikely given the difficulties in expanding the existing system and given the main equipment is brand new and it make no sense to replace it with larger equipment. We recommend a new stand alone system be designed for the addition which will not be connected to the existing building HVAC system. This means that the new addition will have to have some square footage for a mechanical room. We recommend the following types be considered

1. Water source heat pumps with cooling tower and condensing boiler .
2. Two pipe dual temperature system with a condensing boiler and air cooled chiller.

The water source heat pump has the advantage of being able to heat and cool simultaneously with 2 pipes and will have a lower installation cost. The 2 pipes dual temperature system will have the advantage of having a lower maintenance cost but a higher installation and energy cost. Both systems will provide individual space control for every room in the addition.

V. Common Elements Descriptions – For All Program Options (Continued)

All systems will use a dedicated outdoor air system with heat recovery.

A new EMCS system will be provided for the HVAC system in the new addition that will be networked into the MCPS EMCS system.

Plumbing

A. PLUMBING SYSTEM DESIGN

A. DOMESTIC WATER SYSTEMS

1. This addition shall include a potable domestic water system serving all new fixtures. The existing system will need to be analyzed for flow and pressure from current flow tests in order to determine if the system has adequate pressure and flow for the addition.

2. Domestic Cold Water

The domestic cold water supply lines will connect with the existing 2 inch water supply main located in the water service room at the end of the 1988 addition.

3. Domestic Hot Water

The domestic hot water supply will be provided through a new water heater located within the addition. The heater shall be a gas fired storage type high efficiency unit. If ground-source heat pumps are utilized for the HVAC system in the addition, we will consider using a heat pump for domestic hot water. A hot water return system with a circulating pump shall be required. Return pump requirements have been determined by ASHRAE calculation methods. The on/off operation of the 140 degrees Fahrenheit water circulation pump shall be controlled by time clock operation or by the Energy Management System.

V. Common Elements Descriptions – For All Program Options (Continued)

Showers shall be provided with pressure compensated thermostatic mixing valves which shall limit the maximum water temperature to 110 degree F per WSSC section 411.2.a. Lavatories shall be provided with point-of-use ASSE 1070 mixing valves to reduce the water temperature to below 109 degrees F. per the plumbing code.

4. Water Piping System

All above ground piping 2 inches and smaller shall be hard temper type "L" copper tubing with wrought copper fittings, jointed with lead-free solder. All piping shall be insulated.

B. SANITARY DRAINAGE SYSTEM

1. The sanitary system will exit the building by gravity and connect to the existing main sanitary sewer line. Building sanitary drain shall be sloped at 2 percent where possible but not less than 1 percent.

2. Cleanouts will be provided at the base of all stacks, every change of direction greater than 45°, at the end of horizontal drains within the building and other locations required by code. Cleanouts will be located so as to be accessible.

3. Sanitary below grade piping material will be either solid core DWV PVC or cast iron, service weight, hub and spigot. Above ground piping will be cast iron hubless.

C. STORM WATER PIPING:

1. Storm water piping serving the addition areas will connect to the existing storm water line main that runs parallel to existing building walls. All underground piping will be cast iron service weight hub and spigot. For all options some existing downspouts will need to be either drained across the roof of the addition where it abuts the existing gutters, or roof drains added and piped underground or reconfigured in some other way to accommodate the new additions.

V. Common Elements Descriptions – For All Program Options (Continued)

D. PLUMBING FIXTURES AND SPECIALTIES

1. **General:** Fixtures will be provided as required for all areas. The public fixtures provided shall be in accordance with the Americans with Disabilities Act (ADA) where applicable. Fixture types and mounting heights shall be in accordance with MCPS design guidelines. Many of the areas listed to be renovated have outdated fixtures in the adult use facilities and should be upgraded.

2. **Water Closets:** Water closets shall be floor mounted white china low water consumption dual flush valve type with elongated bowl, siphon jet, top spud, 2-1/4" passageway, heavy duty solid plastic open front seat less cover with S.S. hinge posts and combination self-sustaining and check hinge.

3. **Urinals:** Urinals shall be wall mounted, white vitreous china, 0.125 gpf, top spud, rear outlet, washdown action fluch valve type with carrier mounted to floor with foot supports.

4. **Lavatories:** The lavatories will be wall hung and constructed of white vitreous china. The faucets will be metering type and limited to 0.5 gpm flow rate. Supplies shall be 1/2" copper to faucet, looke key and trap shall be cast brass with cleanout and threaded outlet with nipple to wall.

5. **Classroom Sinks:** The classroom sinks will be stainless steel, single compartment, with seamless readius-coved corners, 3-hole ledge for faucet, 8" faucet centers, 5-1/2" deep, limited swing gooseneck faucet , wrist blade handles and duo strainer. Drain shall be offset as required to comply with ADA. Supplies and trap shall be same as lavatory. Bubblers shall be provided on all handicapped sinks and on all elementary school sinks. Art room sinks shall have plaster traps.

6. **Electric Water Coolers:** Electric water coolers shall be dual, two level with HFC-134A refrigerant, barrier free, certified lead free with manual control. Support framing shall be made of heavy gauge galvanized steel with pre-punched mounting holes and mounted to the floor.

7. **Showers:** Showers stall shall be built in place. Valve shall be temperature and pressure balancing valve with fixed shower head and hand held shower with 69" chrome hose and rail.

V. Common Elements Descriptions – For All Program Options (Continued)

8. **Service Sinks:** Service sinks shall be floor mounted mop receptors, pre-cast terrazzo basin (24 x 3), with wall mounted faucet and 3/4" hose thread, vacuum breaker, integral stops, wall brace, pail hook, hose nd hose bracket, strainer and stainless steel edge curbs and wall guards.

9. **Floor Drains:** The floor drains will be 3” with a 5” nickel plated top. Floor drains will be provided in all of the toilet rooms. All floor drain traps will be primed.

10. **Water Hammer Arrestors:** Will be provided where necessary and will be accessible with a shut-off valve upstream for maintenance and testing purposes. Design shall be in accordance with PDI WH201.

11. **Cleanouts:** Will be installed so they are accessible from public areas without the removal of equipment or obstructions and shall not become an eyesore.

E. FIRE SPRINKLER PROTECTION:

The new addition will be sprinklered in accordance with NFPA 13. This system will be extended from the existing system in the 1988 addition. New sprinkler work will match existing system in terms of configuration and finishes. This work will be a contractor design-built system based upon a hydraulic analysis.

V. Common Elements Descriptions – For All Program Options (Continued)

Electrical

1. Normal & Emergency Power for the New Addition (All Options)

The existing electrical service and switchboard are incapable of supporting the proposed work of all options due to the following conditions:

- The available spare capacity is limited to approximately 250 KVA which is insufficient.
- There is no space for the new feeder switch in the existing switchboard.
- There is no space to expand the existing switchboard and new disconnect switches or panelboard in the main electrical space.

The appropriate solution will be:

- To upgrade the service based on the loads of the new addition building, portables and the existing building. The voltage system for the upgraded service will be 208Y/120V, 3-phase, 4-wire, the same as the existing service.
- Include a space as the 'new main electrical room' in the new addition building.
- Provide a new electrical service to the new main electrical room via a new transformer in a proper location outside of the new addition close to the new main electrical room.
- The normal power to the entire school will be provided through a new switchboard with enough capacity to feed the existing building, new addition, the portables and spare for future modifications/expansions.
- A new feeder from the new switchboard will be installed to feed the existing switchboard in the existing boiler room.
- The existing power company transformer and related secondary wiring, C/T cabinet and meter will be removed and the existing switchboard will be back fed from the new electrical service.

The existing stand-by generator seems capable of handling the life safety loads in the new addition building and portable classrooms. In order to determine the possibility of using the existing generator for the optional loads in the new addition building and portables should be calculated and considering the condition of the existing generator and also its spare capacity and starting capability should be carefully examined. In this case:

V. Common Elements Descriptions – For All Program Options (Continued)

- If the existing generator can handle the new optional loads, the existing generator will be used, but some modification in the existing non-emergency panel/distribution may be required.
- If the existing generator cannot handle the new optional loads, a new stand-by generator (to be located outside of the new addition building) and related distribution system will be required to feed the new optional loads.

Normal & emergency power distribution to the loads inside the new addition building will be provided through the appropriate branch panelboards in each floor and portable classrooms area.

2. Normal & Emergency power for Renovation Areas in Existing Building

Electrical systems in the renovation areas will be provided as needed and the electrical loads in these areas will be connected to the existing normal & emergency power sources via related existing distribution panelboards. Some modifications on the existing branch panelboards and/or related wiring may be required.

3. Lighting (All Options)

Complete new lighting system will be designed for the new addition building. Type of light fixtures in each space will depend on the application and the character of the space. Light fixtures with direct/indirect distribution should be used for all classrooms and teaching spaces due to greater visual comfort probability and occupant productivity. Light fixtures/lamps types, and related controls should be selected such that the system's energy saving is as much as possible. Occupancy sensors should be provided for all spaces to turn off lights when the space is not in use. Day light harvesting system should be specified for applicable spaces. Exit lights and emergency lighting will be provided for exit entrances and all means of egress. New exit lights and emergency fixtures shall include battery back-ups. Battery back-up chargers for these fixtures should be connected to the emergency/life safety circuits

4. Fire Alarm System (All Options)

All fire alarm initiation and notification devices in the new addition building and portable classrooms will be connected to the existing system. Additional booster panels and equipment will be provided, if necessary, for complete operation of the system. The existing fire alarm system in the building will cover all areas including the existing building, new addition and portable classrooms.

V. Common Elements Descriptions – For All Program Options (Continued)

The existing graphic annunciator panel is installed at the main entrance of the school. In order to include the new addition in this annunciator panel, the existing panel needs to be modified to include necessary alarm signals and also the floor plans of the new addition building on the graphic faceplate.

New fire alarm devices shall be addressable and compatible with the existing system. Wiring related to the new devices shall be rated to use for fire alarm system.

Battery capacity of the existing fire alarm system will be evaluated and additional batteries, device modules and other components will be provided, if necessary in order to the system to be completely operational as required by NFPA standard.

Notification devices in the new addition building will be audio, visual or combination of both types.

Regarding the areas in the existing building which will be modified/renovated, the fire alarm devices will be relocated and new devices will be provided as necessary for complete coverage of the system in these areas.

5. Public Address & Sound Systems

Public address system in the new addition building includes new speakers, call switches and wall volume controls. The new devices will be connected to the existing PA system in the school. Additional devices will be added to the existing control panel to control the new zones in the addition building.

In the new addition building, in order to improve sound communication in classrooms, a sound enhancement system will be specified in each classroom. This system includes necessary components such as ceiling speakers, amplifier, transmitter and receivers.

Regarding the renovation areas in the existing building, the existing PA system devices/speakers will be relocated or new components will be provided to match the needs for the modified spaces. There is a new multi-purpose room indicated as a part of these areas, which for this room, a new sound system including all related devices/components necessary for complete installation and operation of the system will be specified.

V. Common Elements Descriptions – For All Program Options (Continued)

6. Data/Telephone and Communication Systems

New data/telephone and intercommunication devices will be provided in the new addition building. The new devices will be connected to the existing data/telephone/communication systems in the existing building.

In the new classrooms, necessary devices will be specified to serve the classroom technology system and educational needs. All the work will be according to the county requirements and standards.

7. Security System

The existing security system in the school will be expanded to the new addition building. All necessary security devices/components in the new addition should be compatible with the existing system. New devices/components should be provided for the existing system, if necessary, in order for the existing system to be completely operational and provide proper coverage in the entire school.

VI. Program Options and Designs

Options Considered

Option 1

One and two-story scheme with the two-story portion massed around a central courtyard and the one story abutting the existing gymnasium and classroom wing. **(Preferred)**

This is a partial one story and partial two story addition which connects to both the 4th and 5th grade hallway as well as the kindergarten courtyard. In an effort to keep the kindergartens together, three classrooms in the existing building adjacent to the kindergartens will be renovated and converted to two kindergarten classrooms. These three classrooms will be provided in the addition, in lieu of two new kindergarten classrooms.

The multipurpose room will be redesigned and expanded. In doing so an adjacent classroom will be absorbed into the newly re-configured multipurpose/kitchen area. This classroom is being provided in the addition in the event that the add alternate for the multipurpose/kitchen room is selected. This classroom can easily be deleted from the addition scheme if the referenced add alternate is not picked due to its strategic location.

Some rooms in the existing building will be renovated/repurposed. Rooms shown with a grey shade indicate renovation areas. The administration suite will be renovated to include a security vestibule at the main entry. The spaces in the suite will also be made contiguous instead of being split as it currently is. The counselor's office which gets displaced in the renovation of the administration suite will be relocated in the existing art room. The art room is larger than a standard classroom and when converted to a standard classroom, the extra square footage and the existing assistant principal square footage will be more than ample space for the creation of a new counselor's office.

Pros

- Line of sight at playfields is good.
- More open space for recess.
- The symmetry of the addition works well with the existing building.
- A continuous doughnut circulation through the building is effective and affords good flow. There are 2 options of travel from one part of the school to another.
- Remoteness of noisy areas (music room and Instrumental music room)
- Support spaces well distributed in the addition

VI. Program Options and Designs (Continued)

Cons

- Remoteness of specialty spaces (music and instrumental music rooms)
- Some play areas need to be relocated
- Portables will need to be located on the open field area during construction.

Mechanical

Mechanical systems described in Common Elements included for all options

Plumbing

Option A is a two story addition which requires an elevator. The elevator will require a sump pump with oil detection probe and alarm. Pump will be rated at 50 gpm per elevator shaft and pump controller will be mounted in nearest mechanical or building service space.

Electrical

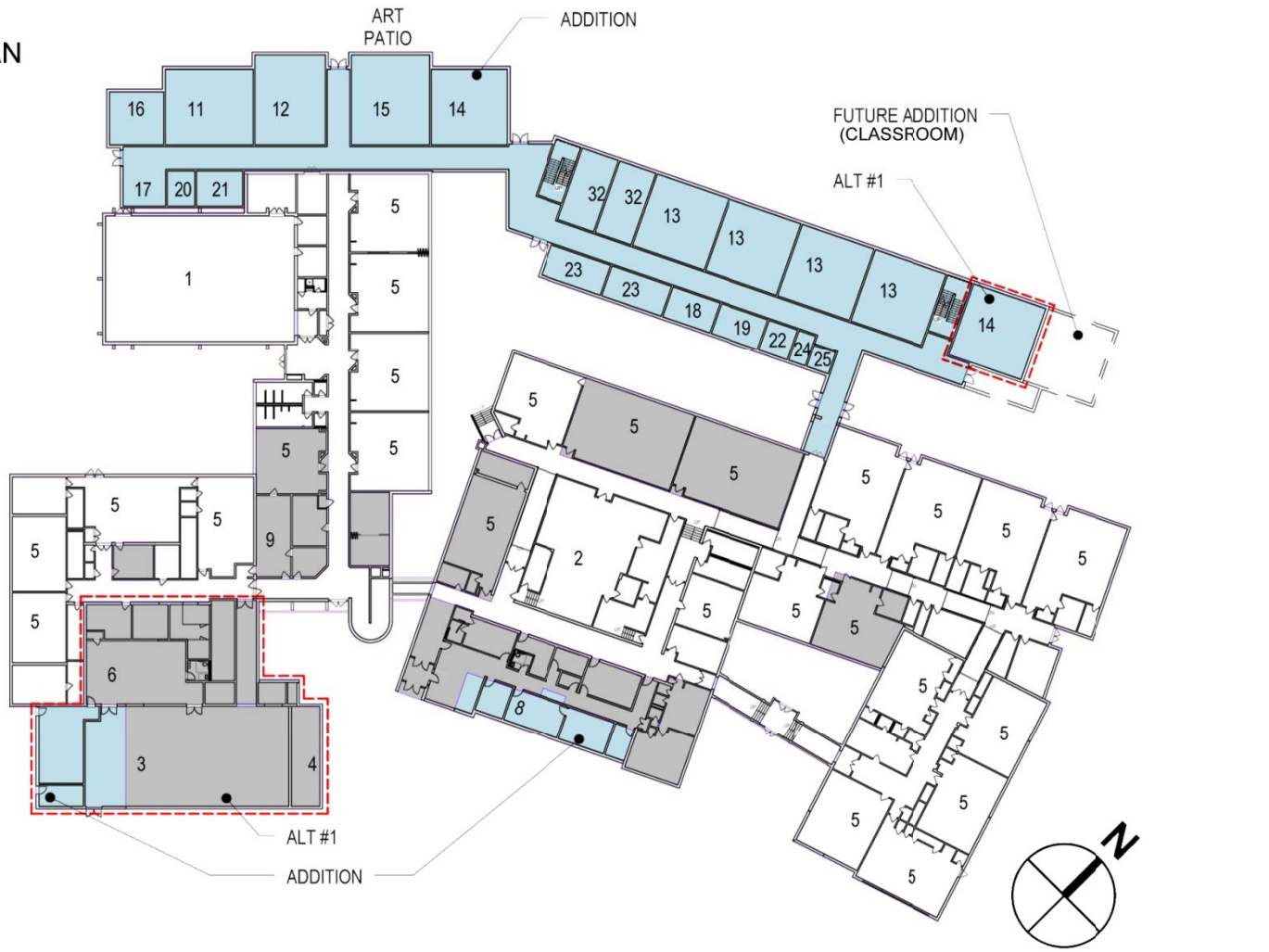
Electrical systems described in Common Elements included for all options.

VI. Program Options and Designs (Continued)

VI. Program Options and Designs (Continued)

OPTION 1 - 1ST FLOOR PLAN

1. Gymnasium
2. Instructional Media Center
3. Multipurpose
4. Platform
5. Classroom
6. Kitchen
7. Health Suite
8. Administration
9. Support
10. Building Services
11. Music
12. Dual Purpose
13. Classroom (Addition)
14. LFI
15. Art
16. Instrumental Music
17. Break Out
18. S.E. Conference
19. Therapy Support
20. PTA Storage
21. General Storage
22. Testing Conference
23. Toilet
24. Machine Room
25. Elevator
32. Small Instructional Support



VI. Program Options and Designs (Continued)

VI. Program Options and Designs (Continued)

Option 2: Two-story scheme with the two-story portion massed around the existing gymnasium and the one-story portion houses the classrooms for music, art and dual purpose.

This is a partial one-story and partial two-story addition which connects to the 4th and 5th grade hallway and wraps the existing gymnasium. In an effort to keep the kindergartens together, three classrooms in the existing building adjacent to the existing kindergarten classrooms will be renovated and converted to two kindergarten classrooms. These three classrooms will be provided in the addition in lieu of the two new kindergarten classrooms indicated in the program.

Similar to Option 1, the multipurpose room will be redesigned and expanded. In doing so an adjacent classroom will be absorbed into the newly re-configured multipurpose/kitchen area. This classroom is being provided in the addition in the event that the add alternate for the MP room is picked. This classroom can easily be deleted from the addition scheme if the referenced add alternate is not picked due to its strategic location. Some rooms in the existing building will be renovated/repurposed. Rooms shown with a grey shade indicate renovation areas.

The Admin suite will be renovated to include a security vestibule at the main entry. The spaces in the suite will also be made contiguous instead of keeping it split as it currently is.

Pros

- The specialty spaces (Art, Music & Dual Purpose) are centralized
- There is space to locate portables during construction
- The line of sight to playfields is affected but supervision can make it work.
- This scheme does not intrude on the fields as much.

Cons

- The travel distance to the specialty spaces is the longest
- The space created between the existing and the new buildings may pose a security issue because of the interior courtyard area created.
- Flow not as effective as in option one.

VI. Program Options and Designs (Continued)

Mechanical
Mechanical systems described in Common Elements included for all options

Plumbing
Option 2 is a two-story addition which requires an elevator. The elevator will require a sump pump with oil detection probe and alarm. Pump will be rated at 50 gpm per elevator shaft and pump controller will be mounted in nearest mechanical or building service space.

Electrical
Electrical systems described in Common Elements included for all options.

VI. Program Options and Designs (Continued)

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VI. Program Options and Designs (Continued)

VI. Program Options and Designs (Continued)

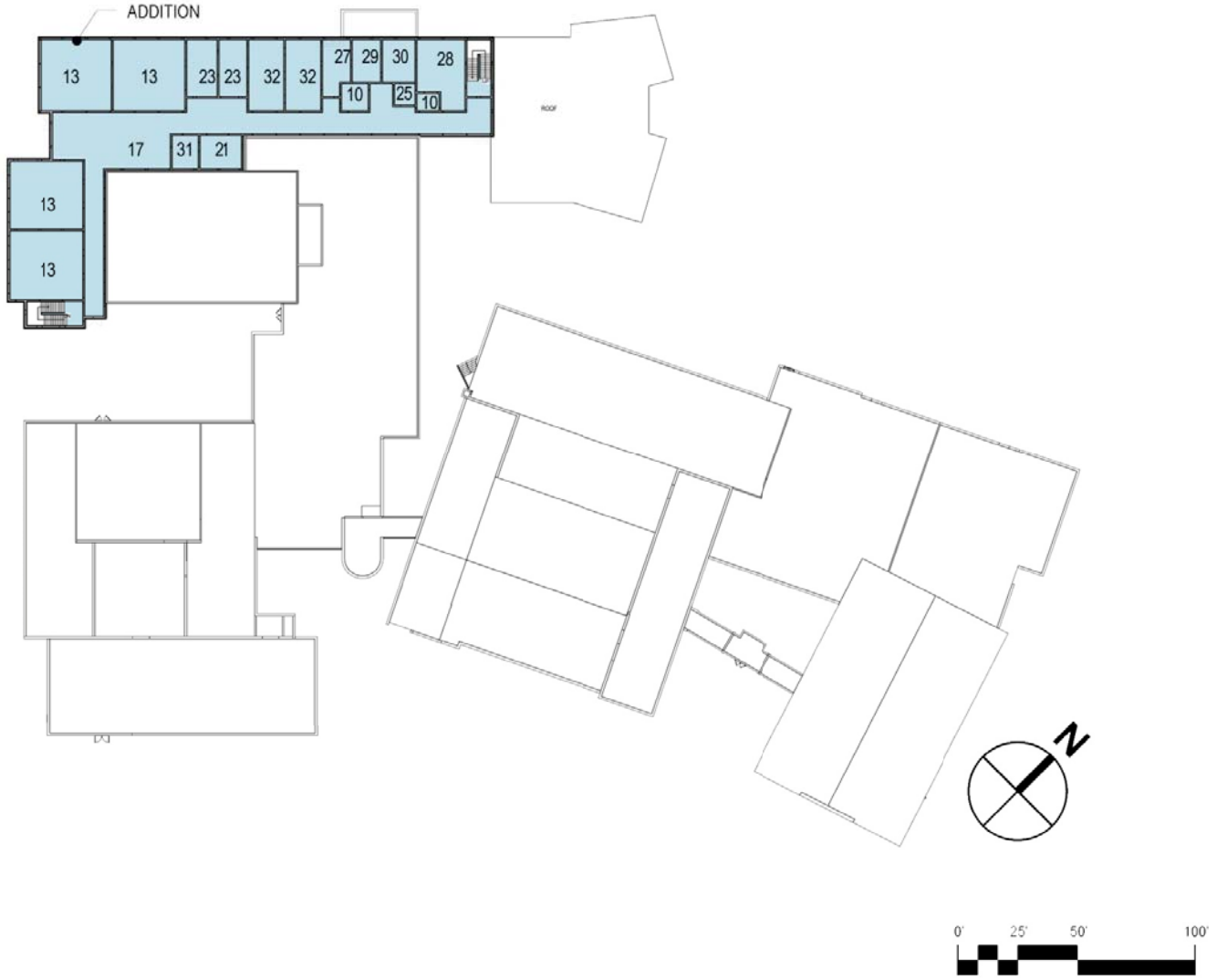
OPTION 2 - 1ST FLOOR PLAN

1. Gymnasium
2. Instructional Media Center
3. Multipurpose
4. Platform
5. Classroom
6. Kitchen
7. Health Suite
8. Administration
9. Support
10. Building Services
11. Music
12. Dual Purpose
13. Classroom (Addition)
14. LFI
15. Art
16. Instrumental Music
17. Break Out
18. S.E. Conference
19. Therapy Support
20. PTA Storage
21. General Storage
22. Testing Conference
23. Toilet
24. Machine Room
25. Elevator
26. Large Instructional Support
29. Staff Office

VI. Program Options and Designs (Continued)

OPTION 2 - 2ND FLOOR PLAN

10. Building Services
13. Classroom (Addition)
17. Break Out
21. General Storage
23. Toilet
25. Elevator
27. Instructional Data Office
28. Training Conference
29. Staff Office
30. Reading/Specialist Office
31. Work Room
32. Small Instructional Support



VI. Program Options and Designs (Continued)

Option 3

This option is a one story addition and connects the existing building at two points providing a looping circulation path through the existing and new addition. The specialty spaces are centralized in the addition and have corridors on all sides serving as buffers for sound transmission. A more usable courtyard for possible outdoor learning is created in this scheme. All renovations in the existing building remain the same in this scheme as in Options 1 & 2.

Pros

- Line of sight at playfields is good.
- Less open space in this option than in Option 1 because this is a one story scheme.
- The symmetry of this addition works well with the existing building.
- Flow through the building is effective. There are two options of travel from one area of the building to another.
- Centrally located specialty spaces with corridor buffers on all sides

Cons

- Some play areas need to be relocated
- Portables would need to be located on the open playfield during construction

Mechanical

Mechanical systems described in Common Elements included for all options

Plumbing

Plumbing systems described in Common Elements included for all options

Electrical

Electrical systems described in Common Elements included for all options.

VI. Program Options and Designs (Continued)

VI. Program Options and Designs (Continued)

OPTION 3 - FLOOR PLAN

1. Gymnasium
2. Instructional Media Center
3. Multipurpose
4. Platform
5. Classroom
6. Kitchen
7. Health Suite
8. Administration
9. Support
10. Building Services
11. Music
12. Dual Purpose
13. Classroom (Addition)
14. LFI
15. Art
16. Instrumental Music
18. S.E. Conference
19. Therapy Support
20. PTA Storage
21. General Storage
22. Testing Conference
23. Toilet
26. Large Instructional Support
27. Instructional Data Office
28. Training Conference
29. Staff Office
30. Reading/Specialist Office
31. Work Room
32. Small Instructional Support

VII. Appendix A – Addition Square Footage Summary

Facility	#	Description	Net Sq. Ft.	Total Net Sq. Ft.
Classrooms				
Kindergarten	**2**	Includes 250 s.f. storage	1300	**2600**
Standard Grades 1-5	**5**	Includes 150 s.f. storage	900	**4500**
LFI Classroom (Special Education)	**1**	Includes 150 s.f. storage, grooming room and prep area	900	**900**
Art	1	Includes 250 s.f. storage	1100	**1100**
Music	1	Includes 250 s.f. storage	1050	**1050**
Instrumental Music Room	1		450	**450**
Dual purpose Room	1	Locate near art and music	1000	**1000**
Support Rooms				
Large Instructional Support Room	1		600	**600**
Small Instructional Support Rooms	2		450	**900**
Special Education Conference Room	1		250	**250**
Therapy/Support Room	1	Repurpose room 31 for storage	250	**250**
Testing/Conference Room	1		150	**150**
Instructional Data Assistant Office	1		250	**250**
Support Staff Office	1		150	**150**
Staff Development Area				
Staff Development Office	1		100	**100**
Reading Specialist Office	1		100	**100**
Training/Conference Room	1		450	**450**

VII. Appendix A – Addition Square Footage Summary (Continued)

Facility	#	Description	Net Sq. Ft.	Total Net Sq. Ft.
Administration				
General Office	1		375	**0**
Workroom	1		300	**0**
Principal's Office	1		250	**0**
Assistant Principal's Office	1		150	**0**
Conference	1		300	**0**
Record Room	1		100	**0**
Telephone Booth	1		50	**0**
Storage	1		100	**0**
Testing Room	1		150	**0**
Toilet Room	1		50	**0**
2nd floor Workroom	1		75	**75**
Building Service Facilities				
General Storage	1	250 sq. ft.	250	**250**
PTA Storage	1		150	**150**
Total	**8**			**15275**

VII. Appendix A – Addition Square Footage Summary (Continued)

Facility	#	Description	Net Sq. Ft	Total Net Sq. Ft.
Design as Add Alternate:				
Multipurpose Room				
Multipurpose Room	1	Consider expansion by 900 s.f.	3200	**3200**
Chair Storage	1		150	**150**
Table Storage	1		150	**150**
Platform	1		450	**450**
Before/After Care Kitchenette	1		30	30
Before/After Care Storage	1		100	100
Kitchen		Consider renovation and expansion		
Serving Area	1		300	**300**
Walk-in Cooler/Freezer	1		155	**155**
Dry Storage	1		192	**192**
Office	1		100	**100**
Toilet Room	1		70	**70**
Preparation Area	1		555	**555**
Compactor/Trash Room	1	Locate further away from serving area	150	**150**
General Storage and Receiving	1		550	**550**
Add-Alternate Total				**6152**
Total including Add Alternate				**21427**

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VII. Appendix B – Educational Specifications

General Planning Considerations

In the general planning of this building, special consideration is to be given to the following comments and instructions:

- The architect is expected to be compliant with all national, state and local fire safety, life safety, and health code regulations and to follow applicable rules of the State Interagency Committee on School Construction.
- The building is to be accessible to the disabled within the meaning of the latest edition of the Americans with Disabilities Act and to conform to all the latest requirements of the Americans with Disabilities Act Accessibility Guidelines (ADAAG) as published by the U.S. Architectural and Transportation Barriers Compliance Board. (The regulation can be found at http://www.access-board.gov/adaag/html/adaag.htm). In addition to the ADAAG, the Maryland Accessibility Code (COMAR.05.02.02) revised in 2002 also is required for public schools. (The regulation can be found at http://mdcodes.umbc.edu/dhcd2/Title05.pdf)
- The facility is to reflect an appealing visual, acoustic, and thermal environment and is to be properly furnished and equipped. Well chosen colors and textures are to be used. Lighting must meet current guidelines and provide adequate levels.
- High quality materials are to be used in the construction.
- The architect should refer to the MCPS Facility Guideline Specifications when noted. The document can be found at: http://www.montgomeryschoolsmd.org/departments/construction/publications/guidelines.shtm
- The first impression of a building is important. The main entrance to the school should have a clear and inviting identity, and the entrance area should be designed and landscaped to emphasize its importance. A covered walkway from the bus loading area to the front door is desirable. The design of the main lobby area needs to convey a feeling of warmth and welcome. The inclusion of a lighted showcase in which children's work can be displayed is recommended.
- The design of the building and grounds must provide for a secure environment for students and staff. Isolated areas should be minimized and natural surveillance encouraged by eliminating visual barriers.
- For security purposes, all doors into classrooms, conference rooms, offices etc. must have a sidelight window with shades.
- Water coolers should be provided throughout the school.
- Every teaching station, support space, and core area must be wired for computer, CCTV, and telephone, along with adequate electrical supply in compliance with Maryland Sate design guidelines for Technology in Schools and the MCPS Office of the Chief Technology Office (OCTO) guidelines. Facilities must be adaptable to accommodate rapid development in high technology and its equipment since educational program and organization in this field are dynamic. Space and power supply must be flexible to meet these changing needs.
- Core spaces such as the cafeteria, gymnasiums, and instructional media center should be easily accessible for community use and secure from the rest of the building after school hours.

VII. Appendix B – Educational Specifications (Continued)

- An MCPS designed alarm system will provide security for this facility. The architect will provide for this system in consultation with the DOC staff.
- Building code requirements call for less than fifty percent of interior corridor space to be used for displaying flammable materials. Display areas can be provided by a 5' x 5' bulletin board per classroom or an equivalent amount of space in a larger area. Please refer to the MCPS Facility Guideline Specifications.
- Students should have ADA compliant access to the play areas from the multipurpose room. Play areas are to be protected from any vehicular traffic. Unobstructed supervision of play areas from one central area is desirable.
- The school is to be air-conditioned except for the gymnasium and kitchen. Careful placement of glass is required to avoid excess heat gain in occupied areas.
- Some windows must be operable in each space in the building. Transmission of radiation through windows into various portions of the plant is to be considered in relation to heating and ventilating and in relation to planning the building for air conditioning. All instructional spaces should have windows, preferably exterior windows. If the design does not permit exterior windows, windows onto corridors should be provided.
- Zoning the plant for heating and air-conditioning should be related to after hours use of various areas such as offices, gymnasium, multipurpose room, and the instructional media center. Appropriate location of parking, corridor barriers, and toilet rooms is necessary for after-hours use. Some classrooms nearby the multipurpose room should be zoned for after hour use as well.
- The architect should refer to MSDE's 2006 Classroom Acoustic Guidelines to address the acoustical qualities for classrooms. In addition, the architect should refer to American National Standard, Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools (ANSI S12.60-2002) for additional information.
- Noise and distracting sounds are to be minimized. In areas such as the multipurpose room and classrooms, which may be used for meetings and adult education, the sound of operating fans for ventilation should not interfere with instruction.
- Adult restrooms should be provided in accordance with the latest code requirements. Adult restrooms in elementary schools will be unisex.
- Spaces that serve no real educational function, such as corridors, should be limited while at the same time assuring an easy to supervise and smooth flow of pupil traffic to and from the instructional media center, multipurpose room, gymnasium, specialized centers, and support rooms.
- Carpeting should be limited to the principal's office, assistant principal's office and conference room in the administration suite and the main reading room of the instructional media center.
- All instructional, resource, or office spaces that students may occupy should be designed with either a sidelight or glass panel in the door and must be able to be supervised from the corridor or an adjacent space. Doors should be provided between classrooms whenever possible, however, expensive folding walls should be carefully considered as they are rarely utilized.

VII. Appendix B – Educational Specifications (Continued)

- The classrooms should be designed to accommodate various size groups. Each classroom should be readily adaptable for group work, various presentation formats, and should have maximum connectivity to outside resources.
- The shape of the classroom and the design of built-in features and storage areas should provide optimum net usable floor area. Elongated rooms and features that protrude into floor area, limiting flexibility, are to be discouraged. Rectangular shaped classrooms are preferred.
- Metal adjustable shelving is to be provided in all building storage closets.
- All plan reviews will be coordinated through the Division of Construction.
- Special consideration must be given to energy conservation including total life cycle costs. The current Maryland State Department of General Service (DGS) requirements will be applied as design criteria. Life cycle cost accounting in accordance with DGS criteria is required.
- Per COMAR 23.03.02: Regulation .29, all school projects that include replacing or upgrading the electrical system should be designed and constructed sot that a designated public shelter area can be fully powered in the event of an emergency.

Description of Facilities

Please refer to the summary of spaces in the front of this document for the square foot requirements for each space described below. Square foot allocations should be considered the standard to be followed, although minor deviations are permitted.

Kindergarten Classroom

- Each room should allow flexibility in creation of activity areas and to provide for individualized instruction through arrangement of the "centers" approach.
- An area should be designated for placement of a 12’ by 15’ area rug over the finished floor.
- A 100 square foot walk-in storage closet and 150 square feet of general storage (casework throughout the classroom) is needed.
- When possible there should be interconnecting interior doors between all kindergarten rooms.
- The computers should not be located next to a whiteboard where magnets might damage the hardware and software. Glare from the windows on the computer screens should be eliminated as much as possible. Security for the computers should be planned in consultation with the DOC. Computer/technology wiring must be in accordance with MSDE/MCPS guidelines.

VII. Appendix B – Educational Specifications (Continued)

- Every classroom must have computer outlets for five student workstations and one teacher workstation. The building information and communications distribution system and other aspects of the building design must comply with the February 2002 revision of the MSDE Maryland Public School Standards for Telecommunications Distribution Systems.
- The main teaching wall layout should be in accordance to MCPS Facilities Guide.
- A sink with a drinking fountain must be provided, with cabinets above and below.
- In a non class-size reduction school, the built-in student wardrobe area must provide 28 individual compartments to store students' belongings. The architect is to refer to the MCPS Facility Guideline Specifications for a typical cubby design. Lockers in the classroom may be considered for the kindergarten classrooms.
- A total of 20 feet of tackboard and 10 feet of magnetic whiteboard should be installed at eye level height for small children, with tack stripping along walls for display of student work.
- Each room must have a toilet room that is accessible from within the room and easily accessible from outside. The toilet room will contain a standard height toilet, a sink with child-height mirror, and soap and towel dispensers that are accessible to small children. The light switch should automatically turn on the vent fan.
- Each classroom should be equipped with window blinds per the MCPS design guidelines.
- Battery operated clocks will be installed.
- All classrooms should be equipped with a handicapped accessible sink with drinking bubbler.
- A full-length mirror should be installed.

Standard Classroom

- Each room must have an open classroom area with moveable furniture.
- 150 square feet of casework storage is needed in the classroom.
- When possible there should be interconnecting interior doors between pairs of classrooms.
- The computers should not be located next to a whiteboard where magnets might damage the hardware and software. Glare from the windows on the computer screens should also be eliminated as much as possible. Security for the computers should be planned in consultation with the MCPS DOC. Computer/technology wiring must be in accordance with DOC/MSDE/OCTO guidelines.
- Every classroom must have computer outlets for 5 student workstations and 1 teacher workstation. The building information and communications distribution system and other aspects of the building design must comply with the latest edition of MSDE Maryland Public School Standards for Telecommunications Distribution System.
- The architect should refer to the MCPS Facility Guideline Specifications for the main teaching wall layout.
- Thirty built-in individual compartments in the wardrobe area for storing student personal property are required. The architect should refer to the MCPS Facility Guideline Specifications for a typical cubby design for grades K-1 and grades 2-5. Lockers in the hallway may be used in place of the classroom cubbies.

VII. Appendix B – Educational Specifications (Continued)

- All classrooms should be equipped with a handicapped accessible sink with drinking bubbler.
- A storage area is needed to hold at least two science kits (approximate 27" x 17" x 12" each) and one math kit in each classroom.
- General storage space must be built in and must accommodate 24 by 36 inch paper and a 4-drawer file cabinet. Each classroom must include 48 linear feet of built-in adjustable shelving.
- A small lockable teacher's wardrobe must be provided, as per MCPS Facility Guideline Specifications.
- Designated shelf space, not near a window, for an aquarium/terrarium with nearby electrical outlet, is desirable.
- Each classroom should be equipped with window blinds. The specifications for the window blinds will be provided by DOC.
- Electrical and data outlets should be provided in the ceiling for a ceiling mounted LCD projector.
- Battery operated clocks will be installed.

Learning for Independence (LFI) Classroom

- The specific requirements are the same as the requirements for standard classroom requirements. Please refer to the preceding section for these requirements.
- Class size is typically no more than ten students however additional cubbies should be provided for flexibility.
- Each classroom or pair of rooms should include a grooming room to accommodate a sink, toilet, shelving, and changing table (NIC).
- Each classroom or pair of rooms should include a preparation area with an adult height sink and refrigerator, counter space, and cabinets, and there should be one stacked washer and dryer in the building that all classes can share.
- Classrooms must be located on the first floor.
- LFI classes are by grade: K/1, 2/3, and 4/5 and should be located near their grade level peers.
- Please see the additional requirements section of this document for additional special education program requirements specific to this school.

Art Room

The art room is to provide space for teaching and creating art, displaying student work and educational aids, and storing supplies and materials. The room should be designed as follows:

- The art room must not be carpeted.
- Both art and music rooms must be located near student restrooms.
- For technology accessibility purposes, the art room is to be considered as a regular classroom with appropriate data, CCTV, modem, and electrical outlets.
- The design of all work, display, and storage areas should create an environment that is functional and easy to clean.
- Lighting should be both natural and artificial and conducive to close work.

VII. Appendix B – Educational Specifications (Continued)

- A door to the outside is desirable.
- Space and electrical outlets for two kilns should be in the farthest corner of the storeroom with proper ventilation.
- Eight duplex electrical outlets are to be provided (where feasible quadruplex outlets may be utilized).

The window wall should have the following:

- Windows that permit views of the surrounding landscape.
- Blinds to permit room darkening.
- Shelves under windows 15" deep.
- Tack board or tack strips above windows if space permits.

The teaching wall should have the following:

- Two 3 foot wide by 7 foot tall, 18" deep, shelf sections for storage of unfinished work.
- Eight-foot long by 4-foot tall whiteboard between two 8-foot sections of 6-foot tall white/tack board with 2 foot tall tack board above the white board. Tack and white boards should be mounted 2 to 4 inches above low shelving.
- Fourteen-inch deep, 24 inch high, shelving under the center of the 16-foot long tack board and white board.
- Wall mounted projection screen with electrical outlet underneath.

The wall near the entrance should have the following:

- Three sinks should be provided. Faucets should be accessible to students and positioned to prevent splashes onto floor.
- One teacher sink (36" high)
- One sink located on a peninsula (30"-32" high). Peninsula is to be no longer than 3 feet.
- One ADA accessible sink (30"-32").
- Sinks and sink area should also include:
- Removable plaster traps
- Closed cabinets below and above
- Conveniently located towel and soap dispensers
- At least 9 feet of counter space (includes 1 ½ feet of counter space on both sides of the sinks) with rounded corners
- Hot and cold water faucets with bubbler
- A 5 to 7 foot open space is needed for drying rack(s) along one wall.
- Approximately 30 smock hooks in 3 feet of staggered tiers, beginning 2 feet from the floor, spaced 4 inches apart, up to 48 inches high. (Optional in rooms where one end of drying rack(s) that measure 44 inches wide and 24 inches deep is accessible, since hooks can be installed on pegboard ends.)

VII. Appendix B – Educational Specifications (Continued)

The wall opposite or adjacent to the teaching station should have the following:

- □ One 6 foot tall, 12 foot long tack board with 24 inch tall, 14 inch deep shelving units below.
- □ Two or three 7 foot tall, 18 inch deep, 36 inch wide shelf sections near kiln area for storage of ceramic work

Kiln Area

- □ The kiln area should be located at the far end of the storeroom and should accommodate two kilns.
- □ Two kiln exhaust hoods and fans (local switch) must be installed. Positive ventilation (using negative pressure) is needed to assure removal of fumes.
- □ Kilns should be 30 inches wide, 30 inches deep and 36 inches tall. Allow an additional 6 inches in depth for opening of the kiln lid.
- □ Electrical characteristics for the kiln are 208 volt, 30 amps, single phase, and 7200 watts. Provide 2-50 amp 250-volt outlets NEMA configuration 6-50R. Provide outlet(s) on wall behind kiln(s).
- □ Kilns may be located in the far end of the storeroom with built-in hood above and metal shelving 12 inches to 18 inches deep on walls adjacent to the kiln area. See notes above for additional kiln information.

Art Storeroom

- □ The storeroom must have a 6-foot wide, 30 inch tall, and 34 inch deep worktable immediately inside the entrance to the storeroom with built-in adjustable shelves below and 14 inch deep wall hung shelving above. This table will accommodate a 30 inch square paper cutter and storage of large art reproductions and papers below, in 3 banks of shelving units 8 inches on center, 20 inches wide (inside width).
- □ One or two 6 foot tall 20 inch wide paper storage shelf section(s), 24 inches deep with shelves 8 inches on center to accommodate 18" x 24" paper.
- □ Seven foot tall open shelving, 18 inches deep, should be provided along remaining walls where space permits. Twelve to fourteen inch deep sections are acceptable for some sections where 18-inch deep shelves won't fit.
- □ Storeroom door is to be lockable, and 2 coat hooks are to be mounted behind the door.

Music Suite

Spatial Needs
Music Room (includes 250 sq. ft. storage)
Instrumental Music Room

- □ The music room and instrumental music room should be located adjacent to each other with a shared storage room.
- □ These rooms should be located near the multipurpose room to allow easy access to the platform.

VII. Appendix B – Educational Specifications (Continued)

- The rooms must be acoustically treated for isolation and reverberation.

Music Room

- The music room should have a clear circular area of at least 20 feet in diameter and access to the music storage room.
- A 150-square foot secure closet area to store instruments, equipment, choral music, and instructional charts is necessary with access from the music room.
- Variable sized shelving must allow for storage of books, records, and small instruments.
- The music room needs a child height sink with a work area and drinking fountain.
- Window blinds and a wall-mounted retractable projection screen are required.
- Approximately 20 feet of white board and 4 feet of tack board must be provided. Continuous tack strips are needed around the room.
- Specific storage and shelving specifications are available through Montgomery County Public School's MCPS Facility Guideline Specifications.
- Eight duplex electrical outlets are to be provided (where feasible, quadruplex outlets may be utilized).
- This room must be acoustically treated.
- Doors into the music room and stage platform must be wide enough to accommodate the passage of a piano.

Instrumental Music Room

- A secure closet area is needed adjacent to the room for large instrument storage.
- A sink and countertop area should be provided for cleaning and repairing musical instruments.
- The Instrumental Music Room must be soundproofed.
- Doors into the instrumental music room must be wide enough to accommodate the passage of a piano.

Dual Purpose Room

- This room should be designed to accommodate both art and music activities in the school but with less detail than the regular art and music rooms.
- Some acoustical treatment should be provided in the room.
- One sink for student use should be provided along with some countertop area.
- No kiln area is needed and less shelving than described in the art room is to be provided.
- The exact details of the design should be discussed with the school staff and community.

VII. Appendix B – Educational Specifications (Continued)

Support Rooms

Spatial Needs
Large Instructional Support Room
Small Instructional Support Room
Special Education Conference Room
Occupational Therapy/Physical Therapy (OT/PT) Room
Testing/Conference Room
Instructional Data Assistant Office
Support Staff Office

Large Instructional Support Room

- Room for a teacher's desk, lockable file cabinet, and assorted sized furniture is desired.
- Every classroom must have computer outlets for two or three student workstations and one teacher workstation. The building information and communications distribution system and other aspects of the building design must comply with the latest edition of MSDE Maryland Public School Standards for Telecommunications Distribution System.
- Approximately 10 to 15 linear feet of magnetic marker board and 10 to 15 linear feet of tack board, both with tack strips and map rails above the boards, should be installed in each classroom. Marker boards should be located so as to reduce glare. Tack strip is needed on all available walls. The architect should refer to the MCPS Facility Guideline Specifications for the main teaching wall layout.
- Each classroom must include a minimum of 50 linear feet of built-in adjustable shelving for books.
- Space for a big book rack should with an incline to display the book open and also for storage beneath for space to lay the books flat should be provided.
- A small lockable teacher's wardrobe must be provided, as per MCPS Facility Guideline Specifications.
- 40 mailboxes should be designed for storage of student work such as folders or notebooks.
- This classroom should be equipped with a handicapped accessible sink with drinking bubbler. Cabinets should be provided above and below the counter area.
- Each classroom should be equipped with window blinds. The specifications for the window blinds will be provided by DOC.
- Each classroom should be equipped with a retractable projection screen (7' x 7'). The projection screen should not be mounted near any emergency lighting tracks. All areas of the screen should be illuminated and readable when the lights are dimmed.
- Electrical and data outlets should be provided in the ceiling for a ceiling mounted LCD projector.
- Battery operated clocks will be installed. The clock should not be mounted behind the projection screen.

VII. Appendix B – Educational Specifications (Continued)

Small Instructional Support Room

- Room for a teacher's desk, lockable file cabinet, and assorted sized furniture is desired.
- Every classroom must have computer outlets for two or three student workstations and one teacher workstation. The building information and communications distribution system and other aspects of the building design must comply with the latest edition of MSDE Maryland Public School Standards for Telecommunications Distribution System.
- Approximately 10 to 15 linear feet of magnetic marker board and 10 to 15 linear feet of tack board, both with tack strips and map rails above the boards, should be installed in each classroom. Marker boards should be located so as to reduce glare. Tack strip is needed on all available walls. The architect should refer to the MCPS Facility Guideline Specifications for the main teaching wall layout.
- Each classroom must include built-in adjustable shelving under the windows.
- A small lockable teacher's wardrobe must be provided, as per MCPS Facility Guideline Specifications.
- This classroom should be equipped with a handicapped accessible sink with drinking bubbler. Cabinets should be provided above and below the counter area.
- Each classroom should be equipped with window blinds. The specifications for the window blinds will be provided by DOC.
- Each classroom should be equipped with a retractable projection screen (7' x 7'). The projection screen should not be mounted near any emergency lighting tracks. All areas of the screen should be illuminated and readable when the lights are dimmed.
- Electrical and data outlets should be provided in the ceiling for a ceiling mounted LCD projector.
- Battery operated clocks will be installed. The clock should not be mounted behind the projection screen.

Special Education Conference Room

- This room requires a whiteboard, tack board, and one bookcase.
- The room may serve as office space and should be wired for access to two computer workstations and should be equipped with a telephone jack.
- The conference room should be carpeted.
- Casework should be provided on one wall with two, two-drawer file cabinets for confidential records, letters forms, etc.

Occupational Therapy/Physical Therapy (OT/PT) Room

- Each room must have whiteboard that is mounted two feet off the floor.
- A tack board, open and closed lockable storage, open shelving, and a lockable teacher wardrobe are required.
- A sink with counter space is required in the OT/PT room.

VII. Appendix B – Educational Specifications (Continued)

- □ Room for a teacher's desk, lockable file cabinet, and assorted sized furniture with adjustable legs should be provided.
- □ The OT/PT rooms should be wired for access to one computer workstation each.
- □ The OT/PT requires a ceiling mounted hook for a swing.
- □ The OT/PT room requires lockable storage with sufficient area to house large gross motor equipment (minimum of 35 square feet) such as therapy balls, scooter boards, walkers, balance beams, ramps, etc.

Testing/Conference Room

- □ School and/or central office staff test individual students or small groups of students. Typical testing includes psychological, diagnostic, vision/hearing, gifted, and makeup testing for required standardized tests. This room also will be used to accommodate post test conferences with teachers and/or parents.
- □ The room should be designed as a secure space for testing materials and should have a counter with lockable cabinets above and below.
- □ This room needs acoustical treatment as well as video, voice, and data outlets.

Instructional Data Assistant Office

- □ This room is required for a data assistant who conducts assessments, updates individual student test scores, and provides remediation of students' skills.
- □ This room houses one computer with printer and card reader and must be lockable and secure.
- □ This room requires some built-in casework with shelves and doors, a small lockable teacher's wardrobe, whiteboards, and video, voice, data outlets, and space for file cabinets.

Support Staff Office

- □ Office space is needed for permanent as well as itinerant support staff (curriculum coordinator, team coordinator, social worker, psychologist, auditory and vision specialists, and psychiatrist).
- □ A teacher's wardrobe should be provided for itinerant staff use.
- □ Video, voice, and data outlets should be provided.

VII. Appendix B – Educational Specifications (Continued)

Multipurpose Room and Platform

Spatial Needs
Multipurpose Room
Platform
Chair Storage
Table Storage

Multipurpose Room

- The multipurpose room should have a ceiling height of 12–14 feet.
- A building service utility closet should be provided near the entrance to the multipurpose room for convenient lunch cleanups.
- Table storage and chair storage must be located adjacent to the multipurpose room.
- Exits from the multipurpose room must be sufficient to allow maximum seating.
- Toilet rooms and an electric water cooler should be near the multipurpose room to allow for public use.
- Audiences need to be able to hear and see presentations from all locations in the room.
- Ventilation equipment noise must not inhibit use of the space for auditorium purposes.
- Acoustical treatment is needed.
- Proper lighting and sound amplification are required.
- Each side of the risers at the multipurpose room floor level should be equipped with CCTV/data/voice/modem/electrical receptacles.
- Lighting, windows, fire alarm box, clock, and ceiling must be protected to prevent damage by balls.
- Outdoor play areas should be accessible from the multipurpose room. Children should not have to cross driveways or parking lots to access the play areas.
- An audio loop system should be provided for hearing impaired students; guidelines are available through the Division of Construction.
- An independent sound system should be provided in the multipurpose room.
- A call button to the main office should be provided.

Platform

- The platform should have a proscenium opening 24 feet wide. The depth is to be 15 feet deep. The platform floor is to be three risers above the multipurpose room floor. A full set of platform curtains is to be provided. An 8'x10' motorized projection screen is to be provided. Platform steps must NOT be carpeted.
- The platform must be accessible to the physically handicapped.
- Each side of the platform should be equipped with CCTV/data/voice/modem/electrical receptacles.

VII. Appendix B – Educational Specifications (Continued)

Chair and Table Storage

- Storage rooms are required for the storing the tables in the multipurpose room and folding chairs.

Food Services

- The kitchen is operated as a "finishing kitchen" and should include an area for dry storage, a manager's workstation, toilet facilities, preparation and serving area, and a receiving area for daily deliveries.
- A sheltered dock is preferred and should be separate from other school receiving.
- Delivery flow path must be clear of preparation area.
- The trash room should be separate from the rest of the building i.e. no common walls.
- The trash room should not be accessed from the kitchen.
- Air conditioning must be available at all times in elementary kitchens, storage, and office.
- Code requirements for lighting, surfaces, and equipment must be met. These requirements are included in the MCPS Facility Guideline Specifications.
- Windows must have screens.
- Receiving door should be 48” wide and must be self-closing with peephole and doorbell to manager’s office.
- An easy to mop, slip resistant quarry tile floor is required. Color of grout should be the same or darker than the color of the floor.
- There should be direct access to both the hallway and the multipurpose room to facilitate one-way circulation through the serving line.
- A minimum 9’ ceiling height is recommended.
- A building service closet with floor type mop basin shall be located outside the kitchen but readily accessible to the kitchen.
- A dedicated circuit is required for the cash register with under the floor conduit for connection to the computer in the manager’s office.

Serving Area

- A 26 ft. long serving line with 3-ft. clearance at each end should be provided.
- The color selection will be approved by Food Services.
- A single door refrigerator and microwave oven on a cart adjacent to the service area is needed.
- A wall clock and tack board should be located on a wall so it is visible from the serving line wall.

Walk in Cooler/Freezer

- A 7' 9" x 8' 8 1/2" cooler is required.
- A 7' 9" x 10’ 8 1/2" freezer with a height of 8' 6" is required.
- A mobile polymer shelving and dunnage is required.

VII. Appendix B – Educational Specifications (Continued)

- A roof top compressor is required.

Dry Storage

- The recommended dimension for the dry storage area is 12’ x 16’.
- A mobile polymer shelving and dunnage is required.
- Adequate ceiling height for top shelf storage should be considered.
- This space should be totally secure and free of roof access ladders or electrical panels.
- Locking cabinets for chemical storage should be provided.

Manager‘s Office

- Visibility to delivery and serving area is required.
- The office should be located away or protected from outside door draft.
- Desk (NIC), file (NIC), telephone, tack board, and LAN access are required.

Toilet Room

- A hand sink with soap and towel dispenser, sanitary napkin disposal, and 3 full-height lockers are required.

Preparation Area

- A roll-in double convection oven is required.
- An oven cart and dolly (2 each) are required.
- A half size range is required.
- A heat removal exhaust hood is required.
- Work tables, one 6 ft. and the other 8 ft. with 2 drawers each, under the table are needed.
- Arlington wire baskets (500 each) and dollies (10 each) are required.
- Hand sink with pedals and soap and towel dispensers that meet the code requirements are needed.
- A three compartment sink, 24” x 24” x 14”, with 24 inch drainboards, is required. Disposal in drainboard with pre rinse spray is required.
- A 6-foot louvered shelf above with hooks is required.
- A mobile warmer to accommodate Arlington baskets is needed.
- Two utility carts are required.

VII. Appendix B – Educational Specifications (Continued)

Administration suite

Spatial Needs
General Office
Workroom
Code Red/Code Blue Command Center
Principal's Office
Assistant Principal's Office
Conference Room
Counselor's Office
Telephone Room
Storage Room
Records Room

- The administration suite must be located with good access from the main entrance of the school and visual oversight of the main entrance and bus drop-off area.
- The suite must be a natural first stop for visitors to the school and must, therefore, have direct corridor access. A security vestibule must be designed so that all visitors must enter the general office to check in before entering the school.
- Spaces need to be arranged for student and visitor flow and for efficient use by office staff.
- The general office is to be treated as the center of the administration suite with direct access to the principal's office, the workroom, and the health suite.
- A coat closet is to be provided for office staff and visitors.
- The Administration suite should be carpeted.
- Sufficient electrical outlets are to be provided (where feasible, quadruplex outlets may be utilized) as well as CCTV receptacle for the general office, principal's, and assistant principal's offices.
- A glass display case should be located in the vestibule of the Administration suite entrance.
- The administration suite should be designed with separate toilet rooms. If the school chooses, one of these toilet rooms may be located in the principal's office.

General Office

- A counter should be provided near the entrance to greet and separate visitors from staff and to provide a place to write.
- Space for two to three staff persons is required behind the counter.
- The general office should be equipped with a staff bulletin board.

VII. Appendix B – Educational Specifications (Continued)

Workroom

- The location of mailboxes should not create congestion by impeding the smooth flow of traffic in the general office and hallways.
- Cabinetry appropriate for storing a variety of office and school supplies should be designed along one wall of the workroom.
- A portion of countertop is to be more than 30 inch wide to accommodate a large paper cutter.
- Space adequate for a large copying machine with necessary electric service and ventilation is required.
- A sink is needed in the workroom.
- There should be direct access to a corridor from the workroom.
- The workroom should be treated acoustically to keep machine and work noises at low levels.

Command Center

- An interior room in the school needs to be designated as the command center for Code Red/Code Blue emergencies. In many schools, the workroom in the administration suite may serve this purpose. The room cannot be on an outside wall.
- The room designated as the command center must have all data and communication equipment including data, cable, phone, and public address (PA) system.
- The PA console should be located in the room that is designated as the command center.
- Window coverings such as mini blinds or roller shades must be provided for all windows and doors to the command center.
- In secondary schools, the security camera monitors should be located in this area.
- The space designated as the Command Center must be large enough to accommodate up to six staff persons.
- Storage space is needed for the Code Red/Code Blue emergency kit.

Principal's Office

- This office should be carpeted.
- This office should be equipped with a tack board and two-shelf adjustable bookcases under the windows. Each shelf must be able to hold a 12 inch notebook upright.
- The office should be directly accessible to the conference room through a connecting door.
- This office should have good visible access of the main entrance and to the bus drop-off area.

Assistant Principal's Office

- This office should be carpeted.
- This office should be equipped with a tack board and two-shelf adjustable bookcases under the windows. Each shelf must be able to hold a 12 inch notebook upright

VII. Appendix B – Educational Specifications (Continued)

- □ This office should have good visible access to the main entrance and bus drop-off.

Conference Room

- □ The conference room should be carpeted.
- □ The conference room is to have a whiteboard, a tack board, and one bookcase.
- □ The conference room should be equipped with a telephone jack.
- □ Casework should be provided on one wall with two, two-drawer file cabinets for confidential records, letters forms, etc.

Counselor's Office

- □ This office should be carpeted.
- □ The counselor's office should be easily accessible from the classrooms and near, but not a part of, the administration suite and should have a window.
- □ This office needs a whiteboard, tackboard, telephone, and bookshelves.

Telephone Booth

- □ A small room where a teacher can talk privately on the telephone is required. (The room needs a door with a window, or a "phone in use" light.)
- □ This room should have a small built in countertop and room for one chair.
- □ This room should be carpeted.

Storage and Records Rooms

- □ Two lockable rooms are needed for storage of office supplies and student records.
- □ The records room needs space for lockable file cabinets.

2nd Floor Workroom

- □ This room requires appropriate electrical wiring and ventilation to house a copier for staff use.
- □ This room requires a work counter and cabinets under and over the counter for storing supplies.
- □ This room should include a telephone jack.

VII. Appendix B – Educational Specifications (Continued)

Staff Development Area

Spatial Needs
Staff Development Office
Reading Specialist Office
Training/Conference Room

This area should be designed as a suite with the offices adjacent to or in close proximity to the shared conference room.

Staff Development Office

- The staff development area should be located near the classrooms.
- The office should include one workstation.
- This office needs a whiteboard, tack board, closet, and video, voice, and data outlets.

Reading Specialist Office

- The staff development area should be located near the classrooms.
- The office should include one workstation.
- This office needs a whiteboard, tack board, closet, and video, voice, and data outlets.

Training/Conference Room

- This room will be used for staff training needs.
- This room should include ample shelving for training materials.
- The room should be able to comfortably accommodate up to 12 participants seated around a conference table.
- A whiteboard and tack board should be installed.
- The wiring for an overhead LCD projector should be provided.

VII. Appendix B – Educational Specifications (Continued)

Building Service Facilities

Spatial needs
Building Service Office
Locker/Shower area
Compactor/Trash Room
Recycling Room
General Storage & Receiving Area
General Storage
Building Service Outdoor Storage
Building Service Closets

Building Service Office

- The entire building services area should be located adjacent to the general receiving area.
- The office should be designed as a general office that can accommodate two staff members with two desks and appropriate wiring for computers, phones, etc.

Locker/Shower Area

- A locker area must be located near the receiving area.
- Six full-size lockers should be provided in the locker area.
- The locker area should be designed with an enclosed toilet room and shower room for building service staff use.
- An ENERGY STAR stackable washer and dryer is required in this area.

Compactor/Can Wash/Trash Room

- This room needs to be completely separate from the kitchen spaces with no common walls.
- Trash trucks must have access to this room.
- The room should be heated and have adequate interior lighting, floor drainage, and easily cleanable surfaces.
- Hot and cold water should be available for flushing and cleaning.
- The room should be designed to be pest free and well ventilated.
- Floors should be sloped so that wash down stays within the room and goes down the drain.
- The compactors need to be installed with enough clearance away from the wall to permit staff to access the equipment from all sides.
- A roll up door for trash transfer to trucks, steam cleaning equipment, and trash collection containers are needed.
- The room should be designed with a ramp to allow trashcans to be rolled to the dock.

VII. Appendix B – Educational Specifications (Continued)

General Storage and Receiving Area

- The receiving area should be enclosed, floor to ceiling, with a chain link fence.
- Flexible shelving is required but should not occupy more than one third of the area.
- This area must be secured.
- Good lighting and easy access to materials being stored are required.
- Electrical outlets, upgraded lighting and ventilation must be provided in this area.

General Storage

- Flexible shelving to accommodate books, teaching aids, large size (24" x 36") paper, and other instructional supplies is required.
- Good lighting and easy access to materials being stored are required.
- Electrical outlets, upgraded lighting and ventilation must be provided in all large storage rooms for future flexibility.

Building Service Outdoor Storage Room

- Outdoor storage is to be near the service area and is to be suitable for heavy mowing, snow removal, and other outdoor equipment.
- The dimensions of the outdoor storage area must be able to accommodate two tractors side by side. (one tractor is approximately 9’ long by 7.5’ wide and a second smaller tractor) and other equipment.
- A rolling garage style door and a regular door must be provided.
- A ramped and paved driveway is required for the tractor so that it can access the sidewalk and driveways of the school during snow removal.
- Electrical service and lighting inside must be provided. Access to the light switches must be available at both entrances.
- Proper ventilation for storage of gasoline is required.

Building Service Closets

- At a minimum, there should be a building service closet for each 19,000 gross square of the facility. In addition, there should be a building service closet on each floor and each wing of the facility.
- The closets should be a minimum of 25 sq. ft.
- The building service closet must accommodate a minimum of one utility cart.
- The closet requires shelving for cleaning supplies and a mop/broom holder is required.
- The closet requires a floor mop sink with hot and cold running water and a floor drain.
- Where feasible, closet doors should swing outward in order to maximize the storage area and provide easier access to items within the closets.

VII. Appendix B – Educational Specifications (Continued)

Site Requirements

- The architect should consider the architecture of the neighborhood in designing the building
- The site should be designed to provide a clear view of all play areas and to facilitate supervision from one location.
- Protective fencing may need to be provided near heavily wooded areas, busy streets, steep hills, parking lots and turnaround areas.
- Metal drains/grates should not be located in the playing fields, paved play areas and mulched playground equipment areas.
- Paved areas and fields must be as level as possible. Water should not collect on paved areas or in mulched areas. The architect should consider the architecture of the neighborhood in designing the building.
- The design should retain as many trees as possible in order to buffer the school and the playing fields.
- Pedestrian access must be provided from the surrounding neighborhoods.
- An unimproved area on-site should be designated to serve as an environmental study area in the future.
- A covered area for students in the bus loading area should be provided.
- Space for buses to load at one time is needed. The number of buses will be reviewed during the design phase in consultation with the Department of Transportation.
- Bike racks should be provided near the building.
- Playground equipment areas should not be located at the bottom of hills unless a provision is made to channel water away from the equipment areas.

Driveway and Service Drive

- The architect/engineer should refer to the MCPS Facility Guideline Specifications when designing the driveway, bus loop, service drives, etc.
- Bus traffic should be separated from car traffic at all times, when possible. Bus loading zones should be able to accommodate the entire student body.
- A student drop off area should be provided and must be separate from the bus loop area.
- All driveways must be arranged so that children do not cross them to get to the play areas.
- Care for safety of students must be exercised in developing the driveways including use of safety rails in the bus loading area.
- Pedestrian access to the school facilities should be designed to make the best use of community right-of-ways and avoid crossing of loading zone areas.
- The site must comply with the most current ADA or COMAR regulations, whichever is most stringent.
- Site access must be provided to comply with fire protection and storm water management.
- Driveway aprons are to be perpendicular to the centerline of the street; and if there is an intersecting street on the opposite side from the proposed driveways, the driveway apron should line up with the intersecting street.
- Driveways should be located so that vehicle headlights do not project into adjacent homes.

VII. Appendix B – Educational Specifications (Continued)

- A service drive is required to service the kitchen, boiler room, and general delivery area. The architect should refer to the MCPS Facilities Guide.
- Site access must be provided to comply with fire protection and storm water management regulations.

Parking

- Ideally, a minimum of 80 parking spaces should be designed initially for a school with regular staffing allocations.
- The parking area should be designed to maximize safety and minimize speed.
- Adequate lighting should be provided.
- Parking area should have two exits.
- Guardrails or bollards are to be installed to protect fields and play areas.

Landscaping

- Planting should include screen planting and other planting needed for erosion control.
- Existing plant stock, if on site, is to be evaluated for reuse and protected accordingly.
- Landscaping to support energy conservation and to relate the building to the site with aesthetic appeal must be included.
- Consideration should be given to safety and security when selecting plant materials.
- Provision for outdoor watering must be included.
- The landscaping plan should include areas for outdoors environmental education programs.

Physical Education Site Requirements

The items described below are for a school that meets the preferred site size of 12 usable acres. At schools with smaller sites, the architect is to work with MCPS staff, including the Physical Education Curriculum Coordinator, Safety Director, and school staff to determine layout of the play areas. The outdoor physical educational instructional space should not be compromised for playground equipment.

Softball Fields

- Two softball fields should be provided with the following design requirements:
- 250' radius, with a soccer field superimposed should be provided if possible. See below for the soccer field dimensions.
- The site size will determine the number and dimension of the softball fields.
- Softball fields should have metal benches protected by fencing for each team's use.
- The fencing and benches should not interfere with soccer field usage.

VII. Appendix B – Educational Specifications (Continued)

- The softball backstops (2) shall be in diagonal corners of the field or in corners on the same side. See the diagram in the MCPS Facilities Guideline Specifications.
- Softball infields are not skinned for elementary schools. However, one field may be skinned if it does not significantly impact the soccer playing area.

Soccer

- The site size will determine the size of the soccer fields. The elementary school size soccer field is 150'x240' however the minimum size field should be 105' x 180'.
- No permanent goals or temporary goals should be installed on the soccer fields.

Paved Play Areas

- Two paved areas, 80' x 100' should be provided if the site permits.
- If located adjacent to one another, a grassy strip of at least 20' should be between the two paved areas.
- One area should have four basketball goals with appropriate striping (see diagram in the MCPS Facility Guideline Specification).
- A second area, designated for primary use, shall be striped according to drawings provided in the MCPS Facility Guideline Specification. On small sites, this pave area should be fenced for use by Grade Kindergarten students.

Kindergarten Paved Play Area

- A third paved area, at least 40'x 60' but preferably 80' x 100', is desired, is needed for the Kindergarten students.
- This area needs to be located adjacent to the Kindergarten playground (mulched) area and close to the other paved play areas.
- This area requires a fence around it or adequate separation from the other paved play areas.
- The area will be striped according to drawings provided in the Facility Guideline Specification.

Playground Equipment Areas (mulched areas)

- One or two areas shall be provided near the playing fields and large paved play area for playground equipment. Each area should be approximately 40'x40'. The size and shape of the play area will be developed during the design process in consultation with MCPS staff.
- The area shall be level, bare ground, unseeded, and no sod. MCPS will provide equipment dimensions for these areas.
- An underground drainage system must be provided.

VII. Appendix B – Educational Specifications (Continued)

- The loose-fill surfacing material (engineered wood fiber) must meet ADA requirements. A border must be provided to contain the filler. The surfacing materials must meet or exceed safety specifications for shock absorbing qualities as outlined by US CPSC.

Kindergarten Play Area (mulched area)

- A mulched kindergarten play area of 40' x 60' should be located adjacent to the kindergarten paved play area described in the physical education section for playground equipment. The size and shape of the play area will be developed during the design process in consultation with MCPS staff.
- The area shall be level bare ground, unseeded, and no sod. MCPS will provide equipment dimensions for this area.
- Protective fencing should enclose the area.
- An underground drainage system must be provided.
- The loose-fill surfacing material (engineered wood fiber) must meet ADA requirements. A border must be provided to contain the filler. The surfacing materials must meet or exceed safety specifications for shock absorbing qualities as outlined by US CPSC.

Additional Program Requirements for Woodlin Elementary School

- The design team should be aware that the building will be modernized in the future.
- If there is major site work on this project, the design team should review how the arrival and drop off of disabled students are accommodated to meet current accessibility requirements.
- The architect should assess the feasibility of adding grooming rooms to the existing LFI classrooms (rooms 10, 16, 26, 35). If the bathroom in room 10 is modified, it should be designed in such a way that it no longer connects to the computer lab next door.
- The current Art room (room 20) should be repurposed into a standard classroom at the completion of the addition.
- Depending on the location of the addition, new security gates to isolate the Gym and Multipurpose Room for after hours use are desirable.
- If there will be a new secondary entrance/exit point for students, the Assistant Principal's office may relocate to provide supervision.
- It is desirable to provide a security vestibule at the main entrance and rework the main office so that the workroom and file room are contiguous with the rest of the Administration suite.
- It is desirable to widen the entrance to the parking lot. This school currently has about 80 staff and only 45 parking spaces.
- There are conflicts between parked cars and busses because there is no dedicated bus loop.
- No changes are proposed for the Woodlin Child Care building.

VII. Appendix B – Educational Specifications (Continued)

- The Instructional Data Assistant/interventions room 27 should be repurposed as a general storage closet at the completion of the addition.
- It is desirable to add a connecting door between the Principal's office and conference room.
- The current Staff Developer's office/pull-out room 28 should be repurposed as another general support staff office at the completion of the addition.
- The current Reading Specialist's room 21 should be repurposed as a third Small Instructional support room at the completion of the addition.
- The current Therapy/Support room 31 should be repurposed as storage at the completion of the addition.
- It is desirable to convert rooms 16, 17 and 18 into 2 Kindergarten classrooms and replace these standard classrooms in the addition.