May 3, 2017

Dear Dr. Allie, Potomac Elementary School Faculty, Parent Teacher Association, and Members of the Community:

Thank you for your continued participation in the design process for the revitalization and expansion of Potomac Elementary School. Collectively, you have raised many perspectives and ideas that we have considered as a part of this project, and we look forward to your continued engagement in this process going forward.

During the project design process for the revitalization/expansion of Potomac Elementary School, the Board of Education and superintendent of schools requested further analysis of the feasibility of conducting the project construction with students on-site at Potomac Elementary School rather than using the Radnor Holding Center. Following extensive analysis, I believe that relocating students to the Radnor Holding Center facility remains the best option for this school construction project.

I have based this decision on the evaluation of key factors, including but not limited to:

- Student safety and security,
- Cost,
- Operational impact, and
- Beneficial design for the long term use of the school.

First and foremost, our analysis shows that relocating students to the Radnor Holding Center for the 18-month period of constructing the new Potomac Elementary School enables us to best ensure the safety and security of our students. This factor, above all others, is the one that figures most prominently in our decision. In addition, there are significant benefits related to the operational impact, cost, and ultimate school design that come from conducting the construction project with our students off-site.

Additionally, we are working to mitigate the concerns raised about student transportation to the Radnor Holding Center during peak traffic rush hours. As a part of our project analysis, we have determined that additional buses should be added to support the transportation for all holding facilities, not just Radnor, to allow for flexible bell schedules at the holding facilities to minimize travel time for students. This step will significantly reduce the transportation impact for this construction project and others by allowing us to tailor the bell times for holding facilities to work with the specific factors of each construction project and each school going forward.

Again, I want to thank you for your continued participation and involvement in this major capital construction project. Based on this decision to relocate students to the Radnor Holding Center during school construction, our staff in the Department of Facilities Management will now proceed with preparing preliminary designs for the new Potomac Elementary School Revitalization/Expansion Project. Our next steps will include an additional community meeting at Potomac Elementary School.

Office of the Chief Operating Officer
850 Hungerford Drive, Room 149 • Rockville, Maryland 20850 • 301-279-3626
to review the conceptual design elements of this approach that utilizes the Radnor Holding Center. Staff will then present preliminary plans to the Board of Education at its June 2017 meeting.

If the project stays on the current anticipated schedule, Potomac Elementary School would move to the Radnor Holding Center beginning the 2018–2019 school year. Each time we move a school into a holding center, our practice is to inspect the holding center facility to identify any repairs or enhancements that are necessary. We also work with the principal to identify any facility adjustments that may be needed to meet the particular operational needs of each school. As the project planning progresses, we will initiate these processes, likely spring 2018, to prepare the Radnor Holding Center for Potomac Elementary School.

The enclosure provides additional detailed information on our analysis of the Potomac Elementary School Revitalization/Expansion Project and the option of construction with students on-site. This analysis includes key elements of the project and site; the project history; review of concepts; discussion of the safety, cost, design, and operational impacts of the on-site versus off-site analysis that we have conducted; and a review of possible alternative sites.

I know this has been an arduous process at times, and I very much appreciate your patience as we have worked to conduct a comprehensive review and analysis of all options available. If you have any questions about our work on this project, please do not hesitate to reach out to me.

Thank you again and have a great rest of the school year.

Sincerely,

Andrew M. Zuckerman, Ed.D.
Chief Operating Officer

AMZ:em

Copy to:
Members of the Board of Education
Dr. Smith
Dr. Navarro
Dr. Statham
Dr. Johnson
Mr. Song
Mr. Ikheloa
Potomac Elementary School Revitalization/Expansion Project
Comprehensive Analysis

This analysis is presented in three sections:

I. **Background**, including overview of project elements, project history, and construction phasing.
II. **Concept Analysis**, including review of construction with students off-site and on-site according to the factors of safety and security, operational impact, building design, and cost.
III. **Alternative Sites**, which reviews other sites that have been evaluated or suggested during the multi-year project process.

I. **BACKGROUND**

A. **Overview of Project Elements**

1. **Educational Specifications/Capacity**
The current program capacity of Potomac Elementary School is 425, with an enrollment of 432 students in the 2016–2017 school year. The feasibility study for the project included a program capacity of 548 students which is significantly higher than the 6-year projected enrollment that is currently projected to remain at the present level of 432 students.

The project plan includes a core capacity of 740 and finished classroom capacity of 450. The project design plans will include a shell space large enough for an additional eight classrooms. If fully built out, the shell space would provide classroom space for enrollment up to 650 students.

The enrollment projections, as well as development in the surrounding area, will continue to be monitored as the project design and planning continues. Should additional classrooms be required, up to two additional classrooms can be implemented during the design or construction phases of the project.

2. **Environmental Site Constraints**
During the design process for all projects within Montgomery County, several environmental factors must be assessed prior to approving development of a property. Site specific environmental features, such as forested areas and water or stream features, are evaluated to ensure construction-related impacts are minimized or avoided entirely. The site of Potomac Elementary School has several unique environmental features that will limit areas of development and/or require additional costs to mitigate or offset potential impacts. These areas are outlined within an approved Natural Resource Inventory/Forest Stand Delineation report prepared by an environmental consultant.

As outlined within this report, the site is bisected, front to back, by existing underground storm water infrastructure. The purpose of this infrastructure is to convey water from a wetland/stream located on one side of the site to an area off-site. While paved features can be constructed above this infrastructure, the physical building cannot.

In addition to this infrastructure, it is a requirement to identify buffer zones which also impact development areas of the site. The stream buffer associated with this site consists of a 100 foot area of avoidance that was approved by the Maryland-National Capital Park and Planning Commission. The Montgomery County Geographic Information Systems (GIS) mapping of this area currently denotes a
large area near the center of the site, adjacent to the existing softball field, that will be impacted by these environmental regulations.

The Potomac Elementary School site also includes a mature stand of trees located at the rear of the site. While this stand does not constitute a protected forest, the removal of trees will require replacement in kind.

These environmental considerations constrain the location and amount of construction that can be conducted in the rear portion of the site that is not occupied by the existing school.

3. Existing Right-of-Way
A right-of-way from the adjacent Chapel Road was initially established as a master planned roadway; however, large portions of this area were subsequently identified as a wetland and denoted as such by Montgomery County GIS mapping. At this point, to receive development approval for a roadway in this area, an entity would have to prove that this entry point is the only way to access the site and that use cannot be avoided. Both the U.S. Army Corps of Engineers, as well as the Maryland Department of the Environment, would have to certify that use of the roadway cannot be avoided. This proof and certification is highly unlikely for this particular site. Therefore, utilizing this area as a roadway or as a temporary access point is not considered feasible.

4. Radnor Holding Center Facility
Radnor Holding Center is located at 7000 Radnor Road, in Bethesda. The original school building constructed on this site was built around 1951. There were two additions constructed, one around 1954 and one around 1957. The existing school structure is 36,663 gross square feet. Radnor Holding Center is situated on an 8.99 acre property. The site is bounded to the west and north by single family homes, to the east by Radnor Road, and to the south by Kenwood Golf and Country Club.

The main school building has a capacity of 270 students. Twenty-three relocatable classrooms located to the south of the building help provide additional classroom space for enrollment exceeding 270 students. Most recently, Radnor Holding Center was the holding facility for Wood Acres Elementary School which had an enrollment of 662 students in the full school year that it was in the Radnor Holding Center facility.

The site is accessed from Radnor Road, where there are three existing connections to the right-of-way. These connections serve the bus loop and two parking areas. The northern parking area also serves as the loading area and student drop-off as required.

The site contains two hard surface play areas and one soft surface play area. The hard surface play area to the west of the building is for general use and is adjacent to the soft surface play area. It is approximately level with the rear addition finished floor. The second hard surface play area is to the south of the building and is adjacent to the softball field and backstop.

The existing facility is single story arranged in a pinwheel fashion with three wings radiating outward from the main entrance. Each of the three wings was constructed separately over the course of approximately 10 years. The main entrance is located near the center of the structure along its northeastern elevation facing Radnor Road.
B. Project History

The Potomac Elementary School Revitalization/Expansion Project was identified in an early Facilities Assessment and Criteria Testing (FACT) process as a priority and originally scheduled within the Fiscal Year 2000 Capital Improvements Program Master Plan with a 2011 completion date. During the time period between when the project was first identified as a priority and when it received funding for a 2019 opening date, staff in the Department of Facilities Management (DFM) have performed several studies to review this particular project.

1. 2000 Feasibility Study for an Addition with Master Plan of Modernization

The Feasibility Study Team was asked to assess options for an addition, as well as options that would modernize the building to align with updated educational specifications and standards, all on the existing site of Potomac Elementary School. The purpose of this feasibility study was to assure the classroom addition could be properly integrated with a future modernization. To this end, a number of options were reviewed for the projects.

After careful evaluation, it became clear that the existing building and site have a number of major difficulties:

1. The present site only has one entry/exit point for both cars and buses. This arrangement necessitates combining cars and buses, as well as requiring students to cross asphalt to enter and exit the school.
2. A short street frontage along River Road makes separate car and bus entry points with sufficient separation difficult.
3. The existing school is located immediately adjacent to River Road, making the addition of a curb cut impossible.
4. The design and arrangement of additions to the school over the years, the introduction of an open plan design in the 1970s, and subsequent fixed-wall modifications in the 1980s have produced a school of windowless classrooms connected by a maze of corridors.
5. The mechanical and electrical systems are outdated and will need to be fully replaced.

It ultimately was recommended that the modernization consist of the removal of the existing school (except for the gymnasium) and the construction of a new school on the site in such a way as to allow for separate bus and parent drop-off areas. The results of the study concluded that a new school should be designed to meet the current educational specifications and to foster an environment of collegiality and security. A two-story classroom wing was recommended due to the limited site area and the concept of a courtyard building plan.

2. 2013 Feasibility Study for Modernization

The purpose of this feasibility study was to explore revitalization and expansion options to accommodate the educational specification requirements for Potomac Elementary School.

The existing school was evaluated by a design team of architects and engineers to determine modifications required to modernize the school to comply with the educational specification requirements and the summary of space requirements.

The study process included the following factors and input:

- Consensus workshops with the feasibility study participants and Montgomery County Public Schools (MCPS) staff (workshops consisting of seven meetings with 78 attendees);
• Evaluation of 11 different concepts and option refinements;
• Analysis of the existing physical plant;
• Review of the existing building infrastructure;
• Analysis of the educational specifications and summary of space requirements provided by MCPS; and
• Research conducted by the design team.

The final study presented four options based on input from the feasibility study participants. All four options met the site and programmatic requirements for the full revitalization/expansion of the building. All options share common site and building elements. Below is an overview of the concepts explored:

• Options 1, 2, and 3 considered the re-use of the existing Potomac Elementary School site on River Road. These options would require the use of the Radnor Holding Center during the revitalization/expansion of the school.
• Options 1 and 2 achieve revitalization/expansion by replacing the existing building and providing a new school building at the same location.
• Option 3 fully renovates approximately half of the existing structure and replaces the other half with new construction.
• Option 4 explored the use of the Brickyard Road site, a Board of Education-owned property designated for future school use. This option would allow the school to remain at River Road while a new school is constructed at the Brickyard Road site. For the purposes of this study, the workshop attendees’ preferred option from the River Road site was used as the concept for the Brickyard Road site.

During this feasibility study process, the Brickyard Road site was not identified as a preferred option. It is a larger site and would be more suited for use as a middle school site or as a colocation site for multiple facilities. At the time, also both the River Road and Brickyard Road communities preferred the existing status of both sites rather than a relocation. It was determined that the Potomac Elementary School site on River Road was a preferred elementary school site, and that additional long-range planning would be needed to determine the best use or mix of uses for the Brickyard Road site.

The feasibility study participants recommended Option 1 as the preferred option for the revitalization/expansion of Potomac Elementary School. The recommendation was consistent with MCPS standards, program requirements, and the interests and concerns of the principal, school staff, the Parent Teacher Association (PTA), and the community as represented by the feasibility study participants.

Option 1 achieves revitalization/expansion by demolishing the existing building and providing a new school building in the location of the existing building. All of the site and building elements from the educational specifications are included in this option. All new infrastructure and systems will be designed to meet MCPS standards, including the Heating, Ventilation, and Air Conditioning (HVAC), life safety, fire protection, electrical, lighting, and data and communication systems. The modernized facility will comply with accessibility codes.
3. 2016 Schematic Design Process
The schematic design process commenced in December 2016, and consisted of four work sessions. The intent of schematic meetings is to begin reviewing the previous feasibility study information as well as to discuss changes associated with the educational specifications, which include programmatic and capacity changes.

Leading up to and throughout this phase of the process, staff from DFM were in regular and frequent communication with the leadership of both the school and the parent community. In fall 2016, prior to the initial design meetings, this communication included:
- Regular communication between the principal and PTA president beginning in September 2016;
- Communication from DFM senior staff directly with the PTA leadership regarding the design process, upcoming dates, and project elements beginning in November 2016;
- Addition of a tab on the school’s website for updated construction information; and
- Inclusion of construction date and project information in both the Principal’s Post newsletter and Connect-ED messages to the school community.

Date selection for the community meetings began in November 2016, and meeting communication included:
- Multiple e-mail communications with the school and parent community leadership; and
- Mailing letters to adjacent homeowners, posting signage on school property, and providing parent notification by means of school Connect-ED messages.

The four community meetings were held December 19, 2016; January 18 and 24, 2017; and February 10, 2017. Concurrent with these community meetings, additional communication included:
- Multiple e-mail communications responding to specific questions from PTA leadership, senior DFM staff, and the chief operating officer;
- A meeting with the elementary director of school support and improvement (DSSI) in the Office of School Support and Improvement (OSSI), senior DFM staff, the principal, and PTA leadership; and
- A meeting with the DSSI, principal, PTA leadership, the chief operating officer, senior DFM staff, Board of Education member Rebecca Smendrowski, and Board of Education chief of staff.

C. Construction Phasing
As part of the schematic design process, staff was asked to analyze the feasibility of conceptual options to construct the new Potomac Elementary School with students off-site at Radnor Holding Center and with students on-site during the project. This section outlines the phasing and processes for construction that would be needed to implement both concepts.

1. Students Off-site at Radnor Holding Center
To construct the new facility with students off-site at Radnor Holding Center, the project would demolish the old facility then construct the new facility in generally the same area of the site as the existing building. The total process would anticipate taking 18 months.
2. Students On-site
To construct the new facility with students on-site, construction would take place in two primary phases. First, the new facility would be constructed at the rear of the site. Additional access on the side of the building would be created to allow site entry for construction vehicles to access the rear of the site and pass by the building without mingling with school traffic. To provide this access, two existing relocatable classrooms would have to be removed. The first phase for constructing the new school would anticipate taking 18 months.

Once the new facility is completed, school operations would move to the new facility. The second phase of construction would focus on the front of the site and begin with demolition of the old facility. Site work to complete the playing fields, parking, and other site elements would then continue. The second phase of demolition and site work would anticipate taking 9–12 months.

The two phases together would create an anticipated total duration of construction with students on-site of 24–28 months.

II. CONCEPT ANALYSIS
For the purposes of this analysis to determine the relative feasibility of constructing the facility with students on- or off-site, two primary conceptual designs were developed. While there were two concepts discussed for construction with students off-site, the primary difference related to the preservation of the old gymnasium, and the concept that preserved the current gymnasium was generally not preferred. This discussion refers to the major elements of the preferred concept with students off-site (which does not preserve the gymnasium) and the major elements of the concept with students on-site.

1. Safety and Security
The primary objective during a school construction project is to maintain the safety and security of students and staff while minimizing disruptions to daily instruction. The construction process often complicates the efforts of school administrators and staff to focus on protecting and educating students with the introduction of contractors to the site and new hazards associated with the changing school environment.

Typically, elementary school revitalization/expansion projects are constructed while students are housed in holding facilities which allows contractors to utilize the entire school site while constructing the new school. While addition projects and high school revitalization projects are often implemented with students on-site, large-scale elementary school projects present different challenges due to the generally smaller site size, the age of the students on the site, and the unique programmatic and process requirements of elementary schools relative to secondary schools.

For Potomac Elementary School, keeping students on-site means that the site will have to accommodate the existing school and all staff, students, and parents; the footprint of the new school; the requirement for contractor parking; and the requirement for equipment and material staging. These site area requirements will compete for space with the existing school operations that include bus and car lanes, staff parking, and recess. The site size limits the ability to create space for all of these functions, and the safe implementation of these school operations each day requires full separation from other construction activities.
Successful implement of the on-site construction option at Potomac Elementary School would require a compromise of the typical elementary school safety and security protocol. Elementary school site guidelines call for students to have the ability to access school property for the outdoor physical education program, recess, and emergency evacuation procedures without crossing an internal vehicular roadway. At Potomac Elementary School, construction with students on-site will not allow enough space to accommodate these purposes, and students would have to cross on-site vehicular roadways and leave school property for emergency evacuation.

Another challenge of construction with students on-site would be to develop and implement a well-vetted safety plan that would ensure close supervision of over 400 students and restrict any overlap between students and the significant number of contractors that are navigating the site to perform their construction activities.

In addition to the contractors themselves, the presence of students on-site would significantly impede the key functions of construction such as crane operations, vehicular traffic, and earth-moving activities. The small site size will complicate the ability to sufficiently separate these functions to ensure the students and staff do not accidentally intersect with these dangerous construction activities.

Construction sites are inherently hazardous. The natural by-product of the construction functions outlined above includes aspects such as:

- Dust and debris,
- Abatement of hazardous materials (asbestos, PCB chalk, etc.),
- Diesel exhaust,
- Noise,
- Falling equipment and materials,
- Vehicular hazards (vehicles, construction equipment, etc.), and
- Disruption of emergency management procedures or obstructed emergency exits.

While many of these aspects can be coordinated to ensure safety with smaller projects, larger sites, or older children, major construction still presents environmental disturbances and challenges for school operations. Given the exacerbating factors of site size, access, and age of students at Potomac Elementary School, it is our assessment that the safety and security of students, families, and staff would be compromised with students on-site during construction, and that a safe school environment during the construction phase could best be assured at the Radnor Holding Center.

2. Impact on School Operations

While the size and location of the Radnor Holding Center facility present some challenges for school operations primarily in the area of transportation, Radnor Holding Center has successfully accommodated elementary schools with much larger enrollment than Potomac Elementary School. MCPS acknowledges that it is inconvenient for many families to have their elementary school in a holding facility rather than the immediate neighborhood school; however, these challenges can be managed within the Radnor Holding Center site and are outweighed by the impact of operating an elementary school within major construction. In addition, MCPS plans to implement a transportation plan for all holding facilities that will minimize the impact of changing bell times as a result of major construction.

The following school operations would be negatively impacted by construction at Potomac Elementary School with students on-site:
The school would not have available playing fields or outdoor space to use during the 24–28 month period of on-site construction. During the last 9–12 months, some hard surface play space could be available, but no soft surface play space would exist.

If the second site entrance were to be permitted, this could be used as a construction entrance for the initial building phase. However, this second entrance would require the removal or replacement of the two existing portable classroom units closest to River Road, decreasing the program capacity of the school.

One option to address the reduced program capacity would be to move classes such as art and music classes to a cart during construction.

The construction entrance also would impact the existing bus loop.

Traffic congestion would increase both on the school site and in the area due to accommodating both school community traffic and contractors, equipment, supply and other deliveries.

School operations would be impacted on the whole by the construction noise, dust, and traffic safety for a period of two years or more.

3. Building Design
An important consideration in this analysis is the long-term design of the building and the ultimate ability of the new Potomac Elementary School to be an asset in the MCPS educational facilities inventory that best aligns with the design and educational specifications for the instructional program and long-term operation of the school.

Concept 1: Construction with Students Off-site
This building concept reflects the design elements of the preferred feasibility study option. The design involves full demolition of the existing facility and subsequent reconstruction of a new facility. This design incorporates a central courtyard and includes a second vehicular entry point from River Road. The following list of positive and negative attributes were developed during the schematic design work sessions.

Positive Attributes
- The courtyard plan provides a simple circulation pattern that is easy to supervise with a controlled outdoor space.
- The site would be easily supervised with outdoor play space at the rear of the site away from River Road and accessible for recess and physical education.
- The building location on River Road offers the best opportunity for a street presence, façade design, and school identity. The building would be set back from River Road approximately the same distance as the church is to the east.
- The stage located between the multi-purpose room and the gymnasium offers flexibility.

Negative Attributes
- Requires the use of Radnor Holding Center facility during the 18-month construction period.
- Community access to the play fields would be further from parking in this option.

Concept 2: Construction with Students On-site
This building concept was developed to evaluate the opportunity to construct a new school at the rear of the existing Potomac Elementary School site. The design consists of reconstruction of a new facility while students remain in the existing building. Following the construction of the new Potomac Elementary School, students and staff would occupy the new school while demolition of the existing building commenced. This design incorporates a linear school facility design and includes a second
vehicular entry point from River Road. The following list of positive and negative attributes was developed during the work sessions.

Positive Attributes
- Eliminates the need to use the Radnor Holding Center.
- This option would have longer drive aisles for parent pick-up queuing.
- The building would be located in the back of the site. Community use would all happen at the front of the site with good access to parking.
- There is the potential for landscape buffers between River Road and the site.
- Some in attendance felt the location of the building in the rear of the site was more representative of the neighborhood.

Negative Attributes
- The design cannot incorporate courtyard options.
- The linear hallway design does not facilitate easy supervision and circulation patterns.
- Site constraints do not facilitate location of core space, office suite, and deliveries in desirable areas of the building relative to their function.
- The new building would be set back from River Road. The new building, service drives, and vehicular traffic would be much closer to existing neighbors than the current conditions.
- The longer roadways equate to larger impervious area that results in more extensive storm water management system and less open space on the site.
- All or part of the existing stand of mature trees would be eliminated with this option.
- Play field location at the front of the site would require significant travel distance from the building.
- The play field along River Road and longer on-site roadways would raise student safety concerns.
- Neighbors expressed concern about the loss of the existing trees and the change in character and value of their properties.

4. Cost
The cost factors associated with each concept are significantly different between a construction model that accommodates students and school operations on-site and a model that consists of contractors only. Overall, our analysis shows that the cost of the Potomac Elementary School Revitalization/Expansion Project could increase by as much as $2 to $3 million if construction takes place with students on-site.

The increased cost elements are associated with both the overall duration and operational staging of the on-site project, as well as specific storm water and site costs that are incurred in the on-site option. The primary cost factors are outlined below.
- Contractor costs increase in part due to the overall project schedule impact. To construct a new school while the existing school maintains operations would require 18 months to construct the new building and an additional 12 months to demolish the existing school after the relocation occurs.
- General condition costs for an elementary school revitalization project can average between $100,000 and $150,000 per month. These costs are associated with many project factors such as labor, equipment rentals, cleaning provisions, temporary fencing, safety program implementation, and other elements.
The extended schedule would create additional remobilization costs to relocate construction functions from the rear of the site to the front of the site for the final 12 months of the project. Additional costs associated with loss of productivity would impact the overall project. The student on-site model would require strict time and operational requirements associated with delivery times, limitations of on-site material storage and contractor parking, stop work orders associated with school specific functions such as testing and events, and off-hours work associated with disruptive procedures (vibratory equipment) and utility connections (electric, water, sewer, and phone). While these costs are not fixed, standard industry estimates range from an additional 3 to 5 percent in labor costs for each trade impacted during the school calendar year.

A specific cost of the student on-site model is associated with storm water management and sediment and erosion control measures. The two phases of the project would require additional sediment and erosion control measures to account for the changes in the contractor location. This would increase the overall site areas impacted by these environmental regulations. Unfortunately, these measures and costs are associated with temporary conditions related to construction, and they would not contribute to the long-term needs of the site.

The final storm water management requirements also would increase due to the additional paving areas associated with the location of the new building at the rear of the site. The additional impervious areas (paved on-site roadways) would increase, and therefore, increase the overall site costs. These additional site specific costs are anticipated to exceed $750,000.

5. Conclusion
In summary, our analysis shows that the key factors of student safety, operational impact, building design, and cost would all negatively be affected by conducting the revitalization/expansion of Potomac Elementary School with students on-site. We recommend that Potomac Elementary School relocate to the Radnor Holding Center for the construction period to ensure safety, reduce impact on school operations, improve the design features of the new facility, and to avoid significant cost increases to the project.

III. ALTERNATIVE SITES

During the feasibility analysis, community members raised questions about whether alternative sites could be considered that would not require the use of the Radnor Holding Center but instead either provide additional space adjacent to the existing site or provide an alternative site for construction of a new Potomac Elementary School.

Staff conducted a review of the suggested properties and alternatives, as well as a general market analysis of current listings in the area. Based on this feasibility review, we do not recommend an alternative site approach due to the following concerns:

- A change in the site would add significant time delay to the project schedule due to the need for additional planning, site identification, and technical analysis.
- The range of alternatives add significant cost to the project. We do not recommend this use of additional capital funds given other pressing facility priorities in the capital budget. The processes required to request and secure any additional needed funds for the project also would add significant time to the project schedule.
Below is a summary of the site review and market analysis for the suggested alternative approaches.

1. **Revisit Building on the Brickyard Road Site**
The Brickyard Road property is a larger site that would be better utilized for a middle school or a co-location of multiple facilities. A stand-alone elementary school would not be an efficient or effective use of this property within the context of the school system’s overall facility planning and educational facility needs. Additional long-range planning is needed to determine the best use or mix of uses for the Brickyard Road property.

   It also is important to note that the Brickyard Road site currently does not have utility infrastructure which would significantly add to the cost and time of the project. The use of the Brickyard Road site as a school site also would require roadway improvements to accommodate an educational facility. Again, these improvements would add to time and cost.

2. **Adjacent Properties**
The suggestion was made to purchase or lease the adjacent property along Chapel Road to provide additional area to build the new school or for additional space to stage construction.
   - Our review indicates that the property sold in 2014 for $1.2 million; it would be reasonable to expect the property to sell for more at this time. It currently is not on the market for sale.
   - The Potomac Elementary School site is 9.7 acres which is a sufficient size for an elementary school once the construction is complete. Additional acreage is not needed at that point.
   - Lease costs could potentially exceed $500,000. Additional costs to restore the site after use would be anticipated.

3. **Lease Space to House the School During Construction**
The annual lease cost for the amount of space needed to house Potomac Elementary School could range from $1.5 to $2 million. This lease estimate does not include build-out costs that likely would be needed to modify the space for use as an educational facility. The space also would need to accommodate outdoor space for school operations, as well as site access for bus, staff, and parent traffic.

4. **Purchase Property in the General Area**
Staff conducted a general market analysis of properties for sale in the area to identify what size properties exist, the market value of available properties, and general site conditions of the properties. This review did not include technical analysis of individual site requirements. Our general analysis of large, multi-acre sites indicates the following:
   - Most of the sites are embedded in residential neighborhoods with a single point of access. These features would complicate traffic access for buses and cars, as well as present challenges for neighboring properties.
   - While multi-acre sites are listed, the full size of the site is often not available for building due to environmental limitations such as forested areas and stream valleys.
   - Property costs are high in this area. Multi-acre properties reviewed in this market analysis ranged from $1.5 to $5 million.

5. **Tuckerman Center**
The Tuckerman Center is currently leased to the McLean School under a long-term lease. The current term of lease expires in 2036. At this time we do not recommend exercising any options to terminate the lease prior to this date.
6. **Adjust Revitalization/Expansion Project Schedule and Use Grosvenor Holding Center**

Under the currently approved Capital Improvements Program, Luxmanor Elementary School is scheduled to occupy the Grosvenor Holding Center during the same time period Potomac Elementary School is under construction, beginning in the 2018–2019 school year. Changing the revitalization and expansion project schedule could both delay the Potomac Elementary School project and result in delays or adjustments to other facility priority projects for multiple schools.