

SECTION 1: *EXECUTIVE SUMMARY*

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DRAFT

The purpose of this feasibility study is to determine the viability of various options to ensure Rock Creek School meets the goals and requirements established for the project.



INTRODUCTION

This feasibility study represents the second of two phases of a comprehensive plan to envision and develop a modern Rock Creek School, one that will provide access and equity for Frederick County's students with complex medical conditions and severe intellectual, physical, emotional, hearing, vision and learning disabilities from ages 3 through 21. The first phase of this plan produced the educational specifications that established guiding principles, program requirements and facility design goals, while the second phase is a feasibility study to determine the optimal strategy to satisfy the specifications. The educational specifications were approved by the Board of Education of Frederick County in November 2015, and are referenced in the narrative of this study. Excerpts from the educational specifications (ed specs) are included in the Appendix of this document for reference.

The purpose of this feasibility study is to determine the viability of various options to ensure Rock Creek School meets the goals and requirements established for the project. This study includes evaluation of the physical condition of the existing building and surrounding site, analysis of the adaptability of the existing building to meet the educational requirements, and analysis of the value and limitations these conditions impose upon the various approaches to this redeveloped project. Options were developed to consider the viability of modernization of the existing building and of modernization and additions to the existing building as well as exploration of new construction both on the current site and other sites owned by Frederick County Public Schools. Each option was then evaluated on its ability to provide the required program and to deliver on the vision, guiding principles and spatial requirements of the educational specifications developed during the first phase.

The results of the study will provide Frederick County Public Schools an essential tool to make an informed and substantiated determination of the best approach to support the unique needs of Rock Creek School and its community. The study provides a comparison of the relative costs of each of the options, and the opportunities and compromises of each option developed by the feasibility study team in consultation with other Frederick County Public Schools central office staff, Rock Creek School staff, MSDE, and numerous parent and community stakeholders.

This recommendation is consistent with feedback gathered from community and staff stakeholder groups, each of whom universally preferred the off-site replacement option.



OPTIONS CONSIDERED

The consultant team examined four categories of options during the feasibility study process in order to explore a full spectrum of interventions, both on the current site and on alternate sites in the surrounding community. The exploration included options for modernization of the existing building; modernization of the existing building with additions; a new replacement school on the existing Rock Creek site; and a new replacement school off-site.

Each option was presented to the feasibility study team for review and comments, then refined and re-evaluated until a consensus on the final version of each option was reached for inclusion in this document. Graphics of each option, along with narrative descriptions and lists of differentiating opportunities and challenges, are included in Section 4 of this report. Earlier versions of the options can be found in the Appendix for reference. Brief outlines of the scope of each of the options follows:

1. **MODERNIZATION:** Modernization of the existing Rock Creek School, with no space added to the building. The building would remain occupied during phases of the modernization.
2. **MODERNIZATION AND ADDITION:** Modernization of the existing Rock Creek School, along with new additions to enlarge the building area to meet spatial requirements of the educational specifications. The building would remain occupied during phases of the modernization and new additions.
3. **REPLACEMENT ON-SITE:** New building on the existing Rock Creek School/Waverley Elementary School (ES) site that meets all spatial requirements of the educational specifications. The existing Rock Creek School would remain occupied during new construction, and would then be demolished after completion.
4. **REPLACEMENT OFF-SITE:** New building on an alternate site that meets all requirements of the educational specifications. The existing Rock Creek School would remain occupied during new construction and would not be demolished after construction, but would be available for another use.

The feasibility study team identified student safety and health concerns during construction as paramount criteria during the evaluation process, and were able to eliminate Options 1 and 2 on these reasons alone.



RECOMMENDATION

After extensive study and discourse on the various options investigated, the feasibility study team unanimously recommended Option 4, Off-Site Replacement, as the optimal choice for delivering the program, guiding principles and overall vision presented in the educational specifications. This recommendation is consistent with feedback gathered from community and staff stakeholder groups, each of whom universally preferred the off-site replacement option.

Each of the other feasibility study options, modernization, modernization plus addition and replacement on-site, presented significant challenges and compromises that exceedingly outweighed the potential opportunities. The feasibility study team identified student safety and health concerns during construction as paramount criteria during the evaluation process of the options. The overriding concerns for the students served to eliminate Option 1, Modernization, and Option 2, Modernization and Additions, independent of the numerous programmatic compromises also found in each of these options. Option 3, On-Site Replacement, addressed some of these concerns, but due to various site constraints and cost impacts, this option was also rejected. Additionally, Options 1, 2 and 3 all present significant logistical challenges for operations of the Rock Creek School during construction. Each of these options will require complex phasing over a two to three-year duration of construction, which will prove especially difficult for Rock Creek, which operates as a year-round program. Construction phase site logistics, including access for construction vehicles and staging areas for materials, will be difficult to accommodate while maintaining safe, simultaneous operation of the existing Waverley ES and Rock Creek School. On-site construction will also involve prolonged durations of noisy construction activities, constant movement of unfamiliar personnel and equipment, as well as significant amounts of dust and debris. These conditions present a significant potential health risk to Rock Creek's students, many of whom are medically fragile and would have extreme difficulty acclimating to such adverse circumstances and stimuli.



In addition to these core safety and health concerns, Options 1, 2 and 3 also failed to meet essential programmatic criteria required in the educational specifications and presented further site logistic issues. Option 1, the modernization of the existing Rock Creek School building, provides only 59% of the net program area required by the educational specifications for the Rock Creek School, allows for none of the additional programs or alternates requested in the educational specifications, fails to improve on the size and relationships of existing program areas, requires compromises to technology and other core systems, and does not address many of the functional challenges present in the existing school. Option 2, the modernization and addition of the existing Rock Creek School building, requires several complex additions to increase building area, yet still falls short in its ability to deliver all required Rock Creek School program spaces, has minimal space for the optional additional programs, only provides uncompromised technology in the areas of new construction, and fails to improve on the many functional and operational compromises in the existing building. Option 3, the on-site replacement, includes a new school building, but presents limited ability for future expansion, construction access, challenging perimeter and service access, and displaces play fields to a remote area of the site that is unsafe to access for both Rock Creek School and Waverley ES students. In addition, Option 3 will limit the ability to provide the much needed planned future addition to Waverley ES.

Option 4 provides the most viable educational facility for the Rock Creek School. A replacement school off-site allows the opportunity for a new building that can deliver on all aspects of the educational specifications, without compromising the operations of the existing building or creating an unsafe condition for Rock Creek School students during construction. The new school building will provide all required program areas, and will afford ideal relationships and adjacencies that will enhance the opportunities to deliver on the project's guiding principles. A freestanding new building will not only allow for optimal site circulation for pedestrians, cars and buses, but will also enable direct connections from the school to various outdoor learning and play spaces. This option will allow for co-located programs, while also providing the potential for future additions and community parks and recreation programs.

In order to ensure that Option 4 was a viable scenario, the team reviewed multiple site locations on which to locate a new school. Several sites were determined to be viable and provided the desired relationship with neighboring schools, but additional detailed investigation is required to determine the most appropriate location. Therefore, as part of the feasibility study team's recommendation of Option 4, the team also suggests that the design phase of the project begin with site selection to determine the most appropriate location. As this site selection process moves forward, priority consideration should be given to sites that provide the largest number of educational opportunities, offering access and equity with neighboring schools. Other key considerations should include a central location to minimize bus ride times, availability and access to community services, and proximity to municipal transit lines, which will offer students mobility options and choices for independent travel.

SUMMARY OF OPTIONS

ROCK CREEK SCHOOL FEASIBILITY STUDY	OPTION 1 Existing Building Modernization	OPTION 2 Modernization and Addition	OPTION 3 Replacement On-Site	OPTION 4 Replacement Off-Site
SPACE NEEDS				
TOTAL AREA DEMOLISHED (GSF)	0	14,289	55,214	0
TOTAL AREA MODERNIZED (GSF)	55,214	40,925	0	0
TOTAL AREA NEW CONSTRUCTION (GSF)	0	34,622	81,103	81,103
TOTAL AREA PROVIDED (GSF)	55,214	75,547	81,103	81,103
TIME AND PROGRAM				
CONSTRUCTION TIME	36 MONTHS	36 MONTHS	24 MONTHS	18 MONTHS
PERCENT OF NET ROCK CREEK PROGRAM PROVIDED	59%	84%	100%	100%
CONSTRUCTION COSTS				
TOTAL ROCK CREEK SCHOOL BUILDING AND SITE COSTS	\$18,566,039	\$26,753,655	\$31,183,622	\$31,156,731
TOTAL PROJECT BUDGET	\$32,043,658	\$44,937,031	\$47,402,677	\$42,062,028
MOST SIGNIFICANT OPPORTUNITIES AND COMPROMISES				
SIGNIFICANT OPPORTUNITIES	<ul style="list-style-type: none"> • Construction is least expensive due to smallest scope of work 		<ul style="list-style-type: none"> • All required base bid program can be provided 	<ul style="list-style-type: none"> • All required program and optimal adjacencies can be met • Shortest construction time • Good access to opportunities for engagement with other FCPS students • Best opportunity to deliver on project guiding principles
SIGNIFICANT COMPROMISES	<ul style="list-style-type: none"> • Construction while the school is occupied could be a health threat to medically fragile students • Long construction time and difficult phasing • Many key spaces from ed specs are not provided, most spaces are undersized per the ed specs • Educational technology is compromised 	<ul style="list-style-type: none"> • Construction while the school is occupied could be a health threat to medically fragile students • Long construction time and difficult phasing • Many key spaces are undersized, some are not provided per the ed specs • Educational technology is compromised 	<ul style="list-style-type: none"> • Construction will happen within very close proximity to the existing school • No space will be left for a future Waverley ES expansion/addition • Playgrounds/fields for Rock Creek and Waverley ES will not be adjacent to school. Site circulation will be difficult • There is not enough space for a Future Expansion Alternate • Most expensive option 	<ul style="list-style-type: none"> • Final site selection may present challenges

*GSF = Gross Square Footage

**For a full list of opportunities and compromises, see Section 4