

District: Town of Carver  
 School Name: Carver Elementary School  
 Recommended Category: Preferred Schematic  
 Date: May 27, 2015

**Recommendation**

That the Executive Director be authorized to approve the Town of Carver, as part of its Invitation to Feasibility Study, to proceed into Schematic Design to replace the existing Carver Elementary School on the existing site. MSBA staff has reviewed the Feasibility Study and accepts the District’s preferred solution.

<b>District Information</b>	
District Name	Town of Carver
Elementary School	Carver Elementary School (PK-5) is comprised of two buildings on the same site that function as one school: <ul style="list-style-type: none"> <li>- Erwin K. Washburn Primary School (PK-2)</li> <li>- Governor John Carver School (3-5)</li> </ul>
Middle/High School	Carver Middle/High School (6-12)
Priority School Name	Carver Elementary School
Type of School	Elementary School
Grades Served	PK-5
Year Opened	Erwin K. Washburn Primary School: 1975 Governor John Carver School: 1951
Existing Square Footage	Carver Elementary School, Total Square Footage: 99,010: <ul style="list-style-type: none"> <li>- Erwin K. Washburn Primary School: 64,392</li> <li>- Governor John Carver School: 34,618</li> </ul>
Additions	<ul style="list-style-type: none"> <li>- Erwin K. Washburn Primary School: one-story wing with eight classrooms opened in 1984, and a portable classroom opened in 1988</li> <li>- Governor John Carver School: two-story addition containing a cafeteria and classrooms opened in 1957</li> </ul>
Acreage of Site	23.7 acres
Building Issues	<p>The District identified deficiencies in the following areas:</p> <ul style="list-style-type: none"> <li>- Mechanical, electrical, plumbing systems</li> <li>- Building envelope</li> <li>- Accessibility (Governor John Carver School)</li> </ul> <p>In addition to the physical plant issues, the District reported that the existing facility does not support the delivery of its educational program as well as existing and projected overcrowding.</p>
Original Design Capacity	Unknown
2014-2015 Enrollment	784
Agreed Upon Enrollment	750
Enrollment Specifics	The District and MSBA have mutually agreed upon a design enrollment of 750 students serving grades K-5, for a project that will serve grades PK-5.

<b>MSBA Board Votes</b>	
Invitation to Eligibility Period	January 29, 2014
Invitation to Feasibility Study	July 30, 2014
Preferred Schematic Authorization	On June 3, 2015 Board agenda
Project Scope & Budget Authorization	District is targeting Board authorization on November 18, 2015
Feasibility Study Reimbursement Rate ( <i>Incentives points are not applicable</i> )	56.26%

<b>Consultants</b>	
Owner's Project Manager	PMA Consultants
Designer	HMFH Architects, Inc.

## Discussion

The existing Carver Elementary School consists of two adjacent buildings: the Governor John Carver School building (“Carver School”) and the Erwin Washburn Primary School building (“Washburn School”). The existing facilities are located on an approximate 24 acre site, are approximately 99,010 square feet in total, and currently serve grades PK-5.

The original two-story Carver School building was constructed in 1951 and the single-story Washburn School building was built in 1974. Additions to the Carver School building were completed in 1957 and additions to the Washburn School building were completed in 1984 and 1988. The existing Washburn School building utilizes an open floor plan with minimal classroom partitions. The District identified numerous deficiencies within the Statement of Interest. The existing facility requires upgrades to provide an appropriate level of accessibility and additional space to deliver certain programs. In addition, the electrical system in the Carver School building is severely inadequate. Boilers in both buildings are 30-40 years old, neither building is equipped with sprinkler protection, and plumbing systems remain original to the buildings. The current building envelope systems are aging and inefficient. Roofing was replaced with single-ply systems in both buildings in 1994 and the 15 year warranty has expired. Some windows in the Carver School building were replaced with insulating glass in 1996; however, the windows in the Washburn School building are integral to the original wall panel system and have never been replaced.

In conjunction with its consultants, the District performed a comprehensive assessment of the existing conditions and the educational program and received input from educators, administrators, and facilities personnel. Based on the findings of this effort, the District and its consultants initially studied five preliminary options that included one base repair option, one addition/renovation option, and three new construction options. The following is a detailed list of the preliminary alternatives considered:

<b>Option</b>	<b>Description of Preliminary Options</b>
1	Base repair of existing Carver and Washburn buildings
2	Addition/renovation of existing Carver and Washburn buildings
3	New construction at existing Carver and Washburn building site
4	New construction at existing Middle/High School site (Field location)

5	New construction at existing Middle/High School site (Woods location)
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As a result of further analysis, “Option 1” was not considered for further evaluation as it does not provide appropriate square footage to deliver the District’s desired educational program for the agreed upon design enrollment. In addition, “Option 1” maintains the delivery of the District’s PK-5 program in two separate buildings, a scenario that the District wishes to eliminate. Although construction of a new facility would produce an appropriately sized building to deliver the District’s educational program, “Options 4 and 5” were not considered for further evaluation. Relocating the District’s PK-5 student population to the existing Middle/High School site has several drawbacks, such as producing limited potential for future expansion of the Middle/High School, replacement of the existing waste water treatment plant, impact to site circulation and use, public safety concerns associated with housing the entire student population on one site, and anticipated added traffic congestion.

It should be noted that, in addition to the list of preliminary options provided above, the District and design team subsequently incorporated an alternative to evaluate a three-story new construction option on the existing Carver/Washburn site.

Upon further review of the District’s Feasibility Study, MSBA staff and the District agreed to three final options for further development and consideration in the final evaluation and development of preliminary design pricing as presented below. (Please note that the “Base Repair” option has been included for comparative purposes.)

**Summary of Preliminary Design Pricing for Final Evaluation of Options**

<b>Option (Description)</b>	<b>Total Gross Square Feet</b>	<b>Square Feet of Renovated Space (cost*/sf)</b>	<b>Square Feet of New Construction (cost*/sf)</b>	<b>Site, Building Takedown, Haz Mat. Cost*</b>	<b>Estimated Total Construction ** (cost*/sf)</b>	<b>Estimated Total Project Costs</b>
Option 1: Base Repair	95,355	95,355 \$298/sf	N/A	\$1,975,902	\$30,360,524 \$318/sf	\$39,869,954
Option 2: Addition/ Renovation	118,051	36,739 \$309/sf	81,312 \$357/sf	\$4,573,431	\$44,999,611 \$381/sf	\$58,033,768
<b>Option 3: New Construction (Two-story)***</b>	<b>112,350</b>	<b>N/A</b>	<b>112,350</b> <b>\$339/sf</b>	<b>\$4,937,702</b>	<b>\$43,024,117</b> <b>\$383/sf</b>	<b>\$55,582,625</b>
Option 3A: New Construction (Three-story)	115,200	N/A	115,200 \$329/sf	\$5,002,678	\$42,780,680 \$373/sf	\$55,451,012

\* Marked up construction costs

\*\* Does not include construction contingency

\*\*\*District’s preferred option

“Option 3A” locates the proposed building in the same general location, produces a slightly smaller footprint, and is estimated at a lower cost than that of “Option 2” and “Option 3,” but does not provide the adjacencies and layout desired by the District in a two-story option. “Option 3A” also creates an unfavorable building height within the District’s semi-agricultural low density

community. “Option 2” provides a two-story addition/renovation to the existing Carver School building that is within the local height limitations and will enable the District to deliver its desired educational program in a bigger building. However, “Option 2” is estimated at a higher cost and longer overall construction duration when compared to “Option 3.” In addition to the aforementioned cost and construction schedule, the complex phasing and extended disruption to students were also viewed as disadvantages to this option.

The District has selected “Option 3,” which replaces the existing Carver School building and Washburn School building with a new PK-5 facility, as the preferred solution to proceed into Schematic Design. The District selected “Option 3” as its preferred alternative because it achieves optimal program needs, produces a spatially efficient layout, and offers the least impact to students during construction. In addition, “Option 3” provides the shortest construction duration and optimizes the site for parking and outdoor play space.

The District presented its proposed project to the MSBA Facilities Assessment Subcommittee (“FAS”) on May 13, 2015. At that meeting, MSBA staff and members of the FAS raised a number of concerns, including suggested enhancements to the educational program and how the proposed building layout supports the educational program, the progress of the conceptual design, the utilization of the proposed multi-purpose room and cafeteria, the interior layout of the building and flexibility for enrollment variations, Pre-Kindergarten space needs, handicap accessibility and coverage of entrances, and environmental concerns related to wells and adjacent cranberry bogs.

Based on the District’s presentation and feedback at the May 13, 2015 FAS meeting, MSBA staff requested an update to the Preferred Schematic Report that addresses the following areas as a condition to staff’s recommendation of the preferred solution: the Educational Program; a further developed conceptual design; and additional information related to the utilization and use of the proposed multi-purpose room, cafeteria, media center, and learning commons. More specifically, the District must provide the following items for review and acceptance no later than June 30, 2015:

- An updated Educational Program that corrects and adjusts redundant information, provides clarity on how the educational program translates to the proposed building layout, and expands on the science, social studies, writing, and arts programs.
- Further developed floor plans that tie to the goals stated in the updated Educational Program and confirmation that plans have been cross-referenced with the Educational Program to ensure that all objectives have been met or the rationale for not meeting them.
- Additional information associated with the use and utilization of the proposed multi-purpose space and description of how the proposed design of the cafeteria could support potential variation in student enrollment.
- Additional information associated with utilization and development of the proposed media center and a description of how this space becomes a learning commons area, how it will be scheduled, and what educational activities this space is designed to support.

MSBA staff reviewed the conclusions of the Feasibility Study, all subsequent submittals, and the enrollment data with the District and found:

- 1) MSBA reviewed the Feasibility Study and finds that the options investigated were sufficiently comprehensive in scope, the approach undertaken in this study was appropriate, and the District's preferred solution is reasonable and cost-effective. However, the District is required to submit an update to the Preferred Schematic Report for review on or before June 30, 2015, as outlined above, to clarify and confirm that the District's preferred solution meets the needs identified by the District.
- 2) Prior to the submission of the District's Schematic Design submittal, the MSBA requests that the District be available to present the updated preferred solution to the FAS should the MSBA determine that an updated presentation is required. This update is to ensure a mutual understanding and agreement of the proposed project scope and to ensure that this scope will be reflected in the District's Schematic Design submittal.
- 3) The District has submitted an operational budget for educational objectives and a capital budget statement for MSBA review.
- 4) The District's Schematic Design submittal will be subject to final review and approval by the Department of Elementary and Secondary Education as part of the Schematic Design submittal prior to a Project Scope and Budget Agreement.
- 5) Subject to Board approval, the MSBA will participate in a project that includes spaces that meet MSBA guidelines, with the exception of variations previously agreed to by the MSBA. All proposed spaces will be reviewed during the Schematic Design phase.

Based on the review outlined above, staff recommends that the Town of Carver be approved to proceed into Schematic Design to replace the existing Carver Elementary School on the existing site.