District: City of Marlborough
School Name: Richer Elementary School
Recommended Category: Preferred Schematic

Date: October 18, 2017

Recommendation

That the Executive Director be authorized to approve the City of Marlborough, as part of its Invitation to Feasibility Study, to construct a new elementary school facility on the existing athletic fields of the Marlborough High School site. MSBA staff has reviewed the Feasibility Study and accepts the District's preferred solution.

As requested by the District in its Feasibility Study, staff has performed its review of available model school designs and recommends that the following Model Schools may meet the District's needs, upon confirmation by the Model School designers:

- Andover, Bancroft Elementary School designed by SMMA;
- Lexington, Estabrook Elementary School designed by DiNisco Design;
- Norfolk, Freeman-Kennedy Elementary School designed by Flansburgh Architects; and
- New Bedford, Lincoln Elementary School designed by Mount Vernon Group Architects.

Staff also recommends that the Executive Director be authorized to approve the City of Marlborough to proceed with interviews and an evaluation to determine which of the model school designs listed above or its original preferred solution best meets the District's educational needs as part of the MSBA's Model School Program and to proceed into schematic design with either its original preferred solution or the selected model school design to construct a new elementary school facility on the existing athletic fields of the Marlborough High School site.

District Information						
District Name	City of Marlborough					
Elementary School(s)	Early Childhood Education Center (PK)					
	Charles Jaworek Elementary School (K-4)					
	Francis J. Kane Elementary School (K-4)					
	Richer Elementary School (K-4)					
Middle School(s)	Charles W. Whitcomb Middle School (5-8)					
High School(s)	Marlborough High School (9-12)					
Priority School Name	Richer Elementary School					
Type of School	Elementary School					
Grades Served	K-4					
Year Opened	1965					
Existing Square Footage	69,312					
Additions	1993 – addition of 6 modular units					
Acreage of Site	12.5 acres					
Building Issues	The District identified deficiencies in the following areas:					
	 Mechanical systems 					
	Electrical systems					
	 Envelope 					

District Information						
	• Windows					
	• Roof					
	Accessibility					
	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.					
Original Design Capacity	Unknown					
2016-2017 Enrollment	528					
Agreed Upon Enrollment	Study Enrollment includes the following configurations:					
	• 675 students in grades K-4 in three school facilities;					
	• 610 students in grades K-5 in four school facilities					
	(Preferred Solution); and					
	• 1,060 students in grades K-5 in three school facilities.					
Enrollment Specifics	Contingent upon the Board's approval of the preferred solution, the					
	District will sign a Design Enrollment Certification for 610					
	students in grades K-5.					
Total Project Funding	No					
Debt Exclusion						
Anticipated						

MSBA Board Votes				
Invitation to Eligibility Period	January 27, 2016			
Invitation to Feasibility Study	July 20, 2016			
Preferred Schematic Authorization	On October 25, 2017 Board agenda			
Project Scope & Budget Authorization	District is targeting Board authorization on			
	February 14, 2018			
Feasibility Study Reimbursement Rate	54.16%			
(Incentive points are not applicable)				

Consultants	
Owner's Project Manager (the "OPM")	Daedalus Projects, Inc.
Designer	Lamoureux, Pagano & Associates

Discussion

The existing Richer Elementary School is a 69,312 square foot facility, located on a 12.5 acre site. The original school building was constructed in 1965, with the addition of six modular units in 1993, a roof replacement in 2011, and a boiler replacement in 2013.

The District's Statement of Interest ("SOI") identified numerous deficiencies in the existing facility associated with outdated mechanical, electrical, and plumbing systems; non-compliant accessibility conditions; overcrowding; and lack of space to deliver the District's educational program.

As part of the Feasibility Study, MSBA staff agreed with the District's request to explore options that included various consolidation alternatives for the District's grade K-5 student population, resulting in the following three study enrollment options:

- 675 students in grades K-4 in three (3) school facilities;
- 610 students in grades K-5 in four (4) school facilities; and
- 1,060 students in grades K-5 in three (3) school facilities.

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 fourteen (14) preliminary options that include: one (1) base repair option, two (2) addition/renovation options, and eleven (11) new construction options on ten (10) different sites. The following is a detailed list of the preliminary alternatives considered.

Option	Description of Preliminary Options
1.1	Base Repair – Grades K-4 (current configuration) with an enrollment of 675 students at the existing Richer Elementary School site.
1.2	Addition/Renovation – Grades K-4 (current configuration) with an enrollment of 675 students at the existing Richer Elementary School site.
1.3	New Construction – Grades K-4 (current configuration) with an enrollment of 675 students at the existing Richer Elementary School site.
1.4	New Construction – Grades K-5 with an enrollment of 1,060 students at the existing Richer Elementary School site.
1.5	Addition/Renovation – Grades K-5 with an enrollment of 1,060 students at the existing Richer Elementary School site.
2.1	New Construction – Grades K-5 with an enrollment of 610 students at the 401 Elm Street site (parcel 54-17)
3.1	New Construction – Grades K-5 with an enrollment of 610 students at the 43 Spring Street site.
4.1	New Construction – Grades K-5 with an enrollment of 610 students at the Hildreth School site.
5.1	New Construction – Grades K-5 with an enrollment of 610 students at the South Street (Rawchuck) site.
6.1	New Construction – Grades K-5 with an enrollment of 610 students at the South Street site.
7.1	New Construction – Grades K-5 with an enrollment of 610 students at the 146-154 Williams Street site.
8.1	New Construction – Grades K-5 with an enrollment of 610 students at the Broadmeadow Street site (Parcel 85-19 & 85-19A).
9.1	New Construction – Grades K-5 with an enrollment of 610 students at the Marlborough High School site (existing athletic fields).
10.1	New Construction – Grades K-5 with an enrollment of 610 students at the 397 Williams Street site.

As a result of further evaluation, it was determined by the District that "Options 1.4 and 1.5" were not viable options and would not be considered for further evaluation because a facility for 1,060

students was too large to meet the needs of the educational program. Additionally, the existing Richer Elementary School site will not adequately support a new school of this size, and the District has determined that a new school of this scale is not appropriate to serve elementary grade levels.

"Option 2.1" was not viable because of lack of access, presence of transmission line easements, and a steep topography on the 401 Elm Street site. The 43 Spring Street Site ("Option 3.1") and the South Street Rawchuck site (Option 5.1) both included limited access and steep topography, which eliminated these options from further consideration. The existing Hildreth School site is currently occupied and is too small; therefore "Option 4.1" was not carried forward into the Final Evaluation of Options. The South Street ("Option 6.1"), 146-154 Williams Street ("Option 7.1"), and Broadmeadow Street ("Option 8.1") sites are classified as prime farmland and farmland of statewide importance, which requires an Environmental Impact Report and additional permitting if the land is altered. Therefore these options were not further considered. The proposed site at 397 Williams Street ("Option 10.1") was not viable because it is currently under a purchase and sale agreement with a potential buyer and unavailable.

Upon further review, MSBA staff and the District agreed to four (4) final options for further development and consideration in the final evaluation and development of preliminary design pricing as presented below.

Summary of Preliminary Design Pricing for Final Evaluation of Options

Option (Description)	Total Gross Square Feet	Square Feet of Renovated Space (cost*/sq. ft.)	Square Feet of New Construction (cost*/sq. ft.)	Site, Building Takedown, Haz Mat. Cost*	Estimated Total Construction ** (cost*/sq. ft.)	Estimated Total Project Costs
Option 1.1: Base Repair for grades K-4 with an enrollment of 675 students.	69,312	69,312 \$291/sf.	N/A	\$2,266,731	\$22,409,895 \$323/sf.	\$27,115,972
Option 1.2: Addition/renovation for grades K-4 with an enrollment of 675 students.	105,101	61,374 \$388/sf.	43,727 \$388/sf.	\$5,117,492	\$45,885,048 \$437/sf.	\$55,520,908
Option 1.3: New construction for grades K-4 with an enrollment of 675 students.	116,591	N/A	116,591 \$451/sf.	\$7,258,250	\$59,783,373 \$513/sf.	\$72,337,881
Option 9.1: New construction for grades K-5 with an enrollment of 610 students.***	108,730	N/A	108,730 \$451/sf.	\$5,766,373	\$55,805,995 \$513/sf.	\$67,525,253

^{*} Marked up construction costs

^{**} Does not include construction contingency

^{***}District's preferred solution

The District has selected "Option 9.1", a new K-4 facility on the existing athletic fields of the Marlborough High School site as the preferred solution, which results in the addition of a fourth elementary school to the District. The proposed facility is 108,730 gross square feet, with an estimated project cost of approximately \$67.5 million dollars.

The District selected "Option 9.1" as its preferred solution to move into Schematic Design because it meets the needs of the District's educational program, will alleviate overcrowding of the existing three elementary schools, and brings the fifth grade back into the elementary schools. The District also requested that the MSBA review its preferred solution and determine if any of the available model school designs could meet the educational needs of the District as documented in its Preferred Schematic Report.

Although "Option 1.1" had the lowest estimated project costs, it was not considered further because it did not provide any additional square footage or address programmatic improvements to the existing school. Additionally, this option requires the use of temporary modular classrooms and would be impacted severely by construction activities due to the amount of work performed inside the existing building while occupied.

"Option 1.2" was not considered for further evaluation because the grade configuration did not meet the needs of the District's educational program, the impacts to the site circulation, and this option would result in the most significant disruption to ongoing education during construction. Additionally, most outdoor spaces would be impacted during the duration of construction, and this option requires the use of temporary modular classrooms.

Although "Option 1.3" partially meets the District's educational program it was not considered for further evaluation because the grade configuration does not meet the District's educational program. Additionally, this option does not align with the District's grade cluster organization of K-2 and 3-5, and this option had the highest estimated project costs.

The District presented its proposed project to the MSBA Facilities Assessment Subcommittee ("FAS") on October 4, 2017. At that meeting, members of the FAS discussed the following: the District's Educational Program and returning the fifth grade students to the District's elementary schools; Special Education programs and spaces; redistricting and community outreach; organization of the proposed building layout; proposed site layout and circulation; delivery of adaptive PE; opportunities for multi-lingual instruction in the general education classrooms; location of elevator; and incorporation of sinks in classrooms.

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

- 1) 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 and meets the needs identified by the District.
- 2) Prior to the submission of the District's Schematic Design submittal, the MSBA has requested that the District be available to present progress of the preferred solution to the Facilities Assessment Subcommittee should the MSBA determine that such a presentation is required. This presentation would ensure a mutual understanding and agreement of the

- proposed concept and ensure that the proposed 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 preferred solution includes a grade reconfiguration and redistribution of its elementary school students across the district. As a condition of the MSBA's approval of the District's proposed project scope and budget the District will be required to submit a draft redistricting plan as part of its Schematic Design Submittal.
- 5) 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.
- 6) 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.
- 7) As part of the Schematic Design Phase, the District will work with the MSBA to determine a mutually agreeable methodology to differentiate eligible costs from ineligible costs.

Based on the review outlined above, staff recommends that the City of Marlborough be approved to proceed into Schematic Design to construct a new elementary school facility on the existing athletic fields of the Marlborough High School site.

Staff further recommends that the City of Marlborough:

- (1) Be allowed to consider using the following as a potential model school design candidate:
 - Andover, Bancroft Elementary School designed by SMMA;
 - Lexington, Estabrook Elementary School designed by DiNisco Design;
 - Norfolk, Freeman-Kennedy Elementary School designed by Flansburgh Architects; and
 - New Bedford, Lincoln Elementary School designed by Mount Vernon Group Architects.
- (2) If the City of Marlborough chooses to formally evaluate the model school designs listed above as a potential model school design candidate, the District will evaluate both the model school designs and the District's Preferred Solution design ("Option 9.1") and will proceed with interviews of their respective designers to determine which design best meets the District's educational needs.