

District: Town of Andover  
 School Name: West Elementary School  
 Recommended Category: Preferred Schematic  
 Date: August 19, 2020

**Recommendation**

That the Executive Director be authorized to approve the Town of Andover (the “District”), as part of its Invitation to Feasibility Study, to proceed into Schematic Design to replace the existing West Elementary School with a new grades PK-5 facility on the site of the existing West Elementary School. MSBA staff has reviewed the Feasibility Study and accepts the District’s Preferred Schematic.

<b>District Information</b>	
District Name	Town of Andover
Elementary School(s)	Shawsheen Preschool (PK) Bancroft Elementary School (K-5) High Plain Elementary School (K-5) Sanborn Elementary School (K-5) South Elementary School (K-5) West Elementary School (K-5)
Middle School(s)	Doherty Middle School (6-8) West Middle School (6-8) Wood Hill Middle School (6-8)
High School(s)	Andover High School (9-12)
Priority School Name	West Elementary School
Type of School	Elementary School
Grades Served	K-5
Year Opened	1951
Existing Square Footage	90,600
Additions	1956 and 1968
Acreage of Site	33.12 acres
Building Issues	The District identified deficiencies in the following areas: <ul style="list-style-type: none"> <li>– Mechanical systems</li> <li>– Electrical systems</li> <li>– Plumbing systems</li> <li>– Building envelope</li> <li>– Windows</li> <li>– Roof</li> <li>– Accessibility</li> </ul> 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
2019-2020 Enrollment	594
Agreed Upon Enrollment	925

<b>District Information</b>	
Enrollment Specifics	The District and MSBA have mutually agreed upon a design enrollment of 925 students for grades K-5, for a project that will serve grades PK-5.
Total Project Budget – Debt Exclusion Anticipated	Yes

<b>MSBA Board Votes</b>	
Invitation to Eligibility Period	December 13, 2017
Invitation to Feasibility Study	December 12, 2018
Preferred Schematic Authorization	On August 26, 2020 Board agenda
Project Scope & Budget Authorization	District is targeting Board authorization in April 2021
Feasibility Study Reimbursement Rate (Incentive points are not applicable)	40.47%

<b>Consultants</b>	
Owner’s Project Manager (the “OPM”)	PMA Consultants, LLC
Designer	SMMA

## Discussion

The existing West Elementary School is a 90,600 square foot facility located on a 33.12-acre site that currently serves students in grades K-5. The original school building was constructed in 1951, with additions in 1956 and 1968.

The District’s Statement of Interest (“SOI”) identifies numerous deficiencies in the existing facility associated with outdated mechanical, electrical, and plumbing systems; building envelope; accessibility issues; overcrowding; and inappropriate existing spaces for delivering the District’s educational program.

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 (5) preliminary options that include: one (1) code upgrade option, one (1) addition/renovation option, and three (3) new construction options. The following is a detailed list of the preliminary options considered.

<b>Option</b>	<b>Description of Preliminary Options</b>
1	Code upgrade option at the existing West Elementary School.
2	Addition/renovation option at the existing West Elementary School.
3	New construction option behind the existing West Elementary School.
4	New construction option behind the existing West Elementary School.
5	New construction option behind the existing West Elementary School with a separate 2-story pre-kindergarten building.

As a result of this analysis, the District determined that “Option 1” was not considered a viable option because it does not meet the needs of the District’s educational program and would result in significant disruption to ongoing education during construction.

Although “Option 4” would meet the needs of the District’s educational program, the District determined it would not be considered for further evaluation due to the elongation of the academic wing which causes significant challenges with respect to the internal management of the building, decreased connectivity of the school community, and the longer runs of mechanical systems.

Although “Option 5” would also meet the needs of the District’s educational program, the District determined it would not be considered for further evaluation due to the increased long-term costs, both operationally and administratively, that maintaining two separate buildings presents.

Subsequent to the evaluation of the preliminary options, the District developed an additional new construction option at the existing West Elementary School site, referred to as “Option 3B”. “Option 3B” has the same footprint as “Option 3” but with a rotated footprint to mitigate some impact on existing wetlands. MSBA staff and the District agreed to explore the following four (4) options for further development and consideration in the final evaluation and development of preliminary design pricing as presented below, including: one (1) code upgrade option, one (1) addition/renovation option, and two (2) new construction options. Please note the District does not consider “Option 1” a viable option, however, it has been included for cost comparison purposes only.

**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*/sq. ft.)</b>	<b>Square Feet of New Construction (cost*/sq. ft.)</b>	<b>Site, Building Takedown, Haz Mat. Cost*</b>	<b>Estimated Total Construction ** (cost*/sq. ft.)</b>	<b>Estimated Total Project Costs</b>
Option 1 Code Upgrade	90,600	90,600 \$431/sq. ft.	N/A	\$1,462,655	\$40,553,179 \$448/sq. ft.	\$56,206,790
Option 2 Addition/ Renovation	203,146	65,629 \$490/sq. ft.	137,517 \$636/sq. ft.	\$12,354,597	\$131,951,259 \$650/sq. ft.	\$164,325,852
<b><i>Option 3*** New Construction</i></b>	<b><i>204,903</i></b>	<b><i>N/A</i></b>	<b><i>204,903 \$535/sq. ft.</i></b>	<b><i>\$13,310,019</i></b>	<b><i>\$122,915,784 \$600/sq. ft.</i></b>	<b><i>\$155,602,365</i></b>
Option 3B New Construction	204,903	N/A	204,903 \$534/sq. ft.	\$14,884,517	\$124,359,801 \$607/sq. ft.	\$157,617,918

\* Marked up construction costs

\*\* Does not include construction contingency

\*\*\**District’s Preferred Schematic*

The District has selected "Option 3", as the Preferred Schematic to proceed into Schematic Design. The District selected "Option 3" as its preferred option because it meets the needs of the District's educational program and it minimizes impacts on the adjacent wetlands while keeping the number of temporary modular classrooms at a minimum.

"Option 2" was not selected because it is more costly than "Option 3", would result in an extended construction schedule, and construction phasing of an occupied building would result in significant disruption to ongoing education during construction.

Although "Option 3B" meets the needs of the District's educational program, it was not selected because it is more costly than "Option 3", and the orientation of the building footprint will result in additional temporary modular classrooms that would result in significant disruption to ongoing education during construction.

The District presented its proposed Preferred Schematic to the MSBA Facilities Assessment Subcommittee ("FAS") on August 5, 2020. At that meeting, members of the FAS discussed the following items: appreciation of the Educational Program; the location and number of toilet facilities; opportunities to create an Early Education and Care Collaborative with neighboring towns; distribution of Special Education spaces; internal circulation of stairwell in the pre-kindergarten wing; location of play space in relation to vehicular circulation; inclusion and location of a flexitorium space; ongoing local discussions about potentially eliminating the proposed flexitorium space from the project; ongoing local discussions about the quantity and types of dedicated pre-k spaces; the benefits to a final design that utilizes guideline spaces for multiple uses creating a more efficient building; and the design team's August 31, 2020 deadline for finalizing decisions regarding both the flexitorium and the pre-k spaces.

MSBA staff reviewed the conclusions of the Feasibility Study and all other subsequent submittals 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 Schematic is reasonable and cost-effective and meets the needs identified by the District.
- 2) The District has submitted an operational budget for educational objectives and a capital budget statement for MSBA review.
- 3) The District's Special Education submission will be subject to final review and approval by the Department of Elementary and Secondary Education as part of the Schematic Design submittal, which is prior to executing a Project Scope and Budget Agreement.
- 4) Subject to Board approval, the MSBA will participate in a project that includes spaces that meet MSBA guidelines, except for variations previously agreed to by the MSBA. All proposed spaces will be reviewed during the Schematic Design phase.
- 5) The design team has indicated that in order to meet the anticipated schematic design schedule for April Board consideration, District decisions associated with potential adjustments to the pre-kindergarten and flexitorium spaces must be communicated to the designer by August 31, 2020. Early in the Schematic Design phase, the MSBA will work

with the District to understand final decisions regarding the magnitude of potential adjustments associated with these proposed spaces.

- 6) 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 Town of Andover be approved to proceed into Schematic Design to replace the existing West Elementary School with a new grades PK-5 facility on the site of the existing West Elementary School.