District: Town of Ludlow

School Name: Chapin Street Elementary School

Recommended Category: Preferred Schematic Date: December 6, 2017

Recommendation

That the Executive Director be authorized to approve the Town of Ludlow, as part of its Invitation to Feasibility Study, to proceed into Schematic Design to replace the existing Chapin Street Elementary School and the Veterans Park Elementary School with a new grades 2-5 elementary school on the site of the existing Chapin Street Elementary School. MSBA staff has reviewed the Feasibility Study and accepts the District's preferred solution.

District Information					
District Name	Town of Ludlow				
Elementary Schools	East Street Elementary School (PK-1)				
-	Chapin Street Elementary School (2-3)				
	Veterans Park Elementary School (4-5)				
Middle School	Paul R. Baird Middle School (6-8)				
High School	Ludlow Senior High School (9-12)				
Priority School Name	Chapin Street Elementary School				
Type of School	Elementary School				
Grades Served	2-3				
Year Opened	1959				
Existing Square Footage	42,672				
Additions	1964, Single Story Classroom Addition				
Acreage of Site	13.8 acres				
Building Issues	The District identified deficiencies in the following areas: - Structural - Mechanical systems - Electrical systems - Envelope - HVAC - Windows - 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	346				
Agreed Upon Enrollment	Study Enrollment includes the following configurations: • 300 students in grades 2-3				
	• 630 students in grades 2-5 (Preferred Solution)				
Enrollment Specifics Contingent upon the Board's approval of the preferred the District will sign a Design Enrollment Certification students in grades 2-5.					

District Information		
Total Project Budget- Debt	Yes	
Exclusion Anticipated		

MSBA Board Votes			
Invitation to Eligibility Period	January 27, 2016		
Invitation to Feasibility Study	November 9, 2016		
Preferred Schematic Authorization	On December 13, 2017 Board agenda		
Project Scope & Budget Authorization	District is targeting Board authorization on February 14, 2018		
Feasibility Study Reimbursement Rate	58.37%		
(Incentive points are not applicable)			

Consultants				
Owner's Project Manager (the "OPM")	STV/DPM			
Designer	Mount Vernon Group			

Discussion

The existing Chapin Street Elementary School is a 42,672 square foot single story building located on a 13.8-acre site that currently serves grades 2-3. The original school building was constructed in 1959 with a classroom addition completed in 1964. In 2014, due to overcrowding, two portable classroom units were added to provide an additional 2,600 square feet.

The District identified numerous deficiencies in the Statement of Interest that are associated with: structural, mechanical, and electrical systems; HVAC; building envelope and windows; and accessibility constraints. The District has also expressed concern regarding the ability to deliver its educational program due to the severe overcrowded conditions and lack of programmatic space.

Early in the Feasibility Study, the District determined that the potential consolidation of two existing schools would be advantageous locally to help overcome current educational, social, and fiscal challenges. In addition to the Chapin Street Elementary School, the District also evaluated the existing Veterans Park Elementary School, which is located 1.5 miles from the Chapin Street Elementary School. Veterans Park Elementary School is a 53,788 square foot single story building on a 60.25 acre site and is adjacent to Ludlow High School. Veterans Park Elementary School was constructed in 1966 and currently houses grades 4-5. Based on this additional evaluation, the District and design team determined that the Veterans Park Elementary School requires similar upgrades and modernization to effectively deliver the necessary educational programming and services.

In conjunction with its consultants, the District performed a comprehensive assessment of the existing conditions and the educational programs for both facilities, and received input from educators, administrators, and facilities personnel. Based on the findings of this effort, the District and its consultants initially studied nine preliminary options on two sites. These options included one base repair option, four addition/renovation options, and four new construction options. It should be noted that upon the initial MSBA review of the proposed options, the MSBA requested that the District also provide and evaluate a "Base Repair" option to the Veteran's Park

Elementary school for grades 2-5 and 630 students. The following is a list of the preliminary alternatives considered.

Option	Description of Preliminary Options
1	Base Repair of Chapin Street Elementary- Grades 2-3 for 300 students
2	Addition/ Renovation at Chapin Street Elementary site- Grades 2-3 for 300 students
3	New Construction at Chapin Street Elementary site- Grades 2-3 for 300 students
4	Addition/ Renovation at Chapin Street Elementary site- Grades 2-5 for 630 students
5	New Construction at Chapin Street Elementary site- Grades 2-5 for 630 students
6	Addition/ Renovation at Veterans Park Elementary site- Grades 2-3 for 300 students
7	New Construction at Veterans Park Elementary site- Grades 2-3 for 300 students
8	Addition/ Renovation at Veterans Park Elementary site- Grades 2-5 for 630 students
9	New Construction at Veterans Park Elementary site- Grades 2-5 for 630 students
10	Base Repair of Veterans Elementary- Grades 2-5 for 630 students

Following staff review of the District's Preliminary Design Program, the MSBA and District agreed that "Options 6 and 7" do not support a project that addresses the issues related to the students of the Chapin Street Elementary School, the District's priority Statement of Interest school. Therefore, these options were not considered further in subsequent phases of the feasibility study. As a result, the following is a detailed list of the preliminary alternatives evaluated for further consideration.

Option	Description of Preliminary Options
1	Base Repair/ Code Upgrade to Chapin Street Elementary- Grades 2-3 for 300 students
2	Addition/ Renovation at Chapin Street Elementary site- Grades 2-3 for 300 students
3	New Construction at Chapin Street Elementary site- Grades 2-3 for 300 students
4	Addition/ Renovation at Chapin Street Elementary site- Grades 2-5 for 630 students
5	New Construction at Chapin Street Elementary site- Grades 2-5 for 630 students
8	Addition/ Renovation at Veterans Park Elementary site- Grades 2-5 for 630 students
9	New Construction at Veterans Park Elementary site- Grades 2-5 for 630 students
10	Base Repair/ Code Upgrade to Veterans Park Elementary- Grades 2-5 for 630 students

As a result of the District's preferred 2-5 grade configuration for 630 students, "Options 2 and 3" were eliminated from further consideration. "Option 8" was eliminated because complex phasing would likely result in disruption of educational spaces during construction. This option would also require expensive swing space and would involve site restrictions associated with documented wetlands and riverfront conditions. Therefore, "Option 8" was not considered further. Upon further review, MSBA staff and the District agreed to five 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: Chapin Street Site Base repair/ Code upgrade for grades 2-3 with an enrollment of 300 students	42,672	42,672 \$70/sq. ft.	N/A	\$2,700,571	\$5,677,370 \$133/sq. ft.	\$7,096,712
Option 4: Chapin Street Site Addition/ Renovation for grades 2-5 with an enrollment of 630 students	101,785	35,960 \$227/sq. ft.	65,825 \$261/sq. ft.	\$15,693,631	\$41,040,320 \$403/sq. ft.	\$51,300,400
Option 5: Chapin Street Site New construction for grades 2-5 with an enrollment of 630 students ***	105,683	N/A	105,683 \$264/sq. ft.	\$18,476,950	\$46,424,819 \$439/sq. ft.	\$58,031,024
Option 9: Veterans Park Site New construction for grades 2-5 with an enrollment of 630 students	105,683	N/A	105,683 \$264/sq. ft.	\$19,307,672	\$47,255,541 \$447/sq. ft.	\$59,069,427
Option 10: Veterans Park Site Base repair/ Code upgrade for grades 2-5 with an enrollment of 630 students	53,788	53,788 \$61/sq. ft.	N/A	\$2,966,380	\$6,271,115 \$117/sq. ft.	\$7,838,893

^{*} Marked up construction costs

The District has selected "Option 5", a new two-story building on the existing Chapin Street Elementary School site, as the preferred solution to proceed into Schematic Design. "Option 5" responds to the specific goals documented in the District's educational program including: adequate special education classrooms and support spaces, neighborhood learning environments, breakout and support space adjacencies, and centrally located library and art rooms. In addition, constructing a new school will allow the existing Chapin Street Elementary School facility and Veterans Park Elementary School facility to remain in operation during construction, thus, eliminating complex construction phasing in an occupied building and eliminating the required

^{**} Does not include construction contingency

^{***}District's preferred solution

temporary swing space, and will allow the District's current educational program to operate without interruption.

"Base Repair "Options 1 and 10" were provided for cost comparison purposes only, as these options do not meet the space needs or the educational program requirements established by the District because the existing classrooms would continue to be undersized and overcrowded, the proper quantities and adjacencies for support spaces would continue to be deficient, and special education spaces would continue to be inadequate.

Although "Option 4" results in the lowest preliminary estimated cost, when compared to the other "build options", this option was not selected because it does not fully provide the educational program adjacency requirements in the District's educational program. In addition, the District has indicated that occupied phased construction and the potential need for swing space may create a disruption of education delivery during construction.

"Option 9" also responds to the specific goals documented in the District's educational program and includes all of the proposed spaces included in the preferred solution. However, this option was eliminated because of the cost associated with remediating site deficiencies on the Veterans Park site which includes the proximity to Higher Brook, the vegetative wetlands and associated setbacks, and unsuitable soils in need of possible structural improvement.

The District presented its proposed project to the MSBA Facilities Assessment Subcommittee ("FAS") on November 15, 2017. At that meeting, members of the FAS discussed a number of topics with the District including: the combining of two elementary schools; the organization and orientation of the building; utilization of the small group rooms, utilization and the safety of the "STEAM" classroom; location and scheduling of the Adaptive P.E. program; the District's coteaching models; site topography including proposed building location in relation to floodplains; and the security of the building during community after-hours use.

Based on the District's presentation and the FAS members' feedback at the November 15, 2017 FAS meeting and the MSBA staff review comments for the Preferred Schematic Report, MSBA staff will continue to work with the District and its consultants while the proposed building orientation is further developed. In addition, MSBA staff requested that the District submit an updated preferred solution including: one transverse and one longitudinal site section, resiliency and sustainability documentation, preliminary grading and drainage plan, site plan, space summary, floor plans, budget, and schedule, as a condition precedent to staff's recommendation of the preferred solution to the Board.

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 costeffective; however, MSBA staff must still review and accept the updated preferred solution, 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 would ensure a mutual understanding and agreement of the proposed project scope and 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 and prior to issuing 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.
- 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 Ludlow be approved to proceed into Schematic Design to replace the existing Chapin Street Elementary School and the Veterans Park School with a new grades 2-5 elementary school on the existing Chapin Street Elementary School site.