District: Town of Belmont
School Name: Belmont High School
Recommended Category: Preferred Schematic
Date: June 20, 2018

Recommendation

That the Executive Director be authorized to approve the Town of Belmont, as part of its Invitation to Feasibility Study, to proceed into Schematic Design for an addition and renovation project at the Belmont High School. MSBA staff has reviewed the Feasibility Study and accepts the District's preferred solution.

District Information					
District Name	Town of Belmont				
Elementary Schools	Roger E. Wellington Elementary School (PK-4)				
	Daniel Butler Elementary School (K-4)				
	Mary Lee Burbank Elementary School (K-4)				
	Winn Brook Elementary School (K-4)				
Middle School	Winthrop L. Chenery Middle School (5-8)				
High School	Belmont High School (9-12)				
Priority School Name	Belmont High School				
Type of School	High School				
Grades Served	9-12				
Year Opened	1970				
Existing Square Footage	257,120				
Additions	N/A				
Acreage of Site	38 acres				
Building Issues	The District identified deficiencies in the following areas:				
	 Mechanical systems 				
	 Electrical systems 				
	 Plumbing systems 				
	– Envelope				
	- 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				
2017-2018 Enrollment	1,294				
Agreed Upon Enrollment	Study Enrollment includes the following configurations:				
	1,470 students in grades 9-12				
	1,845 students in grades 8-12				
	2,215 students in grades 7-12 (Preferred Solution)				
Enrollment Specifics	Contingent upon the Board's approval of the preferred				
	solution, the District will sign a Design Enrollment				
	Certification for 2,215 students in grades 7-12.				

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 June 27, 2018 Board agenda
Project Scope & Budget Authorization	District is targeting Board authorization on
	August 29, 2018.
Feasibility Study Reimbursement Rate	36.89%
(Incentive points are not applicable)	

Consultants	
Owner's Project Manager (the "OPM")	Daedalus Projects, Inc.
Designer	Perkins+Will

Discussion

The existing Belmont High School is a 257,120 square foot facility. The school opened in 1970 and was constructed as a new 9-12 building on a vacant 38 acre site. There have been no additions or major renovations since the facility opened, with the exception of all new mechanical units on the roof of the building. Although the school building is in excellent condition, the District identified numerous deficiencies in the Statement of Interest including inefficient and outdated mechanical and electrical systems, lack of access for the handicapped, hazardous building materials, an inefficient exterior envelope, and lack of space for an increasing enrollment throughout the District.

With the help of an outside consultant, the District performed a District-wide capacity analysis of the various schools in Belmont, studying how the 7-12, 8-12 and 9-12 grade options for this project would affect the remaining middle schools and elementary schools in the District.

In conjunction with its consultants, the District performed an assessment of the existing conditions and the educational program, receiving input from educators, administrators, and facilities personnel. Based on the findings of this assessment, the District and its consultants initially studied twenty-two preliminary options that included fifteen addition/renovation configurations and six new building options. The following is a list of the preliminary alternatives considered.

Option	Description of Preliminary Options
A.1	Base Repair/Code Upgrade for grades 9-12
A.2.1	Major Renovation/Minor Addition for grades 9-12
A.2.2 - A.2.5	4 variations of Minor Renovation/Major Addition for grades 9-12
A.3.1 & A.3.2	2 variations of New Construction for grades 9-12
B.2.1	Major Renovation/Minor Addition for grades 8-12
B.2.2 - B.2.5	4 variations of Minor Renovation/Major Addition for grades 8-12
B.3.1, B.3.2	2 variations of New Construction for grades 8-12
C.2.1	Major Renovation/Minor Addition for grades 7-12

C.2.2 - C.2.5	4 variations of Minor Renovation/Major Addition for grades 7-12
C.3.1 & C.3.2	2 variations of New Construction for grades 7-12

Based on results from the District-wide capacity analysis and due to increasing enrollment at all schools in Belmont, the District selected the option to reconfigure the high school to a 7-12 upper and lower high school, therefore eliminating the 9-12 and 8-12 series of options. Two of the four variations of minor renovation/major addition were eliminated for further evaluation due to space programming and adjacency developments. As a part of the Preferred Schematic Report study, the MSBA requested that the District continue to evaluate a repair/code upgrade option, and an addition/renovation variation of C.2.1 with a moderate scope of work. "Option C.3.2" was eliminated as the building location did not provide optimal site configuration. This left the following options remaining for further evaluation:

Option	Description
C.1	Base Repair/Code Upgrade for grades 7-12
C.2.1	Major Renovation/Minor Addition for grades 7-12 (maintains field house,
	pool, and auditorium)
C.2.3 & C.2.4	2 variations of Minor Renovation/Major Addition for grades 7-12
	(maintains field house and pool)
C.3.1	New Construction for grades 7-12

The District initially selected "Option C.2.4," a minor renovation/major addition for grades 7-12 as the preferred solution to proceed into schematic design due to preservation of the existing pool and field house, and a preferred site configuration. The District presented its proposed project to the MSBA Facilities Assessment Subcommittee ("FAS") on March 21, 2018. MSBA staff and members of the FAS expressed concern regarding the amount of ineligible scope, area in excess of MSBA guidelines, high per square foot construction costs, and community support for the project. Based on discussions during that FAS meeting and in conversations with MSBA staff regarding the benefit to the District of further development of its preferred option prior to the MSBA Board of Directors' vote, the District elected to submit a revised version of its Preferred Schematic Report that would reduce excessive area and costs, further develop the preferred solution, and address the other issues raised at the FAS meeting. The District submitted a revised Preferred Schematic Report on May 9, 2018 that included an additional "Option C.2.4.R1" based on a reduced scope variant of "Option C.2.4" that sought to address these concerns. The District and design team presented this option at a second FAS meeting on May 9, 2018. The six options for consideration in the final evaluation and development of preliminary design pricing are 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 C.1: Base Repair	257,120	257,120 \$290/sq. ft.		\$14,747,909	\$89,192,522 \$347/sq. ft.	\$111,490,653

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 C.2.1: Major Renovation/Minor Addition	451,800	239,354 \$441/sq. ft.	212,446 \$476/sq. ft.	\$34,947,073	\$241,676,850 \$535/sq. ft.	\$302,096,061
Option C.2.3: Minor Renovation/Major Addition	451,800	65,050 \$311/sq. ft.	386,750 \$490/sq. ft.	\$36,266,346	\$245,805,460 \$544/sq. ft.	\$307,256,825
Option C.2.4: Minor Renovation/Major Addition	451,800	62,300 \$316/sq. ft.	389,500 \$486/sq. ft.	\$36,896,842	\$245,770,439 \$544/sq. ft.	\$307,161,440
Option C.2.4.R1: Minor Renovation/Major Addition***	445,100	64,510 \$316/sq. ft.	380,590 \$477/sq. ft.	\$35,520,163	\$237,594,715 \$534/sq. ft.	\$295,824,264
Option C.3.1: New Construction	422,925		422,925 \$472/sq. ft.	\$35,557,448	\$235,060,850 \$556/sq. ft.	\$293,826,063

^{*} Marked up construction costs

The District selected "Option C.2.4.R1," a minor renovation/major addition option on the existing site, as the preferred solution to proceed into the Schematic Design Phase. The District selected this option because it mitigates over-crowding in the Belmont School District, meets the educational program, preserves the existing pool and field house, has a preferred site configuration, and has reduced scope and cost compared to the initial preferred option.

MSBA staff reviewed the conclusions of the Feasibility Study, all subsequent submittals, and the enrollment data with the District. Please note the following items:

- 1) MSBA reviewed the Feasibility Study and subsequent material and finds that the options investigated were sufficiently comprehensive in scope, the approach undertaken in this study was appropriate, the District's preferred solution is reasonable and cost-effective, and the preferred solution 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 schematic design submittal will be subject to final review and approval by the Department of Elementary and Secondary Education prior to 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, with the exception of variations previously agreed to by the MSBA. All proposed spaces will be reviewed during the Schematic Design phase.

^{**} Does not include construction contingency

^{***}District's preferred solution

5) 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 Belmont be approved to proceed into Schematic Design for an addition and renovation project at the Belmont High School.