District: Town of Lunenburg
School Name: Lunenburg High School
Recommended Category: Preferred Schematic

Date: July 24, 2013

Recommendation

That the Executive Director be authorized to approve the Town of Lunenburg, as part of its Invitation to Feasibility Study, to proceed into schematic design for the replacement of the existing Lunenburg High School with a new 6-12 facility on the existing site. MSBA staff has reviewed the Feasibility Study and accepts the District's preferred solution to replace the existing Lunenburg High School on the existing site.

District Information					
District Name	Town of Lunenburg				
Elementary School(s)	Lunenburg Primary School (PK-3)				
Middle School(s)	Turkey Hill Middle School (4-7)				
High School(s)	Lunenburg High School (8-12)				
Priority School Name	Lunenburg High School				
Type of School	High School				
Grades Served	8-12				
Year Opened	1957				
Existing Square Footage	98,000				
Additions	1960				
Acreage of Site	52 acres				
Building Issues	The District identified deficiencies in the following areas:				
	 Original Components of Mechanical System 				
	 Electrical Systems and Fire Protection 				
	 Envelope, Windows, and 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 and that there is existing and projected overcrowding.				
Original Design Capacity	Unknown				
2012-2013 Enrollment	582				
Agreed Upon Enrollment	Study Enrollment includes the following configurations:				
	Enrollment 820 (grade configuration 6-12) (Preferred Solution)				
	Enrollment 445 (grade configuration 9-12)				
Enrollment Specifics	Contingent upon the Board's approval of the preferred solution, the				
	District will sign a Design Enrollment Certification for 820				
	students serving grades 6-12.				

MSBA Board Votes	
Invitation to Feasibility	July 25, 2012
Study	
Preferred Schematic	On July 31, 2013 Board agenda
Authorization	

Project Scope & Budget Authorization	District is targeting Board authorization on November 13, 2013
Reimbursement Rate	
Before Incentives	53.53%

Consultants	
Owner's Project Manager	Joslin, Lesser + Associates, Inc.
Designer	Tappe Associates, Inc.

Discussion

The existing Lunenburg High School is a 98,000 square foot two-story masonry and steel structure. The original school building opened in 1957 with an addition built in 1960. The existing facility served grades 9-12 until June of 2012 when the 8th grade was relocated to the high school to create the current high school grade structure of 8-12.

The District identified numerous deficiencies in its Statement of Interest, including that the original components of the mechanical system were not replaced as part of the 2004 HVAC upgrade, that the electrical systems are original to the building, and that the building lacks a sprinkler system. The existing exterior walls are inefficient and minimally insulated. The windows are non-insulated and original to the building. The roofing that was replaced in 1984 has several areas prone to leaking. In addition to the physical issues associated with the existing building, the District reported that the existing facility does not support the delivery of its educational program due to overcrowding and the insufficient size of most existing spaces.

In February of 2012, the District's Reconfiguration Advisory Committee unanimously voted in favor of a grade reconfiguration that creates a 6-12 grade structure in support of a previously performed District-wide evaluation. The District's intent is to reduce the number of currently operating facilities from four to three, while maintaining facilities for a PK-2, 3-5, and 6-12 grade configuration. In July of 2012, the District and the MSBA agreed to a study enrollment to explore options associated with a 9-12 and 6-12 grade structure serving 445 and 820 students respectively. It should be noted that, in the schematic design phase, the MSBA will determine the appropriate amount of state funding that will be recouped in conjunction with the 2006 boiler replacement project at the Thomas C. Passios facility, which also serves the existing and adjacent Lunenburg High School, for which the Commonwealth provided grant funding to the District.

In conjunction with its consultants, the District performed a comprehensive assessment of the existing conditions and the educational program. The District 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, which included one baseline renovation option, two addition/renovation options, and two new construction options, as shown below.

Option	Description of Preliminary Options		
1	Renovation (baseline) to accommodate grades 8-12		
2	Renovation and limited Addition to accommodate grades 9-12		
3	Renovation/Addition to accommodate grades 6-12		
4	New Construction to accommodate grades 9-12 on existing site		
5	New Construction to accommodate grades 6-12 on existing site		

Option 1 was not considered a viable option as it does not fully address the issues associated with the existing building and does not accommodate the District's desired educational program or grade configuration. Option 2 retains the existing building and was evaluated to provide an addition that enlarges the building to meet most programmatic requirements. However, this option poses extensive renovation, significant student disruption, a longer multi-phased and complex construction process, two entrances at different elevations, longer student travel distances, insufficient space above ceilings to accommodate new systems, and it does not accommodate the District's desired grade configuration. Option 3 retains the existing building and was evaluated to provide an addition that enlarges the building to meet most programmatic requirements and would be large enough to accommodate the District's desired 6-12 grade configuration. This option poses the same inherent issues identified in Option 2. Option 4 proposes a new school that will allow the District to create a more compact and efficient building designed to serve the needs of students in grades 9-12, however, this option does not enable the District to consolidate from four to three schools. Option 5 will allow the District to create a more compact and efficient building designed to serve the needs of students in grades 9-12 and this option will enable the District to consolidate from four to three schools.

The District identified Options 3, 4, and 5 as viable options for further evaluation. The District and its consultants developed preliminary pricing for all five options for comparative purposes as summarized below.

Summary of Preliminary Design Pricing for Final Evaluation of Options

	-	Square			Estimated	
	Total	Feet of	Square Feet	Site, Building	Total	
	Gross	Renovated	of New	Takedown,	Construction	Estimated
Option	Square	Space	Construction	Haz Mat.	**	Total
(Description)	Feet	(cost*/sf)	(cost*/sf)	Cost*	(cost*/sf)	Project Costs
Option 1:	98,000	98,000	NA	\$6,528,600	\$28,578,600	\$35,290,880
Baseline						
Renovation		\$225/sf			\$292/sf	
Option 2:	110,000	98,000	12,000	\$8,049,048	\$33,843,048	\$40,983,200
Moderate	,	,	,		, , ,	, , ,
Addition/		\$225/sf	\$312/sf		\$308/sf	
Renovation		Ψ223/51	Ψ312/31		Ψ300/31	
Grades 9-12						
Option 3:	169,733	87,000	82,733	\$13,593,056	\$60,459,752	\$73,970,934
Addition/		ĺ	,		, , ,	
Renovation		\$242/sf	\$312/sf		\$356/sf	
Grades 6-12		Ψ2 :2/51	φε 12, 51		φεε οι σι	
Option 4:	110,000	NA	110,000	\$9,840,640	\$43,280,640	\$51,971,280
New Construction			,		, , ,	
Grades 9-12			\$304/sf		\$393/sf	
Option 5:	169,733	NA	169,733	\$10,475,040	\$59,697,610	\$74,455,438
New Construction						
Grades 6-12***			\$290/sf		\$352/sf	

^{*} Marked up construction costs

^{**} Does not include construction contingency

^{***}District's preferred option

The District has selected Option 5, which replaces the existing Lunenburg High School with new construction on the existing site adjacent to the existing building, as the preferred solution to proceed into schematic design. The District selected Option 5 as its preferred alternative because this option best supports the District's desired educational goals and grade configuration. Option 5 also reduces the number of operational facilities from four to three. If the District proceeds with Option 5, the currently closed Thomas C. Passios School, which is adjacent to the existing high school, will not be brought back online to operate as a public school. District use and occupancy of this facility has yet to be determined.

The District presented its proposed project to the MSBA Facilities Assessment Subcommittee ("FAS") on May 1, 2013. At that meeting, the District, the Owner's Project Manager, and design team presented an overview of the District's intended 6-12 grade reconfiguration and educational vision, the options studied during the Feasibility Study, the proposed project site, and a conceptual layout of a new 6-12 facility. The District also proposed an alternate conceptual layout for the MSBA's consideration. The FAS and MSBA staff inquired about the following items: 1) delivery of the science curriculum in the proposed spaces; 2) proposed project costs; 3) site drainage associated with the proposed project; 4) student entrances and the proposed separation for middle and high school students; and 5) flexibility of the proposed layout. Additionally, the MSBA had questions about the District's new conceptual layout presented at the FAS meeting.

Subsequent to the FAS meeting, and based on the District's alternative conceptual layout introduced at the FAS meeting, the MSBA requested and received supplemental preferred schematic material that provided an updated description of the preferred solution as well as a more refined conceptual layout.

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

- 1) MSBA reviewed the Feasibility Study including supplemental material 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, 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 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.
- 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.
- 5) Early in the Schematic Design Phase, the MSBA will continue to work with the District to make adjustments to the total area associated with the health and physical education category of the space summary as the MSBA has indicated that this category should not exceed the MSBA guidelines.

6) Demolition of the existing high school and closing of Thomas C. Passios facility will result in the MSBA recovering a portion of state funds previously paid to the District for the repair project at the Lunenburg High School and Thomas C. Passios Elementary School constructed from 2003 through 2006.

Based on the review outlined above, staff recommends that the Town of Lunenburg be approved to proceed into schematic design to replace the existing Lunenburg High School with a new 6-12 facility on the existing site.