District: Leominster

School Name: Leominster Senior High School

Recommended Category: Preferred Schematic Date: March 31, 2010

Recommendation:

That the Executive Director be authorized to approve the City of Leominster, as part of its Invitation for Feasibility Study, to proceed into schematic design for the addition/renovation of the existing Leominster Senior High School. MSBA staff has reviewed the feasibility study and accepts the District's preferred solution of an addition and renovation to the existing Leominster Senior High School to proceed into schematic design.

Background:

The District submitted two Statement of Interests (SOI), one for the Lincoln Elementary School and one for the Senior High School. The District prioritized the SOI for the Senior High School. Leominster Senior High School was built in 1963 and totals 287,000 square feet, which includes additions in 1978 and 1991 and the addition of two modular science and technology classes in 1998. The school serves grades 9-12, with a 2008-2009 total enrollment of 1,805 students, which includes 654 students who participate in the vocational and technical education program at the High School. The MSBA conducted a senior study at the High School on September 26, 2007. The study noted that the school was a well-maintained, serviceable facility for education, included good cafeteria and gym spaces, and was a strong candidate for renovation.

The MSBA Board of Directors originally categorized and approved Leominster Senior High School as a repair project at the November 28, 2007 Board meeting, with the scope of the project concentrated on window replacement and HVAC system upgrades. The District secured the professional services of an Owner's Project Manager and a Designer, and they began to evaluate the proposed project. The MSBA visited the facility again on August 21, 2009, during which the District identified additional deficiencies in the building's electrical system and raised particular concern regarding the condition and limited number of the existing science classrooms. Seeking address as many issues at the facility as the City could afford at this time, the City requested that the MSBA allow the scope of the feasibility study to expand to include options to address deficiencies related to the space devoted to science education and to create a menu of potential system improvements, including mandatory code upgrades and improved interior finishes.

On September 30, 2009, the MSBA Board of Directors approved staff's recommendation to invite the District to conduct a Feasibility Study for the Leominster Senior High School to identify and study possible solutions and, through a collaborative process with the MSBA, to reach a mutually-agreed upon solution.

Discussion

The District and its Design Team met on several occasions to discuss potential upgrades and improvements, determine relative priorities, generate construction cost estimates, and create a menu of options from which the District could define a scope of work that could be financially supported at this time. The District and its Design Team examined critical building systems, all of

which are original systems, and found that almost all components are nearing or have exceeded their life expectancy. The Design Team evaluated accessibility issues throughout the school and the site and generated a list of improvements needed to comply with current standards.

In addition to the physical plant and accessibility issues, the District evaluated options for increasing and improving educational space devoted to the delivery of the science program. The recommended option for increased and improved science space includes possible upgrades to existing science department spaces, demolition of a 4,100 square foot modular unit currently housing two science lab/classrooms, and construction of a 13,484 square foot addition that would include seven science lab/classrooms and one general classroom. This renovation/addition option would provide lab/classrooms, storage rooms and preparation rooms that more closely align with the MSBA guidelines. The District had proposed the addition based on the MSBA's current guidelines but was asked to review its design based on the proposed revisions to the MSBA's guidelines for science classrooms. In response, the District considered enlarging four of the proposed science lab/classrooms from 1,264 to 1,440 net square feet each, but determined that because of site limitations, and the increased costs associated with reconfiguring the paved areas and drives, larger science rooms were not feasible. The recommended option would increase the total area devoted to science from 15,299 net square feet to 20,900 net square feet. Within the proposed program, the science rooms would vary from 958 net square feet to 1,306 net square feet with the new classrooms ranging from 1250 to 1300 square feet. MSBA staff finds that the recommended improvements in support of their science program are reasonable, and are reported by the District to support their curriculum.

This initial evaluation effort concluded with a prioritized menu of options from which the District could select and create a scope of work that could be supported financially by the City at this time. A summary of the "Menu of Options" is presented below. The menu is divided into three prioritized groupings, consisting of increasing levels of project scope as follows:

Category of Work / Priority	Related Work	SF of Renovated Space *(Cost/SF)	SF of New Construction *(Cost/SF)	Estimated Total Construction Cost *(Cost/SF)
Category 1: Mandatory building repairs and upgrades to address life safety system requirements and mandatory code upgrades triggered by related work	 Accessibility Code Compliance both inside and outside the building Structural Code Compliance New Roof on 1961 portion of CTE Bldg Fire Protection Code Compliance Plumbing Code Compliance HVAC – Kitchen and Fume Hoods Electric-Power Distribution & Life Safety 	287,000 (\$37/SF)	0	\$10,715,631 (\$37/SF)

Category of Work / Priority	Related Work	SF of Renovated Space *(Cost/SF)	SF of New Construction *(Cost/SF)	Estimated Total Construction Cost *(Cost/SF)
Category 2: Work necessary to address either malfunctioning or broken components	 Window & Door Replacement Plumbing – Acid Waste Systems & Emergency Eyewash/Showers HVAC – Science Lab/Media Center system & Classroom and Toilet Exhausts Electrical Clock System 	287,000 (\$25/SF)	0	\$7,223,175 (\$25/SF)
Category 3: Major Building Systems & Science Lab/Classrooms Addition and Renovation	 Science Lab/Classroom Addition and Renovations** HVAC Upgrades – Controls, limited AC and equipment Site Repaving Interior Finishes Plumbing improvements and upgrades Electrical and Communication System Improvements 	287,000 (\$40/SF)	13,484 (\$300/SF)	\$15,559,469 (\$53/SF)
Total Categories 1, 2 & 3 Preferred Option	295,769 SF addition plus renovation	287,000 (\$103/SF)	13,484 (\$300/SF)	\$33,498,275 (\$113/SF)

^{*}Note that the renovation costs shown are applied to the total building area and not differentiated by specific area.

**The MSBA visited Leominster High School on March 25, 2010 and requested that they review and estimate the cost of additional upgrades, utility and casework, to improve the condition of the existing science classrooms in addition to the renovation work above.

Individual items within each category of work were presented with an associated cost that, when coupled with a relative priority, provided the District with the information needed to develop an affordable scope of work for renovating and adding to the existing facility. Based on the needs of the District, and the estimated preliminary design costs, the preferred option recommended by the Design Team, and supported by the City, includes all three categories of work as presented in the Menu of Options.

MSBA staff has received and reviewed the Designer's feasibility study and accepts the preferred option selected by the District, and that the approach and conclusions reached on behalf of the District are reasonable. The format and approach taken in this feasibility study was based on the premises that the existing facility substantially meets the educational needs of the District and that the existing structure is fundamentally sound and suitable for repair and renovation. The

feasibility study confirmed these assumptions and demonstrates that renovation of the existing facility with an addition that includes eight classrooms represents the most educationally appropriate and cost effective solution.

MSBA has reviewed the conclusions of the Feasibility Study and the enrollment data with the District and found:

- 1) All initial paperwork required has been processed including an executed Initial Certificate of Compliance, the composition of the School Building committee and the enrollment information.
- 2) MSBA has completed an enrollment projection and have reached a mutual agreement with the District of a design enrollment of 1,825 students for the Leominster Senior High School.
- 3) MSBA reviewed the feasibility study and subsequent material and finds that the alternatives investigated were sufficiently comprehensive in their scope, that the approach undertaken in this study was appropriate, and that the District's preferred option is reasonable.
- 4) MSBA will require the District to produce an operational maintenance budget that will include a capital budget to assure a complete maintenance and capital improvement program for the District.

Based on the review outlined above, staff recommends that the City of Leominster be approved to proceed into schematic design for the addition to and renovation of the existing Leominster Senior High School.