

District: City of Lowell
 School Name: Lowell High School
 Recommended Category: Preferred Schematic
 Date: June 20, 2018

Recommendation

That the Executive Director be authorized to approve the City of Lowell, as part of its Invitation to Feasibility Study, to proceed into Schematic Design for an addition and renovation project at the Lowell High School. MSBA staff has reviewed the Feasibility Study and accepts the District’s preferred solution contingent upon the District gaining full ownership, control, and exclusive use of the entire site, including the adjacent property.

District Information	
District Name	City of Lowell
Elementary School(s)	Abraham Lincoln Elementary School (PK-4) Bartlett Community Partnership School (K-8) Charles W. Morey Elementary School (PK-4) Charlotte M Murkland Elementary School (PK-4) Dr. Gertrude Bailey Elementary School (PK-4) Greenhalge Elementary School (PK-4) John J. Shaughnessy Elementary School (PK-4) Joseph McAvinnue Elementary School (PK-4) Laura Lee Therapeutic Day School (K-8) Moody Elementary School (PK-4) Pawtucketville Memorial Elementary School (PK-4) Peter W. Reilly Elementary School (K-4) Pyne Arts School (PK-8) Rogers STEM Academy (PK-5) S. Christa McAuliffe Elementary School (PK-4) Washington Elementary School (PK-4)
Middle School(s)	B.F. Butler Middle School (5-8) Dr. An Wang School (5-8) Henry J Robinson Middle School (5-8) James S. Daley Middle School (5-8) James Sullivan Middle School (5-8) Kathryn P. Stoklosa Middle School (5-8)
High School(s)	Leblanc Therapeutic Day School (9-12) Lowell High School (9-12) The Career Academy (9-12)
Priority School Name	Lowell High School
Type of School	High School
Grades Served	9-12
Year Opened	1892
Existing Square Footage	628,000
Additions	1922 (original 1892 buildings) 1900, 1939 (Freshman Academy buildings) 1980 (Lord & Fieldhouse buildings)

District Information	
	1997 minor additions & renovations
Acreage of Site	6.6 acres
Building Issues	<p>The District identified deficiencies in the following areas:</p> <ul style="list-style-type: none"> - Structural integrity - Mechanical systems - Electrical systems - Plumbing systems - Envelope - Windows - Roof - Accessibility <p>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.</p>
Original Design Capacity	Unknown
2017-2018 Enrollment	3,154
Agreed Upon Enrollment	3,520
Enrollment Specifics	The District and MSBA have mutually agreed upon a design enrollment of 3,520 students serving grades 9-12.

MSBA Board Votes	
Invitation to Eligibility Period	March 25, 2015
Invitation to Feasibility Study	November 18, 2015
Preferred Schematic Authorization	On June 27, 2018 Board agenda
Project Scope & Budget Authorization	District is targeting Board authorization in April 2019
Feasibility Study Reimbursement Rate (Incentive points are not applicable)	78.95%
Total Project Budget – Debt Exclusion Anticipated	No

Consultants	
Owner’s Project Manager (the “OPM”)	Skanska USA Building, Inc.
Designer	Perkins Eastman Architects, DPC

Discussion

The existing Lowell High School facility is located in the center of the City on Father Morissette Boulevard. The facility is a multi-building campus including the original 1892/1922 building, a separate Freshman Academy building dating to 1900/1939, a 1922 steam plant building, and a more recent 1980 Lord building, field house, and swimming facility. Further upgrades and additions were completed in 1997 and a portion of the existing roof was replaced in 2012. This campus is bisected by the Merrimack Canal. The site and majority of the school buildings are listed in the National and State Registers of Historic Places.

The District identified numerous deficiencies in its Statement of Interest. The existing facility requires new mechanical and plumbing systems, structural upgrades, and accessibility upgrades. The building roof and exterior masonry walls require repairs. Additionally, the District states that the existing building is severely overcrowded and, due to the separated functions of the multi-building campus, does not support the delivery of its 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 assessment, the District and its consultants initially studied 10 preliminary options that include one full renovation option, five addition/renovation configurations, and four new construction options. The following is a list of the preliminary alternatives considered:

Option	Description of Preliminary Options
1	Full Renovation, including new connecting bridges
1A	Addition/ Renovation, minimal additions
2	Addition/ Renovation, new freshman academy wing and field house, limited green space
3	Addition/ Renovation, new freshman academy wing and field house on expanded site
4	Addition/ Renovation, new wing and field house
5	Addition/ Renovation, new wing and field house on existing expanded site
6	New Construction, on the existing site
7	New Construction, on the existing expanded site
8	New Construction, on the Wang site
9	New Construction, on the Cawley site

After further development in the Preliminary Design Program, Option 1A was eliminated due to excessively disruptive construction phasing and failure to meet the District’s educational goals. Although Options 6 and 7 meet the educational goals, they were eliminated due to excessive phasing requirements and anticipated disruption during construction. Options 4 and 5 were eliminated because they do not meet the District’s educational goals and relatively excessive cost. Option 8 was eliminated because of its remote location, limited access to public transportation, and concerns of co-locating with an existing elementary and middle school.

From the ten options listed above, the Preliminary Evaluation of Alternatives concluded with the selection of the following four options for further evaluation:

Option	Description
1	Full Renovation, including new connecting bridges
2	Addition/ Renovation, new freshman academy wing and field house, limited green space
3	Addition/ Renovation, new freshman academy wing and field house on expanded site
9	New Construction, on the Cawley site

After further development, the District added a Base Repair Option, which was included in the initial Evaluation of Options. The District submitted a Preferred Schematic Report to the MSBA for consideration at the August 23, 2017 MSBA Board meeting for approval to proceed into Schematic Design for new construction on the Cawley site as its preferred solution. However, the MSBA Board of Directors tabled further consideration until the District could resolve local

opposition and legal disputes regarding the potential new construction on the Cawley site. . The District reconsidered its preferred solution and submitted an updated Preferred Schematic Report on May 9, 2018 that considered various options on the existing high school site including an addition/renovation option, an addition/renovation option on an expanded site, and a new construction option on an expanded site. None of the updated options include a new pool within the scope of work. The three final options are described in the table 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 2A: Add/ Reno, existing site	618,700	445,500 \$376/sq. ft.	173,200 \$475/sq. ft.	\$12,423,627	\$262,134,802 \$424/sq. ft.	\$333,040,001
<i>Option 3A: Add/ Reno, expanded existing site ***</i>	622,200	432,600 \$378/sq. ft.	189,600 \$484/sq. ft.	\$15,106,259	\$270,456,023 \$435/sq. ft.	\$345,399,220
Option A: All New Construction, expanded existing site	579,400	N/A	579,400 \$479/sq. ft.	\$11,440,511	\$289,152,725 \$499/sq. ft.	\$361,624,018

* Marked up construction costs

** Does not include construction contingency

***District's preferred solution

The District has selected Option 3A, an addition/renovation on the expanded existing site, as the preferred solution to proceed into the Schematic Design Phase. The District selected this option because it meets the Educational Program, brings all students onto the campus, provides natural daylight, provides outdoor green space, does not require temporary facilities during construction, develops a “heart to the school”, establishes zones for school/community use, and includes security measures that are integral in the design.

The District presented its updated proposed project to the MSBA Facilities Assessment Subcommittee (“FAS”) on May 9, 2018. At that meeting, FAS members discussed the following: design of the bridges over the canal and associated travel time required within the building, proposed vehicle and pedestrian site circulation, building and site connection to the canal, community outreach and support for the project, consideration of adding a second loading dock, plans for the current Freshman Academy building, and the District’s anticipated schedule to obtain full ownership, control, and exclusive use of the adjacent property by eminent domain.

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 staff’s recommendation to Board for approval of the City’s preferred solution is contingent upon the City obtaining full ownership, control, and exclusive use of the

adjacent property by eminent domain. The MSBA will not sign a Project Funding Agreement until said conditions are met.

- 2) 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, and the District's preferred solution is reasonable and cost-effective, and it meets the needs identified by the District.
- 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 prior to the issuance of 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 City of Lowell be approved to proceed into Schematic Design for an addition and renovation project at the Lowell High School, contingent upon the District gaining full ownership, control, and exclusive use of the entire site, including the adjacent property by eminent domain.