District: Town of Tewksbury

School Name: Louise Davy Trahan Elementary School

Recommended Category: Preferred Schematic Date: August 22, 2018

## Recommendation

That the Executive Director be authorized to approve the Town of Tewksbury, as part of its Invitation to Feasibility Study, to proceed into Schematic Design to consolidate and replace the existing Louise Davy Trahan Elementary School and the existing North Street Elementary School with a new facility serving grades 2-4 district-wide on the existing John F. Ryan Elementary School site. MSBA staff has reviewed the Feasibility Study and accepts the District's preferred solution.

District Information			
District Name	Town of Tewksbury		
Elementary School(s)	John F. Ryan Elementary School		
	North Street Elementary School		
	Louise Davy Trahan Elementary School		
	Loella F. Dewing Elementary School		
	Heath Brook Elementary School		
Middle School(s)	John W. Wynn Middle School		
High School(s)	Tewksbury Memorial High School		
Priority School Name	Louise Davy Trahan Elementary School		
Type of School	Elementary School		
Grades Served	3-4		
Year Opened	1952		
Existing Square Footage	37,565		
Additions	Library in 1957; 2 classrooms in 1973		
Acreage of Site	6.5 acres		
Building Issues	The District identified deficiencies in the following areas:		
	<ul> <li>Mechanical systems</li> </ul>		
	<ul> <li>Electrical systems</li> </ul>		
	<ul> <li>Plumbing systems</li> </ul>		
	<ul><li>Envelope</li></ul>		
	- Windows		
	- Roof		
Original Design Capacity	Unknown		
2017-2018 Enrollment	234		
Agreed Upon Enrollment	Study Enrollment includes the following configurations:		
	790 (District-wide grades 2-4) (Preferred Solution)		
	525 (District-wide grades 3-4)		
	265 (Grades 3-4, existing configuration)		
Enrollment Specifics	Contingent upon the Board's approval of the preferred		
	solution, the District will sign a Design Enrollment		
	Certification for 790 students in grades 2-4.		
Total Project Budget – Debt	Yes		
Exclusion Anticipated	100		

MSBA Board Votes	
Invitation to Eligibility Period	May 25, 2016
Invitation to Feasibility Study	February 15, 2017

Preferred Schematic Authorization	On August 29, 2018 Board agenda
Project Scope & Budget Authorization	District is targeting Board authorization on
	February 13, 2019
Feasibility Study Reimbursement Rate	52.06%
(Incentive points are not applicable)	

Consultants	
Owner's Project Manager (the "OPM")	CBRE/Heery
Designer	Flansburgh Architects

## **Discussion**

As part of the Feasibility Study, the District determined that the potential consolidation of its two existing grade 3-4 schools, the Louise Davy Trahan Elementary School and the North Street Elementary School, along with moving its second-grade students from both the Dewing Elementary School and Heath Brook Elementary School to a single elementary facility environment warranted consideration. In response to the District's request to study options that could address these goals, the MSBA agreed with the District on the benefit of evaluating three study enrollment scenarios including the existing 265 students in grades 3-4, a 525-student enrollment in grades 3-4 district-wide, and a third student enrollment to evaluate solutions for 790 students in grades 2-4 district-wide.

The existing Louise Davy Trahan Elementary School is a 37,565 square foot facility located on a seven-acre site and currently serves grades 3-4. The existing facility was originally constructed in 1952 as an elementary school that served students in grades 3-4, with additions in 1957 and 1974. Additionally, the District evaluated the existing Heath Brook and North Street Elementary Schools. The existing North Street Elementary School is one of the two schools in the District serving grades 3-4. The North Street Elementary School was constructed in 1952, with additions in 1957 and 1974 resulting in a 40,650 square foot facility. The Heath Brook Elementary School, located 2.7 miles from the Louise Davy Trahan Elementary School, is a 56,476 square foot, one-story building constructed in 1957 that sits on an approximately 6.5-acre site and currently serves grades K-2.

The District identified numerous deficiencies in the Statement of Interests for the Louise Davy Trahan, North Street, and Heath Brook Elementary Schools indicating for all three: outdated mechanical, electrical and plumbing systems; non-compliant accessibility conditions; existence of hazardous materials throughout the schools; non-existing fire protection sprinkler systems, security systems, and safety systems throughout the schools. The District also identified poor energy efficiency performance of the existing facilities because of the building envelope.

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 effort, the District and its consultants initially studied nine preliminary options that included one base repair option, two addition/renovation configurations, and six new construction options. One of the addition/ renovation options, "Option 1C" was eliminated early in the process because the phasing and site development were less advantageous compared to "Option 1B". The following is a detailed list of the remaining preliminary alternatives considered.

Option	Description of Preliminary Options
1A	New Construction for 265 students on the Trahan site
1B	Addition/Renovation for 265 students on the Trahan site
2A	New Construction for 525 students on the Ryan site

2B	New Construction for 525 students on the Ryan site
2C	New Construction for 525 students on the Heath Brook site
3A	New Construction for 790 students on the Ryan site
3B	New Construction for 790 students on the Ryan site
4	Base Repair of the Trahan School

Upon further review, MSBA staff and the District agreed to seven final options for further development and consideration in the final evaluation and development of preliminary design pricing as presented below. Please note that "Option 4" – Base Repair was carried for comparison purposes only and was not further developed as part of the final evaluation of options, as the District stated that this option does not meet the educational needs of the District.

**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 1A: New Construction for 265 students	63,605	0 \$0/sq. ft.	63,605 \$417/sq. ft.	\$7,420,000	\$33,950,000 \$534/sq. ft.	\$45,153,500
Option 1B: Addition/ Renovation for 265 students	63,605	19,355 \$425/sq. ft.	44,250 \$425/sq. ft.	\$7,420,000	\$34,424,000 \$541/sq. ft.	\$45,783,920
Option 2A: New Construction for 525 students	106,451	0 \$0/sq. ft.	106,451 \$402/sq. ft.	\$16,240,000	\$59,080,000 \$555/sq. ft.	\$78,576,400
Option 2B: New Construction for 525 students	106,451	0 \$0/sq. ft.	106,451 \$399/sq. ft.	\$6,390,000	\$48,860,000 \$459/sq. ft.	\$64,983,800
Option 2C: New Construction for 525 students	106,451	0 \$0/sq. ft.	106,451 \$405/sq. ft.	\$8,570,000	\$51,690,000 \$486/sq. ft.	\$68,747,700
Option 3A: New Construction*** for 790 students	139,457	0 \$0/sq. ft.	139,457 \$393/sq. ft.	\$16,670,000	\$71,530,000 \$513/sq. ft.	\$95,134,900
Option 3B: New Construction for 790 students	139,457	0 \$0/sq. ft.	139,457 \$395/sq. ft.	\$6,510,000	\$61,660,000 \$442/sq. ft.	\$82,007,800
Option 4: Base Repair for 265 students	37,565	37,565 \$335/sq. ft.	0 \$0/sq. ft.	\$2,340,000	\$14,940,000 \$398/sq. ft.	\$19,870,200

<sup>\*</sup> Marked up construction costs

The District has selected "Option 3A", new construction, which will replace the existing Louise Davy Trahan and North Street Elementary Schools with a single facility serving students district-wide in grades 2-4, on the existing site of the John F. Ryan Elementary School, as the preferred solution to proceed into Schematic Design. The District selected this option as its preferred solution because it best meets the needs of the District's educational program, allows the school community to create its ideal learning environment for a consolidated grade reconfiguration, anticipates increased student and teacher collaboration, and creates a level of educational

<sup>\*\*</sup> Does not include construction contingency

<sup>\*\*\*</sup>District's preferred option

flexibility and adaptation. Additionally, this option is estimated to include the lowest per student cost, it is anticipated that it will have minimal disruption to the John F. Ryan Elementary School students, and it is anticipated that there will be no disruption to the Louise Davy Trahan and North Street Elementary School students during construction.

"Option 1A" and "Option 1B" (Grades 3-4), "Option 2A", "Option 2B" and "Option 2C" (Grades 3-4 district-wide), and "Option 3B" (Grades 2-4) were not selected for further evaluation. The District determined that "Options 1A and 1B" were not viable solutions because the existing structure is not able to address the educational needs of the District while serving only half of the District's 3-4 grade student population. "Options 2A, 2B, and 2C" were eliminated due to a significant number of lower elementary school students. "Option 3B" was determined to not be viable because of the location on the western edge of the site, bordering the wetland buffer zone, potential for site drainage issues, and was less desired by the District.

The District presented its proposed project to the MSBA Facilities Assessment Subcommittee (the "FAS") on July 25, 2018. At that meeting, members of the FAS discussed the following topics: the educational program and its relation to the proposed building layout; location of special education spaces; use and scheduling of the proposed S.T.E.A.M. rooms; professional development and collaboration opportunities for staff; planning and preparation required for implementation of project-based and interdisciplinary learning; opportunities for flexible use of academic clusters; integration of audio system and sinks in general classrooms; appreciation for the campus concept and thoughtful use of outdoor learning space; use and maintenance of the courtyard; solar orientation of the proposed building; site circulation and location of pick-up/drop-off areas; access to the building for individuals with limited mobility; adaptive PE offerings; and accessibility of the front entrance and size of the main lobby.

In addition, the MSBA requested an updated educational program that clarifies how the educational program informs the proposed building layout; expands on professional development and project-based learning; and updated floor plans demonstrating the reorganization of the proposed special education spaces.

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 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) 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 Tewksbury be approved to proceed into Schematic Design to replace the existing Louise Davy Trahan Elementary School and the existing North Street

Elementary School School site.	with a new facilit	y serving grades	2-4 district-wide	e on the existing Jo	hn F. Ryan Eleme	entary