

District: Town of Danvers
 School Name: Ivan G. Smith Elementary School
 Recommended Category: Preferred Schematic
 Date: August 22, 2018

Recommendation

That the Executive Director be authorized to approve the Town of Danvers, as part of its Invitation to Feasibility Study, to proceed into Schematic Design to replace the existing Ivan G. Smith Elementary School with a new K-5 facility on the existing site. MSBA staff has reviewed the Feasibility Study and accepts the District’s preferred solution.

District Information	
District Name	Town of Danvers
Elementary Schools	Great Oak Elementary School (K-5) Highlands Elementary School (K-5) Ivan G. Smith Elementary School (K-5) Riverside Elementary School (PK-5) Willis E. Thorpe Elementary School (K-5)
Middle School	Holten Richmond Middle School (6-8)
High School	Danvers High School (9-12)
Priority School Name	Ivan G. Smith Elementary School
Type of School	Elementary School
Grades Served	K-5
Year Opened	1975
Existing Square Footage	44,021
Additions	N/A
Acreage of Site	5 acres
Building Issues	The District identified deficiencies in the following areas: <ul style="list-style-type: none"> - Electrical systems - Envelope - Windows - Roof In addition to the physical plant issues, the District reported that the existing facility does not support the delivery of its educational program due to the building’s open classroom design.
Original Design Capacity	Unknown
2017-2018 Enrollment	283
Agreed Upon Enrollment	465
Enrollment Specifics	The District and MSBA have mutually agreed upon a design enrollment of 465 students serving grades K-5.
Total Project Budget – Debt Exclusion Anticipated	No

MSBA Board Votes	
Invitation to Eligibility Period	March 30, 2016
Invitation to Feasibility Study	November 9, 2016
Preferred Schematic Authorization	On August 29, 2018 Board agenda
Project Scope & Budget Authorization	District is targeting Board authorization on December 12, 2018
Feasibility Study Reimbursement Rate (Incentive points are not applicable)	50.58%

Consultants	
Owner’s Project Manager (the “OPM”)	PMA Consultants, LLC
Designer	Tappé Architects, Inc.

Discussion

The existing Ivan G. Smith Elementary School is a 39,000 square foot two-story building located on a five-acre site that currently serves grades K-5. The original school building was constructed in 1973 and was designed with an “open-classroom” type concept.

The District identified numerous deficiencies in the Statement of Interest that are associated with: mechanical and electrical systems; roofing, building envelope, and windows; and accessibility constraints. The District has also expressed concern regarding their ability to deliver its educational program in an open-classroom design concept.

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 six preliminary options that included one base repair option, one addition/renovation option and four new construction options. The following is a detailed list of the preliminary alternatives considered. All options are based on design enrollment of 465 students in grades K-5.

Option	Description of Preliminary Options
R-1	Base Repair/Full renovation of the existing building;
AR-1	Addition/Renovation – Comprehensive renovation and addition of the existing school;
N-1	New Construction - Multi-phased construction on an occupied site, reduces or eliminates the need for modular classrooms;
N-2	New Construction - Multi-phased construction on an occupied site, Split level option having public spaces near the entrance welcome lobby directly connected to classroom wings;
N-3	New Construction - Multi-phased construction on an occupied site, Split level option having separated K and 5 classroom wings;
N-4	New Construction - Multi-phased construction on an occupied site, Three-story option having classroom wings on all levels integrated with art/music/ gymnasium/ cafeteria and administration;

Upon further review, MSBA staff and the District agreed to four final options for further development and consideration in the final evaluation and development of preliminary design pricing, as 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 R-1: (Base repair/ Code upgrade)	39,000	39,900 \$367/sq. ft.	N/A	\$2,073,980	\$16,393,220 \$420/sq. ft.	\$20,581,750
Option AR-1: (Addition Renovation)	91,960	39,900 \$400/sq. ft.	52,960 \$463/sq. ft.	\$4,984,092	\$45,108,436 \$491/sq. ft.	\$55,257,834
Option N-2: (New Construction)	83,045	N/A	83,045 \$437/sq. ft.	\$6,004,548	\$42,297,305 \$509/sq. ft.	\$51,814,199
Option N-3: (New Construction)***	83,045	N/A	83,045 \$439/sq. ft.	\$6,003,391	\$42,430,060 \$511/sq. ft.	\$51,976,824

* Marked up construction costs

** Does not include construction contingency

***District's preferred option

The District has selected “Option N-3” as the preferred solution to proceed into Schematic Design because it supports the goals established by the District in the visioning sessions and detailed in the educational program. Key features include: the creation of two learning environments, a lower and upper academy; separation of kindergarten and grade 5, each providing distinct learning environments; providing varied teaming opportunities and collaboration zones; providing readily available small group spaces for academic support; and integrating and centralizing the art, music and performing arts programs.

Additionally, the proposed layout of the preferred solution will allow the District to zone-off the building for anticipated after-hours community use. The District is proposing a single main entrance located at the front of the building with the academic wings positioned in the rear of the building. The proposed site design takes advantage of the sloping topography. The lower level will be raised two feet above the elevation of the existing school to address concerns on the existing site related to drainage.

Although “Option R-1” (Base Repair) resulted in the lowest estimated project cost, it was not selected because the District determined that this option does not meet the space needs or the educational program requirements desired by the District. This option also proposes phased construction that requires the use of modular classrooms and/or off-site swing-space, both considered unfavorable by the District.

“Option AR-1” meets the MSBA’s space summary guidelines. However, this option was not selected because it did not provide two distinct learning communities; would require longer phasing during construction; would disrupt ongoing school activity; and is more expensive.

Although “Option N-2” meets the requirements for both the educational program and the space summary template, it was not selected because the proposed classroom wing organization did not create a separated kindergarten wing and a distinct 5th grade academy, a feature desired by the District.

The District presented its proposed project to the MSBA Facilities Assessment Subcommittee (“FAS”) on July 25, 2018. At that meeting, members of the FAS discussed the following topics: location of the elevator; use of the ensemble space; site planning and solar orientation of the building; site constraints; location of existing and new play spaces; location and use of wetlands interpretive trail; access to the building for individuals with limited mobility; media center staffing; music room storage; adaptive physical education; audio assistance throughout the building for hearing-impaired; use and location of the S.T.E.A.M. space; safety considerations for the art room; relationship of learning stairs to media center and lobby; circulation of students between the “academic zone” and “community zone”; location of cafeteria; logistics and timing of future redistricting; opportunities for expansion of the building; and appreciation for the building’s layout.

In addition, the MSBA requested the following: a building section through the lobby and learning stairs to better demonstrate variations in the proposed finished floor height; a narrative that further describes how site constraints have influenced the proposed building orientation and describe potential design opportunities relative to solar orientation; a narrative that describes the local process, timeline, and key milestones associated with the anticipated redistricting as a result of the preferred solution; and information that demonstrates opportunities for building expansion associated with the District’s Preferred Solution.

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, MSBA staff recommends that the Town of Danvers be approved to proceed into Schematic Design to replace the existing Ivan G. Smith Elementary School with a new K-5 facility on the existing site.