

District: Town of Harvard
 School Name: Hildreth Elementary School
 Recommended Category: Preferred Schematic
 Date: August 16, 2017

Recommendation

That the Executive Director be authorized to approve the Town of Harvard, as part of its Invitation to Feasibility Study, to proceed into Schematic Design to replace the existing Hildreth Elementary School with a new 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 Harvard
Elementary School(s)	Hildreth Elementary School (PK-5)
Middle School(s)	N/A
High School(s)	Bromfield School (6-12)
Priority School Name	Hildreth Elementary School
Type of School	Elementary School
Grades Served	PK-5
Year Opened	1955
Existing Square Footage	69,000
Additions	1988
Acreage of Site	6.5 acres
Building Issues	<p>The District identified deficiencies in the following areas:</p> <ul style="list-style-type: none"> - Health and Safety - Envelope - Windows - Mechanical systems - Electrical systems - Plumbing systems - 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.</p>
Original Design Capacity	Unknown
2016-2017 Enrollment	433
Agreed Upon Enrollment	445
Enrollment Specifics	The District and MSBA have mutually agreed upon a design enrollment of no more than 445 students in grades K-5, for a project that will serve grades PK-5.

MSBA Board Votes	
Invitation to Eligibility Period	January 27, 2016
Invitation to Feasibility Study	May 25, 2016
Preferred Schematic Authorization	On August 23, 2017 Board agenda

Project Scope & Budget Authorization	District is targeting Board authorization on February 14, 2018
Feasibility Study Reimbursement Rate (Incentive points are not applicable)	44.68%

Consultants	
Owner’s Project Manager (the “OPM”)	NV5 Global, Inc.
Designer	Arrowstreet Inc.

Discussion

The existing Hildreth Elementary School is a 69,000 square foot building located on a 6.5 acre site that currently serves grades PK-5. In 2010, the school was renamed from Harvard Elementary School to Hildreth Elementary School. The original school building was constructed in 1955 with a major addition completed in 1988.

The District identified numerous facility deficiencies in the Statement of Interest that are associated with: health and safety issues stemming from documented mold issues behind the walls of the 1955 classroom wing due to water and moisture infiltration; building envelope and windows issues; outdated electrical, plumbing and mechanical systems; and water infiltration through the roof. Additionally, the District has identified non-compliant accessibility issues and space constraints that are inhibiting the District’s ability to deliver 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 effort, the District and its consultants initially studied four preliminary options that include three addition/renovation configurations, and one new construction option. The following is a detailed list of the preliminary alternatives considered.

Option	Description of Preliminary Options
1	Addition/renovation of the existing facility (Replacement of kindergarten wing, accessibility upgrades, seismic upgrades, building systems repairs, and new fire protection system. Minimal renovation of the 1988 classroom portion).
2	Addition/renovation of the existing facility (Replacement of kindergarten wing, new cafeteria and kitchen, full HVAC replacement, accessibility upgrades, seismic reinforcing, roof and exterior wall improvements, new fire protection, upgrades to fire alarm system and site improvements to address parking and traffic issues. Limited renovation to the 1988 classroom portion).
3	Addition/renovation of the existing facility (Replacement of kindergarten wing, new cafeteria and kitchen, gymnasium replacement, full HVAC replacement, accessibility upgrades, seismic reinforcing, roof and exterior wall improvements, new fire protection, upgrades to fire alarm system and site improvements to address parking and traffic issues. Full renovation to the 1988 classroom portion).
4	New construction on the existing site.

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 (it should be noted that subsequent to the Preliminary Design Program submittal, one ‘Base Repair’ option was included for cost comparison purposes only).

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
Base Repair of the existing facility	69,000	69,000 \$209/sq. ft.	n/a	\$200,000	\$14,620,000 \$212/sq. ft.	\$20,600,000
Option 1: Addition/renovation (Minimal renovation of 1988 portion)	76,730	55,230 \$310/sq. ft.	21,500 \$466/sq. ft.	\$4,953,977	\$32,096,632 \$418/sq. ft.	\$40,120,790
Option 2: Addition/renovation (Limited renovation of 1988 portion)	78,727	49,327 \$285/sq. ft.	29,400 \$473/sq. ft.	\$4,965,667	\$32,923,696 \$418/sq. ft.	\$41,154,620
Option 3: Addition/renovation (Full renovation of 1988 portion)	80,372	42,572 \$276/sq. ft.	37,800 \$486/sq. ft.	\$5,093,113	\$35,219,001 \$438/sq. ft.	\$44,024,760
Option 4: New Construction at existing site***	81,836	n/a	81,836 \$414/sq. ft.	\$5,007,525	\$38,894,398 \$475/sq. ft.	\$48,618,000

* Marked up construction costs

** Does not include construction contingency

*****District’s preferred solution**

The District has selected “Option 4”, a new two-story building on the existing site, as the preferred solution to proceed into Schematic Design. “Option 4” responds to the specific goals documented in the District’s educational program including proposed small group areas, a maker-space, and an appropriately sized gymnasium and cafeteria. In addition, constructing the new school on the existing playing fields will allow the existing building to remain in operation during construction, eliminating complex phasing, sequencing, and disruption to students.

The “Base Repair” option was provided for cost comparison purposes only as this option does not meet space needs or the educational program requirements established by the District. In addition, the scope of work associated with this option does not completely address the ongoing thermal and moisture problems associated with the existing facility.

In the early development of the Preferred Schematic Report, the District eliminated “Option 1” from further evaluation because it did not meet the needs of the District’s educational program and did not fulfill the spatial needs required to deliver the District’s educational program. Although “Option 1” results in the lowest estimated cost when compared to Options “2”, “3”, and “4”, significant deficiencies would continue to remain including the poor thermal performance of the building envelope, inefficient HVAC systems, and an undersized cafeteria and gymnasium. In addition, this option does not allow for site improvements to address traffic and parking concerns.

“Option 2” was not selected as this option only partially meets the needs of the District’s educational program. Existing spaces to remain would continue to be undersized and consist of limited renovations in the 1988 portion of the building. In addition to complex phasing and sequencing, which would require the use of temporary modular classrooms, this option limits the ability to improve site circulation and route traffic around the existing building.

Although “Option 3” meets the District’s educational program by providing full renovation and improved learning spaces in the existing 1988 portion of the building, a new gymnasium, a cafeteria and kitchen sized in accordance with the educational program, this option was not considered further because of the substantial work required to improve the thermal and moisture performance of the existing 1988 building. In addition, this option would also require complex phasing and sequencing, requiring the use of temporary modular classrooms.

The District presented its proposed project to the MSBA Facilities Assessment Subcommittee (“the “FAS”) on July 21, 2017. At that meeting, members of the FAS discussed several topics with the District including: the educational program and its relation to the proposed building layout; layout and parity of educational pods across grade levels and location of lower grades in relation to entrances; delivery of world language curriculum in a dedicated classroom versus general classrooms; curriculum delivery for the proposed maker space; inclusion of the Concord Area Special Education (C.A.S.E.) Collaborative classroom; physical education curriculum and recess; accessibility for hearing impaired students; sinks in general classrooms; and distinction between administrative spaces and teacher planning spaces.

Based on the District’s presentation and feedback at the July 21, 2017 FAS meeting and in the MSBA Preferred Schematic Report review comments, MSBA staff has requested that the District submit updated floor plans and a corresponding updated space summary early in the Schematic Design Phase to clarify and confirm that the proposed concept has been sufficiently developed to meet the needs of the District’s educational program.

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.
- 2) Prior to the submission of the District’s schematic design submittal, the MSBA has requested that the District be available to present progress of the preferred solution to the Facilities Assessment Subcommittee should the MSBA determine that such a presentation is required. This presentation would ensure a mutual understanding and agreement of the

proposed concept and ensure that the proposed scope will be reflected in the District's schematic design submittal.

- 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 as part of the schematic design submittal prior to 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.

Based on the review outlined above, staff recommends that the Town of Harvard be approved to proceed into Schematic Design to replace the existing Hildreth Elementary School with a new facility on the existing site.