

District: Blue Hills Regional Technical School District  
 School Name: Blue Hills Regional Technical High School  
 Recommended Category: Preferred Schematic  
 Date: February 8, 2017

**Recommendation**

That the Executive Director be authorized to approve the Blue Hills Regional Technical School District, as part of its Invitation to Feasibility Study, to proceed into Schematic Design for a limited renovation and repair project at the Blue Hills Regional Technical High School. MSBA staff has reviewed the Feasibility Study and accepts the District’s preferred solution.

<b>District Information</b>	
District Name	Blue Hills Regional Technical School District
Elementary School(s)	N/A
Middle School(s)	N/A
High School(s)	Blue Hills Regional Technical High School (9-12)
Priority School Name	Blue Hills Regional Technical High School
Type of School	High School
Grades Served	9-12
Year Opened	1966
Existing Square Footage	342,000 GSF
Additions	1976
Acreage of Site	35 acres
Building Issues	The District identified deficiencies in the following areas: <ul style="list-style-type: none"> <li>- Mechanical, electrical, and plumbing systems</li> <li>- Lack of fire protection system</li> <li>- Building envelope including windows and roofing</li> <li>- Accessibility</li> </ul>
Original Design Capacity	Unknown
2015-2016 Enrollment	882 students
Agreed Upon Enrollment	900 students
Enrollment Specifics	The District and MSBA have mutually agreed upon a design enrollment of 900 students serving grades 9-12.

<b>MSBA Board Votes</b>	
Invitation to Commence Eligibility Period	March 30, 2016
Invitation to Feasibility Study	July 20, 2016
Preferred Schematic Authorization	On February 15, 2017 Board agenda
Project Scope & Budget Authorization	District is targeting Board authorization on August 23, 2017
Feasibility Study Reimbursement Rate (Incentive points are not applicable)	53.53%

<b>Consultants</b>	
Owner’s Project Manager (the “OPM”)	Dore & Whittier Management Partners, LLC
Designer	Drummey Rosane Anderson, Inc.

## Discussion

The existing Blue Hills Regional Technical High School is a 342,000 square foot building on a 34 acre site located in Canton, Massachusetts. The existing facility currently serves students in grades 9-12. The Regional District includes the towns of Avon, Braintree, Canton, Dedham, Holbrook, Milton, Norwood, Randolph, and Westwood.

The original school building was constructed in 1966 with a three story addition completed in 1976. The District identified numerous deficiencies in its Statement of Interest, including many utilities at the end of their useful life. The existing facility is noted to be structurally sound, but requires replacement of mechanical, electrical, and plumbing systems, replacement of windows, upgrades and renovations to the envelope, and accessibility upgrades.

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 engaged in discussions with the MSBA for a potential limited scope repair project because the District confirmed it is able to deliver its educational program in the existing facility. Based on this premise, the District and design team established the following four categories that became the basis for evaluation:

<b>Main Categories of Work Evaluated</b>
<b>Infrastructure Upgrades:</b> Includes code upgrades and base repair work, and considers various levels of mechanical, electrical, plumbing, fire protection, window, and roofing work
<b>Accessibility Upgrades:</b> Includes work with or without variances at entry, toilet rooms, vertical conveyance, hardware, casework, and equipment
<b>Materials and Finishes:</b> Includes code upgrades and base repair work, and considers various levels of work associated with concrete pavement repair, new floor finishes, hazardous materials removal, ceiling replacement, painting, and new lockers
<b>Programmatic Improvements:</b> Includes relocation options associated with the Health Assisting and Informational Technology program, modifications to Science Labs, and consideration for the potential addition of a Marine Service Technology program

From the initial four main categories of work, the District and design team established a menu of options associated with various types of systems for windows, roofing, HVAC, accessibility, and limited programmatic adjustments. Based on the aging condition of the existing electrical panels, main distribution equipment, and selective plumbing piping and fixtures, full replacement of these items was established for all options. Because a fire protection system does not currently exist, a new system would be installed and is consistent for all options. In addition, various levels of work were established for finishes and non-systems work, such as painting, flooring, and locker replacement. From this menu of options, the District and design team established five distinct options as outlined below that were further evaluated in an effort to determine the preferred scope of work.

Option	Scope of Work
1	<b>Base Repair:</b> Code upgrades, base repair with partial roof replacement – Includes accessibility improvements with variances, minimum repair of systems and materials, with no modification of existing programmatic spaces.
2	<b>Low Range:</b> Code upgrades, base repair with partial roof replacement, unit ventilator replacement with limited air conditioning, limited lighting replacement – Includes accessibility improvements with variances, minimum repair of systems and materials, limited new LED lighting, and includes programmatic modification of existing spaces for educational purposes.
3A	<b>Medium Range:</b> Code upgrades, base repair with full roof replacement, rooftop unit/Variable Air Volume (“VAV”) system with limited air conditioning, full lighting replacement – Includes accessibility improvements with variances, desired repair of systems and materials, all-new LED lighting, and programmatic modification of existing spaces for educational purposes.
3B	<b>Medium Range:</b> Code upgrades, base repair with full roof replacement, variable refrigerant flow system with limited air conditioning, full lighting replacement – Includes accessibility improvements with variances, desired repair of systems and materials, all-new LED lighting, and programmatic modification of existing spaces for educational purposes.
4	<b>High Range:</b> Code upgrades, base repair with full roof replacement, variable refrigerant flow system with full air conditioning – Includes full accessibility improvements, desired and optional repair of systems and materials, with full air conditioning and all-new LED lighting, and programmatic modification of existing spaces for educational purposes.
5	<b>Hybrid Medium Range:</b> Code upgrades, base repair with partial roof replacement, variable refrigerant flow system with limited air conditioning, limited lighting replacement - Includes accessibility upgrades with variances, desired repair of materials, new LED lighting in areas with new ceilings, electrical system replacement of primary and secondary service, switchgear, feeders and panels, and programmatic modification of existing spaces for educational purposes.

Based on the options established above, the District and design team established preliminary design pricing for each option as presented 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 1: (Base Repair)	292,400	292,400 \$202/sq. ft.	0 \$0/sq. ft.	\$2,443,400	\$61,508,200 \$210/sq. ft.	\$74,260,000
Option 2: (Low Range)	292,400	292,400 \$229/sq. ft.	0 \$0/sq. ft.	\$2,587,400	\$69,547,000 \$238/sq. ft.	\$84,050,00

<b>Option (Description)</b>	<b>Total Gross Square Feet</b>	<b>Square Feet of Renovated Space (cost*/sq. ft.)</b>	<b>Square Feet of New Construction (cost*/sq. ft.)</b>	<b>Site, Building Takedown, Haz Mat. Cost*</b>	<b>Estimated Total Construction ** (cost*/sq. ft.)</b>	<b>Estimated Total Project Costs</b>
Option 3A: (Medium Range)	292,400	292,400 \$258/sq. ft.	0 \$0/sq. ft.	\$2,659,500	\$78,098,700 \$267/sq. ft.	\$94,170,000
Option 3B: (Medium Range)	292,400	292,400 \$265/sq. ft.	0 \$0/sq. ft.	\$2,659,500	\$80,145,500 \$274/sq. ft.	\$96,540,000
Option 4: (High Range)	292,400	292,400 \$286/sq. ft.	0 \$0/sq. ft.	\$3,163,400	\$86,789,800 \$297/sq. ft.	\$104,260,000
<b>Option 5: (Hybrid- Medium Range) ***</b>	292,400	292,400 <b>\$236/sq. ft.</b>	0 <b>\$0/sq. ft.</b>	<b>\$2,659,500</b>	<b>\$71,665,900</b> <b>\$245/sq. ft.</b>	<b>\$86,460,000</b>

\* Marked up construction costs

\*\* Does not include construction contingency

\*\*\***District's preferred option**

The District has selected “Option 5” as the preferred solution to proceed into schematic design. Based on the various levels of work evaluated as part of this study, the District identified “Option 5” as the option that best represents the level of repair required to extend the life of the existing facility and to enable the District to continue the successful delivery of its educational program.

The District presented its proposed project to the MSBA Facilities Assessment Subcommittee (“FAS”) on December 14, 2016. At that meeting, members of the FAS discussed a number of topics including: the team’s ability to determine a scope considering all of the variables and options, incorporating a covered canopy at the main entrance, and existing vocational programming and how shop spaces and other areas can be modified to accommodate future flexibility.

MSBA staff reviewed the conclusions of the Feasibility Study, all subsequent submittals, and the enrollment data with the District and found:

- 1) The Department of Elementary and Secondary Education (“DESE”) has reviewed the District’s proposed programming offerings and is satisfied that the District’s planning for the Career/Vocational Technical Education Program offerings has been thorough, and that the programs are viable. The District and DESE discussed the potential to add a Marine Services Technology Program but determined that further evaluation and development is needed and, therefore, the program is not proposed for this project.
- 2) The options investigated during the Feasibility Study 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.
- 3) The District has submitted an operational budget for educational objectives and a capital budget 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. It should be noted that, proposed work in the existing pool area and associated pool locker rooms is ineligible for reimbursement. 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. It should be noted that the costs associated with modular classrooms required for swing space will be considered ineligible for reimbursement.

Based on the review outlined above, staff recommends that the Blue Hills Regional Technical School District be approved to proceed into Schematic Design for the proposed limited renovation and repair project for the Blue Hills Regional Technical High School.