District: Town of Middleborough School Name: Middleborough High School

Recommended Category: Preferred Schematic

Date: May 3, 2017

Recommendation

That the Executive Director be authorized to approve the Town of Middleborough, as part of its Invitation to Feasibility Study, to proceed into Schematic Design to replace the existing high school facility with a new Middleborough High School on the existing site. MSBA staff has reviewed the Feasibility Study and accepts the District's preferred solution.

| District Information | | | | | |
|---|--|--|--|--|--|
| District Name | Town of Middleborough | | | | |
| Elementary School(s) | Memorial Early Childhood Center (PK-K) | | | | |
| | Henry B. Burkland Elementary School (1-5) | | | | |
| | Mary K. Goode Elementary School (1-5) | | | | |
| Middle School(s) | John T. Nichols Middle School (6-8) | | | | |
| High School(s) | Middleborough High School (9-12) | | | | |
| Priority School Name | Middleborough High School | | | | |
| Type of School | High School | | | | |
| Grades Served | 9-12 | | | | |
| Year Opened | 1971 | | | | |
| Existing Square Footage | 132,955 | | | | |
| Additions | N/A | | | | |
| Acreage of Site | 40 acres | | | | |
| Building Issues | The District identified deficiencies in the following areas: | | | | |
| | Mechanical, electrical, and plumbing systems | | | | |
| | Building envelope (exterior walls) | | | | |
| | Accessibility and safety | | | | |
| | Original non-insulated windows | | | | |
| | 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 overcrowding. | | | | |
| Original Design Capacity | Unknown | | | | |
| 2016-2017 Enrollment | 694 | | | | |
| Agreed Upon Enrollment | 720 | | | | |
| Enrollment Specifics The District and MSBA have mutually agreed upon a design enrollment of 720 students serving grades 9-12. | | | | | |

| MSBA Board Votes | | | |
|--|--|--|--|
| Invitation to Eligibility Period | January 14, 2015 | | |
| Invitation to Feasibility Study | November 18, 2015 | | |
| Preferred Schematic Authorization | On May 12, 2017 Board agenda | | |
| Project Scope & Budget Authorization | District is targeting Board authorization on | | |
| | October 25, 2017 | | |
| Feasibility Study Reimbursement Rate | 56.26% | | |
| (Incentives points are not applicable) | | | |

| Consultants | |
|-------------------------------------|-------------------------------|
| Owner's Project Manager (the "OPM") | Compass Project Management |
| Designer | Drummey Rosane Anderson, Inc. |

Discussion

The existing Middleborough High School is a 132,955 square foot facility located on a 40 acre site and currently houses grades 9-12. The original school building was constructed in 1971.

The District identified numerous deficiencies in its Statement of Interest including utilities at the end of their useful life. The existing facility is noted to have minor structural issues at the main entrance and original mechanical, electrical, and plumbing systems, which have reached the end of their useful life. A partial window replacement project was completed from 2001-2003, however, the remainder of the original single-pane windows are in need of replacement. Due to water and moisture infiltration, upgrades to the building envelope at the exterior walls are required. Additionally, the District has identified areas of the building that lack basic accessibility standards. Further, the District has noted that the existing building does not support the delivery of the educational program due to health, safety, and size constraints associated with the physical plant and the existing layout.

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 ten preliminary options that include one base repair option, five addition/renovation options, and four new construction options as presented below.

| Option | Description of Preliminary Options |
|--|---|
| Base Repair/ Code Upgrade | Minimum level of repairs and necessary improvements |
| Addition/renovation Options | Addition/renovation of the existing facility (78,500 sf addition on southern side of building)*; Addition/renovation of the existing facility (78,500 sf addition on northern side of building)*; Addition/renovation of the existing facility (103,000 sf addition, requires temporary modulars); Addition/renovation of the existing facility (41,000 sf addition, requires temporary modulars); Addition/renovation of the existing facility (41,000 sf addition, requires temporary modulars). *Renamed as "Options C and D" in the final evaluation of alternatives |
| Option A - New Construction @ existing HS site | New construction on the existing High School site (linear east-west orientation, located to the south-east of the existing school) |
| Option B - New Construction @ existing HS site | New construction on the existing High School site (linear north-south orientation, located to the south of the existing school) |
| Option C - New Construction @ | New construction on the existing High School site (linear east-west orientation to the south of the existing school) |

| existing HS site | |
|--|---|
| Option A - New Construction @ existing MS site | New construction on the existing Middle School site, creating a campus (linear east-west orientation to the east of the existing Middle School) |

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. Please note that the "Base Repair" option does not address the educational program needs, was not developed further, and has been included for comparative purposes only.

Summary of Preliminary Design Pricing for Final Evaluation of Options

| | Total Gross | Square Feet of Renovated Space | Square Feet of New | Site, Building Takedown, | Estimated Total Construction | |
|-------------------|----------------|---|-----------------------|-----------------------------|------------------------------------|-----------------|
| Option | Square | (cost*/sq. | Construction | Haz Mat. | ** | Estimated Total |
| (Description) | Feet | ft.) | (cost*/sq. ft.) | Cost* | (cost*/sq. ft.) | Project Costs |
| Base Repair/ | 152,500 | 152,500 | N/A | \$13,246,601 | \$52,196,414 | \$65,245,517 |
| Code Upgrade | | | | | | |
| | | \$255/sq. | | | \$342/sq. ft. | |
| | | ft. | | | | |
| Option C: | 167,415 | 85,238 | 82,177 | \$17,124,989 | \$82,233,372 | \$102,791,715 |
| Addition/ | | | | | | |
| Renovation, | | \$364/sq. | \$414/sq. ft. | | \$491/sq. ft. | |
| formerly option 1 | | ft. | | | | |
| Option D: | 167,415 | 84,730 | 82,685 | \$17,109,249 | \$83,969,344 | \$104,961,680 |
| Addition/ | | | | | | |
| Renovation, | | \$393/sq. | \$409/sq. ft. | | \$502/sq. ft. | |
| formerly option 2 | | ft. | | | | |
| Option A: New | 165,600 | N/A | 165,600 | \$17,357,252 | \$83,222,922 | \$104,028,653 |
| Construction @ | | | | | | |
| HS site*** | | | \$398/sq. ft. | | \$503/sq. ft. | |
| Option B: New | 165,600 | N/A | 165,600 | \$18,357,357 | \$84,705,166 | \$105,881,458 |
| Construction @ | | | | | | |
| HS site | | | \$401/sq. ft. | | \$512/sq. ft. | |

^{*} Marked up construction costs

The District has selected "Option A", new construction at the existing site, as the preferred solution to proceed into Schematic Design, as this option addresses all of the deficiencies associated with the existing conditions of the current facility. In addition, "Option A" will allow the District to deliver its desired educational program and is anticipated to result in the least disruption to students during construction.

Although new construction "Option B" would produce similar advantageous results, the proposed site location and conceptual configuration associated with "Option A" proved to be a more flexible design and was determined by the District as the "most-advantageous" solution. "Options C and D", both renovation/addition options, include complex phasing, extended construction durations,

^{**} Does not include construction contingency

^{***}District's preferred option

temporary costs, and disruption to students associated with an occupied facility, resulting in the District determining these to be less advantageous solutions.

The District presented its proposed project to the MSBA Facilities Assessment Subcommittee (the "FAS") on March 29, 2017. The following items were topics of discussion at the FAS meeting: planned use of sound assistance technology; utilization and management of the proposed maker-space; location and grouping of Special Education classrooms; benefits associated with interdisciplinary programming in conjunction with advanced placement course offerings; location and utilization of the proposed black box theater and how it will support the delivery of the educational program; consideration of adjacencies, particularly visual arts and performing arts spaces; the location and use of interior spaces, such as the teacher planning and resource rooms; the physical education schedule; recommendation that science labs incorporate a connecting door to the adjacent classroom; flexibility of science labs to accommodate potential future programming changes; and, the Town's maintenance practices and long-term capital investments.

As a follow up to the FAS meeting, staff requested that the District review the following in conjunction with the MSBA's detailed review comments of the Preferred Schematic Report:

- 1) Educational Program The District was asked to provide clarification and additional information regarding:
 - a) The proposed placement of the clustered Special Education spaces; and,
 - b) The proposed utilization of the black box theater and placement of potentially related spaces such as art and music classrooms and the maker-space.
- 2) Progress of the conceptual design The District was asked to consider improvements to the overall layout and to the proposed planning areas that do not contain access to natural light.

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

- 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. However, prior to the submission of the District's Schematic Design submittal, the MSBA requests that the District be available to present updated material associated with the preferred solution to the FAS should the MSBA determine that an updated presentation is required. This update is to ensure a mutual understanding and agreement of the proposed project scope and to ensure that this scope will be reflected in the District's Schematic Design submittal.
- 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 MSBA will continue to work with the District to explore design improvements associated with adjacencies identified in the Preferred Schematic Report review comments and to identify ineligible cost associated with the District's desire to construct an Auditorium that exceeds the MSBA guidelines.
- 6) As part of the Schematic Design phase, the MSBA will continue to monitor whether the District intends to acquire an adjacent parcel of land to be used as an additional means of site access.

Based on the review outlined above, staff recommends that the Town of Middleborough be approved to proceed into Schematic Design to replace the existing Middleborough High School on the existing site.