District: City of Waltham
School Name: Waltham High School
Recommended Category: Preferred Schematic
Date: February 6, 2019

Recommendation

That the Executive Director be authorized to approve the City of Waltham the (the "District"), as part of its Invitation to Feasibility Study, to proceed into Schematic Design to construct a new high school on a new site. MSBA staff has reviewed the Feasibility Study and accepts the District's preferred solution contingent upon the District gaining full ownership, control, and exclusive use of the entire site.

| District Information | | | | |
|-----------------------------|---|--|--|--|
| District Name | City of Waltham | | | |
| Elementary Schools | Northeast Elementary School (PK-5) | | | |
| • | William F. Stanley Elementary School (PK-5) | | | |
| | Waltham Public Schools Dual Language Program (K-1) | | | |
| | Douglas MacArthur Elementary School (K-5) | | | |
| | Henry Whittemore Elementary School (K-5) | | | |
| | James Fitzgerald Elementary School (K-5) | | | |
| | Thomas R. Plympton Elementary School (K-5) | | | |
| Middle Schools | John F. Kennedy Middle School (6-8) | | | |
| | John W. McDevitt Middle School (6-8) | | | |
| High School | Waltham High School (9-12) | | | |
| Priority School Name | Waltham High School | | | |
| Type of School | High School | | | |
| Grades Served | 9-12 | | | |
| Year Opened | 1968 | | | |
| Existing Square Footage | 384,800 | | | |
| Additions | 1999 – Automotive Building | | | |
| | 2001 – Fine Arts addition | | | |
| Acreage of Site | 30.69 acres | | | |
| Building Issues | The District identified deficiencies in the following areas: | | | |
| | Mechanical systems | | | |
| | Electrical systems | | | |
| | - Windows | | | |
| | Accessibility | | | |
| | In addition to the physical plant issues, the District reported | | | |
| | that the existing facility does not support the delivery of its | | | |
| | educational program and wishes to expand its Chapter 74 | | | |
| | programs. | | | |
| Original Design Capacity | Unknown | | | |
| 2017-2018 Enrollment | 1,620 | | | |
| Agreed Upon Enrollment | 1,830 | | | |
| Enrollment Specifics | The District and MSBA have mutually agreed upon a design | | | |
| | enrollment of 1,830 students serving grades 9-12. | | | |

| District Information | | | | |
|-----------------------------|----|--|--|--|
| Total Project Budget – Debt | No | | | |
| Exclusion Anticipated | | | | |

| MSBA Board Votes | | | | |
|--|--|--|--|--|
| Invitation to Eligibility Period | January 14, 2015 | | | |
| Invitation to Feasibility Study | September 30, 2015 | | | |
| Preferred Schematic Authorization | On February 13, 2019 Board agenda | | | |
| Project Scope & Budget Authorization | District is targeting Board authorization on August 28, 2019 | | | |
| Feasibility Study Reimbursement Rate (Incentive points are not applicable) | 55.46% | | | |

| Consultants | |
|-------------------------------------|---------------------------------------|
| Owner's Project Manager (the "OPM") | NV5 Consultants, Inc. |
| Designer | Symmes Maini & McKee Associates, Inc. |

Discussion

The existing Waltham High School is a 384,800 square foot comprehensive high school on a 31-acre site located at 617 Lexington Street in Waltham, adjacent to the Kennedy Middle School site. The original building was constructed in 1968, with small additions constructed in 1999 and 2001. Upgrades to building systems were completed between 1999 through 2002.

The District identified numerous deficiencies in the Statement of Interest, including a lack of accessibility, outdated science labs and technology, overcrowding due to increasing enrollment, program constraints, and building systems that are at the end of their useful life, including HVAC, plumbing, and electrical systems.

The school currently houses grades 9-12 and ten Chapter 74 Career Vocational Technical Education ("CTE") programs. As part of the proposed project, the District is proposing five new CTE programs and continuing 10 existing CTE programs (including Exploratory). The District engaged with the Department of Elementary and Secondary Education ("DESE") about the proposed CTE programs. Based on DESE review of submitted materials and discussions with the District, the DESE reports it is satisfied that the planning for the District's proposed CTE program offerings has been thorough, and that all programs included in DESE's letter dated December 19, 2016 are viable.

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 13 preliminary options that included one base repair option, one renovation option, two addition/renovation options, two new construction options on the existing site, four new construction options on the Fernald site, two new construction options on the 554 Lexington Street site, and a final option that proposed to relocate the athletic fields to the 554 Lexington Street site and either replace the existing school or construct an addition/renovation on the existing site. The following is a list of the preliminary options considered:

| Option | Description of Preliminary Options | | | | | |
|--------|--|--|--|--|--|--|
| 0 | Base Repair/Code Upgrade | | | | | |
| 1 | Full renovation of the existing building | | | | | |
| 2A | Phased addition/renovation that maintains the newer fine arts wing, gymnasium, and | | | | | |
| | cafeteria with new academic and vocational spaces | | | | | |
| 2B | Phased addition/renovation that maintains the newer fine arts wing only | | | | | |
| 3A | Phased new construction on the existing site | | | | | |
| 3B | New construction on the existing site, not phased | | | | | |
| 4A | Four-story new construction on the west side of the Fernald Development Center site | | | | | |
| 4B | Tiered two-and four-story new construction on the west side of the Fernald | | | | | |
| | Development Center site | | | | | |
| 4C | Tiered two-and four-story new construction on the east side of the Fernald | | | | | |
| | Development Center site | | | | | |
| 4D | Tiered two-and four-story new construction on the west side of the Fernald | | | | | |
| | Development Center site with a free-standing gymnasium building on the east side of | | | | | |
| | the site | | | | | |
| 5A | Four-story tiered new construction on the north side of the 554 Lexington Street site, | | | | | |
| | with athletic fields located on the existing site | | | | | |
| 5B | New construction or addition/renovation on the existing site, and new athletic fields | | | | | |
| | on the 554 Lexington Street site | | | | | |
| 5B3 | New Construction on the south side of the 554 Lexington Street site (developed post | | | | | |
| | PDP) | | | | | |

"Option 0" and "Option 1" were eliminated from further consideration because they do not meet the needs of the educational program, and the existing building is not adequately sized to meet the requirements of the agreed-upon design enrollment. In accordance with MSBA policy, staff required the District to continue to carry the Base Repair/Code Upgrade option into the final evaluation of alternatives for cost comparison purposes.

"Option 2A" and "Option 2B" were not favored by the District due to concerns that phased renovations in an occupied school could disrupt the quality of the students' education. The District also reported concern about the presence of students onsite during asbestos abatement. In order to understand costs related to reuse of the existing facility MSBA staff required the District to continue to carry at least one addition/renovation option into the final evaluations of alternatives analysis. "Option 2A", with the greater extent of renovation between the two options, was eliminated from further consideration.

"Option 3A" and "Option 5B" were also eliminated due to the same concerns within the District about the presence of students on the existing site during phased construction.

Due to obstacles regarding any development on the Fernald Development Center site, "Option 4A" through "Option 4D" were eliminated for consideration. The obstacles include concerns from the Massachusetts Historic Commission, steeply sloping grade and ledge, demolition of existing historic buildings and associated environmental abatement.

Following an extended process to select a suitable alternate site for the project, the District reduced the options to either building on the existing site or building on the 554 Lexington Street

site, located at 554 Lexington Street directly across the street from the existing high school and middle school properties. "Option 5A" was eliminated for further consideration due to the proposed school and athletic fields not being located on the same site, and a significantly sloped access road from the site entrance to the school location required for that option.

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 0: Base Repair/ Code Upgrade | 384,800 | 384,800 \$276/sq. ft. | | \$4,041,270 | \$110,275,866 \$287/sq. ft. | \$135,639,315 |
| Option 2B: Addition / Renovation | 422,599 | 62,299 \$521/sq. ft. | 360,300 \$531/sq. ft. | \$33,139,974 | \$256,905,126 \$608/sq. ft. | \$315,993,305 |
| Option 3B: New Construction on Existing Site | 418,007 | | 418,007 \$562/sq. ft. | \$62,967,470 | \$297,982,352 \$713/sq. ft. | \$366,842,912 |
| Option 5B3: New Construction at 554 Lexington St.*** | 418,007 | | 418,007 \$560/sq. ft. | \$76,182,061 | \$310,074,413 \$742/sq. ft. | \$381,292,924 |

^{*} Marked up construction costs

The District has selected "Option 5B3", New construction at the 554 Lexington St, as the Preferred Schematic to proceed into Schematic Design. The District selected "Option 5B3" as its Preferred Schematic because it addresses the educational program, does not include construction activities on the existing school site, and allows the District to re-purpose the existing school and site.

The District's selection criteria for final evaluation of options included use of the existing high school for a K-8 school, space for the Central Office, Parent Information Center, and a Dual Language School precluding the selection of a code upgrade, "Option 0", or addition/renovation "Option 2B". "Option 3B" was not selected because the existing site is too small to allow for a new high school, sports facilities, parking and the existing/re-purposed use high school building.

The District presented its proposed Preferred Schematic to the MSBA Facilities Assessment Subcommittee ("FAS") on January 16, 2019. At that meeting, members of the FAS raised concerns regarding excessive program scope, construction costs, site costs and project costs, and potential schedule impact relating to gaining full ownership, control, and exclusive use of the entire site. The FAS noted that there will be a large amount of ineligible costs associated with the proposed project, which will be borne exclusively by the District.

^{**} Does not include construction contingency

^{***}District's Preferred Schematic

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

- 1) MSBA staff's recommendation to the Board for approval of the District's Preferred Schematic is contingent upon the District obtaining full ownership, control, and exclusive use of the adjacent property by eminent domain. The MSBA will not sign a Project Funding Agreement until said conditions are met.
- 2) The options investigated were sufficiently comprehensive in scope, the approach undertaken in this study was appropriate, and the District's Preferred Schematic is reasonable and is reported to best meet the needs identified by the District.
- 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, which is prior to executing 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, except for variations previously agreed to by the MSBA. 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.

Based on the review outlined above, staff recommends that the City of Waltham be approved to proceed into Schematic Design to construct a new high school on a new site.