

District: Town of Winchester
 School Name: Winchester High School
 Recommended Category: Preferred Schematic
 Date: March 27, 2013

Recommendation

That the Executive Director be authorized to approve the Town of Winchester, as part of its Invitation to Feasibility Study, to proceed into schematic design for an addition and renovation project to the existing Winchester High School. MSBA staff has reviewed the Feasibility Study and is forwarding the District’s preferred solution for an addition and renovation project to the Winchester High School for the Board’s consideration.

District Information	
District Name	Town of Winchester
Elementary School(s)	Lynch Elementary School (PK-5) Ambrose Elementary School (K-5) Lincoln Elementary School (K-5) Francis J. Muraco Elementary School (K-5) Vinson-Owen Elementary School (K-5)
Middle School(s)	McCall Middle School (6-8)
High School(s)	Winchester High School (9-12)
Priority School Name	Winchester High School
Type of School	High School
Grades Served	9-12
Year Opened	1971
Existing Square Footage	280,327
Additions	N/A
Acreeage of Site	10.9 acres
Building Issues	The District identified deficiencies in the following areas: <ul style="list-style-type: none"> - Structural integrity - Mechanical systems - Electrical systems - Plumbing systems - Envelope - 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 as well as existing and projected overcrowding
Original Design Capacity	1,017
2012-2013 Enrollment	1,167
Agreed Upon Enrollment	1,370
Enrollment Specifics	The District and MSBA have mutually agreed upon a design enrollment of 1,370 students serving grades 9-12.

MSBA Board Votes	
Invitation to Feasibility Study	May 26, 2010
Preferred Schematic Authorization	On April 3, 2013 Board agenda
Project Scope & Budget Authorization	District is targeting Board authorization on October 2, 2013
Reimbursement Rate Before Incentives	33.95%

Consultants	
Owner's Project Manager	Skanska USA Building, Inc.
Designer	Symmes Maini & McKee Associates

Discussion

The existing Winchester High School is a 280,327 square foot building located on a 10.9 acre site on Skillings Road in Winchester. The facility currently houses approximately 1,200 students in grades 9-12; however, as a result of projected enrollment increases, the MSBA and the District have agreed to a design enrollment of 1,370 students. Even at the agreed-upon design enrollment, the existing building is approximately 45,000 square feet larger than current MSBA space standards.

The District identified numerous facility deficiencies in the Statement of Interest. The building was constructed in 1969, and although many systems have been replaced, the building has not been significantly upgraded since the original construction. The building's large massing restricts natural day-lighting and views to interior spaces, and the original open floor plan concept does not meet the educational needs of the District.

In conjunction with its consultants, the District performed an assessment of the existing building conditions and the educational program with input from educators, administrators, and facilities personnel. The assessment noted that the existing building was constructed in a flood plain on a site with poor soil conditions. To mitigate the potential for flooding and to comply with FEMA requirements for construction within a flood plain, any proposed options for renovating the existing building would require that the lower level of approximately 20,000 gross square feet be vacated and all utilities in the lower level be relocated. The existing facility also requires: 1) exterior envelope upgrades; 2) window, heating, ventilation, plumbing, and electrical systems replacement; 3) abatement of hazardous materials; 4) fire protection and seismic code upgrades; and 5) significant site, traffic, and parking improvements.

The District also performed a preliminary investigation of 12 alternate sites within the District for potential new building options but concluded that, due to their small size, limited buildable area, wetlands and flood plain restraints, and potentially poor soil conditions, the existing High School site and adjacent Skillings Field site were the only viable site options for new construction. Based on the findings of this analysis, the District and its consultants initially studied eight preliminary options, all on the existing site, including one base repair option, four addition/renovation configurations, and three new construction options on the existing site. The following is a detailed list of the preliminary alternatives considered:

Option	Description of Preliminary Options
0	Base code upgrade and repair of the existing 280,327 sf building
1-3	Full renovation of the existing building and three variations of 33,000 sf additions including new administration, dining commons, kitchen, and classrooms, totaling 313,000 sf of proposed area
4, 6 & 7	Three variations of a new facility on the existing high school site, totaling 288,000 sf of proposed area
5	Full renovation of the existing 92,480 sf gym and auditorium, demolition of the remaining 187,847 sf, and a 212,000 sf addition, totaling 304,682 sf of proposed area

Upon review of these preliminary alternatives and the alternative site evaluations, MSBA staff determined that the costs shown with the proposed addition/renovation options were excessive due to the added complexities of construction on poor soil conditions, the extent of the existing building deficiencies, and the excessive extent of proposed renovations compounded by the oversized existing building; therefore, the options studied did not meet the District's budget or show an acceptable range of scope. In addition, the site reviews did not provide sufficient analysis to support the District's conclusions. MSBA staff therefore required the District to develop further analysis of two addition/renovation options that better aligned with MSBA space and cost standards, and to provide further review for new construction options on four of the 12 sites, including the combined Wright Locke Farm and adjacent Mullen Field sites, the Mount Pisgah Water Department parcels, the Lynch School site and adjacent Water Department parcels, and the Winchester Park Department parcel (adjacent to the Town of Medford).

After this subsequent analysis from the design team, the District again determined that the alternate site options were not suitable for this project. The District's review indicated that use of these sites would not be advantageous due to delays inherent to acquisition of public open land that may result in a longer construction schedule and a higher cost. In addition, the District stated that these sites lack adequate utilities, require access through residential areas, are too distant from the main Town center, and would increase the Districts's long-term transportation costs. Analysis of these final options for the final evaluation and development of preliminary design pricing is presented below. Please note that the square foot information for the addition/renovation options below excludes 20,000 square feet of existing vacated basement area.

Summary of Preliminary Design Pricing for Final Evaluation of Options

Option (Description)	Total Gross Square Feet	Square Feet of Renovated Space (cost*/sf)	Square Feet of New Construction (cost*/sf)	Site, Building Takedown, Haz Mat. Cost*	Estimated Total Construction ** (cost*/sf)	Estimated Total Project Costs
Option 0: (base code repair, relocate mechanical space)	265,275	260,025 \$78/sf	5,250 \$253/sf	\$700,000	\$22,307,710 \$84/sf	\$27,884,637
Option 1: (substantial addition/renov ation)	288,025	260,025 \$338/sf	28,000 \$332/sf	\$11,616,921	\$108,801,518 \$378/sf	\$134,001,897

Option (Description)	Total Gross Square Feet	Square Feet of Renovated Space (cost*/sf)	Square Feet of New Construction (cost*/sf)	Site, Building Takedown, Haz Mat. Cost*	Estimated Total Construction ** (cost*/sf)	Estimated Total Project Costs
<i>Option 1b: (moderate addition/reno vation)***</i>	278,925	260,025 \$326/sf	18,900 \$353/sf	\$11,616,921	\$103,055,938 \$369/sf	\$127,183,847
Option 8: (new construction on the Town Forest site)	273,620	0 N/A	273,620 \$394/sf	\$15,398,952	\$123,276,173 \$450/sf	\$154,095,216

* Marked up construction costs

** Does not include construction contingency

***District's preferred option

The District has selected Option 1b, a moderate addition/renovation, as its preferred solution to proceed into schematic design because it supports projected student population, the District's educational curriculum, and retains the downtown location strongly desired by the community.

MSBA staff has questioned the proposed scope of work and encouraged the District and its consultants to explore more cost-effective options that better align with the MSBA's space guidelines and funding levels. The District has expressed its interest in continuing ongoing efforts to reduce costs during further development of its preferred solution. Although a potential grant would not be established until the completion of a robust schematic design, MSBA staff note that, based on broad assumptions, current understandings, and the Town's base reimbursement rate of 33.95%, the MSBA estimates that a potential Estimated Maximum Total Facilities Grant, without contingencies or the application of potential incentive points, could be approximately \$30 million. Based on discussions between the District and the MSBA, the District understands that it would be solely responsible for funding costs in excess of the MSBA's grant, if any such grant, for the proposed project, for which preliminary estimates indicate a project budget of \$127 million.

The District presented its proposed project to the MSBA Facilities Assessment Subcommittee (the "FAS") on February 27, 2013. At that meeting, members of the FAS raised a number of concerns including: 1) project scope that exceeds MSBA space and costs standards; 2) challenges associated with phasing and construction in an occupied building; and 3) proposed costs and approval delays associated with the new construction option. MSBA staff reiterated that the District and design team must continue to review the proposed scope of work and associated costs, and that any costs associated with scope not in compliance with MSBA space standards or that exceeds the square footage costs of other new construction may not be eligible for funding by MSBA.

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

- 1) All initial paperwork required has been processed, including an executed Initial Compliance Certification, the composition of the School Building Committee, and the enrollment information.

- 2) MSBA has completed an enrollment projection and has reached a mutual agreement with the District for a design enrollment of 1,370 students for the Winchester High School.
- 3) MSBA reviewed the Feasibility Study and subsequent material and finds that the options investigated were sufficiently comprehensive in scope and the approach undertaken in this study was reasonable given the District's academic curriculum and their strong desire to maintain the high school's current location in the downtown area.
- 4) The District has submitted an operational budget for educational objectives and a capital budget statement for MSBA review.
- 5) 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 execution of a Project Funding Agreement.
- 6) 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.
- 7) As part of the Schematic Design phase, the MSBA will continue to work with the District to better understand costs associated with the project scope.
- 8) 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 has reviewed the Feasibility Study and is forwarding the District's preferred solution for an addition and renovation project to the Winchester High School for the Board's consideration.