

District: Town of Wakefield
 School Name: Wakefield Memorial High School
 Recommended Category: Preferred Schematic
 Date: June 15, 2022

Recommendation

That the Executive Director be authorized to approve the Town of Wakefield (the “District”), as part of its Invitation to Feasibility Study, to proceed into Schematic Design to replace the existing Wakefield Memorial High School with a new three-story facility serving grades 9-12 on the Beasley Oval of the existing school site. MSBA staff has reviewed the Feasibility Study and accepts the District’s Preferred Schematic.

District Information	
District Name	Town of Wakefield
Elementary Schools	Doyle Early Childhood Center (PK) Dolbeare Elementary School (K-4) Greenwood Elementary School (K-4) Walton Elementary School (K-4) Woodville Elementary School (K-4)
Middle School	Galvin Middle School (5-8)
High School	Wakefield Memorial High School (9-12)
Priority School Name	Wakefield Memorial High School
Type of School	High School
Grades Served	9-12
Year Opened	1960
Existing Square Footage	250,430
Additions	1972 – 167,000 GSF of academic and support spaces added
Acreage of Site	10.86 acres
Building Issues	The District identified deficiencies in the following areas: <ul style="list-style-type: none"> – Mechanical systems – Electrical systems – Windows – Roof – 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 overcrowding.
Original Design Capacity	Unknown
2021-2022 Enrollment	846 students
Agreed Upon Enrollment	1,000 students
Enrollment Specifics	The District and MSBA have mutually agreed upon a design enrollment of 1,000 students serving grades 9-12.
Total Project Budget – Debt Exclusion Anticipated	Yes

District Information	
MSBA Board Votes	
Invitation to Eligibility Period	December 11, 2019
Invitation to Feasibility Study	December 16, 2020
Preferred Schematic Authorization	On June 22, 2022 Board agenda
Project Scope & Budget Authorization	District is targeting Board authorization on December 21, 2022
Feasibility Study Reimbursement Rate (Incentive points are not applicable)	49.94%

Consultants	
Owner’s Project Manager (the “OPM”)	Leftfield, LLC
Designer	Symmes Maini & McKee Associates

Discussion

The existing Wakefield Memorial High School is a 250,430 square-foot three-story facility located on a 10.8-acre site currently serving students in grades 9-12. The original facility was constructed in 1960 as a junior high school and was expanded with major additions in 1972, including a field house.

The District’s Statement of Interest (“SOI”) identified numerous deficiencies in the existing facility associated with the age of the building and its systems, along with programmatic deficiencies; accessibility issues; science labs that do not meet the District’s program needs, and are reportedly unsafe due to limited access to sinks, lab spaces, power sources, and safety features; the building envelope has not been improved, is uninsulated and performs poorly; inadequate plumbing, electrical, mechanical and fire protection systems and existing spaces are not conducive for delivering the District’s 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 (11) preliminary options that include: (1) code upgrade option, (4) addition/renovation options, and (6) new construction options, as presented below.

Option	Description of Preliminary Options
1	Code Upgrade / Base Repair for grades 9-12 with an enrollment of 1,000 students at the existing Wakefield Memorial High School; with an estimated project cost of \$154.2 million.
2A	Addition/renovation (existing building footprint) for 1,000 students grades 9-12 at the existing Wakefield Memorial High School, renovating 106,373 gsf and totaling 256,900 gsf; with an estimated project cost of \$218.1 million.
2B	Addition/renovation (existing building footprint) for 1,000 students grades 9-12 at the existing Wakefield Memorial High School, renovating 142,345 gsf and totaling 256,900 gsf; with an estimated project cost of \$217.3 million.

2C	Addition/renovation (Field House Renovation on Walsh Field) for 1,000 students grades 9-12 at the existing Wakefield Memorial High School, renovating 34,575 gsf and totaling 256,900 gsf; with an estimated project cost of \$224.6 million.
2D	Addition/renovation (Field House Renovation on Walsh Field) for 1,000 students grades 9-12 at the existing Wakefield Memorial High School, renovating 34,575 gsf and totaling 256,900 gsf; with an estimated project cost of \$218.6 million.
3A	New Construction (Grafton High School Model School design) for 1,000 students grades 9-12 at the existing Wakefield Memorial High School site on Beasley Oval, totaling 209,228 gsf; with an estimated project cost of \$181.7 million.
3B	New Construction (South Classroom Orientation) for 1,000 students grades 9-12 at the existing Wakefield Memorial High School site on Beasley Oval, totaling 275,900 gsf; with an estimated project cost of \$225.9 million.
3C	New Construction (North Classroom Orientation) for 1,000 students grades 9-12 at the existing Wakefield Memorial High School site on Beasley Oval, totaling 275,900 gsf; with an estimated project cost of \$225.9 million.
4A	New Construction (North Middlesex Regional High School Model School design) for 1,000 students grades 9-12 at the existing Wakefield Memorial High School site on Walsh Field, totaling 198,126 gsf; with an estimated project cost of \$180.1 million.
4B	New Construction for 1,000 students grades 9-12 at the existing Wakefield Memorial High School site on Walsh Field, totaling 275,900 gsf; with an estimated project cost of \$231.8 million.
4C	New Construction for 1,000 students grades 9-12 at the existing Wakefield Memorial High School site on Walsh Field, totaling 275,900 gsf; with an estimated project cost of \$231.8 million.

As a result of this analysis, the District determined that the following options would not be considered for further evaluation:

The District determined that “Option 2B” would not be considered for further evaluation due to the concern associated with the potential for the proposed cluster organization to translate to a building with greater clarity of form and expression of its community space and major circulation.

The District determined that “Option 2C” and “Option 2D” would not be considered for further evaluation due to concerns with disruption to students and education delivery due to the displacement of field house activities during the renovation.

The district determined that “Option 3C” would not be considered for further evaluation because even though it has a similar building organization to “Option 3B”, it places the classroom pods with the Health & Wellness and Fine Arts wings placing classrooms on the north side of the plan and it is not as desirable. The District’s preference is for the classrooms to be oriented south and for the gym to be less visually dominant at the entry of the school.

The District determined that “Option 4A” would not be considered for further evaluation due to constraints of the site with Farm Street vehicular traffic and the proximity to wetland resource area

limits towards the rear of the building. The District also expressed concern with the limited understanding of the geotechnical factors and impact of the existing culvert under the existing Walsh Field site.

The District determined that “Option 4B” and “Option 4C” would not be considered for further evaluation due to constraints of the site with Farm Street vehicular traffic and the proximity to wetland resource area limits towards the rear of the building. The proposed options also result in higher estimated costs when compared to renovation or model school options.

During the Preferred Schematic phase, it should be noted that the District and design team further developed the following options:

- “Option 2A” was further developed and now referred to as “Option 2”.
- “Option 3A” (Model School design).
- “Option 3B” was further developed resulting in additional (4) sub-options related to academic organization referred to as “Sub-Options 3B1, 3B2, 3B3 and 3B4”.

“Sub-Option 3B1” (Community Space Up Front) was not selected by the District because the academic neighborhoods were located at the rear of the building, it did not reflect the District’s priorities and values, and the dominant scale of the Gymnasium/PE volume placed at the main arrival point of the school, was found to create an unwelcoming civic gesture. Additionally, the potentially compressed nature of the academic neighborhoods resulting from the immediate adjacencies of gym and auditorium volumes and the limited east-west dimension of the available building site was found to be undesirable.

- “Sub-Option 3B2” (Highly Visible Academics) was not selected by the District because the proximity of the academic neighborhoods to the high-bay gym and auditorium to the east limit access to natural light for a large number of classrooms and this option provides fewer opportunities for direct connections from classrooms to outdoor learning environments. Additionally, this sub-option does not provide the most optimal solar orientation since most classrooms are west facing, access to the Gym from the main entry is distant and access to athletic fields from the Gym is complicated by grade changes on the south of the site.
- “Sub-Option 3B4” (North Facing Classrooms) was not selected by the District because this sub-option provides more difficult access for deliveries on the southern end of the building due to space constraints and grading challenges, public spaces are far from parking and provides limited access to natural daylighting in comparison to the other options.

MSBA staff and the District agreed to explore the following (4) options for further development and consideration in the final evaluation and development of preliminary design pricing as presented below, including: (1) code upgrade option, (1) addition/renovation option, and (2) new construction options.

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 Code Upgrade	250,430	250,430 \$434/sq. ft.	N/A	\$2,371,685	\$111,179,926 \$444/sq. ft.	\$138,974,908
Option 2 Addition/Renovation	258,917	109,574 \$525/sq. ft.	149,343 \$638/sq.ft	\$13,098,411	\$165,968,490 \$641/sq. ft.	\$207,460,612
Option 3A New Construction (Model School Design)	260,027	N/A	260,027 \$598/sq.ft.	\$20,380,447	\$175,782,209 \$676/sq. ft.	\$219,727,761
*** Option 3B3 New Construction	260,027	N/A	260,027 \$597/sq. ft.	\$20,217,183	\$175,557,629 \$675/sq. ft.	\$219,447,036

* Marked up construction costs

** Does not include construction contingency

****District's Preferred Schematic*

The District has selected “Option 3B3” (South Facing Classrooms) as the Preferred Schematic to proceed into Schematic Design because the District determined that this option best meets the needs of the District’s educational program, and provides the best opportunities to receive natural daylight and view/access to the outdoors. Additionally, the proposed centrality of both the student services suite and the media center to the majority of academic teaching and learning spaces as well as the placement of the academic clusters to face the arrival point of the school was found to be highly desirable. Furthermore, this option provides site amenities and limits the disruption to ongoing education during construction.

“Option 1” was not considered a viable option and was not considered for further evaluation because the District determined that this option does not meet the requirements described in the educational program, has poor indoor/outdoor connections, would require phasing, and results in poor energy efficiency.

“Option 2” was not selected by the District because the proposed addition/renovation would require swing space and significant structural updates to add a third-floor or to introduce new high-base space to support the educational program. The District determined that this option also presents less than optimal adjacencies due to retrofit and presents limited ability to community functions to be optimally centralized.

“Option 3A” was not selected by the District because the placement of large portions of on-grade parking along Farm Street, far from the main entrance, was found to be undesirable relative to “Option 3B”, which locates most of the parking immediately adjacent to the new school building. Additionally, this option places the field roughly level with the entry elevation of the new building, which would require a single, tall retaining wall along the west side of the track along Farm Street. This would likely create a less attractive and less accessible grade transition at the new field facility as compared to “Sub-Alternative B”. Furthermore, the prevailing lower elevation of “Option 3A” would require

more extensive earthwork and soil export than “Option 3B” and was estimated at a higher cost.

The District presented its proposed Preferred Schematic to the MSBA Facilities Assessment Subcommittee (“FAS”) on June 1, 2022. At that meeting, members of the FAS discussed the following items: The view of the building from the street and upon approach; proximity of wetlands and outdoor spaces to the building; considerations for drainage and stormwater management; landscaping opportunities between the school and football field; parking locations; Emergency access circulation; appreciation of the District’s educational program; distribution of Special Education spaces; considerations for acoustics and seating in the dining commons; community support for multiple school building projects; staffing of the library and media center; opportunities to group teacher planning spaces to encourage interdisciplinary collaboration; sheltered access to the building for individuals with limited mobility; consideration of storage space in art rooms; and, opportunities for application of natural light in interior classrooms.

MSBA staff reviewed the conclusions of the Feasibility Study and all other subsequent submittals 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 Schematic is reasonable and cost-effective and meets the needs identified by the District.
- 2) The District has submitted an operational budget for educational objectives and a capital budget statement for MSBA review.
- 3) The District’s Special Education submission 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.
- 4) 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.
- 5) 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 Town of Wakefield be approved to proceed into Schematic Design to replace the existing Wakefield Memorial School with a new facility serving grades 9-12 on the Beasley Oval of the existing school site.