

District: Town of Tyngsborough
 School Name: Tyngsborough Middle School
 Recommended Category: Preferred Schematic
 Date: August 18, 2021

Recommendation

That the Executive Director be authorized to approve the Town of Tyngsborough (the “District”), as part of its Invitation to Feasibility Study, to proceed into Schematic Design to replace the existing Tyngsborough Middle School with a new facility serving grades 6-8 on the existing site. MSBA staff has reviewed the Feasibility Study and accepts the District’s Preferred Schematic.

District Information	
District Name	Town of Tyngsborough
Elementary Schools	Tyngsborough Elementary School (PK-5) Academy of Notre Dame Elementary School (K-8)
Middle School	Tyngsborough Middle School (6-8)
High Schools	Tyngsborough High School (9-12) Greater Lower Technical High School (9-12) Academy of Notre Dame High School (9-12) Innovation Academy Charter School (5-12)
Priority School Name	Tyngsborough Middle School
Type of School	Middle School
Grades Served	6-8
Year Opened	1967
Existing Square Footage	80,667
Additions	N/A
Acreage of Site	56.1 acres
Building Issues	The District identified deficiencies in the following areas: <ul style="list-style-type: none"> – Mechanical systems – Electrical systems – Plumbing systems – Envelope – 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.
Original Design Capacity	Unknown
2020-2021 Enrollment	393 students
Agreed Upon Enrollment	480 students
Enrollment Specifics	The District and MSBA have mutually agreed upon a design enrollment of 480 students serving grades 6-8.
Total Project Budget – Debt Exclusion Anticipated	Yes

MSBA Board Votes	
Invitation to Eligibility Period	December 12, 2018
Invitation to Feasibility Study	February 13, 2020
Preferred Schematic Authorization	On August 25, 2021 Board agenda
Project Scope & Budget Authorization	District is targeting Board authorization in April 2022
Feasibility Study Reimbursement Rate (Incentive points are not applicable)	54.36%

Consultants	
Owner's Project Manager (the "OPM")	Leftfield, LLC
Designer	JCJ Architecture

Discussion

The existing Tyngsborough Middle School is an 80,667 square-foot two-story facility located on a 56.1 acre site that currently serves students in grades 6-8 and was constructed in 1967. In 1994, an access ramp was added to the front entrance and the roof of the main building was replaced. In 1995, two handicapped accessible bathrooms were added on the first floor as well as a limited access elevator in the center of the main building. In 1997, a second limited access elevator was added to the gymnasium side of the building and in 1998, the gymnasium portion of the building received a new roof.

The District's Statement of Interest ("SOI") identified numerous deficiencies in the existing facility associated with outdated mechanical, electrical, and plumbing systems; building envelope; accessibility issues; and existing spaces 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 (7) preliminary options that include: (1) code upgrade option, (2) addition/renovation options, and (4) new construction options, as presented below.

Option	Description of Preliminary Options
A	Code Upgrade at the existing Tyngsborough Middle School; with an estimated project cost \$66.0 million.
B	Addition/Renovation at the existing Tyngsborough Middle School; with an estimated project cost \$84.2 million.
B.1	Addition/Renovation at the existing Tyngsborough Middle School; with an estimated project cost \$75.8 million.
C	New Construction at the existing Tyngsborough Elementary School site (located at 205 Westford Road); with an estimated project cost \$75.3 million.
D	New Construction at the existing Tyngsborough Middle School and Tyngsborough High School campus (located at 50 Norris Road, on the site of the existing baseball field north of the proposed high school); with an estimated project cost \$73.5 million.

D.1	New Construction at the existing Tyngsborough Middle School and Tyngsborough High School campus (located at 50 Norris Road, on the site of the existing parking lots located west of the existing middle school); with an estimated project cost \$71.3 million.
D.2	New Construction at the existing Tyngsborough Middle School and Tyngsborough High School campus (located at 50 Norris Road, on the site of the existing softball field located north of the existing middle school and east of the existing high school); with an estimated project cost \$72.2 million.

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

- “Option B” because existing pedestrian and vehicle conflicts remain, the design is inefficient in its space layout due to the configuration of the existing building, there is limited opportunity to enhance the Performing Arts program, and this option requires a phased construction.
- “Option C” because of the impact on the shared academic and athletic programs between the Middle School and High School, impacts to bus operations, results in the loss of the existing auditorium and loss of a baseball field, and results in significant costs to extend utilities to support the new building.
- “Options D and D.1” because of the inefficient space layout due to the configuration of the existing building, limited opportunities to enhance the Performing Arts program, results in the loss of the existing auditorium, and requires phased construction.

Subsequent to the evaluation of initial preliminary options, the District further developed “Option A”, which is now referred to as “Option A.1.1” and “Option B.1”, which is now referred to as “Option B.1.1.1”. Additionally, “Option D.2” was further developed into (4) design alternatives referred to as “Options D.2.1.1, D.2.1.2, D.2.1.3, and D.2.1.4”.

MSBA staff and the District agreed to explore the following (6) 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 (4) 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 A.1.1: Code Upgrade	80,667	80,667 \$405/sq. ft.	N/A	\$4,884,647	\$37,567,658 \$466/sq. ft.	\$59,648,352
Option B.1.1.1: Addition/Renovation	114,740	17,802 \$377/sq. ft.	96,938 \$519/sq. ft.	\$10,174,018	\$67,204,067 \$586/sq. ft.	\$84,412,753

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 D.2.1.1: New Construction	112,418	N/A	112,418 \$500/sq. ft.	\$9,028,182	\$65,194,808 \$580/sq. ft.	\$81,345,808
Option D.2.1.2: New Construction	112,418	N/A	112,418 \$492/sq. ft.	\$9,282,864	\$64,598,109 \$575/sq. ft.	\$80,719,109
***Option D.2.1.3: New Construction	112,418	N/A	112,418 \$503/sq. ft.	\$9,024,061	\$65,582,615 \$583/sq. ft.	\$81,752,615
Option D.2.1.4: New Construction	112,418	N/A	112,418 \$487/sq. ft.	\$9,404,072	\$64,206,785 \$571/sq. ft.	\$80,307,785

* Marked up construction costs

** Does not include construction contingency

*****District's Preferred Schematic**

The District has selected “Option D.2.1.3” as its Preferred Schematic to proceed into Schematic Design because this option best meets the needs of the District’s educational program, includes desired shared Middle School and High School programs, and provides separate and distinct Central Office, Community, and School entrances. Additionally, this option addresses site circulation issues, includes an enhanced Tiger Plaza and connection to the football field, and does not require swing space.

“Option A.1.1” was not selected by the District because this option does not include sufficient space to support the educational program, limits opportunities for building envelope energy enhancements due to the existing construction, does not address site circulation issues, requires a multi-phased occupied construction, and requires swing space.

“Option B.1.1.1” was not selected by the District because of the undersized gymnasium located on the second floor, inefficient use of space as a result of the limited program to assign to the first floor of the existing building and provides additional challenges in designing and constructing around an existing building.

“Option D.2.1.1” was not selected by the District because the three story classroom wing offers limited flexibility for increased enrollment, includes increased transition time between the three floors, requires a zoning variance for building height and number of stories, requires an additional elevator, is out of scale with the high school, does not include a dedicated community entrance, compromises the desired simultaneous use between Community and Education zones, and does not display education in the Tiger Plaza.

“Option D.2.1.2” was not selected by the District because the outdoor spaces are not directly accessible from the “Heart of the School” and most classrooms, does not include a dedicated community entrance, compromises the desired simultaneous use between Community and Education zones, and includes inefficient delivery vehicle circulation.

“Option D.2.1.4” was not selected by the District because this option isolates the Special Education programs on the first floor, does not include a distinct community entrance, compromises the desired simultaneous use between Community and Education zones, limits classroom connections to the outdoors, and includes inefficient delivery vehicle circulation.

The District presented its proposed Preferred Schematic to the MSBA Facilities Assessment Subcommittee (“FAS”) on July 21, 2021. At that meeting, members of the FAS discussed the following items: appreciation of the District’s educational program; distribution of Special Education spaces; transition from public spaces to academic wings; proposed building orientation and associated site constraints; connections to the existing high school and transition from the building to the outdoor spaces; opportunities for outdoor learning; accessibility of outdoor learning spaces for individuals with hearing, visual, and physical impairments; shelter and access to the building for individuals with limited mobility; and internet access for all students both in school and at home.

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) The MSBA requests that the District be available to present the updated Preferred Schematic to the Facilities Assessment Subcommittee should the MSBA determine that an updated presentation is required. This update would ensure a mutual understanding and agreement of the proposed project scope and ensure that this scope will be reflected in the District’s Schematic Design submittal.
- 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 Town of Tyngsborough be approved to proceed into Schematic Design to replace the existing Tyngsborough Middle School with a new facility serving grades 6-8 on the existing site.