District: Cape Cod Regional Vocational Technical School District

School Name: Cape Cod Regional Technical High School

Recommended Category: Preferred Schematic Date: February 8, 2017

Recommendation

That the Executive Director be authorized to approve the Cape Cod Regional Vocational Technical School District, as part of its Invitation to Feasibility Study, to proceed into Schematic Design to replace the existing Cape Cod Regional Technical High School on the existing site. MSBA staff has reviewed the Feasibility Study and accepts the District's preferred solution.

Cape Cod Regional Vocational Technical School District				
N/A				
N/A				
Cape Cod Regional Technical High School (9-12)				
Cape Cod Regional Technical High School				
High School				
9-12				
1975				
214,000				
N/A				
67 acres				
The District identified deficiencies in the following areas:				
 Building Envelope 				
 Mechanical Systems 				
Electrical Systems				
Plumbing Systems				
Accessibility				
In addition to the physical plant issues, the District reported that the				
existing facility does not support the delivery of its educational				
program.				
Unknown				
616				
650 students				
The District and MSBA have mutually agreed upon a design enrollment of no more than 650 students serving grades 9-12.				

MSBA Board Votes			
Invitation to Eligibility Period	January 14, 2015		
Invitation to Feasibility Study	September 30, 2015		
Preferred Schematic Authorization	On February 15, 2017 Board agenda		
Project Scope & Budget Authorization	District is targeting Board authorization on		
	August 23, 2017		
Feasibility Study Reimbursement Rate	42.20%		
(Incentives points are not applicable)			

Consultants	
Owner's Project Manager (the "OPM")	Colliers International
Designer	Drummey Rosane Anderson, Inc.

Discussion

The existing Cape Cod Regional Technical High School is a 214,000 square foot building located on a 67 acre site. The existing facility was originally constructed in 1975 and currently serves grades 9-12. The existing Cape Cod Regional Technical High School was built originally with the "open" concept approach to classroom instruction.

The District identified numerous facility deficiencies in the Statement of Interest that are associated with: outdated mechanical, electrical, and plumbing systems; structural systems; building envelope; windows; and the roof. The District has also identified non-compliant accessibility issues and space constraints that are inhibiting the District's ability to deliver its 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. Subsequently, the District and its consultants studied eight preliminary options that include two base repair options, two addition/renovation configurations, and four new construction options. The following is a detailed list of the preliminary alternatives considered.

Option	Description of Preliminary Options
Base	Renovation with minimal level of repair to meet code.
repair	
A.1	Renovation only with improvements to educational plan
B.1	Addition/renovation of the existing facility (25,000 sq. ft. addition)
B.2	Addition/renovation of the existing facility (65,000 sq. ft. addition)
C.1	New construction on the existing site (on southern site, courtyard layout), site option 1
C.2	New construction on the existing site (on eastern site, H shaped layout), site option 2
C.3	New construction on the existing site (on existing athletic fields), site option 3
C.4	New construction on the existing site (on existing track/soccer field), site option 4

Upon further review, MSBA staff and the District agreed to seven 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
Base Repair	211,400	211,400		\$6,632,000	\$61,818,000	\$77,275,000
		\$261/sq.ft.	N/A		\$292/sq.ft.	
Option A.1:	212,000	211,400	600	\$7,500,000	\$96,047,000	\$124,861,000
Additions &		\$417/sq.ft.	\$650/sq.ft.		\$453/sq.ft.	
Renovation						
Option B1:	235,000	210,000	25,000	\$7,768,000	\$110,951,000	\$144,236,000
Partial		\$430/sq.ft.	\$515/sq.ft.		\$472/sq.ft.	
Demolition &						
Addition						
Option B2:	226,000	146,000	80,000	\$12,843,000	\$110,060,000	\$143,078,000
Partial		\$378/sq.ft.	\$450/sq.ft.		\$487//sq.ft.	
Demolition &						
Addition						
Option C.1:	228,000		228,000	\$20,415,000	\$115,599,000	\$144,500,000
New		N/A	\$417/sq.ft.		\$507/sq.ft.	
Construction						
Option C.2***	228,000		228,000	\$20,412,000	\$113,131,000	\$141,414,000
New		N/A	\$406/sq.ft.		\$496/sq.ft.	
Construction						
Option C.3:	228,000		228,000	\$21,728,000	\$114,458,000	\$143,073,000
New		N/A	\$407/sq.ft.		\$502/sq.ft.	
Construction						

^{*} Marked up construction costs

The District has selected "Option C.2" as the preferred solution to proceed into schematic design because the District has determined that this option addresses all of the deficiencies associated with the existing conditions of the current facility. In addition, it is anticipated that this option will result in lower operating and maintenance costs, and will provide significantly less disruption to students and staff during construction. The District noted that the construction cost estimates for five of the seven options are within 2% of the average construction cost. This allowed the District and the Design team to focus the discussion regarding the best solution for the facility on criteria that are not associated with construction cost.

The "Base Repair" option was eliminated because it does not address the educational goals or correct the educational deficiencies of concern to the District. "Option A.1", which is an addition and renovation, was eliminated because it requires swing space and limits access to core facilities during certain construction phases. In addition, "Option A.1" does not allow the District to implement an Academy organization model by co-locating related shops and integrating academic classrooms with shops.

^{**} Does not include construction contingency

^{***}District's preferred option

"Options B.1 and B.2", which include partial demolition of the existing building and an addition, were both eliminated because they do not meet the District's needs related to its educational plan, and both options require a longer construction duration with complex phasing which would be disruptive to the District's educational program. In addition, "Options B.1 and B.2" both require the use of temporary swing space.

As noted above, the District has selected "Option C.2" as the preferred solution to proceed into schematic design because this option provides the best educational outcome, results in lower operating and maintenance costs, and minimizes disruption to students and staff during construction. The District stated that "Option C.2" ranked the highest in six of the seven matrix categories established by the District and the Design team.

The District presented its proposed project to the MSBA Facilities Assessment Subcommittee ("FAS") on January 18, 2017. At that meeting, members of the FAS discussed a number of topics with the District including: the educational plan as it relates to partnering with the Cape Cod Collaborative, the educational plan as it relates to incorporating the "maker spaces" within the General Education Curriculum, the flexibility of design for "maker spaces," auto collision classrooms, life sciences classrooms, professional development opportunities for faculty using trapezoidal classrooms, and the costs associated with the addition/renovation options.

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

- 1) The Department of Elementary and Secondary Education ("DESE") has reviewed the District's proposed programming offerings and is satisfied that the District's planning for the Career/Vocational Technical Education Program offerings has been thorough and that the programs being offered are viable.
- 2) The options investigated during the Feasibility Study are sufficiently comprehensive in scope, the approach undertaken in the Feasibility Study is appropriate, and the District's preferred solution is reasonable, cost-effective, and meets 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 DESE as part of the Schematic Design submittal prior to 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, with the exception of variations previously agreed to by the MSBA. All proposed spaces will be reviewed during the Schematic Design phase.

Based on the review outlined above, MSBA staff recommends that the Cape Cod Regional Vocational Technical School District be approved to proceed into Schematic Design to replace the existing Cape Cod Regional Technical High School on the existing site.