District: Pentucket Regional School District School Name: Pentucket Regional High School

Recommended Category: Preferred Schematic October 24, 2018

Recommendation

That the Executive Director be authorized to approve the Pentucket Regional School District, as part of its Invitation to Feasibility Study, to proceed into Schematic Design to replace the existing Pentucket Regional High School and the existing Pentucket Regional Middle School with a new District-wide grades 7-12 middle/high school on the existing site. MSBA staff has reviewed the Feasibility Study and accepts the District's preferred solution.

District Information			
District Name	Pentucket Regional School District		
Elementary Schools	Dr. Frederick N. Sweetsir School (PK-2)		
, and the second	Dr. John C. Page School (PK-6)		
	Elmer S Bagnall School (PK-6)		
	Helen R Donaghue School (3-6)		
Middle School	Pentucket Regional Middle School (7-8)		
High School	Pentucket Regional High School (9-12)		
Priority School Name	Pentucket Regional High School		
Type of School	High School		
Grades Served	9-12		
Year Opened	1958		
Existing Square Footage	208,000		
Additions	1993 Addition		
	2001 4 modular classrooms		
Acreage of Site	54 acres		
Building Issues	The District identified deficiencies in the following areas:		
	 Mechanical systems 		
	Envelope		
	- HVAC		
	- 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 due to existing and projected		
	overcrowding.		
Original Design Capacity	Unknown		
2017-2018 Enrollment	742		
Agreed Upon Enrollment	Study Enrollment includes the following configurations:		
1-8-0-3 opon Zimoninent	605 students (grades 9-12)		
	965 students (grades 7-12) (Preferred Solution)		
	, , , , , , , , , , , , , , , , , , , ,		
Enrollment Specifics	Contingent upon the Board's approval of the preferred		
•	solution, the District will sign a Design Enrollment		
	Certification for 965 students in grades 7-12.		

District Information	
Total Project Budget – Debt	Yes
Exclusion Anticipated	

MSBA Board Votes	
Invitation to Eligibility Period	May 25, 2016
Invitation to Feasibility Study	November 9, 2016
Preferred Schematic Authorization	On October 31, 2018 Board agenda
Project Scope & Budget Authorization	District is targeting Board authorization on
	February 13, 2019
Feasibility Study Reimbursement Rate	52.89%
(Incentive points are not applicable)	

Consultants	
Owner's Project Manager (the "OPM")	Vertex Companies, Inc.
Designer	Dore & Whittier Architects, Inc.

Discussion

As part of the Feasibility Study, MSBA staff agreed with the District's request to explore the potential consolidation of the Pentucket Regional High School and the Pentucket Regional Middle School. This resulted in two study design enrollments, including 605 students for a grades 9-12 configuration and 965 students for a grades 7-12 configuration. The Feasibility Study includes the evaluation of a District-wide grade reconfiguration and studies the impacts that may result from the potential project.

The existing Pentucket Regional High School is a 208,000 square-foot, two-story building that currently serves grades 9-12. The building was designed as a junior/senior high school and was originally constructed in 1958, with an addition completed in 1993. The existing facility is colocated on a 54-acre site with the Pentucket Regional Middle School which currently serves grades 7-8 and was constructed as a 123,000 square-foot, two-story building in 1967.

The District identified numerous deficiencies in the Statement of Interest that are associated with school safety, security, overcrowding, undersized classroom spaces, roof, mechanical systems, electrical systems, plumbing systems, building envelope, and interior damage from water infiltration. The District has also expressed concern regarding its ability to deliver its educational program because the size and layout of the existing facility has a direct impact on student learning and instructional best practices.

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 ten preliminary options that included two base repair options, two addition/renovation options, and six new construction options, as presented below.

Option	Description of Preliminary Options
RP 1.1	Base Repair – Comprehensive renovation of both the existing middle school and existing high school to address facility maintenance and code compliance (Grades 7-12; 965 students)
R1.1	Base Repair – Comprehensive renovation of the existing high school to address facility maintenance and code compliance; (Grades 9-12; 605 students)
AR 1.1	Addition/Renovation – Comprehensive renovation of the existing high school and an addition; (Grades 9-12; 605 students) middle school repairs not included in the scope of work
AR 1.2	Addition/Renovation – Comprehensive renovation of the existing high school and an addition; (Grades 7-12; 965 students) middle school demolition included in the scope of work
N 2.1	New Construction – New three-story middle/high school constructed on the middle school site; (Grades 7-12; 965 students); high school demolition included in the scope of work
N 3.1	New Construction - New three-story high school constructed on the existing football/baseball field at the rear of the high school; (Grades 9-12; 605 students); middle school repairs included in the scope of work
N 3.2	New Construction - New two-story middle/high school constructed on the existing football/baseball field at the rear of the high school; (Grades 7-12; 965 students); middle school demolition included in the scope of work
N 3.3	New Construction - New three-story middle/high school constructed on the existing football/baseball field at the rear of the high school; (Grades 7-12; 965 students); middle school demolition included in the scope of work
N 4.1	New Construction - New three-story middle/high school constructed on the existing practice fields at the front of the high school; (Grades 7-12; 965 students); middle school demolition included in the scope of work
N 4.2	New Construction - New two-story middle/high school constructed on the existing practice fields at the front of the high school; (Grades 7-12; 965 students); middle school demolition included in the scope of work

At the conclusion of the Preliminary Development Program phase, the District determined that the options for the grades 9-12 configurations would not be considered further based on the District's preference to consolidate to a 7-12 grade configuration. Based on this determination, the District identified four final options for further development and consideration in the Preferred Schematic Report as presented below.

Option	Description of Preliminary Options
RP 1.1	Base Repair – Comprehensive renovation of both the existing middle school and existing high school to addresses facility maintenance and code compliance (Grades 7-12; 965 students)
AR 1.2	Addition/Renovation – Comprehensive renovation of the existing high school and an addition; (Grades 7-12; 965 students) middle school demolition included in the scope of work
N 3.2	New Construction - New two-story middle/high school constructed on the existing football/baseball field at the rear of the high school; (Grades 7-12; 965 students); middle school demolition included in the scope of work

Option	Description of Preliminary Options	
N 3.3	New Construction - New three-story middle/high school constructed on the existing football/baseball field at the rear of the high school; (Grades 7-12; 965 students); middle school demolition included in the scope of work	

Upon review, the MSBA requested that the District revisit options associated with the 9-12 grade configuration to ensure that all viable 9-12 scenarios were sufficiently evaluated. As a result of further evaluation and refinement, the District selected eight 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	Total Gross Square	Square Feet of Renovated Space (cost*/sq.	Square Feet of New Construction	Site, Building Takedown, Haz Mat.	Estimated Total Construction **	Estimated Total
(Description)	Feet	ft.)	(cost*/sq. ft.)	Cost*	(cost*/sq. ft.)	Project Costs
Option RP1.1: Base Repair; Grades 9-12	147,000	147000 \$287/sq. ft.	N/A	\$9,984,766	\$52,163,149 \$355/sq. ft.	\$73,203,936
Option R1.1: Base Repair; Grades 9-12	147,000	147,000 \$330/sq. ft.	N/A	\$12,402,061	\$60,955,873 \$415/sq. ft.	\$84,194,841
Option AR1.1: Addition/ Renovation; Grades 9-12	158,335	82,895 \$350/sq. ft.	75,350 \$526/sq. ft.	\$12,828,443	\$81,476,680 \$515/sq. ft.	\$109,845,850
Option N3.1a: New Construction; Grades 9-12	158,335	N/A ft.	158,335 \$480/sq. ft.	\$11,797,069	\$87,724,386 \$554/sq. ft.	\$109,665,483
Option AR1.2: Addition/ Renovation; Grades 7-12	210,426	104,778 \$336/sq. ft.	105,648 \$524/sq. ft.	\$23,860,617	\$114,446,021 \$544/sq. ft.	\$151,082,526
Option N3.2a: New Construction; Grades 7-12	210,426	N/A	210,426 \$460/sq. ft.	26,340,628	\$123,134,173 \$585/sq. ft.	154,917,716
Option N3.3e: New Construction; Grades 7-12	210,426	N/A	210,426 \$445/sq. ft.	26,399,589	\$119,993,859 \$570/sq. ft.	149,992,324
Option N3.3f: New Construction; Grades 7-12	210,426	N/A	210,426 \$464/sq. ft.	\$26,669,929	\$124,267,810 \$591/sq. ft.	155,534,763

^{*} Marked up construction costs

^{**} Does not include construction contingency

^{***}District's preferred solution

The District has selected "Option N-3.3f" as the preferred solution to proceed into Schematic Design because it best supports the goals established by the District in the visioning sessions and detailed in the educational program. The District notes that the key features of the preferred solution include: meeting the desired educational objectives; locating programmatic spaces with desired spatial relationships; locating the core spaces such as the gymnasium, library, and auditorium between the north and south as shared spaces between the two-grade groupings; providing clear sight lines from the administration and guidance spaces to the main entry, including the desired approach to the building and adequate parking; and allowing definition between middle/high school classroom separations.

Additionally, the District has also indicated the proposed "H-shaped" plan creates an extensive forecourt meant to serve as a welcoming gesture and a three-sided courtyard meant to serve as a semi-sheltered outdoor learning environment. The proposed layout of the preferred solution would allow the District to zone-off portions of the building for after-hours community use.

Base Repair "Option RP1.1", was carried into the final evaluation of alternatives for cost comparative purposes as a baseline option. The District determined that this option did not meet the needs of the high school educational program or provide needed spatial improvements to the existing high school. Additionally, the District indicated this option limits opportunities to improve site circulation and athletic field development and would include undesirable construction phasing.

Although Base Repair "Option R1.1" and Addition/Renovation "Option AR1.1" could meet the needs of the high school educational program, these options were not selected because they would not accommodate the needed repairs to the middle school and would limit opportunities to improve site circulation and the athletic fields. Additionally, the District indicated these options would also require undesirable construction phasing.

"Option N3.1a", represents further evaluation of new construction for grades 9-12. Although this option was estimated at a lower cost than the preferred solution, the District did not select it because this option does not accommodate the District's desire to consolidate to a district-wide 7-12 grade configuration. Although "Option AR1.2" partially meets the needs of the educational program and combines students from both buildings into the desired grade configuration, this option was not selected because the District determined that maintaining existing, undersized, and less-flexible spaces were not preferable when compared to new construction. "Option N3.2a" and "Option N3.3e" were both reported to meet the educational program objectives but were not selected. The District determined that the construction phasing required for "Option N3.2a" would not be supported by the community, while "Option N3.3e" would not provide the middle/high school separation desired by the District.

The District presented its proposed project to the MSBA Facilities Assessment Subcommittee ("FAS") on September 26, 2018. At that meeting, members of the FAS discussed the following topics: the estimated cost of the proposed project and the MSBA's interest in understanding from the project team the driving factors associated with the higher square-foot cost than other projects bidding in the same time period; complexity of designing a project with a 7-12 grade configuration; progress of the conceptual design; consideration of potential efficiencies in a middle/high school model; site constraints; other districts' experiences with similar proposed design features; consideration of construction phasing and the constraints that eliminating construction phasing places on the design; the District's adherence to community feedback;

complexity and cost of the project and considerations for reducing the cost of the project; size, location, and logistics of student dining areas; the educational program and its relation to the proposed building layout; the concept of "learning on display"; community outreach for the proposed project and the community's understanding of the educational program; the examination of 7-12 schools in other districts; the concept of the school's community and how departments relate; location and use of "public realm" spaces; the proposed utilization of the academic spaces and deviations from the MSBA space summary guidelines; use and maintenance of the proposed courtyard; how students experience/travel around the building; site circulation for bus and car drop-off; storage for art rooms; the options studied as part of the Preferred Schematic Report; and the local vote schedule.

Following the District's presentation at the September 26, 2018 Facilities Assessment Subcommittee (FAS) meeting, the MSBA met with the District and project team on September 28, 2018 and again on October 4, 2018 to further discuss concerns raised at the FAS meeting and to increase the MSBA's understanding of the rationale associated with the proposed conceptual design. Specific focus associated with the proposed interior layout and adjacencies were discussed as well as the proposed building massing, entry/exits, and the exterior façade and how they may be influencing the cost of the project. The MSBA will require that updated conceptual plans and narratives be submitted and potentially presented prior to the anticipated submission of the Schematic design.

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

- 1) The options investigated were sufficiently comprehensive in scope, the approach undertaken in this study was appropriate, and it meets the needs identified by the District.
- 2) The MSBA requests that the District be available to present the updated preferred solution 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.
- 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, 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.
- 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 Pentucket Regional School District be approved to proceed into Schematic Design to replace the existing Pentucket Regional High

School and the existing Pentucket Regional Middle School with a new District-wide grades 7-12 middle/high school on the existing site.