District: Andover

School Name: Bancroft Elementary School

Category: Preferred Schematic

Date: May 26, 2010

Recommendation:

That the Executive Director be authorized to approve the Town of Andover, as part of its Invitation for Feasibility Study, to proceed into schematic design for the replacement of the existing Bancroft Elementary School. MSBA staff has reviewed the feasibility study and accepts the District's preferred solution to replace the existing Bancroft Elementary School (Grades K-5) and combine students from the Shawsheen Elementary School (Grades PreK-2) within a single new facility for 680, serving grades K-5, on the existing Bancroft site. PreK students will remain at the Shawsheen School.

Background:

The Bancroft Elementary School, the District's prioritized Statement of Interest, was built in 1969 and is a two-story 65,000 gross square foot timber framed facility. The existing facility consists of an open-plan classroom layout and a 4,500 square foot, detached, temporary modular classroom unit. Situated on a 20-acre site, the Bancroft Elementary School houses grades K-5 and has a 2009-10 enrollment of 469 students. It should be noted that the original design capacity for the Bancroft is approximately 350 students. The District added four modular classrooms which are twelve years old and reaching the end of their useful life. The classroom wings are two-story, wood post and beam framed structures surrounding the open plan library centered within the building's footprint. The open-plan classroom layout approach has become unfavorable to teachers due to noise and disruption concerns.

At the District's request, the MSBA agreed to allow the District to study combining the Shawsheen School (a separate Statement of Interest) as part of the feasibility study due to its aging structure, outdated systems, and small size. The District proposed an exploration of options which included combining students from the Bancroft and Shawsheen and evaluating the advantages and disadvantages of maintaining the existing Bancroft, renovating, or providing a new facility. Prior to submission of the feasibility study, the MSBA and the District met several times and reviewed enrollment projections and possibilities for the Bancroft and Shawsheen Elementary Schools.

The District has identified a number of building concerns for both the Bancroft and Shawsheen Schools including deficiencies in exterior walls, windows, HVAC, plumbing, electrical, fire protection, accessibility, and structural integrity. The building's structural framing system has weakened throughout the years and many wall and roof failures are evident. The District has taken extensive action to remediate structural issues by adding steel reinforcement to failing wood posts, columns, and roof structure in an effort to stabilize the structure. These measures have been deemed temporary in nature by an independent study. The majority of the building's

infrastructure has also exceeded its useful life, requiring reoccurring and costly repairs. In addition to the physical plant issues, the District reported overcrowding at both facilities.

On April 2, 2008, the MSBA Board of Directors approved staff's recommendation to conduct a feasibility study for the Bancroft Elementary School to identify and study possible solutions and, through a collaborative process with the MSBA reach a mutually-agreed upon solution.

Discussion

In conjunction with its design team, the District evaluated eight new construction options and one addition/ renovation option. Of the eight new construction options, five new construction options and the addition/ renovation option were short-listed by the School Building Committee for further design review and cost-estimating. Only one option for addition/ renovation was studied due to the limited possibilities resulting from the high cost associated with the repair and stabilization of the structural system. The cost models that have been developed are similar for three potential building locations. The options developed are identified and summarized below with the short-listed options best representing the District's project goals.

The existing site is approximately 20 acres that consists of five isolated sections of wetlands and a Town-owned reservoir, which limits building expansion and relocation opportunities. The District and the MSBA initially agreed upon a design enrollment of 700 students, exclusive of Pre-K students, for a building serving grades K-5. The District and Designer further reviewed the alternatives with a grades K-5 composition and ultimately determined that based upon the findings from traffic, geotechnical, building size and site program that a 680 student K-5 facility was better suited for the existing site. The proposed location of the new building allows for the continued use of the current Bancroft throughout the duration of construction, maximizes site circulation and parking, and provides for a more flexible and useable playing field area while maintaining the greatest amount of open space for passive use. The District is currently studying the relocation of the remaining 80 Pre-K students from the Shawsheen School to another one of its elementary schools.

Based upon the estimated costs and evaluation summarized in Table 1, the District and its Designer have determined that the most cost-effective solution that meets the District's educational needs and priorities is to replace the existing Bancroft School and include the K-2 students from the Shawsheen School into the new Bancroft program. The District has selected 'Option 1C Modified' as their preferred option moving forward into schematic design.

Summary of Preliminary Design Pricing

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Option	Enrollment	Total	SF of	SF of New	Estimated
(Description)	(Grades)	Gross SF	Renovated	Construction	Total
			Space	(Cost/SF)	Construction
			(Cost/SF)		(Cost/SF)
Option 1A	700	105,750	N/A	105,750	\$35.84M
New Construction	(PreK-5)			(\$289.88)	(\$338.92)
2-Story North Siting					
Option 1C	700	105,750	N/A	105,750	\$36.03M
New Construction	(PreK-5)			(\$292.42)	(\$340.70)

Table 1

3-Story North Siting					
*Option 1C Modified	680	98,950	N/A	98,950	\$34.82M
New Construction	(K-5)			(\$306.66)	(\$351.98)
3-Story North Siting					
Option 1D	700	105,750	N/A	105,750	\$38.18M
New Construction	(PreK-5)			(\$313.95)	(\$361.10)
3-Story North Siting					
Multiple phases					
Option 2C	700	105,750	N/A	105,750	\$36.28M
New Construction	(PreK-5)			(\$298.26)	(\$343.11)
3-Story South Siting					
Option 3	700	105,750	N/A	105,750	\$37.73M
New Construction	(PreK-5)			(\$302.65)	(\$356.86)
2-Story Exist. Footprint					
Option 4	680	101,418	60,898	40,520	\$41.97M
Addition/Renovation	(PreK-5)		(\$202.40)	(\$223.97)	(\$413.90)

^{*}District's Preferred Option

'Option 1C Modified' proposes the construction of a new facility on the existing Bancroft site, immediately to the north of the existing building, which will remain occupied during the construction period. The building will be constructed in one phase, with the gymnasium, cafetorium, and administrative suite located in a single story wing. The academic wing will be two-and-one-half to three stories. Existing playing field and playground structures will be displaced during construction and site development will be phased over the summer months. The construction of the site's second means of access will be phased to allow for the construction of the play fields and school access during construction. The entire existing building will be demolished upon completion of the new construction, after which the final roads, parking, and play fields will be built.

MSBA staff has received, reviewed and accepts the Designer's feasibility study submission indicating the preferred option selected by the District and the options that have been explored on behalf of the District. MSBA staff has reviewed and discussed the options and corresponding space summaries with the District and the Designer to better understand which educational program is most-beneficial and efficient for the Town of Andover in accordance with MSBA guidelines. Staff has addressed areas of concern with respect to the program and overall space required to accommodate the District's program and will continue to work with the District as the project progresses into the subsequent phases.

The MSBA has reviewed the Feasibility Study and the enrollment data submitted by the District and has found:

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

- 2) Mutual agreement has been reached between the MSBA and the District for a design enrollment of 680 students for the new Bancroft Elementary School serving grades K-5 which includes all K-2 students from the Shawsheen School. PreK students will remain at the Shawsheen School.
- 3) The feasibility study and subsequent material submitted to the MSBA are sufficiently comprehensive in scope and the District's preferred option is reasonable and cost effective. However, the concept layout for the new construction shall be reviewed more fully by the District and its Designer to ensure that the design appropriately addresses the scale for a five-section school, allows for the flexibility of future expansion, optimizes day-lighting, clearly illustrates adjacencies, and is in conformance with the MSBA guidelines. The District and its Designer should be prepared to present the progress of the concept design at the June 23, 2010 Facilities Subcommittee meeting to ensure that the MSBA and the District are in mutual agreement prior to commencing into the schematic design phase.
- 4) An operational budget for educational objectives and a capital budget have been submitted to the MSBA for review.
- 5) MSBA staff will work with the District to establish a design budget and an understanding of MSBA considerations and levels of funding currently participating in the program.

Based on the review outlined above, staff recommends that the Town of Andover be approved to proceed into schematic design to replace the existing Bancroft facility with a new elementary school serving grades K-5 on the existing Bancroft site.