District: Marblehead

School Name: Glover Elementary School

Recommended Category: Preferred Schematic Date: March 31, 2010

Recommendation:

That the Executive Director be authorized to approve the Town of Marblehead, as part of its Invitation for Feasibility Study, to proceed into schematic design for the replacement of the existing Glover Elementary and Samuel C. Eveleth Elementary Schools. MSBA staff has reviewed the feasibility study and accepts the District's preferred solution to replace the existing Glover Elementary School (Grades 1-3) and combine kindergarten students from the Eveleth Elementary School within a single new facility for 425 students, serving grades K-3, on the existing Glover site.

Background:

The District has three neighborhood school districts serving Grades K to 3, utilizing five existing elementary schools (composed of seven total buildings): Glover (2 buildings)/Eveleth (1-3/K), Gerry/Coffin (K-1/2-3) and Bell (2 buildings; Pre-K to 3). The District's 2007 Master plan indicates that the long-term goal is to consolidate the number of existing elementary schools, resulting in three K-3 facilities. For purposes of this study, the District proposed an exploration of options that included combining students from the Glover and Eveleth Elementary Schools to create a single elementary school serving grades K-3, to unify students and staff from the paired schools into a single facility. A single facility will be more efficient to operate, aligns with the educational goals of the District and may be more cost effective to construct. Therefore, the feasibility study explored multiple options utilizing and evaluating advantages and disadvantages of both the existing Glover and Eveleth sites.

The existing Glover Elementary School ("Glover") facility, which serves grades 1-3, includes two separate buildings, locally known as 'Upper' and 'Lower' Glover. Situated on a 4.78 acre site, with numerous outcroppings and ledge, the existing buildings are not connected. The total gross square footage of both buildings is approximately 43,000 gross square feet. Currently, enrollment at the Glover School is 299. The original building, Lower Glover, is a two-story wood-frame structure with brick exterior that includes a basement level and was built in 1916. The District added a small gymnasium/ auditorium space (accessible only through the basement) in 1926 and a second addition consisting of a library, two classrooms, and a boiler room in 1950. The Upper Glover was built in 1948 and is situated on the upper-most portion of the site behind the 1916 Lower Glover building. The Upper Glover, which includes eight classrooms, is a two-story masonry structure with a basement that provides for mechanical space.

The Samuel C. Eveleth ("Eveleth") was built in 1958 and is a one-story, steel-framed, slab on grade structure consisting of approximately 14,000 gross square feet. Current enrollment at the Eveleth is 78 students. The Eveleth is situated on a relatively flat 3.42-acre site within a residential neighborhood and is located within approximately one-half mile of the Glover.

The District identified a number of building deficiencies for both the Glover and Eveleth Schools in the following categories: exterior walls, windows, flooring, hvac, plumbing, electrical, fire protection, and accessibility. In addition to the physical plant issues, the District reported overcrowding at both facilities.

On May 21 2008, the MSBA Board of Directors approved staff's recommendation to conduct a feasibility study for the Marblehead Glover Elementary School to identify and study possible solutions and, through a collaborative process with the MSBA, reach a mutually-agreed upon solution.

Discussion

The District considered no action and regionalization options and determined that these options were not available or did not meet their educational needs. The feasibility study focused on a range of options and solutions for repairs and upgrades at both the Glover and Eveleth sites and for each of the associated buildings. The feasibility study only considered in detail the existing Glover and the existing Eveleth sites because no alternative sites are available within the nearly 100% built-out Town of Marblehead.

Both the Glover and Eveleth sites are located in densely settled neighborhoods and present specific challenges to accommodating modern educational facilities designed to meet the educational needs for the agreed upon design enrollment of 425 students. The District's design team evaluated the size, layout, subsurface conditions, context within the surrounding neighborhood, and existing infrastructure associated with each site. Because this analysis played a significant role in determining the most educationally appropriate and cost effective solution, the findings of the site related evaluations are summarized below.

Category	Glover Site	Eveleth Site		
Size	4.78 acre	3.42 acre		
Site & Circulation	Adequate area for drop-off and pickup and site circulation	• Insufficient area for drop-off and pickup and site circulation		
Infrastructure	 Main streets with sidewalks surrounding the site to support pedestrian & vehicular traffic Adequate sewer & drain capacity Potential to loop multiple water mains to support hydrant flow 	 Narrow feeder roads without sidewalks Existing 42" drain at ocean level and poor drainage Limited water supply in immediate area 		
Subsurface Conditions	• Ledge requiring special foundation considerations	Poor soil conditions requiring special foundation considerations		
Context & Scale	 Opportunity to design with varied topography to minimize impact of expanded school building New facility ~85% larger, ~ 37,000 sf larger than current facility 	 New facility's size would overwhelm the site and the flat, predominantly single story home neighborhood surrounding the site New facility ~460% larger, ~64,000 sf larger than current facility. 		

Given the size, existing infrastructure and location of the Glover site, the District determined that the Glover site would be best suited to accommodate a new, larger combined facility. The District also noted the potential for additional cost at the Eveleth site associated with improvements to the existing water mains, sewer lines, drainage, and traffic and pedestrian circulation, as a concern and concluded that the option to build a new combined school on the existing Eveleth site for 425 students is unfeasible.

The District's design team developed six options, ranging from simple renovation of the existing buildings with no additions or expansion, to complete replacement and new construction. The options and associated preliminary design pricing listed below have been evaluated by the District and represent the options that most favorably address the District's educational goals, construction cost criteria, and operational costs. The options developed are identified and summarized below, and the specific square footages and cost estimates are provided in the table.

Option A – Renovation of all buildings associated with the Glover and Eveleth with no expansion of square footage. Kindergarten students remain at Eveleth, grades 1-3 remain at Glover.

This option is the least expensive but does not address the educational deficiencies or alleviate overcrowding.

Option B – Addition/ Renovation of all buildings associated with the Glover and Eveleth to the sizes developed through the MSBA space guidelines. Grade configurations remain but increase design enrollment to 115 students at Eveleth and 310 students at Glover. This option results in a 71,269 gross square foot building on the Glover site and a 31,382 gross square foot building on the Eveleth site.

This option is the most expensive and does not address the District's goal of unifying the faculty and students in one building on one site.

Option C – Addition/ Renovation of the Eveleth to house 425 students grades K-3. This option combines Glover grades 1-3 and Eveleth kindergarten and results in a three-story 77,370 gross square foot building.

This option provides adequate interior educational space but results in inadequate outdoor space and insufficient site area for drop-off and pick-up traffic. The three story facility also would overwhelm the 3.42 acre site, the neighborhood and area infrastructure.

Option D – Addition/ Renovation of the Glover to house 425 students grades K-3. This option combines Glover grades 1-3 and Eveleth kindergarten. This option results in a substantially new 79,708 gross square foot building but retains the shell of the existing 1916 building. Acknowledging historic concern within the community, the School Building Committee presented the advantages and disadvantages of retaining portions of the 1916 to the public. Given that the existing building is not registered as a federal, state, or local historic structure, the additional costs that would be incurred to retain portions of the building were considered unfavorable.

This option meets the educational space requirements, provides adequate site and circulation requirements. However, this option would add costs associated with retaining portions of the existing 1916 building and limit flexibility.

Option E – Replacement of the Eveleth with construction of a new facility on the existing Eveleth site to house 425 students grades K-3. This option combines Glover grades 1-3 and Eveleth kindergarten and results in a new three story, 77,927 gross square foot building.

This option provides adequate interior educational space but results in inadequate outdoor space and insufficient site area for drop-off and pick-up traffic. The three-story facility would overwhelm the 3.42 acre site, the neighborhood and area infrastructure.

Option F – Replacement of the Glover with construction of a new facility on the existing Glover site to house 425 students grades K-3. This option combines Glover grades 1-3 and Eveleth kindergarten and results in the construction of a new 79,731 gross square foot building.

This option produces adequate educational space, adequate site and circulation requirements, and adequate site utilities infrastructure. This option also would provide future flexibility and would result in a building that fits with the surrounding neighborhood.

Summary of Preliminary Design Pricing

Option (Description)	Enrollment (Grades)	Total Gross SF	SF of Renovated Space (Building Cost/SF)	SF of New Construction (Building Cost/SF)	Est. Total Construction Cost (Building and Sitework Cost/SF)
Option A	Glover 310	57,000	57,000	N/A	\$15,655,023
Renovate Existing	(1-3)		(\$200.64)		(\$274.00)
Glover & Eveleth	Eveleth 115 (K)				
Option B	Glover 310	Glover	Glover 43,000	Glover 28,269	\$31,627,019
Addition/Renovation	(1-3)	71,269	(\$224.32)	(\$238.32)	(\$314.22)
Glover & Eveleth	Eveleth 115	Eveleth	Eveleth 14,000	Eveleth	
	(K)	31,382	(\$169.45)	(\$238.32)	
Option C	425	77,370	14,000	63,370	\$24,199,431
Addition/Renovation	(K-3)		(\$184.84)	(\$208.33)	(\$309.74)
At Eveleth Site Only					
Option D	425	79,708	6,000	79,708	\$25,449,788
Addition/Renovation	(K-3)		(\$256.89)	(\$214.55)	(\$331.77)
At Glover Site Only					
Option E	425	77,927	None	77,927	\$23,511,188
New Construction	(K-3)			(\$228.76)	(\$301.71)
At Eveleth Site Only					

*Option F	425	79,731	None	79,731	\$24,623,402
New Construction	(K-3)			(\$234.16)	(\$308.83)
At Glover Site Only					

*District's Preferred Option

Based upon the estimated costs and evaluation summarized above, the District and its design team have determined that the most cost-effective solution that meets the District's educational needs and priorities is to replace the existing Glover and combine the students from the Eveleth into the new program. The Glover School Building Committee voted unanimously to recommend Option F as the preferred alternative.

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 Marblehead 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 425 students for the Glover Elementary School which includes all kindergarten students from the Eveleth 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.
- 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 Marblehead be approved to proceed into schematic design to replace the existing Glover Elementary and Eveleth Elementary Schools with a single new elementary school serving grades K-3 on the existing Glover site.