District: Billerica

School Name: Parker Elementary School

Category: Feasibility Study

Recommendation:

That the Executive Director is authorized to approve the Town of Billerica, as part of its Invitation for Feasibility Study, to proceed into schematic design for the construction of a new Elementary School on the site of the existing Parker Elementary School.

Background:

The Parker Elementary School, the District's prioritized Statement of Interest, was built in 1953. The building is approximately 45,500 gross square feet, and there are two modular units that have added five extra classrooms. The current enrollment is 397 students. The District identified a number of building issues associated with the school including sagging and uneven floors, inadequate ventilation, and aging HVAC equipment. In addition to the physical plant issues, the District identified programmatic deficiencies including overcrowding, water penetration that has left the windows damaged, and a lack of SPED classrooms that are currently housed in the basement with no windows.

The MSBA Board previously approved staff's recommendation to issue an invitation to feasibility study to Billerica to further study the problems identified at the Parker Elementary School. Billerica has stated that the District's Elementary Schools have reached capacity. The installation of modular units at Parker Elementary School has provided temporary relief but has affected delivery of the educational program. The District believes that the only viable solution is to construct a new Parker Elementary School on the existing site.

Discussion:

The Feasibility Study by SMMA, dated May 2009, presented material regarding project need, enrollment, alternative site analysis, existing school building and site conditions, and six major options. The preliminary site investigation considered six potential sites, one was determined to be unavailable, two are not viable for construction, one was anticipated to cost in excess of \$5 million, leaving two sites for further consideration: the Locke Middle School property and the existing Parker Elementary School site. The building costs were assumed to be similar for each of the sites. However, the relocation of the school out of the Parker School district and the associated busing costs led to the conclusion of using the existing site. Three options were evaluated for the existing site. The costs shown below represent construction and site development and do not include soft costs or costs associated with swing space or phased construction.

Option 1A: New 3-story Building (90,600 sf) - \$28,360,300

Option 1B: New 2-story Building (90,600 sf) - \$28,725,100

Option 2: Renovation of 22,000 sf and 68,600 sf addition (total 90,600sf) – \$28,867,100

Due to the deterioration of the first floor wooden structure, the extent of renovation is significantly greater than what is expected for a typical renovation for a building of this

vintage. A typical renovation generally includes replacement of HVAC, electrical and plumbing systems, windows and roofing system (not required for this project), and upgrades/installation of a fire protection system. The Parker Elementary School would also require removal of the first floor structure from the classroom wings (the portion of the school considered for renovation), sealing of the exposed dirt floor in the existing crawl space, installation of a steel and concrete first floor structure and seismically upgrading the structure to comply with current code. In addition to the significant work outlined above, the renovation/addition option would require four phases of construction, additional coordination during construction, and the need to lease 12 temporary classroom modulars, all of which contribute to increased construction costs. Beyond cost, there would be significant disruption to the learning environment as students would be moved during the different phases of construction and located immediately adjacent to the construction site.

The analysis concluded that primarily because of the smaller footprint, a three-story facility has a lower construction cost than a more spread out, two-story facility. While a three-story building is not preferred for an elementary school, the smaller footprint would allow for greater separation between the existing school and attending students, and provide more outdoor space once construction is complete, which is needed for the relatively tight site.

The report did not include cost estimates associated with swing space, which would be expected to further increase the cost of the Reno/Addition option. The report concluded that Option 1A – construction of a new three-story school on the existing site – is the preferred alternative.

MSBA staff has reviewed the conclusions of the Feasibility Study and the enrollment data with the District and the information provided from District and found:

- 1) All initial paperwork required has been processed including an executed Initial Certificate of Compliance; the composition of the School Building Committee for MSBA approval; and the enrollment questionnaire.
- 2) MSBA reviewed Billerica's Feasibility Study and finds that alternatives investigated were sufficiently comprehensive in their scope and that the District's preferred option is reasonable and cost-effective.
- 3) MSBA has completed an enrollment projection utilizing the enrollment questionnaire completed by Billerica, and has reviewed Billerica's existing elementary school capacity as provided by the District and an updated status of development under construction in the District. The MSBA enrollment projection supports an enrollment of 500 students for a new Parker Elementary School on the existing site. The enrollment projection is predicated upon the inclusion of 100 students being redistricted into the Parker Elementary School district to alleviate overcrowding at the Dutile and Vining Elementary schools.

Based on the review outlined above, staff recommends that Billerica be approved to proceed into schematic design for the construction of a new three-story Parker Elementary School on the existing site.