

REPORT OF THE JOHNSON SCHOOL RENOVATION COMMITTEE

After town meeting, the committee felt there were three major reasons why the \$7,800,000 project failed (Article 1 and 2 at the January 2004 special town meeting). The first was that the cost was too great. The second was that there was a question as to if and/or when we would get the SBA funding. The third was that the voters were not sure they were presented with the right plan because for example, it still resulted in a school they felt was too big or inefficient.

Based on these conclusions, the Renovation Committee reviewed and refined its criteria for evaluating options for the Johnson School. Any future recommendation would have to:

1. Address critical needs of the school
2. Address regulatory issues
3. Reduce operating & maintenance costs
4. Improve classroom environment and functionality
5. Minimize the cost to the taxpayer
6. Minimize disruption to the student body
7. Develop a project that addresses both long and short-term needs

BUILDING NEEDS

The most critical needs are the heating and air circulation systems that have been problematic and costly to maintain and repair. The electrical system needs to be replaced as it is out of code with current standards and under specified for the current needs of the school. There are large electrical transformers, which need to be moved to outside of the building for safety and code reasons. The floor in the school is currently covered with asbestos containing tile which poses no health risk when in good condition however, these tiles have started to break down in numerous areas of the building. There are many areas of the roof that leak. The fire safety system is out of date and regularly triggers false alarms. Lastly, but not least is the need to have full 2-way communication throughout the building that is currently lacking.

There are some very specific regulatory issues with the current building. The building is not handicap accessible nor does it have a sprinkler. Both of these items would automatically have to be addressed with any major work to the building because they are written into the building code with a threshold which we would exceed even if we decided to just take care of the heating system alone. There is also a major building code violation in the maintenance closet where the main water distribution pipes coexist with the main electrical panel.

The school currently spends more than it should on heat and electricity because the systems are inefficient. There are also major expenditures in maintenance and repairs to keep the systems functional, which could be better spent on the educational program or other needs within the school's budget.

In addition, improvements to the classrooms are necessary for an environment more conducive to learning. There is currently inadequate lighting in most of the classrooms. There are an inadequate number of electrical outlets. Classrooms are not wired for network, cable, and Internet access. Although space has been allotted for a Library, it has basically been a classroom space with bookshelves.

THE APPROACH

With the above items in mind, the committee revisited all previously reviewed options and concluded that a completely new school was still not the answer to the Johnson school building. A new K-6 school building would have a cost closer to \$7,800,000, an amount we felt the town did not want to spend. Instead, we decided to look at a project that combined both renovation and new construction.

The areas that we targeted for replacement with new construction actually ended up being the parts of the building that were added in 1963. Although these spaces were newer than the original building, the cost to renovate them was higher. In addition, they were designed in such a way that no amount of renovation would ever make them energy efficient.

The design we have come up with will require demolition of the two Junior High wings on the north end of the building and the single story addition on the south end of the building. It will include construction of a 16,600 sq ft, two-story addition on the south end of the building to make up the needed space. This achieves a net reduction of 6,400 sq ft in the overall size of the current building. The final building size will be 43,600 sq ft.

Using 240 students as the size student population we need to build a school for, the DOE would allot 38,400 sq ft as the size of our school. If you take into consideration the facts that we have an over sized gym and cafeteria for an elementary school and designated space for a preschool program, the school is in line with the DOE figure. The 240 student enrollment figure is based on a study done by Merrimac Educational Associates for our initial submission to the SBA, which averaged projections and existing data from 1990-2013.

The size of the building is further supported by an analysis of last year's census data, which revealed an average eligible student population of 223 versus the current enrollment of 205 students. Based on these numbers, the building should be able to handle any additional enrollment from the future development of the former coast guard housing property or a general influx of families with school age children.

PROPOSED PROJECT DETAILS

The building size has been set to allow two classrooms per grade. Both the Renovation Committee and the school administration feel this is the right size for this school from a programmatic standpoint. In most years there has been a need for two classrooms per grade with an occasional small class moving through the system that could be accommodated by one classroom. Allowances have been made to give the school the added flexibility of combining two adjacent classrooms on each floor when a smaller class moves through the system that is too small for two separate classrooms, but may be pushing the limits on space for one classroom.

To address accessibility there will be a new ramp at the main entrance to the building. The hallway from the main entrance down to the cafeteria and library will now be ramped where there are currently steps, eliminating the need for any additional chair lifts. All bathrooms will be made handicap accessible and an elevator will be added that will be central to the building.

All classrooms will have new lighting, lockers, white boards, and window blinds. They will be painted, have new flooring, and an appropriate amount of storage. In addition, all classrooms will have new wiring for additional outlets, internal networking, Internet access, and cable as is customary in classrooms of today.

There will be a full replacement of the heating system from the boilers to all distribution piping. New unit ventilators, roof exhaust fans, and associated controls will be installed throughout the building. The system will have automated and programmable temperature controls with the ability to monitor and control the system offsite. All equipment installed will be energy efficient and up to today's technology standards.

A new Main Electrical Service Panel will be installed and existing wiring replaced throughout the building. Outdoor lighting near the entrances will be added for safety and security. Emergency lighting will be accomplished utilizing regular lighting fixtures and all exit signs will be replaced.

The telephone system will be replaced utilizing \$25,000 in previously appropriated funds. The Master Clock and PA system will also be replaced. A fire alarm system with both audible and visual signal will be installed along with a security system with door monitoring and motion sensors.

All hallways and administrative spaces will be painted and have new flooring. Roof repairs will be done as needed. Existing Exterior Masonry will be restored and the building will be brought into compliance with the seismic part of the building code.

New additions to the building will be a Library/Computer Lab in the old locker room areas as was previously proposed. There will be separate Art and Music rooms in the building that can be used by other departments when not in use during the regular school day. There will be adult/staff bathrooms on both floors.

Space will continue to be available to the Periwinkle Preschool for a multitude of reasons. Firstly, there is no alternate location for a licensed preschool to operate within Nahant. Secondly, the current direction of the DOE suggests that preschool will have a more prominent role in the future of education in Massachusetts.

COST REDUCTIONS

The ability to remain eligible for all of the previously approved SBA funds has greatly reduced the overall construction cost of this project but the cost reductions in building operation are just as important because these are funds that must be spent annually, out of the School Department's operating budget. Due to the overall reduction in the square footage of the building and the increased efficiency of the building after completion, operating costs to provide heat and electricity to the building are projected to be reduced by 40% compared to fiscal years 03 & 04 actual costs. This amounts to an estimated average savings of \$35,000 per year.

The average cost to maintain the current building over the last three years has been \$62,000. Even with the addition of the elevator, which will need regular inspections and maintenance, it is expected that maintenance costs would be reduced by 70% or approximately \$44,000. Between utility costs and routine maintenance, the school will see almost \$80,000 in savings on an annual basis.

There are some items the committee has named bid alternates in the interest of managing the project's cost and prioritizing the work based on need. These are items currently not included in the cost of the project, but are recognized as work that both the school administration and the Renovation Committee would like to see done. There will be two additional opportunities as the project moves into the full design phase to get these items added back into the project but for the current time, they remain outside the scope of work. These items are: Cafeteria floor

replacement-\$25,000, New Traffic Pattern at Front Entrance - \$30,000, Remodeling of kitchen area - \$8,000, New Sound System in Cafeteria - \$15,000, Upper Level drop ceiling - \$25,800, Acoustical tile in Cafeteria - \$43,000, Cafeteria and Gym Painting - \$40,000, Playground Equipment - \$30,000, Computer Hardware - \$280,000, and Furniture - \$270,000.

TIMELINE

Assuming a favorable vote for this project, asbestos abatement and certification and relocating of electrical transformers to outside the building will commence this summer. Demolition of the small wing on the south end of the building and construction of the New Addition will occur from November 2005 to May 2006. Installation of main heating lines in the lower level will occur over the summer of 2006. From June 2006 to November of 2006, parts of the remaining building will be renovated. From November 2006 to December 2006, the junior high wings will be demolished, thus ending the construction portion of the project. Site work will follow after the spring thaw.

COST

The total project cost is \$6,300,000. After state reimbursement, which is expected no later than fiscal year 2008, the final project cost to the town of Nahant will be \$4,420,000 as shown below:

	Square Footage	Cost/Sq. Ft.	Total
Addition	16,600	\$164.42	\$2,729,383
Renovation	27,000	\$101.17	\$2,731,625
Demolition	-23,000	\$6.64	\$152,692
Soft Cost/A&E Fees			\$686,300
Total Project Cost			\$6,300,000
SBA Reimbursement			-\$1,880,000
Cost to Nahant			\$4,420,000

CONCLUSIONS

The revisions to the scope of work as described above, along with the commitment of funds from the MSBA, have resulted in a unique opportunity to maximize what the Town of Nahant gets for it's tax dollars. After the project is complete: the Johnson School Building will be in full compliance with all state and federal building codes; it will have a brand new heating and ventilation system; it will have a brand new electrical system; the classroom environment will be greatly improved; a new library will be created that can be used by the community; annual operating and maintenance costs will be reduced; the school will have added flexibility and functionality; and most of all the town will have a school building they can be proud of well into the future.

EXHIBITS

Budget Summary

Floor Plans and Elevations

Letter from MSBA authorizing the \$1.8M grant

Summary of Tax Effects & Estimated Borrowing