

Reading School Building Committee
Questions and Answers Regarding RMHS Schematic Design

On April 2nd, Reading voters will be asked for their consent to exclude a new debt of \$450,000 from the normal property tax limits in order to pay for a schematic design of a renovation to Reading Memorial High School. Producing this design was the recommendation of the School Building Committee (SBC) to Town Meeting on November 13, 2001 as a means to obtain more specific information about the needed renovations and how they will affect the Town. By a vote of 118 to 12, Town Meeting accepted this recommendation, subject to the approval of the debt exclusion by the general electorate. This handout is an intended to answer some of the more common questions about this schematic design.

Question: What are the problems with Reading's high school? Why do they cost so much to fix?

Answer: The high school is a large, sprawling building of outmoded design that has never had a comprehensive renovation in its 48-year history (33 years for its Bldg. A addition in the rear of the complex). Consequently, its physical plant systems are wearing out and its ability to adapt to changing education requirements is also deteriorating.

Examples of the physical plant systems needing repair are:

- the plumbing (not just the fixtures, but the distribution network)
- the electrical system (not just lights, but the building's power network)
- the heating and ventilation systems (replace the inefficient windows and many unit ventilators, repair worn out piping, upgrade boiler efficiency, improve air circulation)
- the communication system (non-existent or non-functional in many areas).

System upgrades trigger building code-compliance requirements and the high school's mechanical systems were designed to what are today antiquated building codes; thus, they cannot be merely patched, they must be completely overhauled and brought up to present Code standards. Other required Code updates are:

- the installation of a fire protection system (sprinklers) for the entire building
- making all areas handicap-accessible
- installing seismic hazard protection (against falling masonry walls)
- removing all hazardous materials (asbestos, PCB's, etc.).

Most importantly, the building must continue to serve its purpose: education of our high school students. Without a renovation, the faculty must continue to teach our students using outdated facilities with diminishing effectiveness as the curricula become more stringent and enrollments increase. At a minimum, the School Building Committee (SBC) has concluded that the following are vital improvements that must be done:

- update the entire facility for new technology (computer network / Internet)
- create four new science labs (to maintain accreditation)
- improve circulation between buildings
- correct gender inequality issues in the athletic facilities.

All this must be done before addressing the teaching facilities in general, such as dedicating space for the music and drama departments, creating computer workstations and a dedicated language lab and replacing obsolete equipment. On top of facility reorganization comes restoration of the building's deteriorating finishes - such as walls, floors and ceilings - and there are quite a lot of them (there are 340,000 square feet in the building).

Each undertaking in renovating this space has a cost associated with it. Total reimbursable renovation costs in the range of \$100 to \$200 per square foot are quite common for Massachusetts's high schools. Hence, big school buildings have big costs associated with fixing their problems and Reading Memorial High School is no exception.

Question: How much will it cost?

Answer: Simply put, we don't know for certain. A major reason for producing a schematic design is to be able to answer this basic question with an acceptable level of confidence, which is in large part why the SBC has recommended it. The reason for this uncertainty is that there are too many unknowns at this point to make a reliable prediction about probable cost. Examples of the unknowns are how to best upgrade the educational program without building new additions, how to maximize State reimbursements under the new regulations and how to accommodate major reconstruction in the (still occupied) building while maintaining quality education and safety for the students.

The SBC feels strongly that costs for such a large project should be predicted with as much accuracy as possible. By using the specific information produced in a schematic design phase, a cost estimate could be based on itemized pieces of preliminary design rather than on a broad diagrammatic description - an "idea" for a design.

This latter method of estimating is the only extent to which a feasibility study can go and was used in the initial high school feasibility studies. These studies (based on old state guidelines) produced several options that covered a wide range of total project costs, depending on how the "unknowns" were answered. Given the old basis on which they were produced and the variation of their estimates, choosing one of these options to commit to – even as a "ballpark" number – would be guessing. For comparison's sake, however, one could look at other communities' high school projects to get an idea of the cost spectrum:

- Lexington High School - \$28.6M / 328,500 sq. ft. (\$87.17/ sq. ft.)
- Newburyport High School - \$34.2M / 190,000 sq. ft. (\$180.26/ sq. ft.)
- Westborough High School - \$42.5M / 283,000 sq. ft. (\$150.18/ sq. ft.)
- Framingham High School - \$54.0M / 390,000 sq. ft. (\$138.46/ sq. ft.)

Thus, finding out how much the project will cost as accurately as possible is of primary importance. To the SBC (and hopefully to the voting public), the \$450K cost for a schematic design seems a reasonable price to pay to gain more specific knowledge for pricing such a significant project and help answer this important basic question.

As to the cost of the schematic design itself, under a "worst case" scenario (no State reimbursement because the resulting project is not accepted by the Town), the cost of borrowing the \$450K will depend on how long it is borrowed for, which is a decision made at the time of sale of the debt. If borrowed for three years, the cost will be a maximum of \$21.47 per year to the average Reading property (\$320K assessment). If borrowed for ten years, this cost would be \$8.68 per year (max.). These amounts would diminish as the debt is amortized.

Question: What's the point of doing a schematic design?

Answer: The most direct answer to this question is to let the community know just what they're voting for when the request for funding the project's full design and construction is made.

The high school renovation will be of a size and scope several times larger than any Town project yet undertaken and the effects on the residents will be far-reaching, both in terms of cost and on the use of the building itself. Just "What to do?" to the high school has yet to be decided, owing to changes in the State's guidelines over the past year.

Feasibility studies answer questions like this, but there are other crucial questions they don't answer, like "How to do it?" and "What will it look like?" The "How" question is particularly important since it involves performing full-scale construction in a building being shared with students and faculty performing full-scale high school education. This is a logistical balancing act known as "Phasing" – how to schedule major renovation work around teaching within the same environment, done in distinct phases - and it has tremendous influence on project costs, project timing and the students' well being. Phasing plans are not produced at the feasibility level, whereas they are at the schematic and they go a long way in answering not only "How?" but "How much?" (since time is money in construction).

Where feasibility studies produce block diagrams and verbal descriptions of what can be done, a schematic plan will produce actual drawings and specifications that inform the community of just what it will look like, what is going into it and what they'd be paying for. In addition, parents who will have their children attending the high school during the renovation will know what to expect.

Providing a schematic plan is also the first step of actual design of the renovations; it is not another study. If accepted by the Town as the basis for full design and construction, it will qualify as a reimbursable fee by the state's School Building Assistance bureau (SBA) and put the project well along on its design schedule. If it's rejected, valuable information will still have been produced to base an alternate scheme on (particularly regarding physical plant issues), avoiding having to start from scratch. Either way, the SBC believes it will be money well spent to move the project forward.

Question: What happens after the schematic design is completed?

Answer: The first use of the schematic design will be for the SBC to present it to Town Meeting for that body's review and to ask for approval to put it before the general electorate in the spring of 2003 as the solution to the high school's problems. It is during this process that the general public will begin looking at what is going to be done to RMHS and how it will happen, hopefully contacting their Town Meeting members with their comments and questions. The particulars of the project will be thoroughly explored by Town Meeting, if its past reviews of school projects are any indication, and it is hoped that approval will be given (or modifications will be requested that will lead to approval).

Once Town Meeting has so acted, the schematic design will be presented to the public at large through several public presentations for their review and approval by way of the ballot box, repeating the process followed for funding the schematic phase. Approval at that time will mean that Reading voters will allow full funding of its SBA-mandated share of the finished design and construction cost of the project (by way of a debt exclusion) that was outlined in the schematic design.

That will be the final step in the review/approval process begun at last November's Town Meeting. This process is a very deliberate one that advances in step-by-step fashion, each new step building on the previous ones. It will ensure that all Reading residents who have a say in the decision to update RMHS will have ample opportunity to learn (in a calm and timely manner) just what the plan is, why it's being proposed and how it will be executed.

Hopefully, then, the only outstanding question to answer will be "When?" This question and its answer will be entirely in the hands of the voters. Should approval be given in the spring of 2003, the earliest the project might be completed would be the fall of 2006.

During the month of March, the School Building Committee will be holding public information meetings at various locations around Reading to allow interested residents to come and have their questions answered about this project. The schedule of these meetings is:

- ***March 5th: Parker Middle School at 7:30 p.m.***
- ***March 11th: Coolidge Middle School at 7:30 p.m.***
- ***March 20th: Reading Senior Center at 7:30 p.m.***
- ***March 30th: Reading Memorial High School - Open House from 9 a.m to 1 p.m.***

Please feel free to come and talk to School Building Committee members and high school administration personnel at any of these meetings. The Open House on March 30th will be of particular interest to people unfamiliar with the high school. We hope to see you there.

- Reading School Building Committee