REPORT OF THE SCHOOL BUILDING ADVISORY COMMITTEE

November 21, 2013

TABLE OF CONTENTS

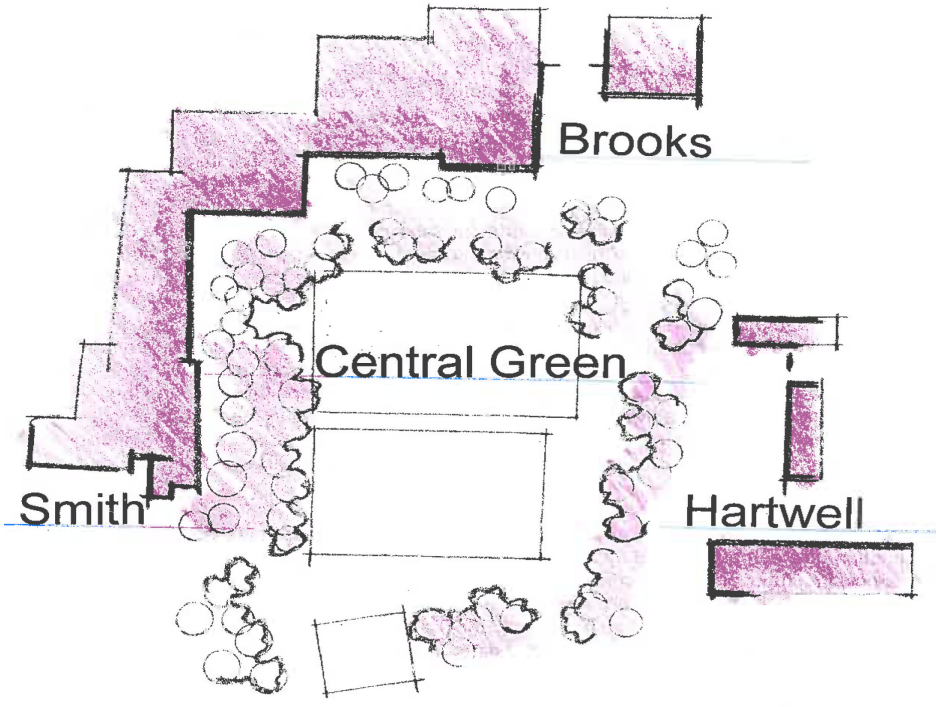
ILLUSTRATIONS:

EXHIBITS:

I. EXECUTIVE SUMMARY

The School Building Advisory Committee ("Committee" or "SBAC") is submitting this report as instructed by the School Committee. The Committee was established by the School Committee on May 16 2013 to propose potential "pathways" towards addressing the needs of the Lincoln K-8 schools ("The Lincoln School").[1] The Committee is recommending two L-shaped "pathways" to the School Committee. The first pathway assumes funding from the Massachusetts School Building Authority ("MSBA"), under its School Building Grant Program, for the work set forth in the School Committee's most recent Statement of Interest ("SOI") to the MSBA. *(See p. 12 and Exhibit 2.)* The second pathway assumes no MSBA funding. *(See p. 23.)* The L-shaped configuration can accommodate the educational objectives of The Lincoln School, preserve its current campus feel, maintain the center field, result in a minimal cutting of trees and thereby preserve the current landscape.

ILLUSTRATION 1- Current Campus Layout



[1] The term "pathway" comes from the School Committee's charge to "SBAC." *(Exhibit 1.)* The Committee initially found the term vague. After receiving clarification, it understands a "pathway" to mean a direction the School Committee should pursue, not the details of a design or construction project.

The Committee discussed several potential pathways in addition to those recommended in this report. It soon became clear that the best results would be achieved by using an L-shaped configuration as the skeleton, which should then be modified to accommodate the various programmatic and functional needs. The dictates of the configuration will only serve as a guide. The eventual solution will depend on the final architectural design to be accomplished by the appropriate specialists working with the School Committee.

Cost estimates were beyond the purview of the Committee. Its charge was limited to identifying "pathways," not the details of a design or construction project. The Committee also was given no budget for its work. It, therefore, did not have the ability to employ professional cost estimators.

The report covers the following topics:

- The lead-up to the formation of SBAC as a consequence of the failure of the November 2012 Special Town Meeting to approve the so-called "Preferred Option," and the subsequent effort by the School Committee and others to find a solution acceptable to the community.
- The recognition of the need for the Town to maintain the exceptional quality of the Lincoln school system, while spending its resources wisely.
- The deliberations and process followed by the Committee over the last six months
- The identification of priority work items for a project to be partially funded by the MSBA, as contained in the SOI. These priority work items include the following, the need for which is explained in the report:
    - A new central kitchen and cafeterias for both the Smith and Brooks schools;
    - Breakout rooms for both schools;
    - The improvement of the second grade space in the Smith School;
    - Constructing a link to the Reed Gym from the Brooks School;
    - Accommodations for students with special needs;
    - Improved lighting, air quality and acoustics in both schools;
    - An improved building envelope for both schools, including, but not limited to, the roofs; and
    - Solving the problem of the flooding of the Smith boiler room.

- The realization that repairs alone, while critical to the maintaining the physical integrity of the buildings, will still incur significant expenditures without furthering the educational objectives.
- The possibility that the MSBA will not support the project and the implications of such a decision on the "pathways" available to the Town.
- The implementation problems associated with any L-shaped pathway pursued by the School Committee.
- The issue of whether the school campus on Ballfield Road should serve as a potential location for a Community Center.

II. INTRODUCTORY REMARKS

On May 16, 2013, the School Committee voted to establish SBAC. The "Task" of the Committee was to propose two (2) to four (4) "pathways" for addressing the needs of the school buildings in Lincoln. These "pathways" were to be based on the SOI submitted to the MSBA in the spring of 2013. If the MSBA agrees to partially fund a Lincoln school building project, the project must reflect what is in the SOI. The Committee was to consider the prior work of the disbanded School Building Committee.[2] The "Goal" of the Committee was to provide the School Committee with "pathways" which it and a future School Building Committee could consider as "starting points" for the design and development of a new School Building Project. The Committee was charged with considering such issues as: "how will renovations support/improve education and position the school for the future;" "how can a renovated building support after-hours community use;" "how should a renovation address Lincoln's sustainable energy goals;" and "what kinds of campus renovations are important for supporting both school and recreational use of the campus fields/parking/roadways)." *(Exhibit 1.)*

The Committee recognizes that Lincoln cares deeply about the quality of its public schools, since education of the Town's children is one of Lincoln's most cherished values. The Lincoln School enjoys the reputation as one of the top-tier schools in Massachusetts. It needs to continue to offer high caliber educational services, not only for the benefit of the Town's children but also for the benefit of the community. There is a nexus between the quality and

[2] The Committee acknowledges the work of the School Building Committee. Many good people in town devoted many hours and much hard work on behalf of the schools and the town. The fact that the Special Town Meeting did not adopt its recommendation should not detract from the appreciation the Town owes to its members, who volunteered their precious time and many talents on behalf of their community.

reputation of the Town's schools and its property values. The Committee also recognizes the strong town ethic of spending its resources wisely.

The Committee acknowledges that, although it can help, a building itself cannot guarantee academic performance or cure an otherwise deficient school. Keys to a superior education also include inspired teachers, outstanding school leadership and committed parents. A building that permits such talented individuals to flourish and take advantage of advances in education can have a positive impact on the quality of the education in a school. A building which does not permit this to occur, or creates significant discomfort or distractions, will probably be a building in which education eventually stagnates.

The Committee, after six months of deliberations, has found that a high quality education, consistent with Lincoln's very high standards for educating its children, can be provided within the L-shape configuration of The Lincoln School if certain changes are made to the facility. These changes will be expensive, so it is hoped that the MSBA will contribute to any school project recommended by the School Committee.

At the outset, a few words are necessary about what the Committee did not attempt to do and why. The Committee recognizes that many persons in Town will be looking for cost estimates for each of the "pathways" described in this report. The report contains no cost estimates. The reason is that the Committee did not have the ability to obtain reliable cost estimates because it had no budget. This made it impossible for this Committee to hire a professional construction cost estimator. The Committee strongly believes that it would be a serious disservice to the Town if its report contained cost estimates which are not reliable. The School Committee will provide cost estimates to the Town for any new school building project it ultimately may recommend in the future.

The Committee also did not address all the minute details of a construction project (e.g. what will be the finish on the walls in a certain room in a building, etc…) because it was not charged with this task. As described above, the Committee was charged with identifying "pathways" the School Committee might follow, not creating a detailed design and construction plan. If the School Committee proposes a school building project to the Town in the future, the details of that plan will be provided to the Town by the School Committee.

This report will initially address the background to the formation of the Committee, its makeup, deliberations and process. The pathways recommended by the Committee, and implementation issues relating to those pathways, will then be discussed. The report will then briefly address the issue of community use of the school campus. It closes with an observation for the Town.

III. BACKGROUND

In November 2012, a Special Town Meeting did not approve the so-called "Preferred Option" school building project, which previously had been approved for funding by the MSBA.[3] Soon thereafter, the School Committee organized a series of well-attended open forums with the community for the purpose of soliciting the community's views on whether and how the School Committee should move forward with a school building project. These meetings culminated in a pair of well attended Community Charettes on January 27 and 31, 2013. The discussion at these meetings and charettes strongly suggested that the community would support a school project that renovated the existing L-shaped school buildings.

Based on this community input, the School Committee, on February 15, 2013, notified the MSBA that it "believes than an L-shaped configuration of the proposed project has the potential to garner the necessary majority…." The School Committee also informed the MSBA that, based on the feedback it had received, it believed any "re-vote" on the project rejected in November 2012 at the Special Town Meeting "would be unlikely to receive the necessary community support." *(Exhibit 3.)*

In March 12, 2013, the MSBA judged the new proposal to be a "different project." This meant that it was ineligible for the state money previously approved by the MSBA for the project that was not approved at the Special Town Meeting. This conclusion meant that, if the town wished to pursue state funding for a new school building project, it had to reapply for that funding. *(Exhibit 4.)* This response by the MSBA resulted in the School Committee dissolving the former School Building Committee. It also resulted in the School Committee submitting a new SOI to the MSBA in April 2013. *(Exhibit 2.)* This submission restarted the process for applying for MSBA funding.

[3] The total cost of this project was $49 million. The MSBA would have paid $20.9 million of this cost. The cost to Lincoln would have been $28.1 million.

On March 23, 2013, the Annual Town Meeting approved, by a two-thirds majority vote, seed funding ($17,000.00) for a new feasibility study for any new school building project that might be recommended by the School Committee in the future. This money will only be spent if the Town is invited back into the MSBA funding pipeline. These funds will be used to determine which parts, if any, of the feasibility study relating to the project not approved at the Special Town Meeting in November 2012 could be re-used or updated in connection with a new school building project. The goal is to avoid duplication of work and, thereby, save both time and money.

On or about June 6, 2013, the Chair of the School Committee and the Town Moderator, after publicly soliciting interested persons to apply for appointment to SBAC, appointed 12 members to the Committee.[4] The composition of the Committee is diverse. Two (2) members are members of the School Committee, two (2) were members of the dissolved School Building Committee, six (6) have experience in the areas of either architecture, construction or land use, five (5) currently have children in the schools, several had children who attended the schools, one (1) attended the schools and several had no active involvement with the old "Preferred Option," or the process leading to that recommendation, and brought new perspectives to the discussion.[5] Some members supported the "Preferred Option;" others opposed it. This diversity brought a broad array of ideas and opinions to the work of the Committee.

IV. THE PROCESS AND DELIBERATIONS OF THE COMMITTEE

The Committee met on 17 occasions between its initial meeting on June 18, 2013 and its final meeting on November 13, 2013. The agenda and minutes of each of these meetings, and documents relating to the Committee's work, are posted on both the School Committee's and Town's websites. (See www.lincnet.org/site/Default.aspx?PageID=3155 and www.lincnet.org/Page3165.)

[4] Two members of the Committee subsequently had to resign from the Committee for personal reasons before the issuance of this report.

[5] Several members have more than one of the above characteristics.

A. PRIOR TO THE COMMITTEE'S CHARETTE

The Committee spent its initial meetings exploring and trying to understand the educational reasons for and value in the work proposed in the most recent SOI. It was informed throughout this process by Superintendent McFall who answered the Committee's questions on these topics.

In its next series of meetings, the Committee analyzed each item of work contained in the SOI. The purpose of this work was to get a sense of the Committee about whether the proposed work was important and/or needed. This analysis culminated in an August 22, 2013 memorandum which contains the Committee's conclusions about the level of priority to be assigned to each item of proposed work. (*Exhibit 5.)* A brief summary of the major priorities is set forth on page 12 of this report. An explanation of the reasons supporting these priorities is set forth on pages 12-22.

The next cluster of meetings was devoted to preparing for a Committee charette which would provide the Committee with a forum for questioning and testing its ideas about possible pathways. While a presumption existed within the group that the so-called L-shaped scheme discussed in the January charettes would likely be one of the pathways going forward, it was nevertheless important for the Committee to discuss other options. These included taking a second look at the old "Preferred Option." The Committee decided that it would not be in the Town's interest to revisit this approach because it would be too divisive. The Committee also discussed the option of building an entirely new school building. This option was rejected because the Committee believed there would be little support for such a project due to its anticipated high cost. In sum, the Committee concluded that these options would lead to some of the same controversies associated with the Town Meeting proposal and could seriously hamper the Committee's ability to move a reasonable school project forward.

The discussions about possible pathways helped to clarify the qualities of the L-shaped scheme that would essentially constitute the basis for a fundamental framework for a schools project, including:

- Maintenance of the overall structure of the Lincoln School campus, with its dominant central open space framed by school facilities on three sides.

- Preservation/reuse of substantial portions of the Smith School complex, including facilities constructed in 1994, the Brooks School, the Media Center and the Reed Gymnasium.
- Protection of significant landscape features that contribute to the quality of the setting.
- Maintenance of current investment in roads, parking, athletic fields, and other site features.

In addition to its work on pathways during this period, the Committee also addressed a number of other issues**.** The Committee met with members of the Town's Community Center Feasibility Committee ("CCFC") for the purpose of understanding the feasibility of using a portion of the school campus on Ballfield Road for a Community Center that would house the Council on Aging ("COA") and the Parks and Recreation Department ("PRD").[6] The July 2012 Final Report of the CCFC was distributed to the Committee (see http://ma-lincoln.civicplus/Document Center/View/477), as were additional materials provided by that committee.

SBAC considered the status of the Hanscom Schools. There appear to be no plans for the closing of the base. *(Exhibit 6.)* In addition, since the Department of Defense has approved a design for a new Middle School at Hanscom, and since a new Primary School is currently in the design process, a base closure was not considered by the Committee to be a concern at this time.

The issue of energy conservation has been discussed throughout the Committee's deliberations. The suggested pathways address this concern, to the degree possible, through roof and outer envelope improvements, more energy-efficient HVAC systems and lighting, and through provisions for the possible later installation of rooftop solar arrays.

B. THE COMMITTEE'S CHARETTE

In preparation for the charette, the Committee organized two subgroups, one to focus on possible L-shaped pathways (remodeling, renovation, new construction) and the other to focus on possible Repair-Only pathways. The Committee recognized that these two types of pathways are not mutually exclusive, since any L-shaped pathway would likely include significant repair work. It believed, however, that the subgroup structure would bring a

[6] If this were to occur, MSBA would not pay for this work.

focus to these two approaches which would then be melded together at the charette.

The charette held on September 11, 2013, modeled four possible pathways for how to approach investment in our K-8 school facilities. These pathways were intended to bracket a full range of options relative to the degree of intervention and associated costs. They included L-shaped and Repair-Only options. As previously explained, the Committee did not have the budget or time to employ professional resources that could lead to cost estimates. However, it was recognized that investment in the schools could range from basic repairs to more comprehensive programs where repairs would be combined with new construction designed to meet educational goals. The four alternatives included:

- Basic repairs that fall short of triggering code compliance measures;
- Repairs, without new construction, but comprehensive in meeting current building codes;
- A combination of repairs and new construction that would fulfill the goals set out in the SOI and likely include State support through the MSBA program's School Building Grant Program; and
- A model that is highly selective in terms of both repairs and new construction due to the lack of MSBA funding.

The evaluation process included a description of the key features of each model and an assessment of associated educational benefits. Several emerging conclusions at the time of the charette included:

- Concerns about models that expended significant funds but provided no significant educational enhancements;
- Models that would attempt to contain costs but inadvertently result in increased costs over time; and
- Models that compromised health and safety by virtue of delayed compliance with applicable building codes.

At the conclusion of the SBAC charette, it was clear that more work was needed.

C. AFTER THE COMMITTEE'S CHARETTE

The next several meetings of the Committee focused on clarifying, refining and altering some of the ideas discussed at the charette. New ideas that were at variance with the L pathways were also reviewed, including a pathway under which a new two story building would be built in the area of the circle in front of the Reed Gym. Under this pathway, the new building would take the place of the portion of the Smith School which runs from north of the gym to the Media Center. The remaining portion of Smith, from the gym south, would be separated from Brooks and the Link and could be available to house a Community Center.

There was little, if any, support for this pathway. It would only accommodate 16 classrooms, not the 22 that would be needed. It raised serious parking issues, as well as issues about where to relocate the kindergarten and the Smith play area. It appeared to create a major problem for school bus and parental drop-off and pick-up of students. There was concern about students being in rooms that looked back onto the façade of the Reed Gym, and the shadow effect of such a structure on the Reed Gym and any new cafeteria/Magnet Classroom that might be built between the Reed Gym and the Brooks School. The two story structure at the eastern end of the campus next to the Reed Gym and the pool area also seemed to unbalance the campus feel of the school. The Committee also sensed that this type of structure, which would have to contain an elevator and two emergency staircases, would be expensive.

The Committee spent considerable time exploring whether a proactive "Repair Only" option would be a prudent course of action to take. Although the initial perceived benefit of this approach is one of relatively low cost, there are several insurmountable reasons why this approach was ultimately rejected as both impractical and insufficient to successfully resolve both the mid/long term facility needs, as well as educational objectives and priorities of the schools. Review of applicable Code triggers and discussion with Lincoln's Building Inspector have led us to the conclusion that any significant repair effort would likely trigger major Code requirements and force very significant expenditures. A project designed as a $6 million repair could turn quickly into a repair and Code compliance project easily costing $12-$14 million. A project designed to avoid triggering codes would likely not be sufficiently large in scope so as to reasonably guarantee successful and continued facility operation over the mid/long term. It would also present an increased risk of multiple emergency-type repairs.

Such a project would be unwise on many dimensions. First, it would leave many facility issues unaddressed, simply requiring them to be addressed later, or, perhaps, sooner in the case of a potentially disruptive failure. A second issue is that a repair project of this sort could effectively lock in technology, such as the HVAC system, that is already out-of-date, or invest in segments of the building (such as the 1948 section of Smith) that a later, more comprehensive, project would rebuild. Moreover, an intensive, prolonged repair approach would take multiple years to complete fully and risks increased and impractical disruption to the successful operation of the facility. Repairing some needs now and addressing others later means multiple, major construction/repair efforts that would be very disruptive and might interfere with teaching and learning. This could do a disservice to both the children of the Town and their teachers.

Perhaps the most fundamental reason that the Committee does not recommend a project strictly limited to repair and code work is that such a project would have limited, if any, educational or security benefits. It would not provide the much needed cafeterias and flexible learning spaces identified as high priorities to provide new alternatives for meeting student needs. Nor would it link the Reed Gym with the rest of the facility and so eliminate a serious security concern.

This sequence of discussions and deliberations has led to the "pathway" recommendations set forth in the next section of this report.

V. THE COMMITTEE'S RECOMMENDED PATHWAYS

Although the Committee's members began their work with very different ideas about what the school buildings needed, they, after weeks of work and deliberations, reached a consensus on what the schools require. These needs are significant and expensive. Thus, MSBA funding is essential for the School Committee to be able to implement its comprehensive plan for school facility improvements and repairs that will support educational enhancement at The Lincoln School.

The Committee recommends two pathways to the School Committee. The first pathway assumes MSBA funding. The second pathway assumes no MSBA funding.

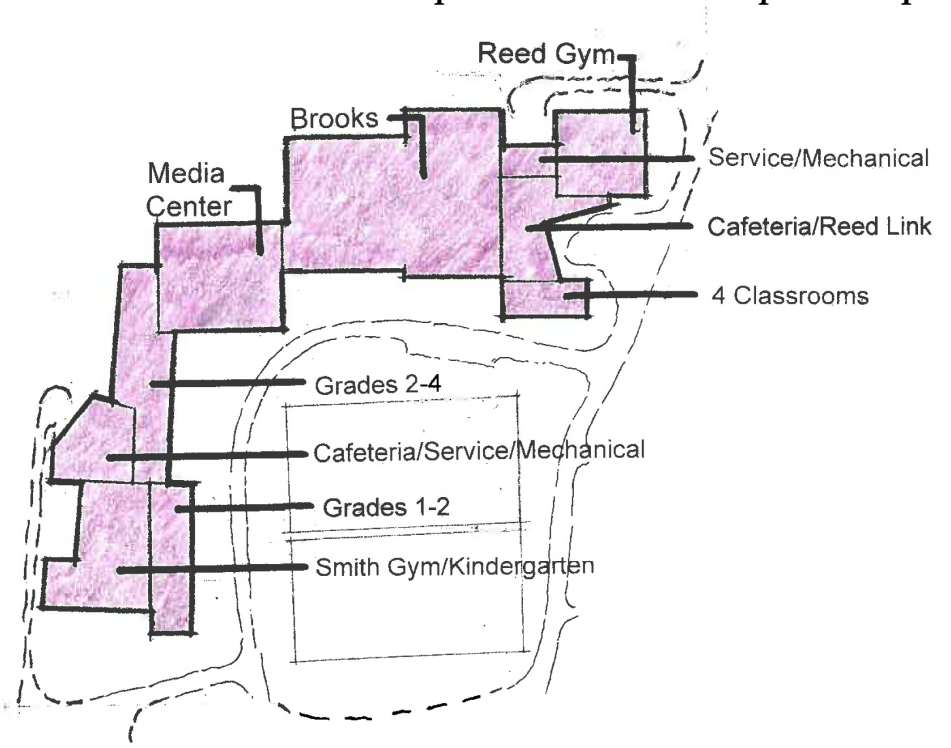
A. PATHWAY 1 – ASSUMES MSBA FUNDING

The Committee unanimously agreed that the major needs of the school buildings are set forth in the SOI. It encourages the School Committee to pursue these educational and facilities improvements to the L-shaped campus in a cost conscious manner (i.e. this recommendation is not "blank check" or a recommendation for a "gold-plated" building).

The Committee endorses this pathway because it believes it is educationally sound and can be pursued in a fiscally responsible manner. It also believes the work set forth in the SOI is needed for Lincoln to maintain its place in the top tier of public school systems in Massachusetts. The major needs of the school buildings are as follows:

- A new central kitchen and cafeterias for both the Smith and Brooks schools;
- Breakout rooms for both schools;
- Improvement to the second grade space in the Smith School;
- Constructing a link to the Reed Gym from the Brooks School;
- Accommodations for students with special needs;
- Improved lighting, air quality and acoustics in both schools;
- An improved building envelope for both schools, including, but not limited to, the roofs; and
- Solving the problem of the flooding of the Smith boiler room.

ILLUSTRATION 2 - Potential Improvements to L-shaped Campus



The reasons for the Committee's recommendation that this work be undertaken are set forth below.

1. The Need for Flexible Educational Space

"The educational vision for the Lincoln School is to increase opportunities for interdisciplinary project-based learning and integrating educational technologies to make learning more powerful."[7] A flexible school facility is an element in realizing this vision. Education inevitably changes and school building design must change with it.

The general education classroom has remained remarkably resilient but both larger and smaller spaces are essential to a dynamic and innovative school curriculum. New educational opportunities can be provided by spaces both larger and smaller than traditional classrooms. Larger rooms, for instance, allow activities that could encompass an entire grade. Smaller spaces permit targeted instruction for subsections of a class or even individualized learning. Because these smaller spaces would be used during normal classroom activity, they must be located so as to allow observation and supervision by the teaching staff.

[7] SOI at p. 6.

The SOI contains two components which would provide the needed educational flexibility.

a. A New Kitchen and Cafeterias

Lincoln school officials believe new kitchen and cafeteria facilities would substantially improve the delivery of educational services. Currently lunch is served in the two gymnasiums. This requires set-up and take-down time that reduces the availability of the gyms for physical education programs. The cramped serving space permits only one service line in each location, thus causing much of the students "lunch" period to be spent waiting in line.

The two new cafeterias (one for Brooks and one for Smith) also provide the schools with needed programmatic flexibility. They could serve as "Magnet" classrooms or meeting space when not being used for lunch, which could accommodate an entire grade or subsets of an entire grade or more than one grade. This fulfills the educational need for a space larger than a classroom but smaller than the Donaldson Auditorium. The cafeterias/Magnet classrooms would be equipped with flexible seating space, light controls and the advanced media capacities and technology needed for a top-notch education in the 21st century.

Another benefit of the cafeterias is that they also could serve the community during after-school hours. There are many groups in Lincoln that need meeting space. The cafeterias could help meet that demand.

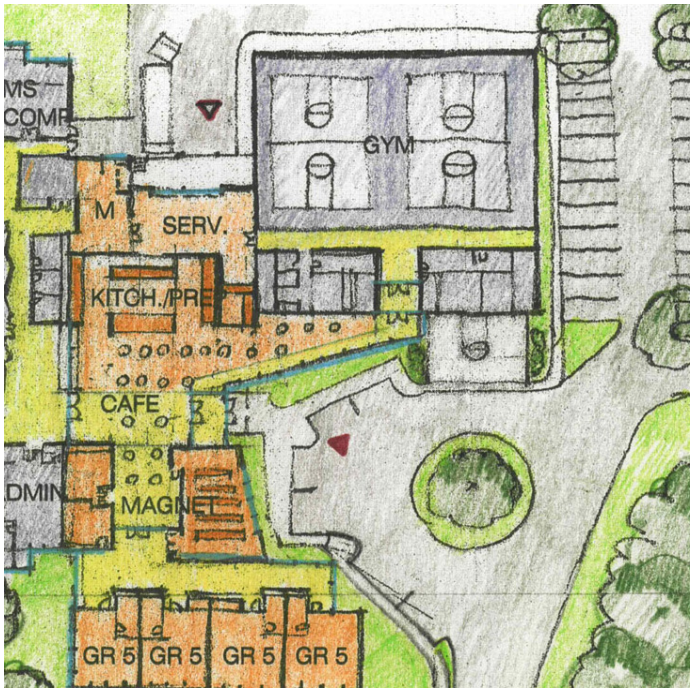
The new Brooks Cafeteria and Kitchen could be located in the open space between the Reed Gym and the eastern end of Brooks. This kitchen would serve both the new Brooks and Smith cafeterias (i.e. there would not be a separate kitchen for the Smith cafeteria).[8] The construction of the kitchen and Brooks cafeteria at this location serves multiple purposes. It provides for a kitchen facility and a separate cafeteria for the Brooks students. In addition, its construction can be tied in with the need to build a secure link between Brooks and the Reed Gym, since both construction needs are located in the same area.

[8] Food from the central kitchen next to Brooks and the Brooks cafeteria would be delivered to the Smith cafeteria in the same manner as it is currently delivered to the Smith gym.

ILLUSTRATIONS 3A & 3B

3A - Possible Smith Cafeteria and Magnet Classroom

3B – Possible Brooks Cafeteria and Magnet Classroom



The Committee spent significant time discussing the locations for the cafeterias. In the end, the Committee agreed that the recommended locations are the only ones that appear to be viable. The Committee discussed locating a single kitchen and cafeteria for both Smith and Brooks off the western end of the Smith School as part of a possible multi-faceted project for that school. It rejected this idea because of the noise and distractions that would be created by having a service entrance for this combined kitchen and cafeteria in close proximity to the Smith classrooms. This option also was not viewed as viable due to the distance Brooks students would have to travel to reach the combined kitchen and cafeteria and the noise they would generate in Smith while doing so.

The Committee rejected the idea of building a combined kitchen and cafeteria for both schools in back (at the north end) of the connection between Smith and the Link. This idea was rejected because of a wetlands restriction in this area. Due to this restriction, there is not enough room for a combined kitchen and cafeteria at this location. This idea was also rejected because a service road would have to be built to access this location. This road would be disruptive to students because it would be located in close proximity to classrooms. This service road is further precluded by its proximity to the wetlands.

b. Breakout Rooms

Education today is more project-based than it was in the past. The educational value of a project-based education is that it is filled with active and engaged learning.

In order for project-based education to deliver its value, it needs to operate in space appropriate for such an education. The Lincoln School does not currently have such space. It is difficult to provide such an education within the current classrooms because of their limited space and the noise created by different groups simultaneously working on different projects within this space. Currently, if a teacher wants to "break-out" a portion of the class from the rest of the class, the teacher sends these students into the corridors, corners of the room and closets that have been converted into office and small group spaces. These spaces have many distractions and limiting factors to learning. Breakout rooms would add about 200 square feet to the classrooms, so they could accommodate a teacher and 6-8 students at a time. The breakout rooms would be fully visible to a teacher in the main part of the classroom.

The Committee understands that breakout rooms are highly valued by the school administration to positively impact learning by providing support for individualized instruction, project based learning and differentiated levels of instruction. The Committee understands that the inclusion of breakout rooms in any school building project is a decision that will be affected by cost, value, and the practical ability to include them within existing spaces that may or may not be renovated or rebuilt. It does not see them as having to be an all or nothing proposition. The Committee expects that the School Committee will do more work to determine priorities for breakout rooms (e.g. for which grade levels and subjects) and whether there is significant value in having breakout rooms across the grade levels.

2. The Need to Improve the Second Grade Space

The west campus connection between the Smith Gym and the Link is of historic merit, in particular the double-height eight (8) original classrooms of 1948, which are bordered on the west side by smaller flat roofed spaces for bathrooms and administrative offices.[9] The flood imperiled mechanical room is below this west facing north/south bar of the building.

The most deteriorated sector of the Lincoln School complex is this southwest end of Smith/near the gym where the four (4) second grade classrooms are located. The second grade space was built in 1955. The nearby third grade space was built in 1948. Although both areas were partially updated during the 1994 school building project, they remain the most problematic on the campus in terms of building deficiencies. The second grade classrooms have wooden walls and windows, and *circa.* 1955 mechanical systems.

A significant change to the layout of the second grade space is probably implied.[10] The renovation of this space would likely require 80% of replacement cost. This would only be of value if it were a distinctive structure or of high quality construction and fit the program for the school. Since this space does not meet these criteria, it is a candidate for demolition.

There are probably several options for dealing with this space, all of which should be studied by the School Committee. The demolition option is

[9] The Committee understands that the Lincoln Historical Commission believes the Smith School to be architecturally and historically significant.

[10] The condition of the third and fourth grade space should also be reviewed and considered by the School Committee.

only one option. It could provide many benefits. It would provide space for the location of the new Smith cafeteria/Magnet Classroom. (See Illustration 3A.) It also could provide space for an on-grade location for the troubled Smith boilers and new mechanical main service points.

Under any demolition plan, the demolished classrooms would be replaced by the building of new classrooms in front of the circle by the Donaldson Auditorium. These would be connected to Brooks by a link that would be constructed at the same time Brooks is linked to the Reed Gym. (See Illustration 3B.)

These classrooms could serve as "swing space" during any construction project. Under this scenario, there would be reallocation of facilities for grades 2-8 (i.e. the locations of grades and other space will move), the details of which will require considerable study. Again, the Committee emphasizes that this is only one idea which could be considered by the School Committee.

3. Security and Safety at the Reed Gym

Currently, the Reed Gym is a stand-alone building. As such, anyone can enter it without passing by administrative offices that could provide security. A teacher in the gym supervising students does not have the ability to screen persons who enter the gym while students are there. Of even greater concern is the fact that because students must frequently pass back and forth between Brooks and the gym, the doors to Brooks must remain unlocked. This permits access to the entire school by anyone at a point where there is no supervision. Although the Committee believes that safety concerns should not lead to turning the school into a prison-like atmosphere, it believes that this particular safety concern should be addressed, ideally by linking the gym to Brooks. This would require anyone from the outside, who wanted to enter the gym, or the schools, to first have to go by new administrative offices to be located by the Donaldson Auditorium entrance to Brooks. Illustration 3B on page 15 shows how this new space might look.

The precast wall panels in the Reed Gym present a separate safety issue. In its October 15, 2012 report to the town, CDR Maguire, Inc. ("Maguire") recommended the immediate replacement of these panels because they presented a safety risk (they could fall on persons in the gym) and were forecast to fail during the 2012-13 school year. Fortunately, no panels fell during this school year. Nevertheless, the Committee believes this issue should be promptly addressed by the School Committee. It does not think it advisable for

the School Committee to wait for the approval of a new school building project before it remedies this situation. There are replacement options, which range from insulated metal panels (highest costs and highest aesthetic value) to concrete blocks (lowest cost).

4. Accommodations for Students with Special Needs

Lincoln's school population includes many students with physical challenges other than mobility (which would be addressed in access codes) ranging from vision and hearing impairments to asthma and other respiratory problems. These often require changes to conditions (such as noise reduction measures) in the classroom. Currently these are handled on an *ad hoc* basis, often requiring duplicative efforts as affected students move from one grade to another. The Committee supports the goal of finding a more efficient approach to dealing with these issues. It believes that each grade should have the required equipment. The issues are how many classrooms in each grade should be so equipped and what equipment should go in which classrooms.

Although this is a complicated issue due to the ever changing make-up and needs of students who require special services, the recommended improvements to the air handling system and air quality in the schools discussed below would help to support students with particular special needs.

5. The Need to Improve the Lighting, Air Quality and Acoustics

Good lighting, air quality and acoustics can have a direct effect on the ability of students to learn and teachers to teach effectively. The Lincoln School does not currently have good lighting, air quality and acoustics throughout the school. The Committee believes any school building project should remedy this situation to the extent that is reasonably possible.

The Committee can discern no reason why good lighting cannot be provided throughout the school. It recognizes that the issues of air quality and acoustics are more complex and expensive. The Committee heard many complaints about the Unit Ventilators (HVAC units) in the classrooms. They are noisy and not very sophisticated in terms of air quality control. There is little doubt that learning declines with distractions and high noise levels. This is particularly the case for students with hearing and attention impairments.

The issue for the School Committee is whether the noise and air quality generated by the unit ventilators are at levels which so negatively affect the ability of students to learn and teachers to teach effectively that the Town should incur the substantial expense associated with replacing all the unit ventilators in all the classrooms. The Committee believes this should be done but recognizes its lack of expertise in the complex fields of air quality and acoustics. Accordingly, the Committee encourages the School Committee to obtain advice from experts in these disciplines before it decides how to proceed with this issue.

Nevertheless, the Committee observes that the unit ventilators may be required to be replaced if the school buildings must be upgraded to meet the requirements of applicable Codes. The Committee heard much about replacing the unit ventilators with a displacement system**,** which is quieter, requires much less maintenance and allows for the control of humidity in a building with a tight envelope.

The Committee also heard much about the potential for a catastrophic failure, which could close the school for a significant period of time, if the Brooks main incoming 2,000 amp switchgear and the distribution sub-panels are not replaced. The Committee understands that School Department has proposed to do this work next year.

6. The Need to Improve the Building Envelope

A tight and secure building envelope (roofs, walls, windows, window walls) is necessary for maintaining temperatures in a classroom within reasonable ranges. Classrooms that are too hot or cold adversely affect teaching and learning on the Lincoln campus. Improving the envelope is also important for energy efficiency and meeting the Town's aggressive energy goals as reflected in the recently adopted Energy 2030 bylaw. The school facilities will play a critical role in the ability of the town to meet these goals, since they comprise the single largest energy user in the Town.

Roughly 50% of the windows in the Lincoln School were replaced in 1994. Those windows are still in good shape. However, the older windows now need to be replaced. This includes most of the windows in Brooks and the windows in the second grade wing. The double glazing of these windows has failed. Some windows have only single glazing. Insulation has failed and wood has rotted around these windows.

The roof is perhaps the most important element in the building envelope. Half of the roofs on The Lincoln School were installed in 1988. The other half was installed in 1994. The insulation under the roofs is deteriorating. With the exception of the roof on the Reed Gym, which was recently replaced, most other roofs are at the end of their useful life and will soon need to be replaced. It does not seem prudent to wait for membrane and shingle failure.

There has been discussion about placing solar panels on some part of the school roof. Although no decision has been made to do this, the School Committee will need to make sure that any roof on which the solar panels are placed is structurally strong enough to hold them.

7. Solving the Problem of the Flooding of the Boiler Room at the Smith School

The Committee heard about and witnessed the Dickensian boiler room in the Smith School basement. During times of high rainfall, this room floods because groundwater rises up through the cracks in the slab. The water then has to be pumped out. The high water corrodes parts of the boiler which then need to be replaced. The Committee believes that an appropriate long-term solution for this problem is needed. It appears that the best long-term solution is to build a new on-grade boiler room at Smith to accommodate these two boilers as part of any school building project. There may be additional solutions. The School Committee is urged to consider all viable solutions to this problem.[11]

The pumping equipment should be replaced along with the boilers. The schools' need for effective control systems for heating and cooling (e.g. room specific digital controls) should be addressed at the same time.

Up to this point, this report has presented a number of illustrations of how certain components of an L-shaped configuration can satisfy the objectives set forth in the SOI. On the following page is an illustration of a potential L-shaped scheme which incorporates all of these components. It is provided for illustrative purposes only.

[11] The Brooks boiler built in 1970 also need to be replaced**.** The Brooks boiler built in 1994 needs to be upgraded.

ILLUSTRATION 4 - Detailed L-Shaped Illustrative Plan

B. PATHWAY 2 – ASSUMES NO MSBA FUNDING

If the MSBA decides not to fund a Lincoln project at this time, the Town will be placed in a difficult position because it will not be able to address the legitimate needs of the schools in a comprehensive manner. It is reasonable to assume that the Town would not be willing to pay for a project the size of the one described above without MSBA funding. What the Town would be willing to pay for under these circumstances is unclear. However, what is clear is that the Town would have to do some deep soul-searching about how much it values the education of its children supported by appropriate facilities and the nexus between a high quality school system and property values.

It should be noted that some repairs will be required in the very near term if a decision on a comprehensive approach is delayed. The School Department, for instance, has already requested funds to replace the electrical switch gear in the Brooks School due to its unreliability and the fact that replacement parts are not available.

The Committee tried to identify elements of the Pathway 1 approach which could be eliminated in order to identify a project the School Committee should pursue if there is no MSBA funding. There are numerous iterations of what could not be included in a project that receives no state funding. Candidates to be cut or reduced in such a project include the following, or any combination of the following:

- A new central kitchen and cafeterias;
- The breakout rooms;
- Improvement to the second space in the Smith School;
- The link to Reed Gym;
- Accommodations for students with special needs;
- Improved lighting, air quality and acoustics;
- An improved building envelope, including, but not limited to, the roofs; and
- Solving the problem of the flooding of the Smith boiler room.

The Committee found it difficult to make these types of judgments because it placed the Committee in the position of making judgments about educational priorities, something it feels unqualified to do. It believes this is best left to the School Committee and the education professionals at The Lincoln School. In the circumstance where the MSBA declines to fund a

Lincoln project, the School Committee should consider any feedback it might receive from the MSBA about the components of the Town's plan. This might help guide the School Committee's decision-making process on which components of its plan should be retained or jettisoned if the Town is forced to fund any school building project or repairs on its own. The Committee also believes that these types of tough judgments should be made after the School Committee has a clear understanding of the cost of each of the components of any project. This decision also should only be made after there has been an intensive public process with the Town after the MSBA informs the Town that it will not fund a Lincoln project under the School Building Grant Program at this time.[12] This process should give the School Committee a good sense of what type of school building project the Town will and will not support if there is no MSBA funding at this time.

There was discussion about phasing any project that is not supported by the MSBA. Under this approach, some portions of the project would be undertaken sooner and others later. This might soften the financial impact of any project on Town residents. However, inflation over time, as well as breaking the project into several smaller pieces, would likely negate this perceived benefit. There is also the concern about for how long the Town wants the school campus to be a construction site.

In the event the MSBA decides not to fund a comprehensive Lincoln project under its School Building Grant Program, there is a possibility that it, through its Accelerated Green Repair Program, still might fund up to 33% of expenditures on any roofing, boilers and windows work only.

C. IMPLEMENTATION ISSUES

There will be significant implementation issues no matter what pathway or project is pursued by the School Committee. The fundamental challenge will be where to place the students during any construction, renovation or repair work. Although certain work could occur during the summer, that work would be limited because the school campus is free of students and teachers for only a couple of months during the summer. Another possibility is that some of the work might be able to be carried out after the school day (i.e. 3:00 p.m.-11:00 p.m.). Reportedly, this approach has been successfully employed on other school construction projects depending on the scope of work being performed. There also will be significant unavoidable contractor demands on the site

[12] Self-evidently, MSBA and Town input, as well as cost information and considerations, should also guide the School Committee if MSBA funding is made available to Lincoln.

during any project – parking, contractor' lay-down and office (trailers) space, perimeter fencing and increased traffic.

Even with efforts to avoid interruptions, any project may intrude into spaces used for education during one or more years. In this event, the Pods could provide "swing space" where students temporarily would continue their education during the construction. The Pods are currently in use for several purposes unrelated to the schools so there would be concerns about finding alternative locations for displaced activities. There are also concerns about the suitability of the Pods for use as temporary classrooms. This raises the possibility that improvements could be made to the Pods for use as swing space that could later benefit the Town.[13]

If the School Committee were to pursue the option of building new classrooms in front of the Brooks circle (see p.18), this space, if built at the beginning of a school project, could house students displaced in later phases of construction.

D. THE ISSUE OF COMMUNITY USE OF THE SCHOOL BUILDINGS

The focus of this issue has been whether a Community Center could and should be built on the school campus. In July 2012, the CCFC issued a comprehensive report on this issue. This report focused on the needs of the COA and the PRD. The CCFC concluded that the time was not ripe for a Community Center because, *inter alia,* "the Selectmen need to articulate a vision of a community center" and the "Town should determine whether residents want a community center." There is also the issue of how much the town is willing to pay for a Community Center, assuming it wants one. The Committee understands that the Selectmen are currently working on these issues.

Until these issues are resolved by the Town, it would be inappropriate for this Committee to make recommendations about a Community Center on the school campus. However, during the course of the Committee's work, the concept of co-location of a Community Center on the site of the Pods at the Hartwell School was discussed. The underlying premise for this approach is the possibility of making more efficient use of the land area covered by the Pods, plus the recognition that their poor condition most likely portends investment in the future, either through renovation or replacement. This

[13] The MSBA will not contribute to expenditures for swing space. Thus, it would make sense either to minimize such expenditures or to incur them in a way that results in continuing benefits to the Town.

concept raises important questions of accommodating existing uses of the Pods should Community Center functions be added to the site, as well as the impact of more intensive use on the parking situation and requirements. By some measures, the site is underutilized. Given the two floor height of Hartwell, the Pod replacements could be two floors to help free up land area for parking.

The Committee is neither endorsing nor advocating for a Community Center in this location. Other locations within Lincoln may offer advantages for the COA and the PRD functions. An additional issue is whether there needs to be one Community Center located at one location in town. As the CCFC observed, an option might be to have different locations for different functions. Under this approach, the cafeterias previously discussed could provide added space for community activities. The Community Center concept needs more study by the Town, assuming the Town desires a Community Center.

The Committee is concerned about the needs of the schools not being addressed by the Town until the Town decides what, if anything, it wants to do about a Community Center. In the view of the Committee, this places the proverbial cart before the proverbial horse. The needs of the schools are real; they need to be addressed now, not at some undetermined point in the future.

VI. CONCLUSION

The Committee believes that its process and deliberations could be instructive to the Town. As set forth at the beginning of this report, the Committee is composed of a diverse group of individuals, many of whom harbored some strong and differing feelings not only about the defeat of the Preferred Option but also what is best for Lincoln. Yet, over the course of this Citizens' Committee deliberations, the differences (and temperature) receded as the Committee members talked with (not at) each other. In the end, this disparate band of Lincoln neighbors reached a unanimous consensus that an L-shaped campus plan can provide the Town with the type of high quality school building the Town expects. We encourage the School Committee to continue to work openly and meaningfully with Lincoln's residents so they are well informed of the options and issues going forward.

There is much work that remains to be done. The question of whether there will be MSBA funding remains unanswered at this time. We understand the School Committee expects to hear from the MSBA within the next few

months. Clearly, MSBA support is critical to the ability of the Town to implement the School Committee's comprehensive plan for bringing the Lincoln school buildings in line with what is expected of a school system and program in the 21st Century. If there is to be MSBA funding, the School Committee will have to work with the MSBA on the design and construction details of a project that can be embraced by the Town. If there is not going to be MSBA funding, the School Committee and the Town are going to face the very difficult decisions set forth in this report.

This Committee's work is now complete. We submit this report to the School Committee with the expectation that it will take the next steps in this school building process required to protect and improve the educational opportunities provided by The Lincoln School. The Committee looks forward to the Town's residents joining with the School Committee in a constructive effort to do so.

Respectfully Submitted
School Building Advisory Committee

Doug Adams
Ken Bassett
Owen Beenhouwer
Vincent Cannistraro
Tim Christenfeld
Steven P. Perlmutter - Chair
Maggy Pietropaolo
Hathaway Russell
Peter Sugar
Gary Taylor

EXHIBIT 1

June 6, 2013

To: School Committee
Becky McFall, Superintendent
Buck Creel, Administrator for Business and Finance

From: Jennifer Glass, School Committee
Sarah Cannon Holden, Town Moderator

Re: School Building Advisory Committee: Proposed Slate

At the May 16, 2013 School Committee meeting, the School Committee voted to establish a School Building Advisory Committee (SBAC). The charge of the SBAC, as outlined at the meeting, is as follows:

Task: Based on the Statement of Interest and the prior work of the School Building Committee, propose 2-4 possible pathways for addressing the needs of the school. Describe the scope of each, and submit a report to the SC by October/November 2013.

- Note: There are no funds dedicated to this work. If Lincoln is invited back into the MSBA pipeline, detailed plans and cost estimates would be developed through the Feasibility Study process. If Lincoln is not invited into the pipeline, the School Committee could still choose to ask Lincoln residents to support the development of these and other options. Funding for plan development would be sought through Town Meeting.

Goal: Proposed pathways will be considered by the School Committee and a future School Building Committee as starting points for future design/project development.

Topics to Consider: In developing proposed pathways, the committee will seek input from, and consistently communicate with, relevant boards and host public forums to consider topics of value to the community such as:

- How will renovations support/improve education and position the school for the future?
- How can a renovated building support after-hours community use?
- How should a renovation address Lincoln's sustainable energy goals?
- What kinds of campus renovations are important for supporting both school and recreational use of the campus (fields/parking/roadways)?

Meetings: The Advisory Committee will schedule its own meetings which will meet in public venues in accordance with Open Meeting Law. The School Committee will announce the meetings and suggests that at least 1-2 meetings are held per month. The Advisory Committee will select its own Chair.

It was also agreed that the composition of the SBAC would be:

- Up to 4 members of the former School Building Committee or current School Committee (appointed by the School Committee)
- Up to 4 community members with architecture and/or construction experience (appointed by the School Committee)
- Up to 4 at-large community members (appointed by the Town Moderator)

June 6, 2013

An article was placed in the Lincoln *Journal* soliciting the community for volunteers. In addition, the same notice was sent out to all Lincoln School families and to the list of community members that voluntarily provided email addresses at the meetings held after the November vote.

As a result of these efforts, 26 individuals indicated their willingness to serve on the committee. The attached slate reflects an effort to create a committee that represents a broad spectrum of views, a mix of people who do and do not have children in the school and a combination of those who have been deeply involved in the process and some who are new to the conversation.

We would like to express our sincere thanks to all who volunteered to invest time and energy into this process, and hope those who are not on the slate will, nevertheless, remain involved. We believe this committee will carefully consider the needs of the Lincoln School and has the opportunity to build consensus.

Proposed Slate:

Former SBC/Current School Committee Members
Owen Beenhouwer, SBC
Tim Christenfeld, School Committee
Jen James, School Committee
Gary Taylor, SBC

Architecture/Construction Experience
Douglas Adams
Ken Bassett
Vincent Cannistraro
Peter Sugar

At-Large Community Members (appointed by the Town Moderator)
Loretta Arthur
Steven Perlmutter
Maggy Pietropaolo
Hathaway Russell

Next Steps
If the slate is approved at the June 6 meeting, the School Committee will be responsible for scheduling the first meeting of the SBAC. After the first meeting, the SBAC will determine the frequency and schedule of its meetings.

EXHIBIT 2

TOWN OF LINCOLN

SCHOOL COMMITTEE

Statement of Interest for the Lincoln School, Lincoln, MA

Resolved: Having convened in an open meeting on March 21, 2013, the School Committee of the Town of Lincoln, Massachusetts, in accordance with its charter, by-laws, and ordinances, has voted to authorize the Superintendent to submit to the Massachusetts School Building Authority the Statement of Interest Form dated March 14, 2013 for the Lincoln School located at Ballfield Road, Lincoln, MA which describes and explains the following deficiencies and the priority category(s) for which an application may be submitted to the Massachusetts School Building Authority in the future:

1. **Replacement or renovation of a building which is structurally unsound or otherwise in a condition seriously jeopardizing the health and safety of school children, where no alternative exists.** Deficiencies include :
   a) High ground water leading to flooding
   b) Wooden structure with no sprinkler system leading to safety concerns
   c) Non-compliant septic system operating under variance
   d) Asbestos-containing materials and lead in water supply pipes
   e) Deteriorating and failing exterior window walls
   f) Accessibility issues
   g) Lack of security, uncontrolled site access & difficult traffic circulation
   h) Leaking roof conditions
   i) Obsolescent and under-capacity electrical system and controls
   j) Moisture, mold & ventilation problems

5. **Replacement, renovation or modernization of the heating system in a schoolhouse to increase energy conservation and decrease energy related costs in the schoolhouse.** In spite of energy conservation programs the school continues to generate low scores in EPA's Energy Star rating system, and exceeds the energy usage of comparable schools by 25% or more. The Town has adopted an aggressive energy conservation by-law, and the current school building will prevent the Town from achieving its goals.

6. **Short term enrollment growth.** The Lincoln School anticipates receiving additional students from near-term shifts in demographics caused by the generational turnover of housing stock.

7. **Replacement of or addition to obsolete buildings in order to provide for a full range of programs consistent with state and approved local requirements.** A study by Symmes, Maini & McKee Associates, confirmed by a subsequent MSBA Senior Study and a survey of existing conditions by the Office of Michael Rosenfeld, identified deficiencies, inadequacies or absence of the following spaces required to meet the School Committee's desired program of instruction:

    a) Size of selected classrooms in each of the schools.
    b) Shortage of special education classrooms and tutorial rooms
    c) Lack of cafeteria and insufficient kitchen area
    d) Few teacher planning spaces
    e) Poorly organized and located administrative areas
    f) Inadequate art and music spaces
    g) Health suite
    h) Insufficient support and storage areas

and hereby further specifically acknowledges that by submitting this Statement of Interest Form, the Massachusetts School Building Authority in no way guarantees the acceptance or the approval of an application, the awarding of a grant or any other funding commitment from the Massachusetts School Building Authority, or commits the Town of Lincoln to filing an application for funding with the Massachusetts School Building Authority.

Jennifer Glass	Dr. Rebecca McFall
Chair, Lincoln School Committee	Superintendent

Massachusetts School Building Authority

dated 14 March 2013 for BOS & SC vote

Next Steps to Finalize Submission of your FY 2013 Statement of Interest

Thank you for submitting your FY 2013 Statement of Interest (SOI) to the MSBA electronically. **Please note, the District's submission is not yet complete**. The District is required to print and mail a hard copy of the SOI to the MSBA along with the required supporting documentation, which is described below.

Each SOI has two Certification pages that must be signed by the Superintendent, the School Committee Chair, and the Chief Executive Officer*. Please make sure that **both** certifications contained in the SOI have been signed and dated by each of the specified parties and that the hardcopy SOI is submitted to the MSBA with **original signatures**.

SIGNATURES: Each SOI has two (2) Certification pages that must be signed by the District.

In some Districts, two of the required signatures may be that of the same person. If this is the case, please have that person sign in both locations. Please do not leave any of the signature lines blank or submit photocopied signatures, as your SOI will be incomplete.

**Local chief executive officer: In a city or town with a manager form of government, the manager of the municipality; in other cities, the mayor; and in other towns, the board of selectmen unless, in a city or town, some other municipal office is designated as the chief executive office under the provisions of a local charter.*

VOTES: Each SOI must be submitted with the proper vote documentation. This means that (1) the required governing bodies have voted to submit each SOI, (2) the specific vote language required by the MSBA has been used, and (3) the District has submitted a record of the vote in the format required by the MSBA.

- **School Committee Vote:** Submittal of all SOIs must be approved by a vote of the School Committee.
  - For documentation of the vote of the School Committee, Minutes of the School Committee meeting at which the vote was taken must be submitted with the original signature of the Committee Chairperson. The Minutes must contain the actual text of the vote taken which should be substantially the same as the MSBA's SOI vote language.
- **Municipal Body Vote:** SOIs that are submitted by cities and towns must be approved by a vote of the appropriate municipal body (e.g., City Council/ Aldermen/Board of Selectmen) in addition to a vote of the School Committee.
  - Regional School Districts do not need to submit a vote of the municipal body.
  - For the vote of the municipal governing body, a copy of the text of the vote, which shall be substantially the same as the MSBA's SOI vote language, must be submitted with a certification of the City/Town Clerk that the vote was taken and duly recorded, and the date of the vote must be provided.

CLOSED SCHOOLS: Districts that have reported closed school information must download the report from the "Closed School" tab, which can be found on the District Main page. Please print this report, which then must be signed by the Superintendent, the School Committee Chair, and the Chief Executive Officer. A signed report, with original signatures must be included with the District's hard copy SOI submittal. **If a District submits multiple SOIs, only one copy of the Closed School information is required.**

ADDITIONAL DOCUMENTATION FOR SOI PRIORITIES #1 AND #3: If a District selects Priority #1 and/or Priority #3, the District is required to submit additional documentation with its SOI.

- If a District selects Priority #1, Replacement or renovation of a building which is structurally unsound or otherwise in

a condition seriously jeopardizing the health and safety of the school children, where no alternative exists, the MSBA requires a hard copy of the engineering or other report detailing the nature and severity of the problem and a written professional opinion of how imminent the system failure is likely to manifest itself. The District also must submit photographs of the problematic building area or system to the MSBA.

- If a District selects Priority #3, Prevention of a loss of accreditation, the MSBA requires the full accreditation report (s) and any supporting correspondence between the District and the accrediting entity.

ADDITIONAL INFORMATION: In addition to the information required with the SOI hard copy submittal, the District may also provide any reports, pictures, or other information they feel will give the MSBA a better understanding of the issues identified at a facility.

If you have any questions about the SOI process please contact Brian McLaughin at 617-720-4466 or Brian.McLaughlin@massschoolbuildings.org.

Massachusetts School Building Authority

School District Lincoln

District Contact Rebecca McFall TEL: (781) 259-9409

Name of School Lincoln School

Submission Date 3/15/2013

SOI CERTIFICATION

To be eligible to submit a Statement of Interest (SOI), a district must certify the following:

- ☑ The district hereby acknowledges and agrees that this SOI is NOT an application for funding and that submission of this SOI in no way commits the MSBA to accept an application, approve an application, provide a grant or any other type of funding, or places any other obligation on the MSBA.
- ☑ The district hereby acknowledges that no district shall have any entitlement to funds from the MSBA, pursuant to M.G.L. c. 70B or the provisions of 963 CMR 2.00.
- ☑ The district hereby acknowledges that the provisions of 963 CMR 2.00 shall apply to the district and all projects for which the district is seeking and/or receiving funds for any portion of a municipally-owned or regionally-owned school facility from the MSBA pursuant to M.G.L. c. 70B.
- ☑ The district hereby acknowledges that this SOI is for one existing municipally-owned or regionally-owned public school facility in the district that is currently used or will be used to educate public PreK-12 students and that the facility for which the SOI is being submitted does not serve a solely early childhood or Pre-K student population.
- ☑ After the district completes and submits this SOI electronically, the district must sign the required certifications and submit one signed original hard copy of the SOI to the MSBA, with all of the required documentation described under the "Vote" tab, on or before the deadline.
- ☑ The district will schedule and hold a meeting at which the School Committee will vote, using the specific language contained in the "Vote" tab, to authorize the submission of this SOI. This is required for cities, towns, and regional school districts.
- ☑ Prior to the submission of the hard copy of the SOI, the district will schedule and hold a meeting at which the City Council/Board of Aldermen or Board of Selectmen/equivalent governing body will vote, using the specific language contained in the "Vote" tab, to authorize the submission of this SOI. This is not required for regional school districts.
- ☑ On or before the SOI deadline, the district will submit the minutes of the meeting at which the School Committee votes to authorize the Superintendent to submit this SOI. The District will use the MSBA's vote template and the vote will specifically reference the school and the priorities for which the SOI is being submitted. The minutes will be signed by the School Committee Chair. This is required for cities, towns, and regional school districts.
- ☑ The district has arranged with the City/Town Clerk to certify the vote of the City Council/Board of Aldermen or Board of Selectmen/equivalent governing body to authorize the Superintendent to submit this SOI. The district will use the MSBA's vote template and submit the full text of this vote, which will specifically reference the school and the priorities for which the SOI is being submitted, to the MSBA on or before the SOI deadline. This is not required for regional school districts.
- ☑ The district hereby acknowledges that this SOI submission will not be complete until the MSBA has received all of the required vote documentation and certification signatures in a format acceptable to the MSBA.

Chief Executive Officer *	School Committee Chair	Superintendent of Schools
(print name)	(print name)	(print name)
(signature)	(signature)	(signature)
Date	Date	Date

* Local chief executive officer: In a city or town with a manager form of government, the manager of the municipality; in other cities, the mayor; and in other towns, the board of selectmen unless, in a city or town, some other municipal office is designated to the chief executive office under the provisions of a local charter.

Massachusetts School Building Authority

School District Lincoln

District Contact Rebecca McFall TEL: (781) 259-9409

Name of School Lincoln School

Submission Date 3/15/2013

Note

The following Priorities have been included in the Statement of Interest:

1. ☑ Replacement or renovation of a building which is structurally unsound or otherwise in a condition seriously jeopardizing the health and safety of school children, where no alternative exists.
2. ☐ Elimination of existing severe overcrowding.
3. ☐ Prevention of the loss of accreditation.
4. ☐ Prevention of severe overcrowding expected to result from increased enrollments.
5. ☑ Replacement, renovation or modernization of school facility systems, such as roofs, windows, boilers, heating and ventilation systems, to increase energy conservation and decrease energy related costs in a school facility.
6. ☑ Short term enrollment growth.
7. ☑ Replacement of or addition to obsolete buildings in order to provide for a full range of programs consistent with state and approved local requirements.
8. ☐ Transition from court-ordered and approved racial balance school districts to walk-to, so-called, or other school districts.

SOI Vote Requirement

☑ I acknowledge that I have reviewed the MSBA's vote requirements for submitting an SOI which are set forth in the Vote Tab of this SOI. I understand that the MSBA requires votes from specific parties/governing bodies, in a specific format using the language provided by the MSBA. Further, I understand that the MSBA requires certified and signed vote documentation to be submitted with the SOI. I acknowledge that my SOI will not be considered complete and, therefore, will not be reviewed by the MSBA unless the required accompanying vote documentation is submitted to the satisfaction of the MSBA.

Potential Project Scope: Renovation/ Addition

Is this SOI the District Priority SOI? YES

District Goal for School: Please explain the educational goals of any potential project at this school

The Lincoln Public Schools provides an educational experience of the highest quality for its students. The district was initially configured with separate schools, housed in individual buildings on the Ballfield Road campus. The 1994 school building project served to provide a new library media center and several classrooms but more importantly, it connected the Smith Elementary School building with the Brooks Middle School building and moved students in kindergarten into a new wing of the Smith School. This began the process of shifting to a single kindergarten to grade eight organizational structure. During the same period shifts in the scope of the Lincoln METCO program, implementation of an inclusion model for special education programming, the addition of computer labs and classroom computer centers and the adoption of interdisciplinary, inquiry-

based instructional pedagogy took full advantage of the school facilities. With the Education Reform Act of 1993, programs such as expanded world language instruction, beginning as early as grade three (Lincoln's current curricular model), science and engineering technology and programs to align the district's educational program with Massachusetts' Curriculum Frameworks caused the school facility to be used differently. Lincoln has a long tradition of small average class sizes with high levels of support from instructional assistants, tutors and special subject teachers. Educational programs built on a small class-size delivery model require higher levels of staffing as well as additional classroom spaces. One significant benefit to this programming option is the district's ability to educate most students in the least restrictive environment, a requirement of the special education regulations. The Lincoln School has been able to educate essentially all students in the general education classroom, with appropriate accommodations and modifications. The educational vision for the Lincoln School is to increase opportunities for interdisciplinary project-based learning and integrating educational technologies to make learning more powerful. These program delivery models require project workspace where teachers and students can establish working environments that are less traditional than the typical classroom. Demonstration and presentation spaces are also necessary to support project-based learning. The goal of the Lincoln School is to have every student fully engaged in their learning, having teachers serve as instructional coaches, guiding students' research, inquiry and assessment through demonstration. This provides opportunities for the appropriate differentiation of instruction, allowing high performing students the opportunity to extend and expand their learning, while other students make sufficient and appropriate progress toward meeting the district's learning standards. The goal for the proposed project is to provide for a learning environment that allows for: (1) greater differentiation of instruction for individual student needs; (2) enhanced project-based learning and technology integration; (3) a variety of learning spaces to accommodate individual, small group and large group learning experiences; (4) improved environmental factors that impact learning; i.e., air quality, lighting, temperature regulation.

District's Proposed Schedule: What is the District's proposed schedule to achieve the goal(s) stated above?

** Sep 2013 - Invitation from MSBA ** Oct 2013 - Selectmen and SC vote for FSA ** Nov 2013 - Town Meeting vote for funds for new Schematic Design ** Nov 2013 - Begin Feasibility update ** Mar 2014 - Begin Schematic Design phase ** Jul 2014 - SBC vote to submit SDR ** Oct 2014 - Selectmen and SC vote for PSBA ** Nov 2014 - Town Meeting and ballot vote for project funding ** Nov 2014 - Begin Design Development phase ** Feb 2015 - possible vote for CM@Risk by School Building Cmte and School Comte -- outcome affects procurement strategy ** May 2015 - Begin Contract Documents phase ** Oct 2015 - Invite bids ** Jan 2016 - Award construction contract ** Feb 2016 - NTP and ground breaking

Is this part of a larger facilities plan? YES

If "YES", please provide the following:

Facilities Plan Date: 10/23/2007

Planning Firm: Symmes Maini & McKee Associates (SMMA)

Please provide an overview of the plan including as much detail as necessary to describe the plan, its goals and how the school facility that is the subject of this SOI fits into that plan:

The Master Plan Study report summarizes the work of Symmes Maini & McKee Associates (SMMA) and the Lincoln Public Schools Master Plan Study Committee during the period July 2006 - October 2007. The study process included an exisiting facilities condition study to validate and update a facilties review performed by LPBA in 2004; a review of current capacity, space size and usage; interviews and a visioning session to explore the impacts of curriculum development and future requirements; and the creation of several options to correct identified deficiencies in facility condition and educational program support. This report documents both the process and resulting options along with estimated project budget costs for dealing with the existing K-8 school located on the Ballfield Road Campus. Numerous meetings with the Master Plan Study Committee were held to discuss issues and options. Based on educational, enrollment and infrastructure needs, conceptual planning options were developed for three levels of activity: (1) minimal renovations only to provide classroom space to meet enrollment (no programmatic educational upgrades); (2) renovations and additions with programmatic upgrades; and (3) renovations, additions, and consolidation by new construction with programmatic upgrades. The following is a list of the Key Points discussed in this Master Plan Study: (1) The 1994 additions and minor renovations (the Link project), did not touch a major portion of the Smith and Brooks buildings. (2) Many of the existing building systems are nearing or are at the end of their useful life, and the rate of deterioration is accelerating. (3) The current school populations are not projected to increase significantly, however that could change rapidly under several scenarios for changes in the Town's demographics over the next decade. (4) The building spaces as currently configured do not meet current best

practices for school programs, State specifications and guidelines, and federal ADA standards. (5) As in the case of most school districts in the Commonwealth, the Lincoln Public Schools have not practiced consistent predictive and preventive maintenance over the 15 years preceding the report. SMMA presented four possible solutions for consideration within the Master Plan Study. Throughout this SOI we will refer to the SMMA report. The existing conditions noted by SMMA were subsequently verified by an MSBA Senior Study and by the Office of Michael Rosenfeld during an MSBA-sponsored Feasibility Study.

Please provide the current student to teacher ratios at the school facility that is the subject of this SOI: 20 students per teacher

Please provide the originally planned student to teacher ratios at the school facility that is the subject of this SOI: 20 students per teacher

Does the District have a Master Educational Plan that includes facility goals for this building and all school buildings in District? YES

If "YES", please provide the author and date of the District's Master Educational Plan.

"K-8 Master Plan Study, Lincoln Public Schools" Edward R. Frenette, AIA, Project Director Symmes, Maini & McKee Associates October 23, 2007

Is there overcrowding at the school facility? NO

If "YES", please describe in detail, including specific examples of the overcrowding.

Has the district had any recent teacher layoffs or reductions? NO

If "YES", how many teaching positions were affected? 0
At which schools in the district?
Please describe the types of teacher positions that were eliminated (e.g., art, math, science, physical education, etc.).

Has the district had any recent staff layoffs or reductions? NO

If "YES", how many staff positions were affected? 0
At which schools in the district?
Please describe the types of staff positions that were eliminated (e.g., guidance, administrative, maintenance, etc.).

Please provide a description of the program modifications as a consequence of these teacher and/or staff reductions,including the impact on district class sizes and curriculum.

Does Not Apply

Please provide a detailed description of your most recent budget approval process including a description of any budget reductions and the impact of those reductions on the district's school facilities, class sizes, and educational program.

The annual budget process in Lincoln begins in August when the District administrators meet to consider the School-Committee goals and objectives for the coming school year, ways to implement them and changes to be considered for the following fiscal year. These discussions lead to development of the level-services budget. During the month of September the School Committee provides its detailed budget guidance, the Superintendent directs the creation of a level-services budget and the school- and district-level administrators propose improvement initiatives for consideration. The Town Finance Committee (FinCom) provides its budget guidance in late September or early October. After some additional evaluation and analysis, the Superintendent proposes a Preliminary Budget to the School Committee. The School Committee discusses the budget and the implications of funding decisions over the next two months, considering any "gap-closing" suggestions proposed by the Superintendent. In early December, the School Committee presents its Approved Budget to the FinCom, who evaluate all requests for funds in excess of their earlier guidance and provide decisions in the form of their Proposed Budget to be presented at Town Meeting in March. The Lincoln Town Meeting is the approving authority for the budget affecting the Lincoln School directly. The Lincoln School Committee has been able to conduct its desired educational program (as limited by the constraints posed by the existing school facilities) within the FinCom budget guidance for the past five years.

General Description

BRIEF BUILDING HISTORY: Please provide a detailed description of when the original building was built, and the date(s) and project scopes(s) of any additions and renovations (maximum of 5000 characters).

The Town of Lincoln has a unique campus setting with the pre-school, elementary and middle schools currently serving the pre-Kindergarten through Grade Eight school population at one location. The current Ballfield Road Campus facilities are comprised of a grouping of buildings that date from 1948 through 1994. The following describes the chronology of the buildings that make up the Lincoln Public School system:

* Smith Elementary School, constructed in 1948, with a six classroom and gymnasium addition in 1953, a four classroom addition in 1955, and a four classroom Kindergarten wing with computer lab in 1994.

* Hartwell Pre-School, constructed in 1957 as an elementary school, with the addition of four classroom Pods in 1957, 1959 and 1963. The Pods are not currently used for educational purposes, and would not meet current standards.

* Brooks Middle School, constructed in 1963, with a six classroom addition in 1970 and a small addition containing technical education and life sciences classrooms in 1994.

* Reed Gym, constructed in 1970 to provide gymnasium and locker facilities for the middle school.

* Library/Link Building, constructed in 1994 to provide six classrooms, a computer lab, keyboarding classroom, music classroom, health suite, and library to link the Smith and Brooks Buildings. The health suite, computer lab, and library are shared by the elementary and middle schools.

The 1994 project provided some renovation of the Smith Building, but did not significantly touch the existing Brooks Building or Reed Gym.

TOTAL BUILDING SQUARE FOOTAGE: Please provide the original building square footage PLUS the square footage of any additions.

139477

SITE DESCRIPTION: Please provide a detailed description of the current site and any known existing conditions that would impact a potential project at the site. Please note whether there are any other buildings, public or private, that share this current site with the school facility. What is the use(s) of this building(s)? (maximum of 5000 characters).

The Ballfield Road Campus of the Lincoln Public Schools is 54.39 acres in size, generally flat, particularly near the Lincoln School. The site contains numerous wetland areas, has a tributary to a public water supply (the Cambridge Reservoir) running through it, is within the Zone II Wellhead Protection area for the Town's main drinking water supply well, and has a high ground water table. As a consequence, the school septic system, while functioning, operates under a variance from the DEP. The high ground water table causes water to flow into the Smith basement, and creates the potential for mold and mildew to develop, as well as damage to the boilers and circulation pumps. Flooding in the Smith boiler room has occurred three times in the past nine years.

The site also contains the Town outdoor swimming pool and associated outbuildings, and the Hartwell School complex which houses the Lincoln Public School Preschool and supporting spaces, a private preschool of four classrooms, the District offices, maintenance and custodial support areas, the Recreation Department offices, and an after-school care program. The Hartwell Complex is some distance from the Lincoln School and is not part of the Lincoln School project consideration.

ADDRESS OF FACILITY: Please type address, including number, street name and city/town, if available, or describe the location of the site. (Maximum of 300 characters)

Lincoln School
Ballfield Road
Lincoln, MA 01773

BUILDING ENVELOPE: Please provide a detailed description of the building envelope, types of construction materials used, and any known problems or existing conditions (maximum of 5000 characters).

The Smith building is a one story building with a mechanical basement and crawl spaces for piping. There have been three small classroom additions to the original building. The original 1948 building and the 1953 and 1955 classroom additions were constructed of columns and load bearing masonry walls (brick and block) with wood framed roof members. The 1994 kindergarten classroom addition was constructed with structural steel. Most of the architectural components of the building are in serviceable to good condition (with the exception of the 1955 classroom addition and some features of the original 1948 building), and the newest addition in good condition.

The Library/Link building is a one story building with a mechanical mezzanine that contains the air handling equipment plant. The Library/Link addition contains classrooms, Health Suite, Computer Lab, Computer network head-end, and the Library. The Library/Link addition was constructed of structural steel with a masonry veneer (brick) over light gauge steel framing for the exterior envelope. Most of the architectural components of the building are in good condition. Roof leaks along the areas where there are rising walls above the lower roof areas have been reported. The architectural finishes in this facility are kept in good repair by the maintenance and custodial staffs, and appear in good physical condition.

The Brooks Building is a one-story building with a double height Auditorium space. The mechanical equipment plant is located at the East end of the building in a depressed slab area. There have been two small classroom additions to the building that enclose a courtyard at the rear. The original building was constructed of load bearing masonry walls (brick and block) with glue-laminated beam roof structure at the classrooms and structural steel beams and joists over the Auditorium area. The most recent classroom addition was constructed of structural steel with a masonry veneer over light gauge steel framing for the exterior envelope. Most of the architectural components of the building are in fair to good condition with the newest addition in good condition. The roofs leak, especially over the areas of the original building. The architectural finishes in this facility are kept in good repair by the maintenance and custodial staffs. There is a concealed spline acoustical tile ceiling throughout the Lobby and Corridors around the Auditorium where the tile has tested positive for asbestos. The Auditorium and Stage are surrounded by a double loaded Corridor that also serves the Science Labs, Art, and Music rooms. The Auditorium seating is original to the building and there are no provisions provided for accessible seating. There are some non-conformance accessibility issues at doors, threshold heights and with related hardware.

The Reed Gym is a one story building with a double height gymnasium. The mechanical equipment plant is located in the Brooks building. There has been one small addition to the building for cafeteria storage at the rear. The original building was constructed with vertical precast concrete plank and concrete masonry load bearing walls with steel truss roof structure for the gymnasium area and concrete masonry load bearing walls with steel bar joist roof structure over the locker room area. The storage room addition was constructed of concrete masonry load bearing walls and light gauge steel roof rafters. The gymnasium is also used as the cafeteria as there is a small warming/prep kitchen adjacent to the gymnasium. Most of the architectural components of the building are in poor condition with the newest addition in good condition. The vertical precast concrete planks are uninsulated, saturated and failing. The locker room, shower facilities and internal arrangement are substandard and do not adequately support the physical education and athletics programs. There are many non-conformance accessibility issues at doors and with related hardware. The entrance doors to the Reed Field House do not meet the current Access Code requirements. Other than the concrete wall panels, locker rooms, accessibility deficiencies, and wear of original interior finishes, the facility is in serviceable physical condition.

Additional details and existing condition reports are included in the SMMA Master Plan report, submitted with this SOI.

Has there been a Major Repair or Replacement of the EXTERIOR WALLS ? YES

Year of Last Major Repair or Replacement: 1994
Description of Last Major Repair or Replacement:
Along with the addition of the Link/Library Building and Kindergarten wing in 1994, a portion of the Smith wooden window walls were replaced with insulated aluminum walls containing modern double-glazed windows.

Has there been a Major Repair or Replacement of the ROOF? YES
Year of Last Major Repair or Replacement: 2009
Type Of ROOF: PVC
Description of Last Major Repair or Replacement:
The original built-up roofs in the Brooks and a portion of the Smith Buildings were removed and replaced by EPDM roofing in 1988. The additions in 1994 brought their own new roofs. The constant roof leaks in the Reed Gym required the replacement of the original tar and gravel roof with an insulated PVC roof in 2009.

Has there been a Major Repair or Replacement of the WINDOWS? YES
Year of Last Major Repair or Replacement: 1994
Type Of WINDOWS: modern double-glazed windows in a portion of the Smith Building.
Description of Last Major Repair or Replacement:
The original window walls in the Smith 1955 addition, portions of the original 1948 Smith Building and the 1963 and 1970 portions of the Brooks building all have wooden window walls with inefficient glazing. Storm windows have been installed over single-glazed windows and wood has been painted and caulked. The wood framing is failing on many of the elevations. The transite panels below the windows are also energy-inefficient.

MECHANICAL and ELECTRICAL SYSTEMS: Please provide a detailed description of the current mechanical and electrical systems and any known problems or existing conditions (maximum of 5000 characters).

Smith Building classrooms are heated and ventilated with hot water unit ventilators. Each space has an exhaust. Unit ventilators and exhaust system are in fair to good shape. The teachers lounge unit ventilators (2) have DX cooling coils. The boilers for Smith and Link/Library Building are located in the basement. The basement has flooded previously, with the high water line above the burner level. Hot water pumping is constant volume (No VFD's). Two pumps operate in a lead/lag manner. The boiler, breeching and pumps are approximately 25 years old. Due to flooding, the boilers are in fair to poor shape. The H&V unit for the Smith gym is located in the attic and is 19 years old. Controls are pneumatic, controlled by the DDC system through EP switches. Various fan coil units and other terminal units (for heating only and heating/cooling) supply heat to the balance of the spaces. The electrical service to Smith is provided through the service of the Link/Library building. Newer electrical distribution equipment is manufactured by GE, with some original equipment manufactured by Pelham Electrical Mfg.

The Link Building is primarily occupied by the library and associated offices. Hot water is piped from the Brooks Boilers to this building. There is a large indoor variable volume air handling unit in the attic space, above/adjacent to the Library. VAV boxes serve the different 'zones' in the Library and offices. This unit also serves various interior spaces in the building, along the corridor. An air cooled condensing unit is mounted on the roof outside of the attic space. All equipment is 19 years old and appears in serviceable condition. This unit and VAV boxes are controlled by the DDC over pneumatic valves system. Classrooms in the Library/Link Building are heated and ventilated by hot water unit ventilators, 19 years old in fair condition. The electrical service is underground via a utility owned pad-mounted transformer; electrical distribution equipment is manufactured by GE. The fire alarm system is an EST analog system whose panel is no longer supported. The District anticipates that the Town will provide funds to replace the panel in FY13, which will alleviate a significant portion, but not all, of the system problems. Lights that did not meet the criteria of the utility program were retrofitted with T8 lamps and more energy efficient ballasts. The cable infrastructure for the computer system consists mainly of Cat 5 cable and is inadequate.

The Brooks building has a boiler room associated with it. The boiler room provides hot water to the Brooks Building and the Reed Fieldhouse Gym building. Two boilers, one 19 years old and one 43 years old, operate in a lead/lag arrangement. Both boilers' burners are 15 years old and are in fair to good shape. The 43-year-old boiler had its tubes replaced approximately 7-8 years ago. While the new boiler is in fair to good condition, the older boiler has reached its expected useful life and should be replaced. There are separate pumps for the Reed Gym and Brooks Building, recently rebuilt. There are a series of inline hot water booster pumps associated with the hot water distribution system. These pumps are located in the crawlspace

(in pits) below the floor of the school, in different locations making them difficult to monitor and maintain. Controls for the building are a combination of digital and pneumatic. Classrooms in Brooks are heated and ventilated with hot water unit ventilators, which have all been replaced within the past 11 years. Each classroom is provided with an exhaust fan, roof mounted and in fair shape. The Auditorium and Lecture Hall are served by single zone heating and ventilating units. These units are controlled by failing mercury switches and appear to have exceeded their expected useful life. The Auditorium, Lecture hall and Stage areas are each served by a dedicated H&V unit. Original electrical distribution equipment is manufactured by Federal Pacific. The fire alarm system is a troubled EST analog system as described above. The building has no sprinkler system, so building is protected only by this system. Lights have been retrofitted by a recent utility program with T8 lamps and more energy efficient ballasts. The electrical switchgear is original and is the subject of reliability concerns.

The kitchen area of the Reed Gym was renovated 19 years ago, and is in fair condition, but insufficient to support a modern school lunch program. The Gym is served by horizontal Unit Ventilators, which are original to the building (approximately 32 years old), and were the subject of intensive maintenance recently. There is no heat generating equipment in the Gym. Hot water is piped to the gym, from boilers in the a

Has there been a Major Repair or Replacement of the BOILERS? YES
Year of Last Major Repair or Replacement: 2010
Description of Last Major Repair or Replacement:

The original oil-fired Smith boilers were replaced in 1988 with gas-fired boilers of sufficient capacity. A significant repair was required to make the boilers operational following the 2010 Smith basement flood.

Has there been a Major Repair or Replacement of the HVAC SYSTEM ? YES
Year of Last Major Repair or Replacement: 2006
Description of Last Major Repair or Replacement:

Over the four-year period ending in 2006, all of the unit ventilators in both buildings of the Lincoln School were replaced with new McQuay unit ventilators. Those in the Smith and Link buildings contain a unit package which is tied into the EMS; those in the Brooks Building are rigged for local control, pending extension of the EMS.

The HVAC system installed in 1994 to service the Library and portions of the Link Building provides both heating and cooling. Both cooling compressors, along with portions of the control systems, have been replaced in the past four years.

Has there been a Major Repair or Replacement of the ELECTRICAL SERVICES AND DISTRIBUTION SYSTEM? YES
Year of Last Major Repair or Replacement: 1994
Description of Last Major Repair or Replacement:

The incoming switchgear in the Smith Building was replaced in the 1994 project. The electrical distribution system in the Brooks Building and portions of the Smith Building are essentially original, over 50 years old.

BUILDING INTERIOR: Please provide a detailed description of the current building interior including a description of the flooring systems, finishes, ceilings, lighting, etc. (maximum of 5000 characters).

Much of the interior finishes and lighting in the Smith and Library/Link Buildings are 19 years old or less, having been installed with the 1994 project, or replaced as part of the annual "Classroom Rehabilitation" warrant program over the past twelve years. In general, floors are VCT or carpet in Smith and the Library/Link; VAT, carpet or carpet and/or VCT over VAT in Brooks. Walls are painted CMU or sheetrock on studs, as was popular at the time of construction. Much of the ceiling is exposed roof and rafters, with and without acoustical tiles. Hallways have full or partial tile ceilings, mostly spline construction. Some of the ceiling tile in the Brooks Building contains asbestos, which complicates maintenance. Ceiling condition varies. Most of the VAT in Brooks was removed in 2009.

Most of the classroom lighting in Smith and Brooks comes from pendant flourescent tube lighting, relamped to T8 in 2004. In hallways, the lighting is T8 flourescent tubes in recessed or surface-mount fixtures. While the fixtures may have been replaced with more energy-efficient types, the lighting levels in several areas of the facility are insufficient.

PROGRAMS and OPERATIONS: Please provide a detailed description of the current programs offered and indicate whether there are program components that cannot be offered due to facility constraints, operational constraints, etc. (maximum of 5000 characters).

PROGRAM INADEQUACIES - SMITH BUILDING

Classrooms

* The Kindergarten classrooms and several other classrooms are slightly smaller than state standards.

Teacher Planning

* Teachers have no dedicated meeting space to conduct ongoing curriculum planning and delivery. Teachers' room are used for individual music lessons and by parent volunteers for PTO activities.

Gymnasium

* Dual use for the lunch program limits use of space for physical education to allow for food service preparation, set-up service and clean-up for lunch. Dual use creates scheduling conflicts and limits programming options.
* There is no full service kitchen; the food is prepared elsewhere and reheated in a small facility.
* Limited use of space for assembly. Stage is small, and is used for educational programs from time to time.

Health Suite

* Health Suite is located in the Library/Link building and shared with middle school.
* Satellite Nurse Station in Smith is small.

PROGRAM INADEQUACIES – LIBRARY/LINK

Music

* Music room for elementary school is more than 20% below minimum state standards.

IMC/Library

* The layout of Library is not conducive to instruction because it is shared between the two schools, which make it difficult to accommodate more than one class at a time. This is especially true when it involves classes from the elementary and middle school grades simultaneously. The instructional space is not configured properly for teaching library skills.
* Insufficient electrical power to support the needs of the current educational program.

Computer Lab

* The Computer Lab has been recently equipped with new technology, but the Word Processing/Keyboarding Lab is more than 20% below minimum state standards.

Engineering Technology

* Science classes for engineering technology are delivered in a general classroom which is not properly configured, lacks adequate project storage and instructional space.

PROGRAM INADEQUACIES - BROOKS

Classrooms

* Some classrooms lack sufficient storage for equipment, supplies, or project storage.

Teacher Planning

* Teachers have no dedicated meeting space to conduct ongoing curriculum planning and delivery.

Auditorium/Lecture Room

* The Auditorium and Lecture Room spaces are non-compliant with access requirements and accessible seating.
* The Lecture Room layout is not conducive for use as assembly or instruction space. The tiered seating arrangement makes it difficult to supervise.

Art & Music

* Music room has tiered seating, non-compliant with access requirements and incompatible with current educational practices.
* The Music room is too small for the current and growing band , growing chorus and orchestra programs. There are no spaces available for small group instrumental music lessons.

* Toilet rooms are non-compliant with access requirements.

PROGRAM INADEQUACIES – REED GYM

Gymnasium

* Dual use for the lunch program limits use of space for physical education to allow for food service preparation, set-up service and clean-up for lunch. Dual use creates scheduling conflicts and limits programming options.
* Limited use of space for assembly.
* Kitchen is more than 75% below minimum state standards for a serving kitchen and lacks appropriate storage.

Locker Rooms
* Locker rooms do not have direct access for supervision from Physical Education Instructor.
* Locker and shower facilities are substandard and do not support the physical education or athletic programs.
* Locker and toilet rooms are non-compliant with access requirements.

Health Suite
* Location of Health Suite is in the Library/Link building making emergency response time difficult.

Administration
* Location of Health Instructor's office is not adjacent to the entrance of the Reed Gym.
* Because the building is not connected to the middle school, security and visibility to main entrance is a concern.
* Without a sheltered walkway, movement of students from the main building to the Field House for classes and lunch is impacted by inclement weather.

GENERAL COMMENTS, ALL AREAS

Special Education
* Current needs are not met due to inappropriateness and size of spaces.
* Lack of break-out / tutorial spaces connected to classrooms to support the full-inclusion

Support/Storage
* Storage space for equipment, supplies, and records is not sufficient.
* Classrooms lack sufficient storage for equipment, supplies, or project storage.

Administration at all Buildings.
* Is in poor location for public access. No vestibule or dirt control structure.
* Security and visibility to main entrance is a concern. The School Committee considers the current access control arrangements and facilities to be a significant area of risk.

CORE EDUCATIONAL SPACES: Please provide a detailed description of the Core Educational Spaces within the facility, a description of the number and sizes (in square feet) of classrooms, a description of science rooms/labs including ages and most recent updates, and a description of the media center/library (maximum of 5000 characters).

EXISTING K THROUGH 4 EDUCATIONAL SPACES

The MSBA guidelines identify 173 square feet per student for a school with an enrollment between 360 and 369. The draft standards also define a classroom size of 1200 square feet including toilet facilities for the Kindergarten classroom and 950 square feet for the general elementary classrooms. Smith's Kindergarten classrooms are 1180 square feet including the toilet facilities. The 1200 square foot classroom is intended to accommodate a standard size Kindergarten class, in Lincoln's case, eighteen students. Smith's general classrooms vary in size from 887 square feet to 1067 square feet. The MSBA guideline of a 900-1,000 square foot classroom is intended to accommodate a standard size class, in Lincoln's case, nineteen to twenty-two students.

The area of Smith and the portion of the Library/Link building that is dedicated to the Kindergarten through Fourth Grade programs totals to approximately 60,846 gross square feet. This accounts for nineteen general classrooms, one collaborative classroom, a number of special education rooms, office area, Art and Music, Gymnasium, and the Library which is shared with the Middle School. Based on the MSBA allowance of 173 square feet per student, this area is sufficient to support 352 students.

EXISTING 5 THROUGH 8 EDUCATIONAL SPACES

The MSBA guidelines identify 190 square feet per student for a middle school with an enrollment of less than 400. The draft

standards also define a classroom size of 950 square feet for the general middle school classrooms. Brook's general classrooms vary in size from 884 square feet to 1523 square feet. The MSBA guideline of a 900-1,000 square foot classroom is intended to accommodate a standard size class, in Lincoln's case, twenty-two to twenty-four students (depending upon grade).

The Grade 5-8 area is made up of the Brooks Building, Reed Gym and the portion of the Library/Link building that is dedicated to the grade 5 through 8 programs, and totals to approximately 73,922 gross square feet. This area includes sixteen general classrooms, three science classrooms, a number of special education rooms, office area, Art and Music, Gymnasium, and the Library which is shared with the Elementary School. The Auditorium is used for middles school assemblies and the music and drama programs, and there are other spaces such as the gymnasium and library that are larger than MSBA standards and areas required to support the METCO program that when included in the overall square footage, would imply that there is more than sufficient space to support the educational programs for the Grades 5-8 population. If we were to deduct 18,600 gross square feet attributable to the portion of the existing area that is either for community use, oversized gymnasium and library, METCO program support areas, and other inefficiencies due to the layout of the existing building, we arrive at 55,322 gross square feet as the area that supports the Grades 5-8 education. Then, based on the MSBA allowance of 190 square foot per student, this area is sufficient to support 291 students.

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SCIENCE ROOMS/LABS

The Brooks Building has three Science Classrooms:
- 8th Grade 1322 sq ft
- 7th Grade 1256 sq ft
- 6th Grade 1151 sq ft

All three are piped for water and gas. Two of the three date from the original, 1970 construction of the Brooks Building; one was the subject of a fire in 2008 and was restored to the same standards as the other two.

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IMC/LIBRARY

The Library was constructed in 1994 as part of the Link project, and is shared by the K-4 and 5-8 programs. It currently contains approximately over 26,000 books in 2,800 square feet. The space is attractive and functional as a lending library, but has no appropriate educational space to teach technology-assisted library skills. These important classes are conducted in a jury-rigged space taken from the larger library.

The Lincoln School contains three computer/media centers. Two satellite off the Library in the Link Building: the Word Processing/Keyboarding room (692 sq ft), used primarily by the K-4 program for basic skill development, and the Bjork Computer Lab (1063 sq ft), used primarily by the 5-8 program for educational program support as well as MIDI and foreign language programs. In the Smith Building, the Matloff Computer Lab (1095 sq ft), is used primarily by the K-4 program for educational program support. All three computer labs have 24 student and 1 teacher workstations, and a mounted and integrated interactive whiteboard.

CAPACITY and UTILIZATION: Please provide a detailed description of the current capacity and utilization of the school facility. If the school is overcrowded, please describe steps taken by the administration to address capacity issues. Please also describe in detail any spaces that have been converted from their intended use to be used as classroom space (maximum of 5000 characters).

EXISTING SMITH BUILDING CAPACITY

The current capacity is a function of the number of classrooms needed for regular and collaborative or special education as well as the spaces needed to support student and faculty related educational needs and activities. Using the town standard of

eighteen to twenty-two students per classroom for grades Kindergarten through Four, we have calculated the capacity for the Smith Building as shown below:

INVENTORY OF EXISTING K THROUGH 4 SPACE
Total Rooms 43
(purpose & number available)
Kindergarten Classrooms 3
Grades 1 - 4 Classrooms 16
Collaborative 1
Special Education 14
Art 1
Music 1
Library/LMC 1
Cafeteria 0
Re-Therm Kitchen 1
Stage 1
PE/Gymnasium 1
Auditorium /Assembly 0
Computer Lab 1
Administration 2
Nurse 1, shared w/MS
Guidance 2
Staff Work Area 1
Staff Lounge 1

Available Classroom Space 19
Student Capacity @ Classrooms
Kindergarten 64
Grades 1-4 288
Total Capacity 352

EXISTING BROOKS BUILDING CAPACITY
The current capacity of the middle school is a function of the number of general classrooms (homerooms) times the number of students per classroom and then multiplied by a scheduling factor to determine actual capacity as well as special education classrooms and support spaces required. Using the town standard of twenty-two to twenty-four students per classroom for Grades Five through Eight, we have calculated the capacity for the middle school as shown below:

INVENTORY OF EXISTING 5 THROUGH 8 SPACE:
Total Rooms 60
(purpose & number available)

General Classrooms (Math, Eng, SS, World Lang) 16
Science Classrooms/Labs 3
World Language Lab 0
Technology Education Classroom 1
Technology Education Shop/Lab 0
Health Classroom 0
Collaborative 0
Special Education - Classroom 1
Special Education - Small Group 3
Special Education - Resource 1

Art 1
Music 1
Library/LMC (Shared with Smith School) 1
Cafeteria 0
Kitchen 1
Stage 1
PE/Gymnasium (2 teaching stations/gym) 1
Auditorium/Assembly 1
Computer Lab 0
Administration 6
Nurse 4
Guidance 2
Staff Work Area 1
Staff Lounge 1

Available Classroom Space 19
Maximum Capacity 352
Scheduling Factor @ 85% 299

At least four areas were converted from their intended use for classes:

* An area originally designed to be a satellite library area for the 1st and 2nd Grades has been converted and used to deliver special educational services to small groups.
* An area used for teaching home economics was partially converted for middle school social studies.
* A space housing HVAC equipment is used for Special and General Education tutorials and counselling, for students without hearing impairments.
* A hallway area originally part of the egress system was walled in to provide an area to deliver literacy support services. The door is unlocked and signed, and the area continues to provide an emergency exit.

MAINTENANCE and CAPITAL REPAIR: Please provide a detailed description of the district's current maintenance practices, its capital repair program, and the maintenance program in place at the facility that is the subject of this SOI. Please include specific examples of capital repair projects undertaken in the past, including any override or debt exclusion votes that were necessary (maximum of 5000 characters).

The Town funds maintenance and capital repairs in three ways:

* Funds for annual inspections, maintenance and repairs are included directly in the School Committee's operating budget. For FY13 this amounts to $88,323. The maintenance force for the district is 3.2 FTE, a portion of which is allocated to the Lincoln School. The Lincoln School total operating budget for maintenance is $183,962 including these allocated personnel costs. This figure does not include the value of repairs and maintenance performed by custodians or by the maintenance supervisor.

* $75,000 was appropriated as a separate maintenance warrant article during past Town meetings. $50,000 is designated for classroom rehabilitation, and has been used for the univent replacement program, repainting of classrooms and common areas, replacement of carpets, the repair of window shades and the replacement of blackboards with whiteboards. This continues a classroom rehabilitation program begun in 2003. $25,000 is designated for preventive maintenance and has been used to rebuild pumps, clean boilers, service air compressors and exhaust fans and replace HVAC components. This is the sixth year of a designated, multi-year preventive maintenance program.

* Capital repair projects may be proposed by the School Committee, vetted by the Town's Capital Planning Committee and approved at Town Meeting. These amounts vary from year to year, but typical warrants for the past few years included the following Lincoln School projects:

FY05
Removal of Canopy Phase I ** $33,600
HVAC System Repairs $50,200
Upgrade Site Lighting $19,000

** Canopy had fallen into significant disrepair and was determined to be a safety hazard

FY06 -- Removal of Canopy Phase II $25,000

FY07
Replace Brooks Connector Window Wall $32,000
Phase 1 Exterior Door Crash Hardware $ 8,000 (for classrooms, to meet ADA and safety regulations)
Replace Brooks Skylights $17,600
Replace Smith Gutters and Downspouts $16,500
Repair & Relocate Sewage Pump Controls$14,000

FY08
Construct Re-therm Kitchen Smith Gym $60,000
Phase 2 Exterior Door Crash Hardware $14,400
Replace Field House Dividing Curtain $10,000
Field House Exterior Joint Resealing and Interior Painting $55,000

FY09
Exterior Painting Schools $25,000
Emergency Access Way, Lincoln Campus $25,000

FY10
Replace Library A/C Compressor & controls $16,500
Replace VAT with VCT, Brooks Auditorium block $49,750
Replace Reed Gym Roof $160,000

FY11
Reseal Seams, Brooks Roofs $55,000
Replace/Seal Asphalt paving, Various Locations on the Lincoln Campus $21,000

These capital repair projects required an override for FY05, FY06 and FY07, but not for FY08-FY11. The 2009 project to replace the Reed Gym roof was a capital exclusion. The Town has supported projects requiring significant funding (1994 Library/Link project and other municipal buildings) requiring bonding as well as projects requiring more modest funding (1988 and 2009 roof replacements) through capital exclusion. The Town has passed overrides in 20 of the past 30 years, when required, so there is little question of Town support for sensible projects.

Priority 1

Question 1: Please provide a detailed description of the perceived health and safety problem(s) below. Attach copies of orders or citations from state and/or local building and/or health officials.

Problem Areas

1. Ground Water. The Lincoln Campus is constructed on low-lying, filled ground next to a tributary of the Cambridge Reservoir, a public water supply. The water table rises to within a few feet of the surface, and the site is relatively flat, allowing for little natural drainage. The oldest portion of the Smith Building, constructed in 1948, has a heating plant based on two boilers in a basement boiler room whose floor is 10 feet below ground level. During the majority of the year water flows into the basement through cracks in the old slab, and sometimes directly through a connection to the partial crawlspace under the Smith Building. Picture 1.11 shows the results: a floor which is constantly wet. Pictures 1.12 and 1.13 show water bubbling up out of a crack in the floor to the height of 2-1/2", and some of the damage caused by a flood in 2006. The flood waters rose to a height above the burners, damaged the fire eyes and control systems, and reduced the efficiency of both boilers. One similar flood was reported occurring in 1990, two years after the boilers were installed; six events have occurred during the past 25 years. In 2010, a heavy rainfall resulted in the flood inflow exceeding the sump pump capacity; the boiler room flooded to a height of 54" above the floor, damaging controls and burner units. Picture 1.14 shows the flooded Smith Boiler Room. In addition, the high water table has created septic problems and mold issues, as discussed in Problem Area 10 below.

2. Structure and Safety.
The current structure in the pre-1994 portions of the buildings has exposed wooden beams supporting a wooden roof deck. While a fire detection and alarm system is in place in most of the school the building structure and egress ways are not protected by an automatic fire suppression or sprinkler system.

The Lincoln Fire Department recommends replacing the fire alarm master panel (picture 1.21) with a more reliable communications system. The panel is obsolete and no longer supported; it will communicate only with analog fire detection sensors. The District anticipates that the Town will provide funds to replace the panel in FY13 with one that will communicate with both analog and digital sensors. A fire in 2008 in one of the science laboratories underscores the importance of quick notification and easy egress, and pointed out how easily a fire can engage the mostly-wooden structure. The School Committee considers this a major area of risk.

Most classrooms have exterior doors, and the non-compliant paddle hardware was recently replaced with crash-out hardware. Nevertheless, the narrow doorway widths and outside step configurations make easy egress from each classroom in the event of an emergency problematic. The majority of emergency exits are marked by self-luminous fixtures which have exceeded their ten-year design life.

The Lincoln School Buildings do not meet the current seismic codes, presenting a small danger to the students and staff.

The roof structures in the Smith and Brooks buildings and in the Reed Gym were designed before the structural codes were changed to reflect the lessons of the Blizzard of '78. We have had to shovel roofs to mitigate the risk of roof collapse.

3. Septic System. The Lincoln Campus school buildings are serviced by a common leaching field located under the center athletic fields. The system operates under a variance from Title 5 granted in 2007, required because the main leach field does not satisfy the DEP minimum vertical separation from the bottom of the leach bed to the seasonal high groundwater. The leaching field is within 100 feet of a tributary to a public water supply, and is within the Zone II Wellhead Protection area for the Town's main drinking water supply well, which imposes strict nitrate loading limits. The School Committee is concerned with the possibility that future revisions to DEP regulations or Title 5 may make the current septic system ineligible for a continued variance. Certainly, any significant renovation or new construction project will require close attention to the septic system design, and may trigger the requirement for a sewage treatment plant.

4. Asbestos-Containing Materials and Lead. The older sections of the Brook and Hartwell Buildings have 9"x 9" and

12"x12" vinyl tile containing asbestos (VAT). Several of these areas have had carpet applied, minimizing damage. Projects in 2009-2011 have abated much of the VAT, but some remains in low-traffic areas.

A portion of the Brooks Building contains concealed-spline acoustic ceiling tiles which contain asbestos. These tiles have deteriorated over the years and present a continual maintenance problem. Finally, recent repair projects confirm that some of the concealed piping is insulated with asbestos-containing insulation, complicating repairs caused by pinholes which have developed in the 1963-era copper supply piping.

All of the water bubblers have been removed because repeated water testing has shown excessive levels of lead in the water, due to old and corroding pipes. Bottled drinking water is supplied at considerable expense. Changes to the water chemistry by the Lincoln Water Department over the past ten years may have reduced the free lead in the water supply, but not all pipes have had water flowing through them to make these changes possible. Significant exploration will be required during project design.

5. Exterior Window Walls. The glazed exterior curtain wall in the Brooks Building and a significant portion of the Smith Building are wood or wood with Transite panels. Double glazing has failed, wood has rotted and operable windows leak air. Pictures 1.51 through 1.53 indicate the condition of the curtain walls.

Some portions of the exterior walls are single glazed. In the Brooks Building, the exterior portions of the wood composite beams supporting the roof structure are heavily weathered. Most of the exterior wall structural system is mortared block or brick with uninsulated cavities, contributing to an inefficient use of energy. Unit ventilators contribute to this inefficiency.

6. Accessibility. A number of features do not meet the accessibility requirements of ADA and the Massachusetts Architectural Access Board (MAAB). While many of the toilet rooms exhibit some degree of accessibility, few of them are completely compliant with MAAB standards. Staff toilets in the Smith Building are not accessible. The signage throughout the school needs to be completely overhauled to become compliant. Lever hardware should be installed on doors throughout the campus. Only one of the major exterior entrances has a vestibule. Some classroom exit doors are not wide enough to meet code standards, and have a step down of a foot or more. The stage access for both Smith and Brooks stages is not completely compliant.

7. Security, Site Access & Circulation. Access to the buildings was designed in a less-security conscious era. The major entrances at both buildings are not observable by the office staff, and visitor greeting, registration and control is very difficult as a consequence. Several intruders have gained access to the buildings over the past few years, and the local public safety officials have pointed out the difficulty of securing the school facilities. The security problem is exacerbated by the separation between the Reed Gym and the Brooks Building. Not only do the middle school students have to go outside to attend physical education classes, they have to go outside to get to the Reed Gym where tables are set up for lunch. The door to the middle school in the Brooks Building is less secure because of the constant traffic in and out during the day.

Site traffic patterns make the safe drop-off and pick-up of children by parents and Special Education vans difficult, and additional attention to traffic is needed to resolve several conflicting traffic flows. These conflicts cause delays in dropping children off, resulting in lengthy idling of cars with a resultant increase in air pollution. The roadways and parking lots themselves are in fair to poor condition, with areas of failed or missing pavement. The access problems are a result of the "patchwork" building projects over the past 70 years; a studied approach and large-scale renovation is needed.

The site lighting is inadequate, causing concern for teachers walking to their cars during the low-light conditions in the winter. In addition, inadequate site lighting reduces the effectiveness of periodic police patrols, causing periodic episodes of loitering and vandalism.

8. Roof Conditions. Roofs on the Brooks Building and a portion of the Smith and Link Buildings are either beyond their useful life, experience leaking, or both. We suspect that the underlying insulation and some of the roof deck is compromised, adding to the energy conservation problem.

Of particular concern is the roofing over the Brooks Building, which exhibit leaking during rain storms, to an extent which disrupts educational activities below. In the Brooks Building, the concern is the leaking will rot the wooden roof deck, as a number of

seams and joints appear to have failed. A stop-gap project to reseal the seams in 2010 has bought several years of relief, but the tab shingles on the Link and Smith Buildings are beginning to show signs of failure, and the EPDM membranes are beginning to fail.

Repair efforts over the past four years do not seem to have affected the rate of leak propagation. The failing roofs should be replaced with rigid insulation and tapered sections to ensure positive flow to the roof drains.

9. Electrical System and Controls. The current electrical system, designed for the classroom of the 50s, is at capacity. Large portions were constructed with Federal Pacific, Kelek and other equipment no longer readily obtainable. The main switchgear breakers at the Brooks Building are difficult to reengage to restore power after they have tripped, and present a significant risk of large impact in the event of failure. The master clock and annunciator system is outmoded and dysfunctional in part. The Building Management System (EMS) covers only the Smith and Link Buildings; it does not extend into the Brooks Building, contributing to an inefficient use of energy. The EMS is an obsolete, DOS-based system which was outmoded when it was installed in 1994. It does not control lighting or other features of the building. The panels are no longer stocked; a board failure in September 2012 was corrected only through the installation of a used panel purchased from another state.

The EMS sits over a pneumatic control system. The entire control system should be replaced by a DDC system which will begin to establish a proper educational environment.

10. Moisture, Mold & Ventilation. The Smith and Brooks Building are primarily slab-on-grade construction, with a portion of each building constructed over a crawlspace. The moist conditions of the site and lack of air-conditioning created mold problems in a number of rooms several years ago, which was remediated at great expense. The lack of effective climate control requires constant vigilance, particularly during the summer to ensure that mold does not reestablish. Moist soil conditions have created termite, ant and other insect problems. These conditions are exacerbated by a flat site and site drainage which does not effectively move roof run-off water away from the building envelopes.

Priority 1

Question 2: Please describe the measures the district has taken to mitigate the problem(s) described above.

1. Ground Water. Three pumps in two separate sumps are installed to protect the boilers in the Smith Building basement. A water level alarm sends a warning in the event of increased flooding. The pumps and alarms are powered from circuits connected to the emergency generator. They are inspected frequently to ensure they continue to operate properly, and contingency plans involving electric pumps stored on site and Fire Department support are in place in the event they or the electrical supply fail.

In spite of all of these preparations, the basement is constantly damp.

2. Structure and Safety. The frequency of fire detection system inspection and servicing was increased from annually to quarterly, and problems with the alarm system receive immediate attention and response from our alarm contractor. Fire drills for students, faculty and staff are discussed and practiced frequently. The alarm contractor has expressed concern that the fire panel program may not restore properly in the event of a power failure, so contingency plans for fire watches have been discussed with the Fire Chief. The District anticipates that the Town will provide funds to replace the panel in FY13 with one that will communicate with both analog and digital sensors, which could alleviate a significant portion, but not all, of the system problems.

3. Septic System. The Reed Gym shower rooms are no longer used, to reduce loading on the septic system. Kitchen grease traps are regularly pumped and cleaned out, to ensure the leaching field is not compromised or clogged through discharge of improper matter.

4. Asbestos-Containing Materials and Lead. AHERA management procedures restrict floor cleaning to non-abrasive methods. Extra care is taken to reduce disturbance of ceiling tiles, but from time to time leaking roofs create problems by damaging the ceiling tiles below.

All of the water bubblers have been removed because repeated water testing showed excessive levels of lead in the water. Bottled drinking water is supplied at considerable expense.

5. Exterior Window Walls. Storm windows were installed some time ago over the single-glazed windows. A five-year cycle of painting wood framing and trim was re-started. Obvious cracks are re-caulked during the process. Damaged portions of the window walls are replaced with modern, insulated store-front framing and double glazing, but a very small portion of the total requirement has been replaced.

6. Accessibility. Very little mitigation has occurred.

7. Security, Site Access & Circulation. While a visitor registration system was established two years ago, the primary mitigation effort is faculty and staff training and vigilance. Periodic police support assists in helping educate parents in efficient drop-off/pickup procedures. Periodic police patrols help guard against loitering and vandalism.

8. Roof Conditions. Repair efforts have been marginally effective. The incidence of leaks in the EPDM roofs installed over the Brooks Building seems to be increasing as the 20-year point in their life passes.

9. Electrical System and Controls. See below.

10. Moisture, Mold & Ventilation. The program to systematically replace carpet with new VCT in typical classrooms is nearly 90% complete. As most of the Lincoln School is not air-conditioned, the primary mitigation measure is to pay strict attention to ventilation during the summer months, rotating floor fans to ensure a certain level of drying ventilation occurs regularly in areas prone to mold and mildew.

Priority 1

Question 3: Please provide a detailed explanation of the impact of the problem described in this priority on your district's educational program. Please include specific examples of how the problem prevents the district from delivering the educational program it is required to deliver and how students and/or teachers are directly affected by the problem identified.

Some impacts are directly related to the nature of the problem:

- The Lincoln School cannot function if the Smith basement floods and the boilers are inoperable, or the Brooks Building switchgear trips and cannot be reset.
- Proper, constant temperature in classrooms is difficult and expensive to maintain with poorly-insulated or leaky window walls, and unit ventilators not under the control of an energy management system.
- Children are in danger if positive control over visitors cannot be consistently maintained.
- Students, faculty and staff with allergies and mold sensitivities are potentially affected by poor ventilation.
- The noise and drafts created by running unit ventilators detracts from the learning environment, particularly for those with impaired hearing.

Some impacts create impressions among students and faculty which are not in accord with School Committee philosophy or policies:

- Clearly inaccessible facilities do not teach students the proper respect for the ADA and its concern for others with limitations.
- Social science classes interrupted by roof leaks, or library periods cancelled because of puddles on the floor, create an impression which does not reflect the district commitment to stewardship of these Town facilities.
- "Water unsafe" signs on bubblers, with the use of bottled water, creates an unwarranted distrust of the public water supply. The micro-filtered water supplied by the Lincoln Water Department is actually safer than some bottled water supplies.

Please also provide the following:

In the space below, please tell us about the report from an independent source that is not under the direct control of the school district or the city/town, stating that the facility is structurally unsound or jeopardizes the health and safety of the students. The entirety of this report should be submitted in hard copy along with the hard copy of the district's SOI.

Please note that the MSBA will accept an official report from a city or town department/employee, if the person preparing the report is a licensed building inspector, architect, or engineer. For example, a report from the district, city, or town maintenance or janitorial department would not meet this requirement.

Name of Firm that performed the Study/Report (maximum of 50 characters).:
Symmes Maini & McKee Associates (SMMA)

Date of Study/Report: 10/23/2007

Synopsis of Study/Report (maximum of 1500 characters).:
KEY POINTS OF MASTER PLAN STUDY

The following is a list of the Key Points discussed in the 2007 Master Plan Study:

* The 1994 additions and minor renovations (the Link project), did not touch a major portion of the Smith and Brooks buildings.

* Many of the existing building systems are nearing or are at the end of their useful life, and the rate of deterioration is accelerating.

* The current school populations are not projected to increase significantly, however that could change rapidly under several scenarios for changes in the Town's demographics over the next decade.

* The building spaces as currently configured do not meet current best practices for school programs, State specifications and guidelines, and federal ADA standards.

* As in the case of most school districts in the Commonwealth, the Lincoln Public Schools have not practiced consistent predictive and preventive maintenance during periods before the report was written.

Is the perceived Health and Safety problem related to asbestos?: YES

If "YES", please describe the location in the facility, if it is currently fiable, and the mitigation efforts that the district has undertaken to date (maximum of 2000 characters).:

The older sections of the Brook, Smith and Hartwell Buildings have 9"x 9" and 12"x12" vinyl tile containing asbestos (VAT). AHERA management procedures restrict floor cleaning to non-abrasive methods, and constant attention is paid to high-traffic areas to ensure that no wear takes place. A portion of the Brooks Building contains concealed-spline acoustic ceiling tiles which contain asbestos. These tiles have deteriorated over the years and present a continual maintenance problem. Extra care is take to reduce disturbance, but from time to time leaking roofs create problems by damaging the ceiling tiles below. Finally, recent repair projects confirm that some of the concealed piping is insulated with asbestos-containing insulation.

Is the perceived Health and Safety problem related to an electrical condition?: YES

If "YES", please describe the electrical condition, any imminent threat, and the mitigation efforts that the district has undertaken to date (maximum of 2000 characters).:

The main switchgear breakers at the Brooks Building are difficult to reengage to restore power after they have tripped. As a consequence, projects are planned and executed to minimize the number of times the main switches are disengaged. The danger is that an outage with this unreliable switchgear will occur during cold weather, making it impossible to restore power and deliver education services. Replacements for these main breakers are not readily available.

Is the perceived Health and Safety problem related to a structural condition?: YES

If "YES", please describe the structural condition, any imminent threat, and the mitigation efforts that the district has undertaken to date (maximum of 2000 characters).:

The wood framing and roof, and the hallways, are not protected by sprinklers; the classroom exit doors are narrow by ADA standards; the fire alarm system suffers from unidentifiable problems.

The Lincoln School Buildings do not meet the current seismic codes, presenting a small danger to the students and staff.

The roof structures in the Smith and Brooks buildings and in the Reed Gym were designed before the structural codes were changed to reflect the lessons of the Blizzard of '78. We have had to shovel roofs to mitigate the risk of roof collapse.

Is the perceived Health and Safety problem related to the building envelope?: YES

If "YES", please describe the building envelope condition, any imminent threat, and the mitigation efforts that the district has undertaken to date (maximum of 2000 characters).:

The original window walls in the Smith 1955 addition, portions of the original 1948 Smith Building and the 1963 and 1970 portions of the Brooks building all have wooden window walls with inefficient glazing. Storm windows have been installed over single-glazed windows, wood has been painted and caulked, but it remains difficult to maintain a constant, appropriate temperature in the classrooms during much of the year. This problem is particularly apparent in the 1948 and 1955 portions of the Smith Building.

Is the perceived Health and Safety problem related to the roof?: YES

If "YES", please describe the roof condition, any imminent threat, and the mitigation efforts that the district has undertaken to date (maximum of 2000 characters).:

The EPDM roofs installed on the Brooks Building in 1988 were seemingly not installed over sloped insulation. Water ponds and does not drain, leaking though membrane seams and the membrane itself which are beginning to fail in places. The resultant leaks disrupt classes in progress below.

The roof structures in the Smith and Brooks buildings and in the Reed Gym were designed before the structural codes were changed to reflect the lessons of the Blizzard of '78. We have had to shovel roofs to mitigate the risk of roof collapse.

Is the perceived Health and Safety problem related to accessibility?: YES

If "YES", please describe the areas that lack accessibility and the mitigation efforts that the district has undertaken to date. In addition, please submit to the MSBA copies of any federally-required ADA Self-Evaluation Plan and Transition Plan (maximum of 2000 characters).:

Classroom exit doors are narrow and some have drop-offs below, making them inaccessible to all. Some restrooms are non-compliant, as are the stages and several other areas of the Lincoln School. Signage and some door hardware is also non-compliant with applicable codes.

Priority 5

Question 1: Please provide a detailed description of the issues surrounding the school facility systems (e.g., roof, windows, boilers, HVAC system, and/or electrical service and distribution system) that you are indicating require repair or replacement. Please describe all deficiencies to all systems in sufficient detail to explain the problem.

High Energy Use in the Lincoln Public Schools

The public school complex is the single largest consumer of energy in the Town of Lincoln. In spite of thermal and electrical energy efficiency investments recommended in an energy audit and installed in the 1980's and a second round of lighting efficiency upgrades eight years ago the school continues to generate low scores in EPA's Energy Star rating system. Based on preliminary analysis of the school's facilities, staff and administration have begun to identify the root causes for the school's low energy performance.

The causes range from obvious concerns such as inadequate insulation to more subtle and often interconnected issues such as boiler water temperature settings and unit ventilator installation and operation. Most of the concerns and issues that we have identified have multiple potential solutions that will need to be vetted and sorted out as part of the school's systematic analysis of the town's education facility needs. The most appropriate bundle of energy efficiency and renewable energy investments for the existing buildings may be less appropriate or more expensive than other investments for a major renovation project or new building project. This causes us to believe that a systematically-designed major rehabilitation or new construction project will meet the Town's energy conservation goals far more efficiently and effectively than a program of retrofit and tune-ups of the existing plant. Following is a summary of the school's existing energy-related conditions that school staff has identified and a range of potential energy efficiency and renewable energy investments currently under consideration.

Building Envelope

One of the major causes for the schools poor energy performance is the building envelope. The building envelope includes large expanses of glass (initially single-glazed and upgraded to double-glazed in the 1980's), brick and concrete block walls with no insulation, exposed wood ceilings with minimal rigid insulation on the roofs, and concrete floors on dirt or above damp crawlspaces with little if any insulation or moisture barriers. Significant penetrations exist throughout the school that connect outside air penetrations created for the unit ventilator make up systems with the rest of the school. Piping and wiring chases provide the primary conduits of uncontrolled air movement through the building. Significant heat loss through the building envelope will continue to plague the school buildings regardless of the heating system efficiency and fuel source without aggressive building envelope upgrades.

HVAC Equipment and Operation

Primary mechanical systems in the Smith and Brooks Schools include vintage equipment that was installed when these buildings were constructed in 1949 and 1970. The original low-pressure steam boilers were converted to forced hot water sometime before 1990. Two boilers were replaced about 25 years ago, but are in fair-to-poor condition due to several floods which occurred over the past decade. Flood damage has surely degraded the energy efficiency of these two boilers. One of the four primary boilers is original equipment as are most of the existing heating, cold water, domestic hot water piping and electric wiring distribution systems.

Unit ventilators deliver heat and fresh air to most classrooms. Auxiliary radiators and fan coils deliver heat to the corridors. The unit ventilators in the Smith and Brooks Buildings have been systematically replaced 5 years ago in a maintenance initiative. Ventilation exhaust fans mounted on the roof serve multiple classrooms and pull relief air out of the classrooms that is provided by the classroom unit ventilators.

School HVAC design guidelines prepared by McQuay International for the unit ventilators it manufactures suggest that 30% to 40% of the total heating load in a typical classroom is for ventilation. It is unclear, however, how much fresh air the unit ventilators installed in the Lincoln schools provide and how much of the heating load is attributable to ventilation (and air leakage) in the Lincoln schools. Individual bimetallic and pneumatic thermostats installed in each room control the heating and ventilation in each

classroom. The current control logic opens the unit ventilation dampers for heat and outside air 100% when the room thermostats request more heat. The heat and outside air dampers close 100% when the thermostat is satisfied. The pneumatic controls modulate the heat and outside dampers (that are physically linked directly together) between 100% open and 100% closed during the day as the thermostat swings between calls for more or less heat.

The mechanical ventilation rate could be as low as 5 Cubic Feet per Minute (CFM) of outside air per person in a classroom (Recommended in the 1980 energy audit). This would be significantly lower than the current recommended ventilation rate set by ASHRAE Standard 62.1-1999 recommendation of 15 CFM per person. The schools low energy star score, however, suggests that the mechanical ventilation and air leakage rate is significantly higher than 5 CFM.

Large make up air systems with heating coils connected to the central boilers provide heat and fresh air to the two gymnasiums and the auditorium. The operation for these systems has not been confirmed yet.

Air conditioning was added to a few specialty rooms (such as computer labs) and the library as part of the most recent building addition in 1994. Classrooms are not air conditioned.

Electrical Equipment and Lighting

Lighting, Motors, and Computers are the major sources of electricity consumption. Energy efficient fluorescent lighting was installed throughout the school five years ago. No lighting controls were installed. Light levels vary significantly from one point in the school to another. Classrooms and hallways with clerestory windows or skylights have excellent daylighting and in many cases excessive daylight levels. Classrooms and hallways with low wood ceilings and large outdoor overhangs have very low daylight levels. Teachers and staff often keep shades closed over skylights or windows and the fluorescent lights on in rooms with excessive daylighting. As a general rule all lights are turned on in the morning and turned off at night when the rooms are closed for the evening.

Multiple sets of 5 to 7.5 horsepower motors circulate heated water around the buildings whenever the outside temperature drops below 65 Deg F. The motors are standard efficiency and fixed speed. Additional pumps located in trenches and crawlspaces have been installed to assist hot water circulation to classrooms furthest away from the boilers. Multiple fixed speed motors drive supply and exhaust fans throughout the school complex.

Proposed Solutions

1) Reduce the School's Thermal Load

Figure 5.1 summarizes the energy performance of eight school buildings that received energy audits recently as part of MA DOER's Municipal Energy Audit Program, and the Lincoln School. As figure 5.1 indicates the Lincoln school complex has the highest thermal energy use per square foot (blue portion of the columns) of the nine studied buildings.

The Gardner High School is a school building constructed to current codes and energy conservation standards, and provides a useful target. To reduce the energy use intensity of the thermal load in the Lincoln School down to the level of the Gardner High School will require a combination of building envelope, mechanical system, and building control upgrades. In addition the heating and ventilation operation logic will need to be restructured to match the heating and ventilation needs of the school more aggressively.

Primary fuel source selection will be another consideration for the school administration and the school board. An interesting opportunity exists, for example, to replace the old gas-fired boilers with water source heat pumps. The school sits on a very high water table that could potentially provide a source of constant temperature water for this type of high efficiency heating and cooling system. Another option under review is a wood pellet boiler system that would provide an alternative fuel source as a hedge against rising fossil fuel costs. Confounding any immediate decisions about specific thermal energy equipment upgrades, however, will be the timing and layout of any potential design changes to the school complex. Multiple energy efficiency and renewable energy options will need to be analyzed in parallel with each other as the school administration, school board, and town citizens grapple

with the preferred long term plans for the town's education facilities on Ballfield Road.

2) Reduce the School's Electrical Load

Opportunities to reduce Lincoln's electrical load include better light management with a combination of lighting control and daylight harvest management, tighter control of large motor operation schedules and possible replacement of water supply motors and large air supply and exhaust fans with variable speed controls, and good power management of the school's computer equipment. Simple occupancy controls and building structure upgrades such as fiberglass light filters for skylights and light shelves for classroom windows will provide the most durable lighting solutions. Complicated central digital control photo sensor systems have been difficult to commission properly and maintain.

Primary fuel source selection for electricity consumption will be another consideration for the school administration and school board. Several locations have been identified for solar electric generation installations on the campus and any new construction would provide another opportunity to integrate onsite solar electricity generation into the school building. Multiple measures will need to be analyzed for electrical energy as well as thermal energy in order to assess the most appropriate investments for the town's long term education facility plans.

Taken together, the proposed improvements will help reach the goal of cutting the Lincoln School thermal energy use in half. In 2013 budget terms, this could result in annual savings of $160,000.

Priority 5

Question 2: Please describe the measures the district has already taken to mitigate the problem/issues described in Question 1 above.

The Town of Lincoln is very energy-conscious, and at the recent Town Meeting passed a by-law requiring an aggressive reduction in the use of fossil fuel in the immediate future, with a target of reducing fossil-fuel consumption 80% by 2020 and 100% by 2030. To aid in accomplishing this goal, the Selectmen established a "Green Committee" several years ago, which has been actively exploring ways to reduce energy usage and increase energy efficiency. The School Committee has maintains a close relationship with the Green Committee with the express goal of fostering innovative energy management and efficiency. These measures are visible symbols of the inherent and deep-seated commitment of the Town to green principles over the past decades.

Driven by this guiding spirit, the Lincoln Public Schools has upgraded, repaired and replaced equipment throughout the years. A few examples include:

- The replacement of the two boilers in the Smith Building in 1988.
- The boiler replacement and addition of a partial energy management system during the 1994 addition project.
- The addition of storm windows and replacement of single with double-pane windows in the Hartwell Building.
- Relamping program conducted in the Smith and Brooks Buildings several years ago.
- The multi-year program to replace original unit ventilators with more modern units, completed for the Lincoln School in 2006.
- A constant program to select more energy-efficient models when replacing equipment, including the replacement of window DX air conditioners with split units handling larger areas.
- A program to rebuild hot water circulating pumps as part of a preventive maintenance program.
- Replacement of boilers and circulating pumps in the Hartwell Building fifteen years ago.

In spite of these efforts, critical barriers hinder attaining true energy efficiency. Until the building management systems are extended throughout the entire complex, the system will not function at a high level of efficiency. Until the exterior building envelope is replaced, along with the roof membranes and underlying insulation, excessive energy will be required to heat the school. These efforts are beyond the resources and scope of maintenance efforts, but are required to begin to reach the Town's goals. Typical of the type of project under consideration for the near future is the follow-on project to the 2009 replacement of the roofing system for the middle school gymnasium. The Town (through the School and Green Committees) is exploring the installation of solar power generation arrays on the newly-replaced roof. An upgrade to the previous vermiculite insulation, (which had a severely compromised low R-value), was part of the 2009 roof system replacement project and will reduce energy consumption.

Priority 5

Question 3: Please provide a detailed explanation of the impact of the problem/issues described in Question 1 above on your district's educational program. Please include specific examples of how the problem prevents the district from delivering the educational program it is required to deliver and how students and/or teachers are directly affected by the problem identified.

Both the teachers and students, and the educational programs, are affected by the problems described.

Teachers and Students

- Inability to control the temperature properly during the school year affects the attention and focus of students and teachers. The classrooms are too hot or too cold, the windows are drafty, the level of ventilation is too great or not enough, the unit ventilators are noisy and distracting, etc. These problems are exacerbated in the portions of the Lincoln School not affected by the 1994 project: the 1953-55 portion of the Smith Building and the 1963-1970 Brooks Building.
- The 5-8 principal cannot focus on her tasks during the coldest parts of the winter because the 1970-vintage window walls in her office allow drafts and air leaks.Her faculty have similar complaints.
- Inability to control the temperature and humidity properly during the school year affects the control of moisture in the buildings, leading to mold and mildew, and the suspicion of these problems.
- Periodic failure of portions of the heating system result in uncomfortable conditions, the requirement for maintenance crew intervention and/or the assistance of outside repairmen, and the uncertainty of scheduling and need for rearrangement of room assignments these problems cause.

Educational Programs

- Improperly controlled heat and ventilation sends the wrong message to young students, particularly in a town like Lincoln which has set serious and aggressive goals for energy conservation. The School Committee cannot deliver the proper conservation message.
- Funds spent on purchasing extra energy, above the amount required to reasonably run the facilities, are funds which could be spent on the direct delivery of educational programs.
- The same goes for the cost of repairs, both in dollars and the distraction from other tasks.

Priority 5

Question 4: Please describe how addressing the school facility systems you identified in Question 1 above will extend the useful life of the facility that is the subject of this SOI and how it will improve your district's educational program.

The proposed improvements will help reach the goal of cutting the Lincoln School thermal energy use in half. Extension of the energy management system into the Brooks Building and the Reed Gym, coupled with improvements to the building envelope, replacement of the Brooks and Smith boilers with an energy efficient upgrade of the correct capacity, replacement of the unit ventilators with a modern HVAC system incorporating heat-recovery mechanisms and other system improvements will allow the facility to continue forward into the 21st Century. All of these proposals lead directly to an improved educational environment that will promote increased learning.

Please also provide the following:

Have the systems identified above been examined by an engineer or other trained building professional?: YES

If "YES", please provide the name of the individual and his/her professional affiliation (maximum of 250 characters)::

SMMA team of engineers, engineering consultants to the Office of Michael Rosenfeld (OMR)

The date of the inspection:: 10/23/2007

A summary of the findings (maximum of 5000 characters)::

Please see the Existing Building Evaluations in the attached Master Plan report.attached

Priority 6

Question 1: Please describe the conditions within the community and district that are expected to result in increased enrollment.

The Town of Lincoln is undergoing a period of changeover in the demographics of the community, from a period of relatively stable family population to one of growth in school-aged children. This cycle of change has occurred several times in the past. The strong interest from the aging population in Lincoln in moving into smaller housing or extended-care facilities has already resulted in a noticeable churn in housing ownership, and a number of smaller, older homes have turned over, with young families moving into town. We anticipate this trend will continue in the next few years.

The Town expects a significant increase in the number of students attending the schools. New classroom and associated support space may be required to meet this expected increase in enrollment. As a one-school Town, the school building must have sufficient flexibility to handles cyclical enrollment shifts.

Priority 6

Question 2: Please describe the measures the district has taken or is planning to take in the immediate future to mitigate the problem(s) described above.

The Town of Lincoln added classroom space in 1994 when it completed the Link addition. Since that time, changes in programmatic needs coupled with anticipated further increases in populations have raised concerns about available space. To that end, in June 2006, the firm of Symmes Maini and McKee Associates was retained to evaluate the existing conditions of the Lincoln Public Schools located on the Ballfield Road Campus to develop an overall master plan for renovations and/or upgrades to address the space needs, enrollments, and building infrastructure needs. The results of that study provided information for this Statement of Interest.

Priority 6

Question 3: Please provide a detailed explanation of the impact of the problem described in this priority on your district's educational program. Please include specific examples of how the problem prevents the district from delivering the educational program it is required to deliver and how students and/or teachers are directly affected by the problem identified.

Additional students may require actions which will impact the educational program desired by the School. Special education services could be delivered on the gymnasium stage, as they have in the past, freeing up those special education areas for core classrooms. Spaces currently used as computer/technology labs could be taken out of service and converted into core classrooms. The class size policy could be adjusted to allow for larger classes, a prospect not desired by parents, teachers or students. Before that occurred, the School Committee would solicit funding for modular units, with all of the attendant problems.

None of these possibilities are desirable, and all of them result in some degradation of the educational program desired by the School Committee. One of the purposes of this project request is to solicit support for space in anticipation of the need, to avoid makeshift after-the fact solutions.

Priority 6

Question 4: Please provide a detailed explanation addressing the reason(s) why the district believes that enrollment growth is only short term. Please include estimates of when this short term growth is expected to begin and end, and explain the district's current plan for accommodating this growth.

The District believes that the anticipated increases are the result of a generational turnover of housing stock. While this turnover has been slowed somewhat by the economic conditions of the past four years, housing in Lincoln has always been considered desirable, and any upturn in the economy will see a strengthening of the housing churn.

Please also provide the following:

Cafeteria seating capacity: 290
Number of lunch seatings per day: 3
Are modular units currently present on-site and being used for classroom space?: NO
If "YES", indicate the number of years that the modular units have been in use:
Number of modular units:
Classroom count in modular units:
Seating capacity of modular classrooms:
What was the original anticipated useful life in years of the modular units when they were installed?:
Have non-traditional classroom spaces been converted to be used for classroom space?: YES
If "YES", indicate the number of non-traditional classroom spaces in use: 4
Please provide a description of each non-traditional classroom space, its originally-intended use and how it is currently used (maximum of 1000 characters).:

An area orginally designed to be a satellite library area for the 1st and 2nd Grades has been converted and used to deliver special educational services to small groups. An area used for teaching home economics was partially converted for middle school social studies. A space housing HVAC equipment is used for Special and General Education counselling, for students without hearing impairments.

Please explain any recent changes to the district's educational program, school assignment polices, grade configurations, class size policy, school closures, changes in administrative space, or any other changes that impact the district's enrollment capacity (maximum of 1000 characters).:

The district opened up two computer/technology spaces to support the curriculum five years ago. The district policy of full inclusion, coupled with a gradual but constant increase in the number of students requiring special educational services, has resulted in an increase in the space required for that purpose. The movement of the curriculum to a more collaborative, team-approach delivery model has increased the need for small meeting areas, putting stress on space use and eliminating non-classroom areas available for other purposes. The School Committee adopted a revised class size policy in December 2007 with the potential, with a relatively small growth in enrollment, to increase the number of classrooms which are at or above capacity.

What are the district's current class size policies (maximum of 500 characters)?:

A. Lincoln School Grades 6-8: Maximum = 24.
B. Lincoln School Grades K-5: Preferred Average Class Sizes
Kindergarten: 18; 1st grade: 20; 2nd and 3rd grades: 21; 4th and 5th grades: 22
In no case can the average class size of a K-5 grade exceed the Preferred average size for that grade plus two students.

Priority 7

Question 1: Please provide a detailed description of the programs not currently available due to facility constraints, the state or local requirement for such programs, and the facility limitations precluding the programs from being offered.

As part of the 2007 Master Plan effort, all spaces on the Lincoln Campus were evaluated on the ability to:

- Adequately deliver the Lincoln Preschool, Elementary and Middle School curricula
- Provide dedicated program space for all program needs
- Meet minimum current MSBA standards

The SMMA report states that the following spaces did not meet the evaluation criteria:

Size of classrooms in each of the school buildings.

- Some general classrooms in the Smith and Brooks, except the six in the 1994 addition, are below minimum state standards for size. Deficiencies are detailed in the SMMA report.
- The addition of four computer stations in each classroom as part of the District's technology initiatives has exacerbated the space problem.
- Classrooms lack sufficient storage for equipment, supplies, or project storage.
- The electrical distribution system in the Lincoln School is loaded, with little capacity available to support additional requirements.

Special Education classrooms and tutorial rooms

- Current needs are not met due to inappropriateness and size of spaces. An example is the special education space in the Smith Building, converted from the former 1st and 2nd Grade satellite library area. Picture 7.1 shows the crowded conditions under which these services are provided, and is only one of several similar spaces.
- Use of open spaces converted from other purposes creates privacy issues, as reported in the 2008 DESE Coordinated Program Review (CPR).
- Use of some of the space converted from other purposes is restricted. For example, a space housing HVAC equipment is used for Special Education counselling, but can be used only for students without hearing impairments because of the background noise levels.

Cafeteria and kitchen area

- The Lincoln School lacks a cafeteria with a centralized kitchen to properly support the School Committee's Wellness Policy. Providing quality lunches is difficult and costly.
- Brooks Kitchen is more than 75% below minimum state standards for a serving kitchen and lacks appropriate storage. A report from the Maguire Group in 2012 deemed the kitchen unsafe for certain operations.
- Dual use space limits use of space for physical education to allow for set-up and clean-up for lunch.
- Limited use of space for assembly.

Teacher planning spaces

- The efforts of the District to move to a teaching model which emphasizes collaborative efforts among grade and subject teams are hampered by the lack of space for teams to use for planning and assessing.
- Teachers have no dedicated meeting space to conduct ongoing curriculum planning and delivery.
- Teachers' room is used by students for individual music lessons and by parent volunteers for PTA activities.

Administrative areas

- Security and visibility to main entrance is a concern for both buildings.
- Brooks Building office is in a poor location for public access.
- Insufficient storage for equipment, supplies and records.
- Location of Physical Education instructor's office is not adjacent to the entrance of the Reed Field House. Because the building is not connected to the middle school, security and visibility to main entrance is a concern.
- Insufficient meeting spaces.

Art and Music

- Insufficient space exists to both store work in progress and display finished art projects.
- Music room for elementary school is more than 20% below minimum state standards.
- Music room for middle school has tiered seating and is non-compliant with access requirements.
- The middle school music room is too small for the current and growing band, orchestra and chorus programs.
- The inability to accommodate the band and choral programs limits the District's ability to expand this program in the desired manner.
- No spaces are dedicated to small group instrumental teaching and ensemble rehearsals.

Health Suite

- While centrally located, the Health Suite lacks close proximity to the school administration offices and gymnasiums.
- Satellite Nurse Station in Smith is small and toilet does not always function properly.

Support and storage

- Some toilet rooms are non-compliant with access requirements.
- Classrooms lack sufficient storage for equipment, supplies, or project storage.
- No spaces exist to store shared-usage technical equipment like interactive whiteboards and laptop carts.
- Supplies and equipment are stored in custodian closets, electrical and mechanical spaces, creating a fire hazard.

Priority 7

Question 2: Please describe the measures the district has taken or is planning to take in the immediate future to mitigate the problem(s) described above.

Size of classrooms in each of the school buildings. Very little can be done to rectify these shortcomings. Compact furniture was procured for the classroom computer equipment. Creative arrangements of furniture help maximize the use of available space.

Special Education classrooms and tutorial rooms. Use of screens and screening walls, and paper over interior windows, help preserve privacy.

Cafeteria and kitchen area. A retherm kitchen was constructed in an old storage room in 2007, allowing the Smith gymnasium to be used for lunch time feeding as well as the Reed Gym. This solution creates the same interference with the scheduling of physical education classes as existed in the Reed Gym. Food is sometimes transported at some expense from other District kitchens.

Teacher planning spaces. Teachers seek empty spaces for planning on an ad hoc basis, wherever available, bringing their materials and projects with them each time.

Administrative areas. Efforts are made to corral visitors into the school offices for visitor pass sign-up, but the process is imperfect.

Art and Music. Music classes are conducted on the Auditorium stage, interfering with drama activities. Drama activities, including scene construction, are conducted in the adjacent hallways. Drama classes are conducted in the orchestra area of the Auditorium. Art projects are completed in the classroom, but not displayed for public viewing.

Support and storage. Supplies and equipment are stored in custodian closets, electrical and mechanical spaces, creating a fire hazard.

Priority 7

Question 3: Please provide a detailed explanation of the impact of the problem described in this priority on your district's educational program. Please include specific examples of how the problem prevents the district from delivering the educational program it is required to deliver and how students and/or teachers are directly affected by the problem identified.

The district has moved to a problem-solving, investigation-based curriculum, weaving strands of math, science and engineering through all grade levels. In the absence of separate project space, smaller-sized classrooms create problems for teachers when the time comes to create student groups to work on projects; it becomes almost impossible to carve out space for the temporary but sole use of the project teams. Finally, the strong drive to differentiate instruction to meet each student's individual needs is hampered by the lack of breakout rooms, easily accessible from the classroom and under the visual control of the teacher.

A similar problem exists at the grade and curriculum team level. In the absence of collaboration and meeting spaces, it becomes difficult for the teams to work on projects, discuss student performance and plan future units when the available spaces are used for a wide range of activities.

Meeting the desired performance levels by faculty and staff becomes more difficult as the School Committee and district administration move the curriculum in the new directions set by the Massachusetts frameworks. Proper delivery of the desired curriculum requires space for teachers to plan, and space for students to execute projects. The classroom sizes do not provide sufficient space to meet the current requirements; additional space must be provided. The non-classroom space for team collaboration does not exist; additional meeting areas must be provided to support assessment and planning.

The absence of a cafeteria with a full-service kitchen presents several problems. Achieving the nutritional standards expected of the 21st Century school lunch programs is difficult when the meals are prepared in under-sized re-therm kitchens satellite off teaching gym spaces. Closing half of the gym teaching spaces for a significant portion of each day complicates the scheduling of physical education classes, an important part of the educational program.

The absence of a cafeteria also means that one of the varieties of teaching spaces is absent. The cafeteria would provide a flexible, large teaching space outside the times that meals are being served. It would fulfill part of the need for flexible project spaces, and could house grade-level meetings and small performance groups. It could serve as a gallery for display of a grade's art projects. It would bolster the creativity of our teachers striving to deliver a strong educational program in a variety of spaces.

Vote

Vote of Municipal Governing Body YES: 3 NO: 0 Date: 11/3/2008

Vote of School Committee YES: 4 NO: 0 Date: 10/16/2008

Vote of Regional School Committee YES: NO: Date:

REQUIRED FORM OF VOTE TO SUBMIT AN SOI

REQUIRED VOTES

If a City or Town, a vote in the following form is required from both the City Council/Board of Aldermen **OR** the Board of Selectmen/equivalent governing body **AND** the School Committee.

If a regional school district, a vote in the following form is required from the Regional School Committee only. FORM OF VOTE Please use the text below to prepare your City's, Town's or District's required vote(s).

FORM OF VOTE

Please use the text below to prepare your City's, Town's or District's required vote(s).

Resolved: Having convened in an open meeting on _____, the

_____ *[City Council/Board of Aldermen*

Board of Selectmen/Equivalent Governing Body/School Committee] of _____ *[City/Town]*, in accordance with its charter, by-laws, and ordinances, has voted to authorize the Superintendent to submit to the Massachusetts School Building Authority the Statement of Interest dated _____ for the

_____ *[Name of School]* located at

_____ *[Address]* which describes and explains the following deficiencies and the priority category(s) for which an application may be submitted to the Massachusetts School Building Authority in the future

_____

_____

_____

_____

_____

_____; *[Insert a description of the priority(s) checked off on the Statement of Interest Form and a brief description of the deficiency deemed applicable for each priority]* and hereby further specifically acknowledges that by submitting this Statement of Interest Form, the Massachusetts School Building Authority in no way guarantees the acceptance or the approval of an application, the awarding of a grant or any other funding commitment from the Massachusetts School Building Authority, or commits the City/Town/Regional School District to filing an application for funding with the Massachusetts School Building Authority.

CERTIFICATIONS

The undersigned hereby certifies that, to the best of his/her knowledge, information and belief, the statements and information contained in this statement of Interest and attached hereto are true and accurate and that this Statement of Interest has been prepared under the direction of the district school committee and the undersigned is duly authorized to submit this Statement of Interest to the Massachusetts School Building Authority. The undersigned also hereby acknowledges and agrees to provide the Massachusetts School Building Authority, upon request by the Authority, any additional information relating to this Statement of Interest that may be required by the Authority.

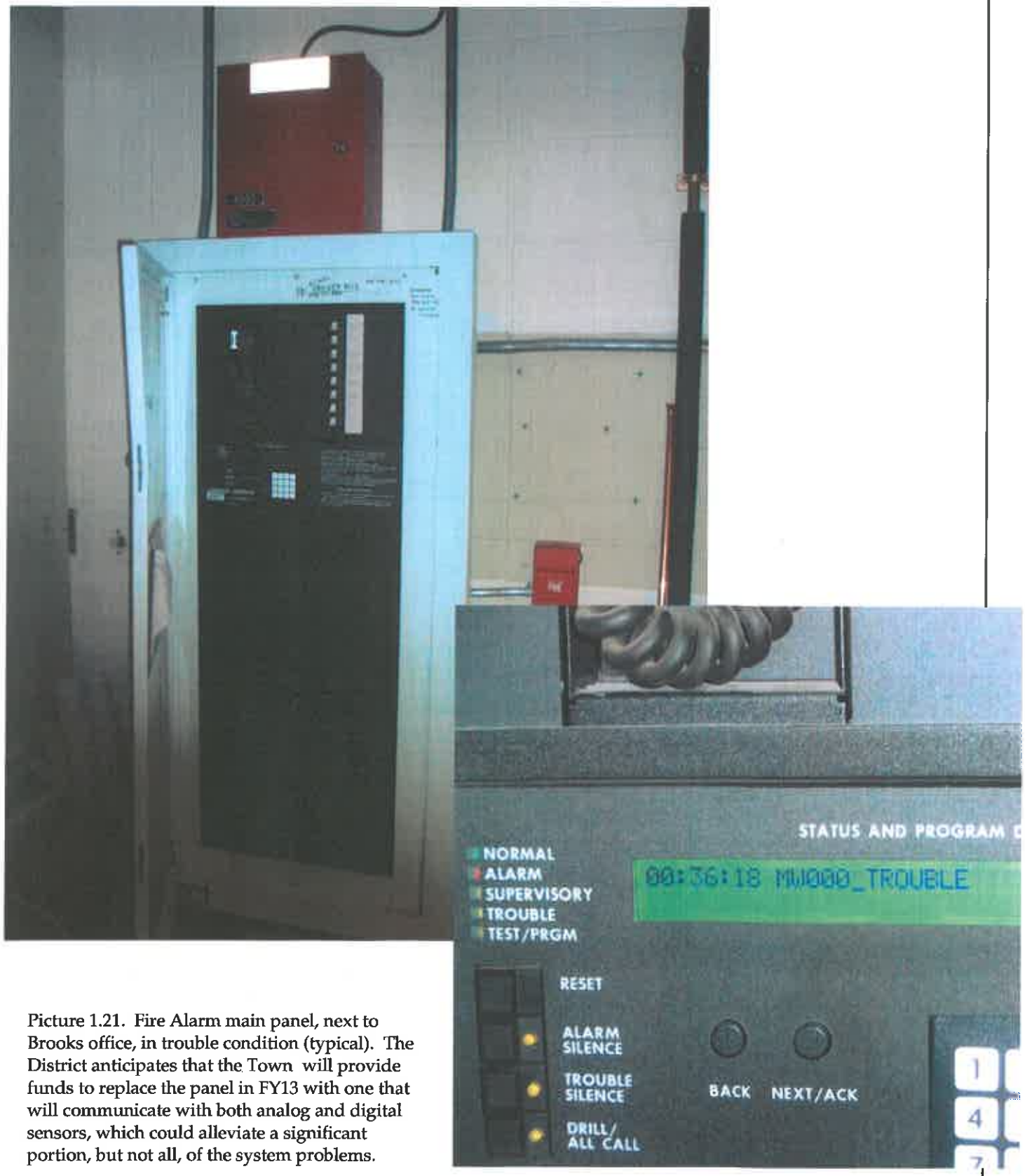
Chief Executive Officer *	**School Committee Chair**	**Superintendent of Schools**
(print name)	(print name)	(print name)
(signature)	(signature)	(signature)
Date	Date	Date

* Local chief executive officer: In a city or town with a manager form of government, the manager of the municipality; in other cities, the mayor; and in other towns, the board of selectmen unless, in a city or town, some other municipal office is designated to the chief executive office under the provisions of a local charter.

Picture 1.11. View of Smith basement boiler room, showing water infiltration.

Picture 1.12. Smith basement, showing water damage to boiler (typical)
Picture 1.13. Smith basement, detail of water bubbling up out of floor due to high water table

Picture 1.14. View of stairwell to the Smith basement taken on March 15, 2010. Water is 53 inches above the floor level.



Picture 1.21. Fire Alarm main panel, next to Brooks office, in trouble condition (typical). The District anticipates that the Town will provide funds to replace the panel in FY13 with one that will communicate with both analog and digital sensors, which could alleviate a significant portion, but not all, of the system problems.

Pictures 1.51 through 1.53. Condition of Brooks window curtain walls, showing deteriorated panels and rotting trim.

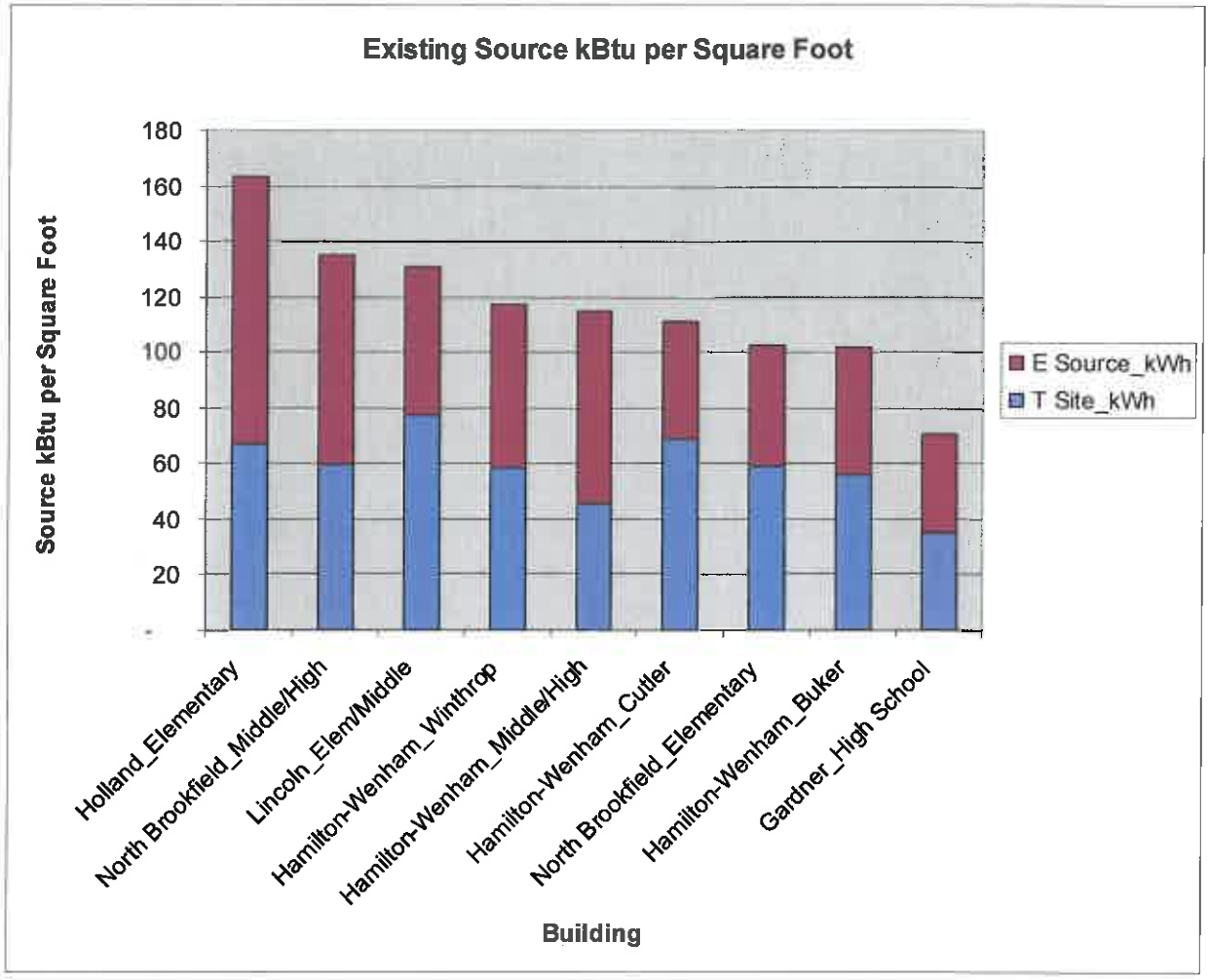


Figure 5.1 Source kBtu per Square Foot for nine Massachusetts school buildings. Blue bar shows thermal energy use per square foot.

Picture 7.1 Special Education services delivered in inadequate area.

EXHIBIT 3

February 15, 2013

Mary Pichetti, Director of Capital Planning
Massachusetts School Building Authority
40 Broad Street, Suite 500
Boston, Massachusetts 02109

Dear Ms. Pichetti:

On behalf of the Lincoln Public Schools (the "District"), we are writing to report on the work of the Lincoln School Committee and Lincoln School Building Committee since the approved project failed to garner the 2/3 majority required to pass Town Meeting on November 3, 2012. At Lincoln's request, the Massachusetts School Building Authority (the "MSBA") granted the District until February 28, 2013 to conduct community outreach in order to determine if there is a pathway forward that could gain the necessary support of the town while continuing our partnership with the MSBA.

In the letter to Lincoln from the MSBA dated December 14, 2012, the third paragraph of section B on page 2 states:

> "If the District successfully secures local support for its Statement of Interest and the MSBA's Board of Directors affirmatively votes to continue its support for the Proposed Project, the District will remain in the Capital Pipeline at the Project Scope and Budget phase. All work that the District and the MSBA have undertaken to date, including the feasibility study, would be retained and would form the basis of any potential project at the Lincoln K-8 School."

The results of our outreach have demonstrated support for the Statement of Interest ("SOI") as submitted in November 2008, although the results also made it clear that a re-vote of the project as configured and presented to the Town in November would be unlikely to receive the necessary community support. However, the District believes that an "L-shaped" configuration of the approved project has the potential to garner the necessary majority, and that this configuration maintains the program, scope and budget of the MSBA-approved project.

January 16, 2013: Site and Design Event: Knowing that site and design issues were a central concern, the SBC and SC solicited improvement ideas from the community. Community members made several proposals, from adjusting roadways and parking on the approved project, to revisiting and further developing a configuration based on two of the three options that were submitted to the MSBA in the December 2011 final evaluation of alternatives as part of the Preferred Schematic Report. Supporters of the latter proposal felt strongly about finding a solution that addressed the educational and facilities needs of the school, but that placed a clear value on preservation of the 1994 work and the site. As we read this public sentiment, it was clear that a project that changed the current configuration did not have widespread support. The proposed configuration became known locally as the "L-shaped" scheme.

The SBC and SC asked OMR to evaluate what had been proposed in the context of the current project, scope and budget, and to provide sketches of the ideas for consideration at the next set of community events.

January 27 and 31, 2013: Community "Charettes": Using the amended evaluation criteria and the concepts generated at the January 16 meeting, two identical community events were held to talk about a range of directions the Town could consider.

The "charettes" were attended by a total of about 200 people, each lasted three hours, and gave participants the opportunity to weigh the advantages and disadvantages of three (3) directions: 1) the approved project with some minor site changes involving parking and roadway locations; 2) the "L-shaped" configuration, which was presented with the intent that it would meet the stated needs of the 2008 SOI, and with the knowledge that it would require an MSBA Board vote in order to enable us to stay in the MSBA pipeline; and 3) making basic repairs outside of the MSBA process. At the end of each session was a secret straw poll, the results of which are attached. [See *Results from Community Charette Voting*]

Conclusions Drawn from Community Outreach

In addition to the above events, we also conducted a town-wide survey. We received about 600 responses, with a slightly higher response from those who had originally voted against the project. A summary of survey responses is attached [See *Summary of Survey Results*] and information taken from the survey helped to inform the following conclusions:

- The vote at the charettes was overwhelmingly in favor of proposing to the MSBA the development of an "L-shaped" configuration of the approved project that

would meet the objectives of our SOI, with the intent of remaining in the MSBA pipeline. Additional schematic design work would be funded by Lincoln.

- The charette results and information from the survey lead us to believe that bringing this configuration through full schematic design could keep the support of most of the 53% who voted in favor of the approved project and add the support of those willing to fund a large project but who objected to the demolition of 1994 work and the change to the campus green.
- Modifications to the site design of the project as voted on at Town Meeting would not be sufficient to gain the additional support needed to get a 2/3 majority at Town Meeting; and a re-vote of the project would divide the community.

Actions Taken

Throughout this process, the SC and SBC have been clear with the community that there is no guarantee of MSBA participation in funding the L-shaped configuration, as it may be considered a different project. The SC and SBC have also been clear that even if allowed to move forward, significant funds would be required to bring the L-shaped concept to the schematic design level, and that these funds would be borne entirely by Lincoln. Nevertheless, it is apparent from the growing consensus around the L-shaped configuration, that it is the right decision for the SC and the SBC to advance the proposal. To that end, the community has taken several actions:

- On February 6, 2013, the SBC and SC voted to bring the L-shaped configuration to the MSBA, as we believe it meets the MSBA qualifications for an educationally sound and fiscally responsible understanding of the Project, Scope and Budget assumptions.
- Our regular Town Meeting is on March 23, 2013, and the SC requested a placeholder warrant for additional design/OPM funds that could be voted on in the event that we are able to proceed with the MSBA.
- The Lincoln Capital Planning Committee ("CapCom") voted unanimously on February 7, 2013 to support this warrant and the presentation of the L-shaped configuration to the MSBA. (Note: In October, the CapCom vote to support the MSBA-approved project was split 5-2.)
- The Board of Selectmen ("BOS") voted unanimously on February 11, 2013 to authorize a statement supporting 1) the SBC/SC request to stay in the MSBA pipeline while we vote on additional schematic design funds and then further develop the L-shaped configuration, and 2) the process that the SBC/SC went through to ascertain the reasons for the failed vote and what revisions might be reasonably expected to gain the voters' support. (Note: In October, the BOS vote in favor of the MSBA-approved project was split with two in favor and one against.)

- The Lincoln Finance Committee ("FinCom") voted on February 12, 2013 to approve the placeholder warrant for additional design funds. (Note: In October, the FinCom voted unanimously to support the MSBA-approved project.)

Next Steps

The Lincoln School Committee and School Building Committee are requesting that the MSBA review the L-shaped configuration. It is our belief that this concept fulfills the SOI that was originally submitted to the MSBA in 2008, and is educationally and fiscally sound. Attached is a floor plan and a comparison of the concept to the approved project. Following is the set of assumptions on which the proposal is built:

- Education: The L-shaped configuration will be educationally appropriate, support Lincoln's current program, and be flexible to meet future needs.
- Statement of Interest: All the needs outlined in the SOI can be met, including additional needs that have arisen since it was submitted in 2008. Since the submittal of our SOI in November 2008, systems continue to fail. The District is committed to a comprehensive, fiscally responsible solution that meets educational and facilities needs.
- Feasibility Study: The study was very complete, including 11 different design options, intensive development with the users and SBC of educational needs and the supporting space program requirements, and a thorough review of the existing conditions. During the original Final Evaluation of Alternatives, schemes 3, 4, and 5 were the final choices that the SBC considered. The decision to choose scheme 5 was based on values of the community that were evident at that time. The revised scheme is based on additional community input about specific values and criteria that surfaced prior to and after the vote. The revised configuration uses the best and most valued parts of schemes 3, 4 and 5, retains the historical configuration of the building, including all 1994 additions that were funded with support from the MSBA, and preserves the full campus green.
- Program: The net program square footage will remain the same, except for two items: 1) the Smith two-station gym with stage would be retained in lieu of one new gym station, and 2) a satellite kitchen would be added to the program and the new café split into two separate spaces. The gross square footage will change, as appropriate, as the project moves forward into schematic design with additional user, Town and SBC meetings.
- Scope: The original scheme was a renovation/addition project with approximately 38% addition. The revised scheme renovates more, retaining more of the MSBA-subsidized 1994 renovation, to allow for a smaller new addition. The revised configuration retains the Grades 6-8 educational spaces in the Link, Brooks and Reed buildings in relatively the same location as the original scheme.

- Budget: Based on the survey and community charrettes, the Town requests that we continue to work towards reducing the project cost. Understanding that market conditions are showing higher costs in many of the trades, and escalation will be a factor, we feel we can save on site and demolition costs with this revised scheme. In addition, the District will work with the design team to continue to make appropriate choices on reuse and repair vs gut renovation of the southwest corner of Smith, including retaining work from 1994, with the goal of being at or below the original schematic design project costs.
- Schedule: Understanding that a revised schematic design needs to be prepared for an updated PSBA, the original construction schedule of breaking ground in the summer of 2013 will shift out a year, but remain essentially unchanged. Pending positive support at Town Meeting for additional design funds, the Town is dedicated to moving forward without further delay.

Based on the above, the District believes the project is the same as the original, albeit with a different configuration of spaces, and that a new SOI and feasibility study would result in the same understanding of needs and range of solutions.

Knowing that pursuing this direction will incur additional cost to the Town, the District is sensitive to the fact that it will be difficult for citizens to make an informed vote on additional design/OPM funds without information from the MSBA as to whether Lincoln will be able to stay in the funding pipeline. To that end, we are seeking a response from the MSBA as soon as possible after the receipt of this letter. If the alternate concept allows Lincoln to remain in the pipeline, the District requests being added to the March 20, 2013 Facilities Assessment Subcommittee agenda in order to seek feedback on the L-shaped configuration.

In the December 14, 2012 letter to Lincoln from the MSBA, section A on page two states,

> "If the District determines as a result of its community outreach ***that a different project*** from the one proposed and reviewed by the MSBA is the preferred direction, the District will have to submit a new Statement of Interest and await a second invitation from the MSBA Board of Directors to enter the feasibility study phase of the MSBA's process."

In the event that the L-shaped concept is not deemed by the MSBA to be within the parameters of the scope, budget or schedule of the approved project, the District seeks to receive this information as soon as possible after the receipt of this letter. The District requests an opportunity to meet with the MSBA to discuss the merits of the L-shaped

concept and its alignment with the parameters of the approved project prior to a final decision by the MSBA.

We believe that the District's collaborative efforts with the MSBA over the past 2 1/2 years have led to a thorough understanding of the educational and facilities needs of the Lincoln School, and that the recent process has resulted in a reconfirmation of the original SOI. In addition, we value the considerable investment of the MSBA's and the Town's time and resources into the project thus far. We are sure you agree that it is in the best interests of the Town and the MSBA to bring this project to fruition. We are certain that a new SOI and process would bring us to our current conclusion. Therefore, we request that the District be approved to move forward with the current SOI and develop the schematic design for the L -shaped concept.

On behalf of the citizens of Lincoln and the Lincoln Public Schools District, we express our gratitude to the staff and the Board of the MSBA for their time, guidance and collaboration over the past four years. We look forward to continuing our work together.

Sincerely,

Dr. Rebecca McFall
Superintendent

Jennifer Glass
Chair, Lincoln School Committee

Gary Taylor
Co-chair, School Building Committee

Summary of Lincoln Outreach Events
November 2012-February 2013

November 8, 2012: School Building Committee ("SBC")/School Committee ("SC") Meeting: Understanding Vote Results/Public Comment

November 13, 2012: SBC/SC Meeting: Public Comment and Request for Support from Lincoln Finance Committee

November 15, 2012: Letter submitted to the Massachusetts School Building Authority ("MSBA")

November 20, 2012: SBC/SC Meeting: Preparation for December 5, 2012 meeting with the Lincoln Planning Board

December 5, 2012: Meeting hosted by Planning Board to discuss process

December 14, 2012: Letter received from the MSBA

December 18, 2012: SBC/SC Meeting: Review of response from the MSBA; Next Steps

January 9, 2013: SBC/SC Workshop: Guiding Principles/Evaluation Criteria

January 16, 2013: SBC/SC Meeting: Soliciting Site/Design Ideas from the Community

January 17, 2013: Lincoln Finance Committee community presentation of financing scenarios related to a school project

January 18-February 1, 2013: Town-wide Survey

January 22, 2013: SBC Meeting: Planning Community Charettes

January 27 and 31, 2013: Community Charettes

February 6, 2013: SBC/SC Meeting: Results of Outreach/Planning Response to the MSBA

Community Charette Voting Results
January 27 and 31, 2013

Which could you support?			**Is your support dependent on state funding?**		
	# of Votes	**% of Votes**	**YES**	**NO**	**No Answer**
Original MSBA-approved proposal with site changes	7	4.00%	7	0	0
Alternate L-shaped proposal	108	60.0%	40	47	21
Either proposal	49	27.00%	33	13	3
None of the above: Develop a repair approach	15	8.00%	1	10	4
TOTAL	179		81	70	28

Summary of Lincoln Outreach Events
November 2012-February 2013

November 8, 2012: School Building Committee ("SBC")/School Committee ("SC") Meeting: Understanding Vote Results/Public Comment

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EXHIBIT 4

Massachusetts School Building Authority

March 12, 2013

Dr. Rebecca McFall, Superintendent
Lincoln Public Schools
6 Ballfield Road
Lincoln, MA 01773

Re: Lincoln Public Schools, Lincoln K-8 School

Dear Dr. McFall:

The Massachusetts School Building Authority (the "MSBA") is issuing this letter in response to the Town of Lincoln's (the "District") letter dated February 15, 2013 indicating the results of the District's recent community outreach associated with the Lincoln K-8 School building project. Although the proposed project failed to secure project funding at the Town Meeting on November 3, 2012, the District's letter indicates that there is support to proceed with a building project at Lincoln K-8 School. However, the project as proposed in the letter is different from the one proposed previously by the District and reviewed and approved by the MSBA's Board of Directors.

As indicated in the MSBA December 5, 2012 letter to Lincoln and confirmed in the MSBA's conversation with the District last week, if a different project was determined to be of interest to the community, then a new Statement of Interest would need to be filed and the District would need to await a new invitation from the MSBA to enter the feasibility study phase of the MSBA's process. If the MSBA Board of Directors were to issue a new invitation, the MSBA would require the District to start the process at the beginning, with the selection processes for an Owner's Project Manager and Designer, as well as a new feasibility study, and to perform a new feasibility study and schematic design for the Lincoln K-8 School without financial participation from the MSBA for these phases of the work.

If you have any questions, please do not hesitate to contact me at 617-720-4466.

Sincerely,

Mary Pichetti
Director of Capital Planning

40 Broad Street, Suite 500 • Boston, MA 02109 • Tel: 617-720-4466 • Fax: 617-720-5260 • www.MassSchoolBuildings.org

Cc: Legislative Delegation
D. Noah Eckhouse, Chair, Lincoln Board of Selectmen
Timothy S. Higgins, Lincoln Town Administrator
Jennifer Glass, Chair, Lincoln School Committee
Gary Taylor, Chair, Lincoln School Building Committee
Buck Creel, Administrator for Business and Finance, Lincoln Public Schools
Dan Tavares, Owner's Project Manager, Skanska USA Building, Inc.
Jeanne Roberts, Designer, OMR Architects, Inc.
File: 10.2 Letters (Region 4)

EXHIBIT 5

MEMORANDUM

To: SBAC Members

CC: Jennifer Glass, Sarah Cannon Holden, Becky McFall

From: Steven P. Perlmutter

Date: August 22, 2013

Subject: SBAC Prioritization of Work Identified in the Most Recent Statement of Interest (Rev. August 22, 2013)

This memorandum summarizes the Committee's conclusions, to date, on what level of priority each item of work identified in the most recent Statement of Interest ("SOI") should receive. I am providing this prioritization list to the Committee at this time since we recently have completed our review of the SOI. It identifies three levels of priority: high, medium and low. It also includes a category for items on which the Committee could not, at this time, identify a level of priority. The order of items within each a priority category is arbitrary i.e. it does not reflect a level of priority within a category.

It must be emphasized that the placement of a need in the middle or low priority categories does not mean that this work is not important to the Lincoln Public Schools. All the work on this list is important to the schools. At this time, it is unclear whether the State will be willing to work with the schools on a school building project. It is also unclear what kind of school building project the members of the Lincoln community will support if the State refuses to work with the Lincoln schools. In light of such uncertainty, the Committee thought it prudent to try to establish some priorities for its work.

The Committee discussed each of the items in the SOI at its July 17, July 24, August 7 and August 14 meetings. The text below is taken virtually verbatim from the minutes of those meetings. The meeting from which the text was taken is indicated by a date at the end of an entry (e.g. 7/17/13). On occasion, you will see my initials with a date after them (e.g. SPP 7/17/13). This text,

which is italicized, comes from my personal notes of the meeting on the date indicated. I only included these comments in circumstances where I thought they were needed in order to fully elucidate the reason for the priority placement.

The priorities of the Committee, to date, as reflected in this memorandum, are subject to change based on the further deliberations of the Committee. It is also possible (although I would like to think this did not happen) that the Committee inadvertently missed something of importance during its review of the SOI.

High Priority

Dual use of gym for lunches - Supt. gave high priority to have separate gyms and cafeteria(s). Community use is a big consideration here, as well as better use of the gyms. Gr 2-3
Question arises here: separate cafeterias for Brooks and Smith? Cafeteria "magnet" adds good combination of single central kitchen, service area, community-use(s) co-located with (Brooks) gym. Renovation options have clearly require different version of solutions. Two cafeterias would help travel time for the two schools. Extra, perhaps 3, serving lines will alleviate the problem of the short lunch time assigned (25 minutes). Difference in cost among the pathways needs to be brought forth early for better understanding by the public. **7/17/13**

Reed Gym - needs connection to main build this is a high priority, because of questions of total building security, student issues like travel control and time and the present outside dirt issues. **7/17/13**

-Pre-cast panels in the gym. The Maguire Report says that these should be replaced immediately due to the safety risk. Even any repair option should take this into account. Should be on the list of items to address in any project. **8/7/13.** *The committee is in no place to second guess Maguire on the need for this to be attended to immediately by the schools.* ***SPP 8/7/13***

IMC or Library building - not good instructional space as is. It needs better configuration to be a good instructional space.
Broad range of needs in K-8 should be reflected in possible interior arrangements. Note that within a few years "computer labs" will no longer be used, digital instruction will be individualized, within CRs or IMC e.g.

The "Library" should be the most exciting space on campus. Note existing and future changes in teaching because of digital advances must be planned for, e.g. in art production and videos.
The 1996 library design had vey different goals -- what is the future going to bring?
Should the IMC space be a magnet space or should the activities be dispersed to the classrooms -- that extreme does not make sense. The present area just seems too big, needs useful reconfiguration, with the re-gained space appropriately assigned or subdivided.
Again, this should become exciting space, primarily suited to teaching goals. **7/17/13**

Break-Out Rooms – It is clear that one of the Superintendent's high priorities is the need for break-out rooms in classrooms. **7/17/13.**

Classrooms Equipped for Special Need Students – This is a high priority of the Superintendent. Each grade should have this type of equipment. The question of how many classrooms in each grade should be so equipped requires further analysis. **7/17/13**

Building Envelope - Improvements here are also a high priority: walls, window areas, roofs. Some of the roof structures may not support the extra load of, e.g., heavy snow, or new solar panels, if they are part of any project. **8/14/13**

-Exterior window walls -- double glazing has failed, insulation plus wood has rotted, areas of single glazing. Envelope issue that should be a top priority. Note the attendant energy-savings advantage of improving exterior walls, along with any improved HVAC system -- these together become a top priority therefore. **7/24/13**

- Roofs-Roof leaks, deteriorating insulation under the roofing, etc. -- half of the roofs were installed in 1988, half in 1994. New sloped insulation will entail re-roofing and some restructuring: this is a high priority as an envelope issue and to improve insulation for energy efficiency, but just what are the costs? Waiting for membrane and shingle failures does not seem wise for the already recommended replacements. **7/24/13**

High Energy Use in Lincoln Public Schools - Buildings overall made should be more energy efficient. The Town has adopted Energy 2030, so this should be considered as part of the Town's strategy for all its building,

especially since the school complex is the single largest energy user for Lincoln. Committee gives high priority to energy efficiency. **8/14/13**

Electrical Equipment and Lighting - Lighting everywhere should be good -- again as a high priority -- however that is achieved. This problem should be easier to fix than the HVAC problem. Controls again should be operable/adjustable in each classroom. **8/14/13**

-Brooks switchgear replacement -- actually a plan is being developed for a quick emergency re-placement in case of failure. Switchgear or boiler parts "replacements" are not off the shelf items -- quick fixes may require several weeks of down-time. Distribution panels must be addressed at the same time. All these issues must be designed together, with the new loads that will come with power-needs changes in HVAC, lighting, program changes. **7/24/13.** *Buck Creel and Michael Haines described the priority to be "urgent, high."* ***SPP 8/7/13.***

HVAC Systems - The technology library and offices are the only A/C in Smith. Air quality, noisy and inefficient unit ventilators, and good controls HVAC controls remain the prime issues -- perhaps the one needing most attention probably is the unit ventilators, which are noisy, erratic, controls are out-dated. Are central systems better than individual area ones? Cooling is not the main benefit desired -- ventilation and air quality improvements are, especially important in the tight building-envelope design necessary to reach energy efficiency and code requirements. Becky stressed the importance of improvements of these for learning effectiveness. Air quality and ventilation improvement are therefore high priority, however that can be achieved. Individual room control is very desirable, including operable windows. **8/14/13**

-Moisture and mold conditions: how widespread will they remain, e.g. with A/C? Note we have little carpeting now, a chief offender. This all seems related to ventilation and climate control i.e. the entire HVAC system, and any improvements have educational benefits attached. With the inter-related HVAC, electrical and envelope issues we should pursue possible State assistance. These issues are of course all of concern in meeting the educational environment we desire. **7/24/13.** *The Superintendent identified this as a high priority.* ***SPP.***

Security - Staff should be able observe main entrances, plus security concerns remain in not having a connection to Brooks: The entire security structure needs to be addressed together -- CR exterior doors (safer with or without these?), visibility, and cameras. How high a priority is this? Fairly high. How

difficult to develop a good perimeter system? Air-lock requirements for exterior doors may complicate any solution. So far so-called security problems have historically been a low occurrence issue. Conflicting on-site travel flows exist -- traffic volume, bus vs. cars, drop-offs, pathways. **7/24/13.**

Mid-Level Priority

Music and Art Rooms - both too small, well under State standards.
A variety of spaces (5?) is needed for a good music program. Sound separation is a serious consideration here. Separate storage for these two programs is a big need, bigger for art.
How valuable are art and music programs to Lincoln? What can we afford? Altogether, these are not as a high a priority as the cafeteria. **7/17/13** *As we move forward, we should look at the art room storage problem. The music room is not a big problem.* ***SPP 7/17/13***

Low Priority

Classrooms: K + "several others" smaller than State standard - bring them all up to standards, though this was not high on Supt.'s priority list - with agreement by this Com. since Lincoln's number of pupils per classroom are typically low. Does state require to have all CRs at min. standard?
Should we consider one among the L-shaped pathways to be developed not to bring all of these up to State min., e.g. if we are rebuilding the Smith section. **7/17/13**
This is not a high priority and need not be addressed now. The larger deviations in some rooms in Smith can be addressed in the context of any work to be done at Smith. ***SPP 7/17/13***

Teachers have no dedicated meeting / work /planning space(s) - this is not a high priority need as a dedicated space, though it has merit e.g. for parent-teacher conferences and for teacher development-training sessions. This need could easily be filled through an open function (multi-use) room or in part of the cafeteria or the library space, though not as well.**7/17/13.** *This is not a high priority but has merit. We should keep this issue in mind as we continue our work.* ***SPP 7/17/13***

Engineering and technology - need reconfiguration esp. middle school, perhaps more storage and space apart from the science classroom -- probably not a high priority. **7/17/13.** *Not on Superintendent's list of priorities. Middle school has good space for this.* ***SPP 7/17/13***

Health suite - not considered a priority by the Com. **7/17/13**

Locker rooms - do they need re-design? Repurpose this area? **7/17/13**

Earthquake and Snow-loading Resistance- Buildings appear not to be up to current standards in earthquake resistance and snow loading design. Consensus is obviously to tend to these, if we go "over the threshold" but not within any repair option that can stay under the threshold. These two areas seem to be "low" in typical evaluations by public school building committees. **7/24/13.**

Septic system/field - operating under a variance -- we have only a small height above groundwater level to bottom of septic field. In our operating variance for the current system, we have a limit on total flow. We pump up to a extra raised area near the tennis courts to alleviate this problem.
Will an expanded kitchen void our variance? Probably the increased load will not be significant enough. **7/24/13.**

Asbestos-containing materials in building - floor tile (VAT), ceiling tiles, pipe insulation. Typically not a problem unless physically disturbed. Maintenance has already removed something like 12,000 sf of VAT tiles, approx. 1,000remaining. Asbestos removal should be addressed as part of any renovation project where the VAT remains. **7/24/13**

Water Quality - Water samples are showing good results from chemical treatments. Copper pipe replacements also can be handled in individual areas for water-fountains, e.g. So the question of the need to use bottled water has been solved, or if not, would probably be solvable. Pin-holing is probably a bigger problem in the pipes. Total replacement of pipes does not appear to be necessary. **7/24/13**

Committee Could Not, To Date, Establish A Priority

Accessibility questions - Consensus is that these need to be faced, whether or not we trip the compliance threshold (construction in excess of 30% of assessed value -- approx. $7 million). **7/17/13**

- However, 7/24/13 minutes state as follows: School policy is to be completely accessible. Probably a low priority, but any project we do must be HC complaint. **7/24/13.** *SPP – but what about doors to the outside that are too narrow*

for HC persons to use in the case of an emergency? Because the minutes seem to be contradictory on this issue, I have placed this in this category for now.

Groundwater is a problem on campus - which is entirely low-lying (high water table).Water rises up through cracks in the slab -- hence e.g. boiler problems, though pumpshave been installed and help considerably -- plus dampness.
Noted: these problems were identified in 1994, not fixed then.(Buck + Mike and Michael joined the table at the Committee's request, as "expert witnesses".)3 added sump pumps have been installed, the situation has improved though not totally solved. Problem gets serious when there is a flood (2010 -- 54") or high water: electrical, corrosion, boilers could break.

Could Bentonite (clay) wall-and--lining be installed, as it has been frequently in Boston?(e.g. elev. pits).Perhaps this could be at least a temporary fix, before the construction project is finished. On-grade new boiler room seems the better permanent solution and investment, in addition to helping us face the energy efficiency the Town wishes to reach by 2030.

General question for the Committee: should we be fixing the problem(s) or should we choosing the more permanent solutions? All current "problems" should be considered together, not individually, develop a strategy.
We should discuss the issues, determine the serious ones -- e.g. this water-entry one --make a recommendation but not reach for a specific solution. **7/24/13.** *This is a priority if the town builds. If the town does not build, this is in the low to medium priority category. It is unclear how this should be handled if the town does not build.* ***SPP 8/7/13.***

Sprinkler system and doors to the outside - A sprinkler system is needed -- a threshold issue ($6M) -- but also a health and safety issue. Does the Committee give priority to a full new sprinkler system? Can sprinklers save damage, act beyond children's and the public's safety? Can they cause problems and damage in going off "accidentally"? Note that exterior doors perhaps should be kept if no sprinklers are to be installed, as quick exiting from CRs. **7/24/13.** *If Code upgrades are required, this is mandatory and therefore a high priority. The committee could not decide whether this would be a priority in the absence of a mandatory Code upgrade. Some committee members thought it would not be a priority in this circumstance because there are two means of egress in many rooms. Other members of the committee disagreed with this analysis because, among other things, there was concerned that some doors are too narrow and not handicapped accessible in the case of an emergency. Some committee members thought the classroom doors to the outside could be a safety issue. Others*

*thought that we do not want to build a prison and that the standard we should be using should not be the most unsavory person who might surface in the community Other members of the committee thought that the doors from the classroom to the outside should not be eliminated because of the town value of trying to meld the outside environment with the inside environment. .**SPP 8/7/13.***

Travel Flow - Conflicting on-site travel flows exist -- traffic volume, bus vs. cars, drop-offs, pathways, lighting -- all should be considered in any renovation project. These are design issues, should be addressed as such -- in L-shaped scheme we would keep essentially the current general layout. Perhaps Smith drop-off should be changed. Note that private car drop-offs are high, probably growing. **7/24/13.** *The committee did not give this a priority at this time because it believed it premature to do so before a decision is made by the School Committee about what work, if any, will be done on the school campus.* **SPP 8/7/13**

EXHIBIT 6

Panel rejects request for military base closings

By RICHARD LARDNER and DONNA CASSATA / Associated Press / June 11, 2013

WASHINGTON (AP) — Another round of military base closings has hit a dead end.

The Senate Armed Services readiness subcommittee on Tuesday approved legislation rejecting the Defense Department's request to shutter installations and facilities in the United States that are no longer needed as the military branches cut the number of troops in uniform.

The House Armed Services Committee last week also said "no" to more base closings, and even took the step of adding a provision barring the Pentagon from even planning for another round.

The refusals by the House and Senate effectively ensure that a final defense policy bill approved by Congress for the 2014 fiscal year won't give the department permission to close excess bases even as lawmakers clamor for ways to cut the federal deficit.

Lawmakers also have rebuffed the Defense Department's attempts to rein in spending on the costly military health care program by increasing enrollment fees for military retirees and their dependents. Pentagon Comptroller Robert Hale warned during a separate congressional hearing Tuesday that the military would have to cut about 25,000 troops to offset the expense if it can't slow the growth of the health care program by 2018.

Rejection of the base closing request in the House defense policy bill along with several other provisions limiting President Barack Obama's authority prompted the White House to threaten a veto of the measure.

Specifically, the White House complained about provisions that would restrict the president's ability to transfer terror suspects from the detention facility at Guantanamo Bay, Cuba, and to implement a nuclear reduction treaty with Russia.

On base closings, Defense Department leaders have argued the troop drawdown will leave them with more installations than they need. The money saved by closing unused facilities can be spent on training and other essential operations.

But military installations are often the economic lifeblood of the communities that surround them and any discussion about shutting bases is a political hot button.

Sen. Jeanne Shaheen, D-N.H., the chairwoman of the readiness subcommittee, said the upfront costs of starting a new round of closures are too high.

The Pentagon's budget for the 2014 fiscal year sought $2.4 billion over five years to cover the initial expense of base closings. Decisions on which bases to close would start to be made in 2015 and implemented a year later, according to the military's plan.

But Sen. Kelly Ayotte, the readiness subcommittee's top Republican, said the last round of base closings in 2005 ended up costing $13 billion more than estimated.

"To put that in perspective, that's three fewer nuclear submarines or seven fewer destroyers for our undersized Navy fleet," Ayotte said

To help offset the negative impact of the automatic spending cuts on the readiness of the armed forces, the readiness subcommittee trimmed $1.3 billion from unspecified military construction projects and another $400 million in "excess" spending for operations and maintenance. The $1.7 billion total is being "put back into critical readiness accounts for all the services in an attempt to restore flying hours, steaming days, unit training and essential depot maintenance in our hangars and shipyards," Shaheen said.

The automatic cuts, known as sequestration in Washington speak, kicked in March 1 and are the result of Congress' failure to trim the deficit by $1.2 trillion over a decade.

The Pentagon must reduce its 2013 budget by roughly $41 billion by the end of the fiscal year on Sept. 30. The reductions have forced the military to furlough hundreds of thousands of civilian workers and scale back essential training and maintenance programs.

If sequestration remains in effect, the Pentagon likely will have to cut $52 billion from its 2014 budget to meet the numbers dictated by the law, Defense Secretary Chuck Hagel told the Senate Appropriations defense subcommittee.

"And, if there are no changes, continued sequestration will result in roughly $500 billion in additional reductions to defense spending over the next ten years," Hagel said.

Separately, the military also has to absorb a $487 billion reduction in defense spending over the next 10 years mandated by the Budget Control Act passed in 2011.

Elsewhere on Capitol Hill Tuesday, the chairman of the Senate Armed Services Committee pushed back against calls by House Republicans to build a missile defense site on the East Coast of the United States to expand the country's defenses from a potential ballistic missile attack by

Iran. The House measure would require the site at a yet-to-be-determined location to be ready by 2018. Continued...

Panel rejects request for military base closings

By RICHARD LARDNER and DONNA CASSATA / Associated Press / June 11, 2013

Sen. Carl Levin, D-Mich., released a June 10 letter from senior U.S. military officials in which they wrote that there was "no validated military requirement" to establish a site on the east coast. Vice Adm. James D. Syring, director of the Missile Defense Agency, and Lt. Gen. Richard P. Formica, commander of the Joint Functional Component Command for Integrated Missile Defense, wrote that there are less expensive alternatives to a proposed East Coast site, which has been estimated at costing at least $3 billion.

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