Needham Public Schools

Article 26 Annual Town Meeting: Appropriate for Feasibility Study
Pollard Middle School

1. Why do we need this project?

The Pollard School, which was constructed in 1956 and renovated in 1968 and 1992, is in need of a comprehensive renovation/addition project. The intended scope of the project includes upgrading and replacing sections of the school that are obsolete and/or deficient according to current codes, as well as expanding and renovating the core educational spaces, which are undersized for the student population and in appropriate to the content area being delivered.

Some deficiencies include:

- Undersized classrooms throughout the building
- Inadequate space for science and performance arts
- 10 Modular classrooms are beyond their useful life and in severe disrepair
- Special education program spaces inadequate
- Handicapped accessibility in some areas, including the lecture hall
- Building systems, including electrical and HVAC, either non-existent or requiring replacement
- Doors and window systems failing
- Inadequate office, conference and meeting spaces

The Pollard School has been the subject of numerous facilities plans and studies over the years, including the 2020 School Master Plan Study (Dore + Whittier), the 2014 Facilities Master Plan (HKT), the 2006 Facilities Master Plan (DiNisco), and the 1998 Town-wide Comprehensive Facilities Study (Kaestle Boos.)

2. Which aspects of the Pollard School are obsolete and in need of replacement?

Although the Town has undertaken significant repair and maintenance of the Pollard School over the years, all of the Town Master Plans agree that the building is in need of a comprehensive upgrade, due to the building's age (32 – 68 years), deficiencies in many of the building's systems, and poor energy performance. As examples, the HVAC system must be totally redesigned and replaced to meet contemporary specialized energy code and the Town's stated goal of meeting net zero emissions by 2050. Portions of the heating system are original to the building and there is no central cooling system in place. The HVAC system requires constant repairs to maintain the design airflow, and the control system, which was installed in 1995, is past the end of its useful life. Portions of both the electrical and plumbing systems also are original to the building and are in need of replacement. Only about 40% of the building is sprinklered, which is less than the 100% threshold identified in the current fire protection code. Additionally, although the building structure and envelope are sound, renovations or additions to the building would need to conform to contemporary seismic and snow load criteria. Improving the thermal performance of the building, also will require insulation to be added to the walls, windows and roof. Finally, the ten modular classrooms, which were installed in 2002, are now at the end of their useful life.

These classrooms are necessary for the school to accommodate the current population of students and must now be replaced with permanent construction.

The Pollard Middle School will be required to bring all of the existing envelope, structural, HVAC and life safety systems up to contemporary building and energy codes with a major renovation project that exceeds 30% of the existing value of the building.

3. Is the Pollard School undersized?

Yes. Core academic spaces are about 23% smaller than the MSBA space summary guidelines for the current enrollment. The building was designed for 45 classroom spaces, which vary from 553-872 sf. As enrollment has increased over the years, and the educational program has changed, the 45 classroom spaces have been converted to 40 regular education classrooms for core subject delivery and 22 classrooms for elective programs. These elective spaces include use of the lecture hall, Auditorium, Cafeteria, Media Center, computer labs, music lab and modular classrooms. Due to scheduling and physical space limitations, current class sizes are as high as 24 students in math and English, and 25 students in social studies and science. Elective class size maximums are even higher at 31 for art, 32 for music, 25 for technology, 27 for PE/wellness, and 23 for world languages. The science classrooms (661 sf-1004 sf) are all smaller than the MSBA standard of 1,440 s.f. and, as a result, sometimes cannot accommodate sufficient lab tables for all students. In addition, many elective classes are held in shared spaces. For example, orchestra classes are held in the Lecture Hall; art classes are offered in a science classroom; data science and health classes are held in open social studies or English classrooms, and other classes are placed in the Cafeteria, Library or Auditorium, where applicable. Finally, the school lacks sufficient and appropriate spaces for the Special Education and English Language Learner (ELL) Programs, as well as Guidance. Special education students often share learning center space, the Intensive Learning Center is undersized, and there is no dedicated ELL space for English language instruction.

The gyms, Media Center/Library, Auditorium, locker rooms and Adaptive Physical Education (PE) Center are also undersized for the student population. The gyms are both smaller than the 6,000 s.f. MSBA guideline, and lack sufficient space to fully accommodate the concurrent use by multiple sections of students (as is required by the schedule), with negative implications for student instruction. The Media Center is about half the size of the MSBA guideline, and the Auditorium is not large enough to accommodate a grade level, or the whole school for any activity. The locker rooms are undersized and no more than 20 students can occupy the Adaptive PE space, which is smaller than many classes of 25+ students.

To accommodate the current student population in the Cafeteria, the school has implemented split lunches. As a result, Pollard cannot work on a bell system. Teachers must rely on personal clocks for guidance. Additionally, the two main staircases and narrow hallways are heavily congested during passing times. Although the Pollard allows 3-4 minutes for passing between classes, students are often late, due to the congestion and lack of a bell system.

Finally, the school lacks sufficient administrative spaces for staff. The administrative offices occupy a small space formerly allocated to the Media Center. The school lacks appropriate space for curriculum meetings, resource materials, and individual offices for literacy specialists and curriculum coordinators. Due to shared classrooms, teachers also do not have a dedicated space for their preparation time and often use the hallways, a table in the café, or the library, if available, to plan, develop and assess students. The lobby space is often used as additional work and copy layout space. Finally, most of the administrative

offices that do exist, as well as the two small conference rooms used for meetings, are internal to the building and lack natural light.

4. How do the building's issues detract from the delivery of Pollard's educational program?

To mitigate the lack of appropriate and appropriately-sized classroom space for core curriculum, the Pollard School has been required to increase class size, subdivide existing space and/or modify the existing curriculum, to the detriment of the educational program. Given the lack of additional classrooms, teachers have modified the existing curriculum, particularly science experiments, to meet the existing facility constraints. Units are often designed with safety and facility conditions in mind, rather than promoting student interest or delivering the middle school programming. Similarly, most teachers have limited the type and scope of student projects to those which can be accomplished within the limited classroom and storage space. As enrollment increases, the quality of instruction will be further eroded as more students are squeezed into these spaces or as additional standard classrooms are converted into shared spaces.

Additionally, non-traditional spaces have been used for specialized instruction, which has limited the educational program in other ways. For example, the lack of a dedicated space for ELL instruction compromises the type of focused and individualized instruction that our multilingual students require. Additionally, due to the lack of available space, special education spaces are shared or public, thus compromising the program and confidentiality of our students.

Common spaces such as the Pollard Auditorium, the gymnasiums, the lecture hall, the Library, the Fitness Center, and the Lecture Hall are not large enough to accommodate a whole grade for any activity. Additionally, these spaces are scheduled at 80-100% usage every day, which causes shared spaces and congestion/ overcrowding through the building.

The inadequate space available for curriculum instruction also has compromised the professional development program for teachers. The teachers who participate in professional development workshops either are squeezed into too-small spaces, or rotated through a series of venues, neither of which are conducive to promoting effective teacher learning. Additionally, the limited available space constraints Needham's plans to increase collaboration among the professionals, as there are no teaching collaboration or workspaces.

Finally, the HVAC deficiencies, leaking roof and plumbing problems, lack of ADA compliance, and sprinkling systems negatively affect the educational program. The HVAC system, which has had multiple issues over the years, including the loss of heat and air conditioning on school days, and inadequate ventilation, has made teaching and learning even more difficult. These issues have resulted in staff grievances, school cancellations, and the relocation of classes. The constantly leaking roof has led to overcrowding, shared spaces, and mildew and mold concerns, especially with our library books. Finally, although the student (larger) restrooms were updated in the past five years, the private restrooms, which are deemed *All Gender,* have not been updated in more than 40 years. Plumbing issues are a constant in each of the restrooms, causing congestion for staff and students in the few restrooms that do work.

5. How did we get to this stage of the project?

On December 13, 2023, the Massachusetts School Building Authority (MSBA) invited Needham's Statement of Interest (SOI) for the Pollard Middle School into MSBA's Eligibility Period. This invitation is not a guarantee that MSBA will fund a Pollard project; rather, it is an important first step in the MSBA's process, the successful completion of which could result in a partnership with MSBA.

Moving forward in the MSBA's process will require the District to successfully complete what is known as the “Eligibility Period,” and for the MSBA Board to vote to invite Pollard to the next stages of the process.

6. What is the MSBA’s Eligibility Period and what does it require?

During the MSBA's 270-Day Period, Needham will be required to complete a number of activities, including appropriating funding for a feasibility study (the “local vote authorization”) at the May 2024 Special Town Meeting. If the Town successfully completes all of the required activities within the Eligibility Period, it will become eligible to receive an MSBA invitation to Feasibility Study from the MSBA Board of Directors.

The eligibility period deliverables include: 1) executing an Initial Compliance Certification; 2) forming a School Building Committee; 3) completing an Educational Profile Questionnaire to further inform the MSBA’s understanding of the District’s current and proposed educational facilities, teaching methodology, grade configurations and program offerings; 4) summarizing the District’s maintenance practices; 5) certifying the design enrollment for the proposed project; 6) securing the community’s authorization and funding to proceed (“the local vote authorization”); and, 7) executing the MSBA’s standard Feasibility Study Agreement which establishes a process for the District to be reimbursed for eligible expenses.

Needham’s Eligibility period formally begins on May 1, 2024. Districts that do not successfully complete the preliminary requirements within the 270-day period will have to re-file an SOI during the next open SOI filing period.

Districts that are able to successfully complete the preliminary requirements in less than 270 days may receive an invitation earlier than 270 days, as determined by the MSBA.

7. What is a feasibility study and why is it important?

The Feasibility Study is the first step in the design process for a new school in partnership with the Massachusetts School Building Authority (MSBA). The Feasibility Study includes three stages ending with the Schematic Design and Project Funding Agreement (PFA). The PFA becomes the basis for the override vote and the MSBA reimbursement for a school project.

If approved by MSBA, the feasibility study effort is expected to take approximately two years and lead to an October 2026 Special Town Meeting appropriation request and a November 2026 ballot override vote.

8. What amount is being requested for the feasibility study at the May 2024 Special Town Meeting?

The total amount requested is $2.75 million. The requested amount includes design services, Owner’s Project Manager (OPM) services and Construction Manager at Risk (CMR) services. The OPM budget includes approximately 75% of the cost of a new Senior Project Manager in the Building Design and Construction Department who would help to manage the project for the PPBC.

This $2.75 million study budget is less than the $3.95 million preliminary feasibility study estimate, which had been included in the capital request and was based on a percentage of the overall construction budget, plus escalation. The revised estimate reflects a more concrete, itemized accounting of services and costs to be incurred as part of the study, developed in collaboration with Dore & Whittier Architects.

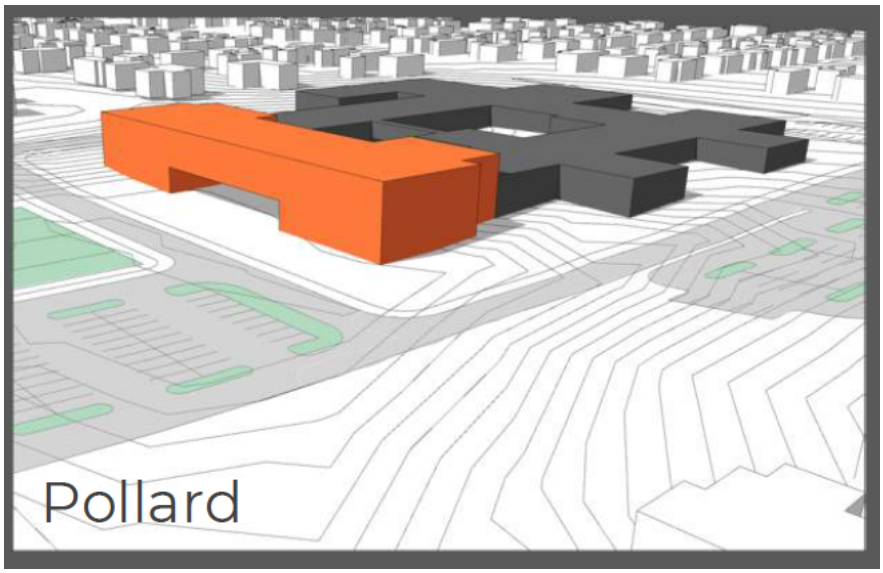
The requested feasibility study budget also includes design funds to upgrade the theatrical lighting and sound equipment in the Pollard Auditorium.

9. What is the proposed overall project cost?

The proposed total cost of the preferred Master Plan scenario is $313.915 million. As noted above, however, the MSBA and Needham will consider many construction scenarios as part of the process, which may lead to a different recommended outcome and cost than the preferred Master Plan scenario. The various options to be considered will include both new construction and renovation/addition, as well as both the current grade configuration (7th and 8th), and the proposed new configuration (6th, 7th and 8th.)

10. What is the proposed scope of the Pollard Master Plan project?

The project proposed in the preferred School Master Plan scenario is a renovation/ addition project that would unify Grades 6 through 8 under one roof at Pollard. The total cost of that project is estimated at $313.915 million. Elements of the project include a 100,000 gsf addition to the school, and the renovation of the existing 134,000 gsf. During the renovation, the existing modular classrooms would be replaced by an approximate 40 teaching station addition onto the existing building, paired with a phased, occupied renovation of the remaining building and site. Additionally, a new, three-story addition with a 6th Grade Center would be constructed on the south side of the existing school. A massing diagram of this project scenario appears below with the addition shown in orange:



11. Will the Pollard project include upgrades to the theatrical lighting and sound equipment in the Pollard Auditorium?

Yes, the proposed scope includes a plan to upgrade the theatrical lighting and sound equipment in the Pollard Auditorium. This equipment is decades old and poorly-functioning, with many non-working components. The Fine and Performing Arts Department currently rents sound and lighting equipment for performances and shows, which occur in this space. The planned upgrade would convert audio systems from analog to digital, replace wireless equipment with newer systems that conform to FCC-assigned operating frequencies, upgrade video equipment to “high definition” and widescreen aspect ratios,

replace obsolete lamp-based fixtures with LED lighting, and repair/replace rigging equipment to conform with current safety standards and codes.

The auditorium sound and lighting scope may not be fully reimbursable under MSBA rules. This will be determined during the Schematic Design phase and integrated into the Project Funding Agreement.

12. What is the proposed project Schedule?

The proposed schedule is as follows:

- District Submits SOI to MSBA – April, 2023
- MSBA Invites Pollard SOI into Eligibility Period – December, 2023
- Eligibility Period Begins – May 1, 2024
- Approve Funding for Feasibility & Schematic Design – May 2024 STM
- Approve Funding for Construction – October 2026 STM
- Override Vote/ Ballot Question to Approve Construction Funding – November 2026
- Detailed Design and bidding - January 2027-May 2028
- Construction – June/July 2028 – August 2031

13. What would be the MSBA's share of the overall project and how would that share be determined?

The MSBA's share of the overall project cost will be determined after the feasibility study is completed, according to a funding formula established by state law (MGL c. 79B s 10.) The statutory formula starts all districts at a base rate of 31 percentage points, which is then adjusted based on three, sliding-scale socioeconomic factors: community income formula (the district's per capita income as a percent of statewide average per capita income), community property wealth factor (the district's per capita equalized property valuations, as a percent of statewide average per capita valuations), and community poverty factor (as measured by the district's proportion of low income students, as defined by federal eligibility for free or reduced lunch as a percent of the statewide average proportion of low income students.) The last step in the reimbursement process is for the MSBA, in its sole discretion, to award incentive points to eligible districts. Current categories of incentive points are: newly-formed regional school district (up to 6 points), high-efficiency green school program (up to 4 points), best practices for routine and capital maintenance (up to 2 points), MGL 40R or 40S overlay zoning (up to 2 points), renovation/reuse of existing facilities (up to 5 points), establishing a maintenance trust (up to 1 point with district match.). The sum of the base rate, plus additional points, if any from the socioeconomic factors, plus incentive points, results in the MSBA's reimbursement rate for the project.

In June 2023, the MSBA updated its policies to change the standard for receiving additional incentive points under the green schools program. Now, districts may receive additional reimbursement of up to 3% for meeting the minimum energy efficiency requirements in the "Opt-in-Specialized Code" and up to an additional 1% for achieving a minimum of five points in the LEED indoor air quality points, or a minimum of 8 points in the NE-CHPS indoor air quality points. These standards exceed those in place during the Sunita Williams Elementary School project, which had granted up to two additional reimbursement percentage incentive points for meeting LEED- Silver. The LEED -Silver rating is now a minimum requirement.

14. Does the MSBA reimburse all project costs?

No, in the MSBA regulations, certain costs are ineligible for reimbursement. These include, but are not limited to:

- Site acquisition
- Swimming pools, skating rinks, field houses
- Modular classrooms and swing spaces used by students.
- Needham's debt issuance, legal, inspection and permitting expenses
- District administrative space
- Auditoriums – for Middle Schools MSBA only accepts "Cafetoriums" or "Gymatoriums"
- Operational expenses, including utilities, building maintenance, normal operations (textbooks, supplies, staffing)

15. What was MSBA's effective reimbursement rate for the Sunita Williams project?

The MSBA reimbursed 34.72% of Sunita Williams' eligible expenses. This reimbursement rate was based on receiving the 31% base points, plus 1.72 maintenance best practices incentive points and 2.0 energy efficiency points. Unfortunately, Needham did not qualify for any points based on the socioeconomic indicators, and thus was awarded a lower reimbursement rate than many other towns undergoing a building process with MSBA.

The total cost to build the Sunita Williams Elementary School (excluding land purchase) was $47.972 million. The MSBA reimbursed $12.711 million of these expenses, for an effective reimbursement rate of 26.5%. The total cost of site acquisition, which is excluded from the above calculation, was $7.727 million.

16. What is the School Master Plan and How Does Pollard Fit into that Plan?

The School Master Plan was undertaken to address the School Committee's goals of: a) remediating the deteriorating physical infrastructure and programmatic deficiencies of the Mitchell and Pollard Schools, including the end-of-life middle school modular classrooms; b) alleviating overcrowding and lack of adequate program space at the District's two middle school facilities (High Rock and Pollard); c) mitigating the impact of construction on one or more generations of students; d) avoiding expensive building maintenance over time by completing renovations in a timely manner; avoiding expenditures for temporary facilities, to the extent possible; and f) providing elementary enrollment capacity, including preparing Needham for the possibility of Universal Preschool.

On April 5, 2022, the Needham School Committee voted Pollard as its priority school for renovation, in conjunction with this Master Plan, because: a) it makes possible the fastest resolution of the Pollard, High Rock and Mitchell building issues; b) provides additional enrollment capacity around the district that offers the possibility for a renovated, three-section school on the Mitchell site – a school size that may be better suited to the constraints of the Mitchell site; c) it ensures that no single generation of students would experience multiple construction projects; and because d) it unlocks a project sequence that circumvents the need for costly temporary swing space and offers the most elementary classroom capacity for enrollment growth.

The School Committee's preferred Master Plan scenario, "High Rock as Elementary School" is a multi-school plan to meet the above objectives. As originally proposed, it: a) positions grades 6th - 8th under one roof at the Pollard School, b) repurposes High Rock as a sixth elementary school and c) renovates the aging Mitchell School as a smaller, 3-section elementary school. At the Pollard School, the existing modular classrooms would be replaced by an approximate 40 teaching station addition onto the existing building, paired with a phased, occupied renovation of the remaining building and site. Additionally, a new, three-story 6th Grade Center would be constructed on the south side of the existing school. The Pollard

renovation would be undertaken in parallel with the feasibility/design study for the Mitchell project in order to complete the Pollard School addition and vacate the High Rock school for reuse as an elementary school. The execution of these two projects concurrently would allow the High Rock to serve as swing space for the Mitchell Elementary School project, with some students re-distributed to other elementary schools until a new Mitchell School can be completed. This scenario assumes that both Pollard and Mitchell are constructed in partnership with the MSBA.

The 2020 School Master Plan (and 2022 Update) is available on the School Department's website.

17. The preferred Master Plan construction scenario has a budgeted construction cost of $1,176 per square foot (excluding escalation), which exceeds the MSBA's $650/s.f. 'cap' amount. Does this mean that the proposed project would be more costly than MSBA guidelines allow?

No, the MSBA does not expect construction costs to be less than the $650/sf cap, nor is the cap intended to represent an idea of what a 'reasonable cost' should be. Rather the $650 cap is MSBA's way of 'spreading' finite resources to as many districts as possible. The MSBA fully understands that construction costs will exceed the cap amount. The vast majority of new school buildings within Massachusetts exceed this cost/s.f. reimbursement rate.

18. How does the cost of the proposed Pollard project compare to other middle/high school projects in Massachusetts, on a square foot basis?

The proposed cost of the Pollard project included within the School Committee's preferred Master Plan Scenario is 'in the ballpark' of similar projects in the MSBA pipeline. The vast majority of these projects have a cost that is well in excess of $605/sf. Of the new construction projects in the MSBA pipeline, which have a construction date on or after November 2023, 28 of 29 (97%) projects have a construction cost per square foot exceeding $605: the cost of these projects ranges from $619/sf - $1,001/sf. Similarly, 4 of 5 (80%) of addition/renovation projects occurring in the same time frame, have a construction cost exceeding $605: these projects range from $684 - $727/sf. (Source MSBA, https://info.massschoolbuildings.org/TabPub/TableauCostData.aspx, date as of 3/11/2024)

19. Will the community and neighbors have an opportunity to participate in the design process and provide feedback on site considerations, including design, traffic, environmental issues, etc. that could impact the neighborhood?

Yes. The School Committee and PPBC have a long and successful track record of engaging the community— and especially abutters and neighbors—in the design process. Neighbors were very much involved in design and traffic issues as part of the Needham High School, High Rock, Newman and Sunita Williams construction projects. In fact, neighborhood participation and community interaction made each one of these projects better and improved traffic concerns and issues. The same will be true of the Pollard School project.

20. Is the Pollard site large enough for an expanded school?

Yes, the site is considered large enough for the proposed construction. To accommodate the proposed population, Dore + Whittier determined that the most appropriate location for the new wing would be on the south end of the existing building, effectively connecting the east and west wings of the existing school. The existing modular classrooms would be demolished during the process. This project would require a phased construction plan, in which the new addition would be constructed first, and then 7th and

8th grade students would move into the new addition, thereby vacating each wing for subsequent renovation. The designers tested the feasibility of creating a new parking lot to the east, expanding the bus drop off lane along Harris Avenue, and creating a secondary parking lot near the existing field on the southern end of the site. However, the site is not without constraints. The existing topography slopes down from Harris Avenue, to Dedham Avenue. Increasing the number of parking spaces may require retaining walls. Wetlands exist on the southeast corner of the property. Traffic restrictions limit how buses and passenger vehicles enter and exit the site. Finally, previous studies have revealed how permitting processes and requirements will need to be carefully studied.

21. If Grade 6 moves to the Pollard site, what would happen to the High Rock School?

Under the School Committee's preferred Master Plan scenario, "High Rock as Elementary School," the High Rock School would eventually become the District's sixth elementary school. Additionally, the Master Plan proposes that the Pollard and Mitchell renovation projects happen in coordination with one another, such that the High Rock School could serve as swing space for the Mitchell Elementary School project, with some students re-distributed to other elementary schools until a new Mitchell School could be completed. The re-use of High Rock as an elementary school also would allow the District to renovate the Mitchell School as a smaller, three-section school, which is a size better suited to the constraints of the Mitchell site.

22. Where can I find out more information about the Pollard project and School Master Plan?

The School Department's website contains more information about the proposed Pollard project at: 2020 School Master Plan (and 2022 Update).

23. What is the MSBA and how is it funded?

The MSBA is the Massachusetts School Building Authority. It is a quasi-independent government authority created in 2004 to replace the former school building assistance program administered by the Department of Education (now the Department of Elementary and Secondary Education). It works with local communities to create affordable, sustainable, and energy efficient schools across Massachusetts. The MSBA has a dedicated revenue stream of one penny of the state's 6.25-percent sales tax.

24. What are the various stages of the MSBA's core construction program?

The MSBA's ("Core Program") capital process is depicted in this process flow chart. Briefly, it consists of the following phases:

Module 1: *Eligibility Period.* This is a 270-day period during which a community completes a number of preliminary requirements, including obtaining the community's authorization for the project ("local vote requirement" and funding for a feasibility study. Communities that complete these requirements are eligible to be invited by the MSBA Board of Directors to the next stage. Communities which are unable to meet. Districts that do not successfully complete the preliminary requirements within the 270-day period will have to re-file an SOI during the next open SOI filing period.

Module 2: *Forming the Team*. During this stage, the Town selects/ appoints the Owner's Project Manager and then works with the MSBA Designer Selection Board to select the Design Team of Architect and Engineers.

Module 3: *Feasibility Study*. This module is broken into two steps:

- Preliminary Design Program (PDP) – Defines the complete list of rooms and areas within the building that fulfill the district's educational profile.
- Preferred Schematic Report (PSR) – Studies alternative solutions to the project design including renovation/addition, demolition and new construction and recommends a preferred solution to focus on during Schematic Design.

Module 4: *Schematic Design* – Refines the schematic design layout for the building in sufficient detail to establish the scope, budget, and schedule for the proposed project. This provides the information for the Project Scope and Budget Agreement (PFA) between the Town and the MSBA. The PFA identifies the level of MSBA reimbursement for the project.
Module 5: *Funding the Project* - Town voters approve a tax override and Town Meeting appropriates funding for the project.

After funding is approved the project moves forward with the final three modules:

Module 6: *Detailed Design & Bidding*,
Module 7: *Construction*, and
Module 8: *Completing the project.*

25. Has Needham worked with the MSBA before to construct capital facilities?

Yes. Needham has partnered with MSBA on several occasions to rebuild or renovate Needham schools, including the Broadmeadow and Eliot Schools, the NHS, The Newman repair project and the Sunita Williams Elementary School.