



SECTION 3.1.1 INTRODUCTION

3.1.1.1 Summary of Facilities and Current SOI

The District's most recent Statement of Interest was filed with the MSBA on April 9, 2019. It can be found in the Appendix at the end of this report, and under Tab A of the hard-copy binder. A 'high level' summary follows:

The existing William L. Foster Elementary School is located on a 39.75-acre lot at 55 Downer Avenue in Hingham, MA. Much of the lot is unbuildable tidal marsh, and another large portion of the site is a wooded hillside.

Foster currently serves approximately 482 K-5 pupils. It is one of four elementary schools serving Kindergarten through Grade 5 pupils in the District. The others are the South School, Plymouth River School, and East School. East School also houses the District's Pre-Kindergarten program.

The original school was roughly 45,000 sf, constructed in 1951. A 28,000 sf addition was constructed in 1957. Portions of this addition were demolished and rebuilt as part of a third addition/renovation project in 1974. This addition created a number of 'internal' classrooms with folding partitions which was considered desirable at the time. A final project was undertaken in 2009. It consisted of renovations focused on accessibility, special needs space, the creation of dedicated music, art, and presentation rooms, and asbestos remediation. As it stands today, the building is three-stories and is 71,982 gross square feet in size.

The current design and layout results in inefficiencies related to energy costs and educational use. As previously noted, nearly half of the building's 26 classrooms lack windows or have windows but students and staff have to travel through an adjacent classroom to access a hallway. Both of these issues have a negative impact on learning.

The library and computer lab share a single space which limits the school's ability to schedule these two 'specials'. The gymnasium (another 'special') and cafeteria are severely undersized, creating additional scheduling problems for the administration. Lunch is served over five periods and neither of these spaces is able to accommodate a whole-school gathering, creating an impediment to strengthening the school community. Special programs need to run two or more times to reach the entire student body. This adds cost and complicates scheduling.

Most of the school's HVAC, plumbing, and electrical infrastructure dates back to the 1950's and is in constant need of repair. Steam piping is failing at an increasing rate as corrosion gets worse. Steam leaks under slabs and inside walls are common, also impacting the building's electrical distribution system as it is exposed to steam system moisture. Corrosion clogs steam traps, causing them to constantly fail.

The building's roof, walls, and windows are not up to current energy code standards, resulting in a sub-optimal learning environment due to the lack of temperature control and a significant drain on the District's operating budget. Windows are single pane glass and the roof is in need of replacement, with the oldest portion of the roof having been installed in 1985. Leaks are a constant issue that require maintenance funding and disrupt the normal operations of the school. Air quality is not up to today's standards and each classroom has been equipped with multiple



ceiling fans to circulate air and address overheating due to the poor insulating properties of the building envelope. There are many times when students have to be relocated due to either hot or cold temperatures inside the classroom, impacting learning.

Asbestos insulation and other asbestos-containing materials (ACM) exists throughout the school and are managed under an AHERA plan. The approximate cost of remediating all remaining ACM in the building was recently estimated to be \$1.25-million.

The building's exterior masonry is losing its ability to resist rain and is accumulating moisture due to deterioration of its mortar joints and caulking at window and door systems. The porosity of the brick is resulting in water infiltration into exterior wall cavities.

The Foster School is not sprinkled and lacks an emergency generator. The District relies on a 'roll up' generator to keep its mechanical and plumbing systems from freezing and its food from rotting during extended power outages.

3.1.1.2 Date of Invitation to Conduct a Feasibility Study / Board Action Letter

The District was invited to partner with the MSBA in conducting a feasibility study for the Foster Elementary School on December 16, 2020. The MSBA's Board Action Letter can be found in the Appendix at the end of this report, and under Tab B of the hard-copy binder.

3.1.1.3 Executed Design Enrollment Certification

After working with the Town of Hingham during the month of September 2020, the MSBA issued an Enrollment Letter to the town on November 5, 2020 with its determination of an appropriate enrollment projection for the Foster School project. Based on a projected upward trend in enrollments starting in 2020 and continuing thru 2030, the MSBA has recommended a design enrollment of 605 K-5 students for the Foster School project. Per this same letter, Pre-Kindergarten space programming is to be determined during the Feasibility Study.

The District executed an MSBA Design Enrollment Certification for 605 students in grades K-5 on November 10, 2020.

Both the MSBA's Enrollment Letter and the District's Design Enrollment Certification letter can be found in the Appendix at the end of this report, and under Tab C of the hard-copy binder.

3.1.1.4 Narrative of Capital Budget Statement and Target Budget

Based upon the review of Preliminary Planning Alternatives A through J (see 3.1.6), the preliminary estimated project cost for this project ranges from \$18.3-million for a Base Repair of Foster Elementary School, up to \$100+-million for an Addition/Renovation or New Build project housing 605 K-5 students and a Pre-Kindergarten program on the Foster site.. The local share of debt service would be secured via debt exclusion if supported by the Town of Hingham during a 2022 ballot.



The year 2020 Base Reimbursement rate from MSBA for this project is 33.95%. This is subject to MSBA review on an annual basis. Depending on the preferred solution ultimately selected, it is estimated that between four and nine additional incentive points may be received, depending on whether the project is an Addition/Renovation or a New Build.

The following are the incentive points that might be applied: High Efficiency Green School Program, Best Practices for Routine and Capital Maintenance, and Renovation/Re-use of Existing Facilities.

As noted above, the balance of project costs after eligible reimbursable costs are accounted for would be locally funded via a debt exclusion.

At this time, the Foster Elementary School project is the most significant ongoing major municipal project being undertaken by the Town of Hingham, with a Public Safety Building project also underway and in the design phase.

Although a target budget has not been formally approved, because the process of developing a design that best meets the goals of the Educational Program is still ongoing, the School Building Committee agreed that a total project budget would range from \$63M to meet the minimum MSBA space guidelines for the MSBA-certified enrollment, to up to \$100+M based for the New Build or Addition/Renovation options that are being developed to satisfy the goals of the Educational Plan.

The School Building Committee understands that the dollar values contained within this Preliminary Design Program (PDP) submission are subject to adjustment as a preferred option is selected and designed.

3.1.1.5 Project Directory with Contact Information

The Project Directory can be found at the end of this Section, and under Tab 3 of the hard-copy binder.

3.1.1.6 Updated Project Schedule

The Project Schedule follows at the end of this Section, and can be found under Tab 4 of the hard-copy binder.

The schedule calls for the submission of the Preferred Schematic Report on or about December 28, 2021 with a presentation to the MSBA Facilities Assessment Subcommittee at either its January 19 or February 2, 2022 meeting. Assuming Board of Directors approval at its March 22, 2022 meeting, the project will commence with the Schematic Design phase and submit its Schematic Design Submittal to the MSBA on May 4, 2022.

Given the District's desire to open the school in September 2024, its current goals for funding the entire project budget are to seek approval at a Town Meeting to be held the fourth Monday of April 2022, followed up with a debt-exclusion ballot vote in early May 2022. Securing project funding in May 2022 will allow design work to progress immediately upon receipt of the MSBA's Schematic Design review comments and to proceed uninterrupted as the SBC strives to achieve the Town's September 2024 opening goal.



The Town understands that any funds expended prior to a MSBA Board-Approved Project Scope and Budget Agreement are at the Town's sole risk. This will include the District's Design Development submission to the MSBA on or about July 29, 2022, and the District's response to the MSBA's Design Development review comments.

3.1.1.7 Preliminary Sustainable Design Goals

The Town of Hingham is committed to a sustainable future. With the encouragement of the grass-roots Hingham Net Zero group, the May 201 Town Meeting supported the creation of a Climate Action Plan to be overseen by an 11-member Climate Action Planning Committee and funded by the Hingham Municipal Lighting Plant.

Knowing how important this is to the Town, the design team, including the project's sustainability consultant and its mechanical/electrical engineer, presented an overview of the current 'state of play' on MSBA-funded school construction projects at the School Building Committee's (SBC) October 6th meeting. Also in attendance was Laura Burns, a founding member of Hingham Net Zero and a member of the Hingham Light Board.

Though the SBC does not want to be tied down to a net zero/carbon neutral design, it does want to be as aggressive as possible with energy efficiency and sustainability. Initial feedback from the SBC is that it would like to design around an all-electric building as long as it fits into the project budget and schedule. This would involve the use of carbon-neutral heating and cooling systems, most likely air-source or ground-source heat pumps. Another clear take-away from the discussion was that the proposed building envelope should be more insulated than energy code compliant buildings are required to be. Minimizing the overall size of the building and providing robust insulation are the first things to look at going forward. The cost of increased insulation can be offset by smaller mechanical systems.

As part of its Preliminary Planning Alternatives A through J, the design team highlighted those options that made use of an optimal solar orientation, that being wings that run along an east-west axis with north/south fenestration. Windows and doors on the north and south facades of buildings are the easiest to manage from a natural light and heat gain perspective.

Going forward, an emphasis on developing a compact design and a highly efficient building envelope with optimal solar orientation will be guiding principles.