# 3.3.5 Local Actions and Approvals

A. LOCAL ACTIONS AND APPROVALS CERTIFICATION

B. CERTIFIED MEETING MINUTES

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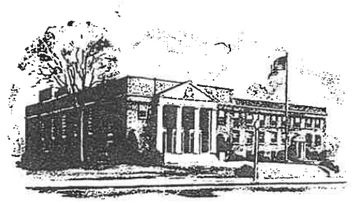
## A. LOCAL ACTIONS AND APPROVALS CERTIFICATION

Attached is the signed local actions and approvals certification letter. Following that are copies of meeting notes of the School Building Committee with agendas and copies of materials presented. Also included are public meeting presentations.

## A. LOCAL ACTIONS AND APPROVALS CERTIFICATION



*April Lanni*
PROCUREMENT OFFICER

TOWN OF
STONEHAM
MASSACHUSETTS
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December 23, 2020

Ms. Diane Sullivan
Senior Capital Program Manager
40 Broad Street
Boston, Massachusetts 02109

Dear Ms. Sullivan:

The Town of Stoneham School Building Committee ("SSBC") has completed its review of the Feasibility Study *Preferred Schematic Report* for the Stoneham High School project (the "Project"), and on December 16, 2020, the SSBC voted to approve and authorize the Owner's Project Manager to submit the Feasibility Study related materials to the MSBA for its consideration. A certified copy of the SSBC meeting minutes, which includes the specific language of the vote and the number of votes in favor, opposed, and abstained, are attached.

Since the MSBA's Board of Directors invited the District to conduct a Feasibility Study on October 30, 2019 the SSBC has held sixteen (16) meetings regarding the proposed project, in compliance with the state Open Meeting Law. These meetings include:

- March 9, 2020, 7:00 PM, @ Central Middle School, Media Center.
- May 4, 2020, 7:00 PM, @ Remote Locations.
- June 22, 2020, 7:00 PM, @ Remote Locations.
- July 6, 2020, 7:00 PM, @ Remote Locations.
- July 20, 2020, 7:00 PM, @ Remote Locations.
- August 3, 2020, 7:00 PM, @ Remote Locations.
- August 17, 2020, 7:00 PM, @ Remote Locations.
- August 31, 2020, 7:00 PM, @ Remote Locations.
- September 14, 2020, 7:00 PM, @ Remote Locations.
- September 28, 2020, 7:00 PM, @ Remote Locations.
- October 13, 2020, 7:00 PM, @ Central Middle School, Gymnasium, see Meeting Minutes attached.
- October 26, 2020, 7:00 PM, @ Central Middle School, Gymnasium, see Meeting Minutes attached.
- November 9, 2020, 7:00 PM, @ Remote Locations, see Meeting Minutes attached.
- November 30, 2020, 7:00 PM, @ Remote Locations, see Meeting Minutes attached.
- December 7, 2020, 7:00 PM, @ Remote Locations, see Meeting Minutes attached.
- December 16, 2020, 7:00 PM, @ Remote Locations, see Meeting Minutes attached.

Note: Meeting minutes for the October 13, 2020 through December 16, 2020 meetings, attached, outline any information shared or votes taken and were posted to the Town of Stoneham School Building Committee website (https://www.stoneham-ma.gov/hsbc). The prior twelve (10) meetings were included in the Preliminary Design Program (PDP) submission on October 6, 2020.

In addition to the SSBC meetings listed above, the District held four (4) public meetings, which were posted in compliance with the state Open Meeting Law, at which the Project was discussed. These meetings include:

- August 11, 2020 @ Remote Locations, the presentation was given by the SSBC Members and the project team.
- September 23, 2020 @ Remote Locations, the presentation was given by the SSBC Members and the project team.
- November 7, 2020 @ Remote Locations, the presentation was given by the SSBC Members and the project team, see PowerPoint presentation attached.
- December 9, 2020 @ Remote Locations, the presentation was given by the SSBC Members and the project team, see PowerPoint presentation attached.

Note: There were notes taken, however no formal meeting minutes or votes resulted from the meetings. Presentation materials were posted to the Town of Stoneham School Building Committee website (https://www.stoneham-ma.gov/hsbc). The August 11, 2020 and September 23, 2020 Powerpoint presentations were included in the Preliminary Design Program (PDP) submission on October 6, 2020.

The presentation materials for each meeting, meeting minutes, and summary materials related to the Project are available locally for public review at and were posted to the Town of Stoneham School Building Committee website (https://www.stoneham-ma.gov/hsbc).

To the best of my knowledge and belief, each of the meetings listed above complied with the requirements of the Open Meeting Law, M.G.L. c. 30A, §§ 18-25 and 940 CMR 29 *et seq*.

If you have any questions or require any additional information, please contact Superintendent John Macero at (781) 279-3802 or via email at jmacero@stonehamschools.org.

By signing this Local Action and Approval Certification, I hereby certify that, to the best of my knowledge and belief, the information supplied by the District in this Certification is true, complete, and accurate.

**By: Dennis Sheehan**
**Title: Chief Executive Officer**
**Date: December 23, 2020**

By signing this Local Action and Approval Certification, I hereby certify that, to the best of my knowledge and belief, the information supplied by the District in this Certification is true, complete, and accurate.

**By: John Macero**
**Title: Superintendent of Schools**
**Date: December 23, 2020**

By signing this Local Action and Approval Certification, I hereby certify that, to the best of my knowledge and belief, the information supplied by the District in this Certification is true, complete, and accurate.

**By: Jaime Wallace**
**Title: Chair of the School Committee**
**Date: December 23, 2020**





## B. CERTIFIED MEETING MINUTES

Project Management | SMMA

# Project Minutes

| | | | |
|---|---|---|---|
| Project: | Stoneham High School Feasibility Study | Project No.: | 20033 |
| Prepared by: | Joel Seeley | Meeting Date: | 10/13/2020 |
| Re: | School Building Committee Meeting | Time: | 7:00pm |
| Location: | Middle School Gymnasium | Meeting No: | 11 |
| Distribution: | Attendees (MF) | | |

Attendees:

| PRESENT | NAME | AFFILIATION | VOTING MEMBER |
|---|---|---|---|
| ✓ | Marie Christie | Co-Chair, School Building Committee | **Voting Member** |
| ✓ | David Bois | Co-Chair, School Building Committee; Community Member with Architecture Experience | **Voting Member** |
| ✓ | Nicole Nial | School Committee Member | **Voting Member** |
| ✓ | Raymie Parker | Chair Select Board | **Voting Member** |
| ✓ | Albert Talarico | Community Member with Building Commissioner Experience | **Voting Member** |
| ✓ | Douglas Gove | Community Member with Engineering Experience | **Voting Member** |
| Attended Remote | Stephen O'Neill | Community Member with Engineering Experience | **Voting Member** |
| ✓ | Josephine Thomson | Community Member | **Voting Member** |
| Attended Remote | Jeanne Craigie | Town Moderator | **Voting Member** |
| | Lisa Gallagher | Community Member, School Secretary, Past member of Middle School Building Committee | **Voting Member** |
| ✓ | Sharon Iovanni | Community Member | **Voting Member** |
| ✓ | Cory Mashburn | Community Member, Finance and Advisory Board | **Voting Member** |
| ✓ | Paul Ryder | Community Member with Construction Experience | **Voting Member** |
| Attended Remote | David Pignone | Athletic Director, Member knowledgeable in educational mission and function of facility | **Voting Member** |
| ✓ | Kevin Yianacopolus | Local Official responsible for Building Maintenance | **Voting Member** |
| ✓ | Dennis Sheehan | Town Administrator / MCPPO Certified | Non-Voting Member |
| ✓ | John Macero | Superintendent of Schools, Secretary of School Building Committee | Non-Voting Member |
| ✓ | Bryan Lombardi | Stoneham High School Principal | Non-Voting Member |
| ✓ | Brian McNeil | Facilities Director | Non-Voting Member |
| Attended Remote | Brooke Trivas | Perkins and Will | |
| Attended Remote | Patrick Cunningham | Perkins and Will | |
| Attended Remote | Leo Liu | Perkins and Will | |
| ✓ | Joel Seeley | SMMA | |
| | | | |

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Project: Stoneham High School Feasibility Study
Meeting Date: 10/13/20
Meeting No.: 11
Page No.: 2

| Item # | Action | Discussion |
|---|---|---|
| 11.1 | Record | Call to Order, 7:00 PM, meeting opened by roll call. |
| 11.2 | Record | In accordance with the executive order issued by the Governor on March 10, 2020, this meeting will be held via video conference and a recording of such will be posted on the Town's website. |
| 11.3 | Record | J. Seeley reviewed the MassSave Engineering Services Agreement, dated 10/6/20 and attached, for ZNE Expert Services to be performed by the MassSave TA Vendor, Thornton Tomasetti. MassSave will cost share 50% of the TA Vendor's fee, which is $19,000. Stoneham's share to be funded out of the Other Budget (Owner's Contingency), ProPay Code 0004-0000, which has a current balance of $39,385.92, however only $7,500.00 is applied to the Feasibility/Schematic Design Phase.<br><br>A motion was made by R. Parker and seconded by N. Nial to approve the MassSave Engineering Services Agreement and recommend execution by D. Sheehan. No discussion, motion passed unanimous by roll call vote. |
| 11.4 | J. Seeley | J. Seeley reviewed Warrant No. 4, attached.<br><br>A motion was made by R. Parker and seconded by N. Nial to approve Warrant No. 4. No discussion, motion passed unanimous by roll call vote.<br><br>J. Seeley to forward Warrant No. 4 to D. Bois for signature. |
| 11.5 | Record | J. Seeley distributed and reviewed the PSR Phase Meetings and Agenda Schedule and the Preliminary Project Schedule with PSR Phase Tasks, attached. |
| 11.6 | Record | J. Seeley distributed the PSR Submission Requirements and Responsibilities List, dated 10/4/20, attached. |
| 11.7 | J. Macero | J. Macero to review if there is a Pre-K Guideline that the proposed Pre-K program can be compared to. *(from prior meeting)* |
| 11.8 | J. Seeley | J. Seeley provided an overview of the PDP Submission, submitted to MSBA on 10/6/20. The submission has been uploaded to the SSBC Project Website and a link has been forwarded to the Committee.<br><br>Committee Discussion:<br><br>1. D. Bois indicated the link may have downloading restrictions. *J. Seeley will review and correct any issues*. |
| 11.9 | B. Trivas<br>J. Seeley | D. Sheehan reviewed the Project Finance Considerations, attached, defining the approximate PDP Total Project Costs, Reimbursement and Residential Tax Impact based on a 20-year bond at 3.00% interest, for each Option.<br><br>Committee Discussion: |

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Project: Stoneham High School Feasibility Study
Meeting Date: 10/13/20
Meeting No.: 11
Page No.: 3

| Item # | Action | Discussion |
|---|---|---|
| | | 1. R. Parker asked if there is any retiring debt that could offset the tax increase? *D. Sheehan indicated the elementary school debt retires by 2023, but since the Town currently receives reimbursement payments from the MSBA for the elementary schools, the net reduction in debt is not significant. The middle school debt retires in 2033.*<br><br>2. R. Parker asked if the interest rates of 3.0% for 20-year bond and 3.5% for the 30-year bond are more favorable than a few years ago? *D. Sheehan indicated yes and explained the Town's current bond rating outlook*.<br><br>3. D. Bois asked if the effective reimbursement rate, after calculating in the ineligible costs, is conservative? *J. Seeley indicated the MSBA Total Project Budget form, which calculates the reimbursement, is largely formulaic. The amount of site costs over the 8% cap and the costs over the $333/SF cap are by formula. The amount of ineligible square feet above MSBA Guideline was conservatively input, as this will be defined by MSBA in their review of the PDP.*<br><br>4. D. Bois asked if the PreK Program square feet was input as eligible or ineligible? *J. Seeley indicated it was input as eligible square feet per the Town's discussion with the MSBA during the Eligibility Phase*.<br><br>5. D. Bois asked how conservative are the cost and tax figures? *D. Sheehan indicated the assumptions made on the assessed values and interest rates are conservative. J. Seeley indicated the construction cost estimates include design and pricing contingencies appropriate to the level of design*.<br><br>6. A. Talarico asked how is the Town's Base Reimbursement Rate calculated? *J. Seeley indicated the MSBA calculates the Base Rate using the same methodology for all communities, factoring in each community's income factor, property wealth factor and poverty factor.*<br><br>7. A. Talarico indicated concern over the amount of square feet the project is above MSBA Guidelines.<br><br>8. D. Bois requested a breakdown of the ineligible costs in each option. *B. Trivas and J. Seeley to provide a breakdown for review at the next Committee meeting*. |

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Project: Stoneham High School Feasibility Study
Meeting Date: 10/13/20
Meeting No.: 11
Page No.: 4

| Item # | Action | Discussion |
|---|---|---|
| 11.10 | J. Macero<br>B. Trivas<br>J. Seeley | J. Seeley distributed and reviewed the Space Summary and Total Project Cost for the District Offices Memo, dated 10/11/20 and attached. The offices are 3,900 square feet with a $2.3M total project cost, which would not be reimbursable.<br>Committee Discussion:<br>1. D. Bois asked where would the District Offices be located if they were to be located in the middle school?<br>*J. Macero reviewed a potential location and indicated he would prefer the District Offices not be included in the high school project due to the cost impact*.<br>2. S. Iovanni asked if the District Offices are included in the PDP project estimates?<br>*D. Sheehan indicated the District Offices and their costs are not included in the PDP cost estimates*.<br>3. D. Bois asked when does the Committee need to decide on whether to add the District Offices into the project?<br>*B. Trivas indicated if not tonight, the Committee needs to decide by next meeting*.<br>4. N. Nial asked how close is the middle school to capacity and will it need the space for the potential District Offices in the future?<br>*J. Macero will review and provide direction*<br>5. J. Macero indicated it may be better to show the District Offices in the project now and remove if needed at a future time.<br>*D. Sheehan indicated the District Offices should be added to the list of ineligible costs by option to assist the Committee in making decisions. B. Trivas and J. Seeley to provide for the next Committee meeting.*<br>6. J. Craigie recommended the District Offices be included in the project and if needed, could be value engineered out at a future time.<br>7. J. Craigie indicated she believes the middle school does not have the space to accommodate the District Offices and that the District Offices should not be located in former classrooms.<br>8. J. Craigie indicated she believes the District Offices belong in the high school.<br>9. J. Thomson indicated she believes the District Offices do not belong in the middle school, but should be located in the high school and that the middle school may need the space in the future. |

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Project: Stoneham High School Feasibility Study
Meeting Date: 10/13/20
Meeting No.: 11
Page No.: 5

| Item # | Action | Discussion |
|---|---|---|
| | | 10. J. Macero indicated the District Offices have been located in the high school since 1981, and this needs to be discussed with MSBA for consideration of reimbursement. |
| 11.11 | Committee | J. Seeley reviewed the MSBA DBB and CM at Risk Comparison, attached, described the CM at Risk selection process, and explained if the Committee had a preference to utilize the CM at Risk methodology, there would be benefit to retain the CM by the start of the Schematic Design Phase to provide cost estimating and construction logistics planning.<br>Committee Discussion:<br>1. J. Macero indicated the CM at Risk process was used at his former school and was very successful.<br>2. D. Bois indicated the CM at Risk not only will provide estimates, but can also assist the Committee in making smart decisions on cost avoidance strategies as well.<br>3. M. Christie indicated the middle school utilized the CM at Risk process and would recommend this process for the high school project.<br>4. J. Craigie indicated the middle school project benefited from the knowledge of the CM staff and she would highly recommend the CM at Risk process.<br>A Motion was made by N. Nial and seconded by J. Craigie to approve the CM at Risk process for the high school project. No discussion, motion passed unanimous by roll call vote.<br>Committee members to email J. Seeley if they would like to volunteer for the CM Prequalification and Selection Subcommittee. |
| 11.12 | B. Trivas<br>J. Seeley | J. Seeley provided an overview of the presentation to the remote participation Tri-Board meeting, scheduled for 10/15/20. |
| 11.13 | Committee<br>PR Subcommittee<br>J. Seeley | **Subcommittee Updates**<br>**Public Relations Subcommittee**<br>1. S. Iovanni reviewed a Promotional Branding memo, dated 9/30/20 and attached, and asked the Committee for feedback. The promotional branding will be developed by the Public Relations Subcommittee at their next meeting.<br>2. S. Iovanni reviewed the Updated FAQ, dated 10/8/20 and attached and asked the Committee to email any comments to J.Seeley, who will update the FAQ posted on the SSBC project website with this version. |

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Project: Stoneham High School Feasibility Study
Meeting Date: 10/13/20
Meeting No.: 11
Page No.: 6

| Item # | Action | Discussion |
|---|---|---|
| | | **Educational Mission Subcommittee**<br>1. J. Seeley reviewed the 9/21/20 Educational Mission Subcommittee Meeting Minutes, attached.<br>**Green Building Initiatives**<br>1. J. Seeley reviewed the 9/29/20 Green Building Initiatives Meeting Minutes, attached. |
| 11.14 | Record | **Committee Questions** - none |
| 11.15 | Record | **Old or New Business**<br>1. D. Sheehan asked if the Committee preferred to continue with in-person SSBC meetings in the Middle School Gymnasium?<br>*The Committee indicated they preferred to meet in-person.* |
| 11.16 | Record | **Public Comment** - none |
| 11.17 | Record | Next **SBC Meeting: Tuesday, October 13, 2020 at 7:00 pm.** |
| 11.18 | Record | A Motion was made by N. Nial and seconded by D. Bois to adjourn the meeting. No discussion, motion passed unanimous by roll call vote. |

Attachments: Agenda, MassSave Engineering Services Agreement, Warrant No. 4, PSR Phase Meetings and Agenda Schedule and the Preliminary Project Schedule, PSR Submission Requirements and Responsibilities List, Project Finance Considerations, Approximate PDP Total Project Costs, Reimbursement and Residential Tax Impact, Space Summary and Total Project Cost for the District Offices Memo, MSBA DBB and CM at Risk Comparison, Promotional Branding memo, Updated FAQ, 9/21/20 Educational Mission Subcommittee Meeting Minutes, 9/29/20 Green Building Initiatives Meeting Minutes

The information herein reflects the understanding reached. Please contact the author if you have any questions or are not in agreement with these Project Minutes

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SMMA
Project Management

# PROJECT MEETING SIGN-IN SHEET

| | | | |
|---|---|---|---|
| Project: | Stoneham High School Feasibility Study | Project No.: | 20033.00 |
| Prepared by: | Joel Seeley | Meeting Date: | 10/13/2020 |
| Re: | School Building Committee Meeting | Time: | 7:00pm |
| Location: | Middle School Gymnasium | Meeting No: | 11 |
| Distribution: | Attendees, (MF) | | |

| SIGNATURE | ATTENDEES | EMAIL | AFFILIATION |
|---|---|---|---|
| Attended | Marie Christie | mariechristie@comcast.net | Co-Chair, Past Member of the School Committee/Middle School Building Committee |
| Attended | David Bois | bois@arrowstreet.com | Co-Chair, Community Member with Architecture Experience |
| Attended | Nicole Nial | nicole.nial@stonehamschools.org | School Committee Member |
| Attended | Raymie Parker | rparker@stoneham-ma.gov | Select Board Member |
| Attended | Albert Talarico | albert.talarico@gmail.com | Community Member with Building Commissioner Experience |
| Attended | Douglas Gove | goved11@gmail.com | Community Member with Engineer Experience |
| Attended Remotely | Stephen O'Neill | soneill@hayner-swanson.com | Community Member with Engineer Experience |
| Attended | Josephine Thomson | Jjthomson315@yahoo.com | Community Member, Middle School Faculty |
| Attended Remotely | Jeanne Craigie | jcraigie@stoneham-ma.gov | Town Moderator |
| | Lisa Gallagher | lgallagher@stonehamschools.org | Community Member, School Secretary, Past member of Middle School Building Committee |
| Attended | Sharon Iovanni | sharon.iovanni@stonehambank.com | Community Member |
| Attended | Cory Mashburn | cory.mashburn910@gmail.com | Community Member, Finance and Advisory Board |
| Attended | Paul Ryder | pryder52@icloud.com | Community Member with Construction Experience |
| Attended Remotely | David Pignone | dpignone@stonehamschools.org | Athletic Director, Member knowledgeable in educational mission and function of facility |
| Attended | Kevin Yianacopolus | kyianacopolus@stonehamschools.org | Local Official responsible for Building Maintenance |
| Attended | Dennis Sheehan | DSheehan@stoneham-ma.gov | Town Administrator / MCPPO Certified |
| Attended | John Macero | jmacero@stonehamschools.org | Superintendent of Schools, Secretary of School Building Committee |
| Attended | Bryan Lombardi | blombardi@stonehamschools.org | Stoneham High School Principal |
| Attended | Brian McNeil | bmcneil@stonehamschools.org | Facilities Director |
| Attended Remotely | Brooke Trivas | brooke.trivas@perkinswill.com | Perkins and Will |
| Attended Remotely | Patrick Cunningham | Patrick.cunningham@perkinswill.com | Perkins and Will |
| Attended Remotely | Leo Liu | xi.liu@perkinswill.com | Perkins and Will |
| Attended | Joel Seeley | jseeley@smma.com | SMMA |

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# Agenda

| | | | |
|---|---|---|---|
| Project: | Stoneham High School Feasibility Study | Project No.: | 20033 |
| Re: | School Building Committee Meeting | Meeting Date: | 10/13/2020 |
| Prepared by: | Joel Seeley | Meeting Time: | 7:00 PM |
| Location: | Middle School Gymnasium | | |
| Distribution: | Attendees (MF) | | |

1. Call to Order
2. Approval of Minutes
3. Approval of Invoices and Commitments
4. Schedule and Budget Update
5. PDP Submission Overview
6. Preliminary Tax Impact Review
7. Project Scope Discussion
    - Central Offices Review
8. Decide Construction Delivery Method
9. Prepare for Tri-Board Meeting
10. Subcommittee Updates
11. New or Old Business
12. Committee Questions
13. Public Comments
14. Next Meeting: October 26, 2020
15. Adjourn

**Join GoToMeeting:**
https://global.gotomeeting.com/join/128124661

**Dial-In:** +1 (646) 749-3122

**Access Code:** 128-124-661

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09/30/2020

**Stoneham High School Feasibility Study**
**Stoneham, Massachusetts**

**FEASIBILITY STUDY BUDGET STATUS REPORT**

| ProPay Code | Description | Total Project Budget | Authorized Changes | Revised Total Budget | Total Committed | % Comtd to Date | Budget Balance | Actual Spent to Date | % Spent to Date | Projected Expenditure/ Commitments | Balance to Spend |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **FEASIBILITY STUDY AGREEMENT** | | | | | | | | | | |
| 0001-0000 | **OPM Feasibility Study/Schematic Design** | $ 187,500.00 | $ (57,500.00) | $ 130,000.00 | $ 130,000.00 | 100% | $ - | $ 21,000.00 | 16% | $ 109,000.00 | $ 109,000.00 |
| 0002-0000 | **A/E Feasibility Study/Schematic Design** | $ 465,000.00 | $ (45,000.00) | $ 420,000.00 | $ 420,000.00 | 100% | $ - | $ - | 0% | $ 420,000.00 | $ 420,000.00 |
| 0003-0000 | **Environmental & Site** | $ 60,000.00 | $ 100,000.00 | $ 160,000.00 | $ 71,747.50 | 45% | $ 88,252.50 | $ - | 0% | $ 71,747.50 | $ 160,000.00 |
| 0004-0000 | **Other** | $ 37,500.00 | $ 2,500.00 | $ 40,000.00 | $ 614.08 | 2% | $ 39,385.92 | $ 614.08 | 100% | $ - | $ 39,385.92 |
| | **SUBTOTAL** | **$ 750,000.00** | | **$ 750,000.00** | **$ 622,361.58** | | **$ 127,638.42** | **$ 21,614.08** | **3%** | **$ 600,747.50** | **$ 728,385.92** |

** *Committed from Other* — Amount

| | | |
|---|---|---|
| Stoneham Independent | $ | 230.81 Advertisement in Stoneham Independent for Designer Procurement |
| Andrew T. Johnson / SMMA | $ | 383.27 Designer Proposal Production for Designer Procurement |
| | **$** | **614.08** |

Project Management | SMMA

# Warrant No. 4

| | | | |
|---|---|---|---|
| Project: | Stoneham High School, Stoneham, Massachusetts | Project No.: | 20033 |
| Prepared by: | Joel G. Seeley, AIA | Date: | 10/13/2020 |

School Building Committee for the Stoneham High School hereby authorizes to draw against funds for the obligations incurred for value received in services and for materials shown below:

| Vendor | Invoice No. | | Invoice Date | Invoice Amount | ProPay Code | Balance After Invoice |
|---|---|---|---|---|---|---|
| SMMA | 53638 | | 10/08/2020 | $ 7,000.00 | 0001-0000 | $ 102,000.00 |
| Perkins & Will | 0178394 | | 10/09/2020 | $ 75,000.00 | 0002-0000 | $ 345,000.00 |
| Perkins & Will | 0178394 | AM1 | 10/09/2020 | $ 13,750.00 | 0003-0000 | $ 127,550.00 |
| Perkins & Will | 0178394 | AM1 | 10/09/2020 | $ 13,750.00 | 0003-0000 | $ 127,550.00 |
| Perkins & Will | 0178394 | AM1 | 10/09/2020 | $ 4,950.00 | 0003-0000 | $ 127,550.00 |
| | | | **Total** | **$ 114,450.00** | | |

| | |
|---|---|
| _____ | _____ |
| Marie Christie | David Bois |
| _____ | _____ |
| Nicole Nial | Raymie Parker |
| _____ | _____ |
| Albert Talarico | Douglas Gove |
| _____ | _____ |
| Stephen O'Neill | Josephine Thomson |
| _____ | _____ |
| Jeanne Craigie | Lisa Gallagher |
| _____ | _____ |
| Sharon Iovanni | Cory Mashburn |
| _____ | _____ |
| Paul Ryder | David Pignone |

Approved on _____

1000 Massachusetts Avenue
Cambridge, MA 02138
617.547.5400

www.smma.com

p:\2020\20033\00-info\0.8 warrants\warrant no. 4 - october 13, 2020\warrant no. 4.docx



Perkins&Will

# Invoice

October 9, 2020
Project No: 153010.000
Invoice No: 0178394

Dennis Sheehan
Town of Stoneham
Town Hall
35 Central St
Stoneham, MA 02180

Stoneham High School - FS-SD
**Professional Services: through October 2, 2020**
**Fee**

| Billing Phase | Fee | Percent Complete | Earned | Previous Fee Billing | Current Fee Billing |
|---|---|---|---|---|---|
| Feasibility Phase | 175,000.00 | 42.8571 | 75,000.00 | 0.00 | 75,000.00 |
| Schematic Design | 245,000.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Survey/Wetlands | 27,500.00 | 100.00 | 27,500.00 | 0.00 | 27,500.00 |
| Phase 1 ESA | 2,970.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Geotechnical Services | 16,417.50 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hazardous Materials | 4,950.00 | 100.00 | 4,950.00 | 0.00 | 4,950.00 |
| Hydrant Flow Testing | 1,760.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Traffic Analysis | 18,150.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total Fee | 491,747.50 | | 107,450.00 | 0.00 | 107,450.00 |

**Total Fee** **107,450.00**

**Total this Invoice** **$107,450.00**

**REMIT PAYMENTS TO** Perkins&Will, Inc.
PO Box 71181
Chicago, IL 60694-1181

**WIRE/ACH TO** BMO Harris Bank
ABA# 071000288, Acct# 3769601
SWIFT HATRUS44

**TERMS** Net 30 Days

225 Franklin Street, Suite 1100, Boston, MA 02110 t 617.478.0300 perkinswill.com



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Nitsch Engineering
Celebrating 30 Years!

2 Center Plaza, Suite 430
Boston, MA 02108-1928
T: 617-338-0063
F: 617-338-6472
www.nitscheng.com

Robert Brown
Perkins & Will
225 Franklin Street, Suite 1100
Boston, MA 02110

August 14, 2020
Project No: 14166.1
Invoice No: 69617

Project 14166.1 Stoneham High School Land Survey/Wetlands Delineation

**Professional Services from July 1, 2020 to July 31, 2020**

**Fee**

| | | | | |
|---|---|---|---|---|
| Total Fee | 25,000.00 | | | |
| Percent Complete | 50.00 | Total Earned | 12,500.00 | |
| | | Previous Fee Billing | 0.00 | |
| | | Current Fee Billing | 12,500.00 | |
| | | **Total Fee** | | **12,500.00** |
| | | **Total this Invoice** | | **$12,500.00** |

$12,500.00 * 1.1 = $13,750.00



Nitsch Engineering

2 Center Plaza, Suite 430
Boston, MA 02108-1928
T: 617-338-0063
F: 617-338-6472
www.nitscheng.com

Robert Brown
Perkins & Will
225 Franklin Street, Suite 1100
Boston, MA 02110

September 16, 2020
Project No: 14166.1
Invoice No: 69878

Project 14166.1 Stoneham High School Land Survey/Wetlands Delineation

**Professional Services from July 26, 2020 to September 12, 2020**

**Fee**

| | | | | |
|---|---|---|---|---|
| Total Fee | 25,000.00 | | | |
| Percent Complete | 100.00 | Total Earned | 25,000.00 | |
| | | Previous Fee Billing | 12,500.00 | |
| | | Current Fee Billing | 12,500.00 | |
| | | **Total Fee** | | **12,500.00** |
| | | **Total this Invoice** | | **$12,500.00** |

**Outstanding Invoices**

| Number | Date | Balance |
|---|---|---|
| 69617 | 8/14/2020 | 12,500.00 |
| **Total** | | **12,500.00** |

$12,500.00 * 1.1 = $13,750.00



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UEC universal environmental consultants

**INVOICE #8348**

August 31, 2020

Accounts Payable
Perkins + Will
225 Franklin Street, Suite 1100
Boston, MA 02110

Reference: **Hazardous Material Inspection Services**
**Stoneham High School**

Professional Services:

| Type | Contract Amount | Percent Completed | Previously Billing | Current Fee Billing |
|---|---|---|---|---|
| Fee: | $ 4,500.00 | 100% | $ 0.00 | $ 4,500.00 |
| **Lump Sum Fee** | | | **$ 4,500.00** | |

$4,500.00 * 1.1= $4,950.00

Thank you for the opportunity for UEC to provide professional services.
Please reference UEC invoice number with payment.
**FID#04-3573107**

12 Brewster Road
Framingham, MA 01702
(508)628-5486
adieb@uec-env.com



SMMA

Mr. Dennis Sheehan
Town Administrator
Town Administrator, Town of Stoneham
35 Central St
Stoneham, MA 02180

October 8, 2020
Project No: 20033.00
Invoice No: 0053638

Project 20033.00 Stoneham High School OPM Services
**Professional Services from August 22, 2020 to October 2, 2020**
**Fee**

| Billing Phase | Fee | Percent Complete | Earned | Previous Fee Billing | Current Fee Billing |
|---|---|---|---|---|---|
| Feasibility Study | 56,000.00 | 50.00 | 28,000.00 | 21,000.00 | 7,000.00 |
| Schematic Design | 49,000.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total Fee | 105,000.00 | | 28,000.00 | 21,000.00 | 7,000.00 |
| | | **Total Fee** | | | **7,000.00** |
| | | | | **Total this Invoice** | **$7,000.00** |

**Outstanding Invoices**

| Number | Date | Balance |
|---|---|---|
| 0053146 | 6/30/2020 | 7,230.81 |
| 0053302 | 7/28/2020 | 7,000.00 |
| 0053473 | 9/3/2020 | 7,383.27 |
| **Total** | | **21,614.08** |

**Billings to Date**

| | Current | Prior | Total |
|---|---|---|---|
| Fee | 7,000.00 | 21,000.00 | 28,000.00 |
| Expense | 0.00 | 614.08 | 614.08 |
| **Totals** | **7,000.00** | **21,614.08** | **28,614.08** |

**Authorized By: Joel Seeley**

1000 Massachusetts Avenue
Cambridge, MA 02138

275 Promenade Street, Suite 275
Providence, RI 02908

617.547.5400
www.smma.com



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SMMA

Project Management

# Memorandum

| | | | |
|---|---|---|---|
| To: | Stoneham School Building Committee | Date: | 10/9/2020 |
| From: | Joel G. Seeley | Project No.: | 20033 |
| Project: | Stoneham High School Feasibility Study | | |
| Re: | MassSave Path 1 ZNE Expert Cost Share | | |
| Distribution: | Stoneham School Building Committee (MF) | | |

**MASSSAVE PATH 1 ZNE EXPERT COST SHARE**

**FEE:** $9,500.00

**REASON:** MassSave's Memorandum of Understanding for Path 1, provides for ZNE Expert Services performed by the MassSave TA Vendor, Thornton Tomasetti. MassSave will provide cost sharing of 50% of the TA Vendor's fee, which is $19,000.

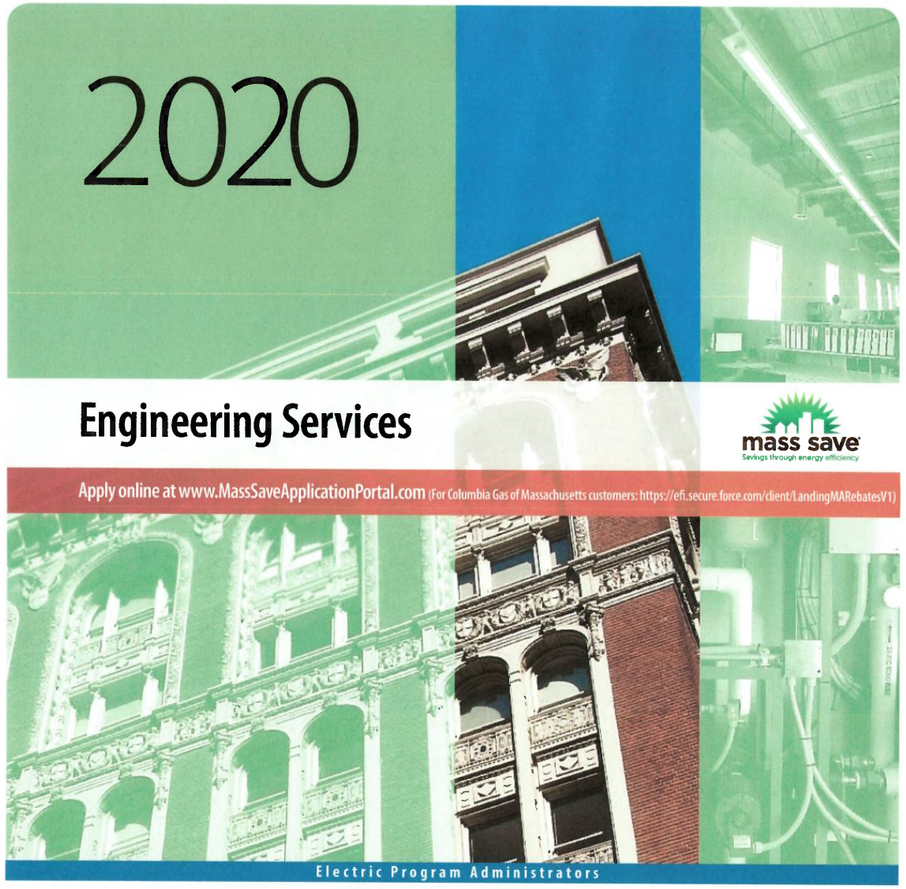
**BUDGET AVAILABILITY:** This Amendment would be funded out of the Other Budget (Owner's Contingency), ProPay Code 0004-0000, which has a current balance of $39,385.92. Note, only $7,500.00 is applied to the Feasibility/Schematic Design Phase.

1000 Massachusetts Avenue
Cambridge, MA 02138
617.547.5400

www.smma.com

JGS/sat /P:\2020\20033\00-INFO\Mass Save Program\ZNE Expert Cost Share\M_ZNE_Expert_Cost Share09October2020.Docx



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## ALL FIELDS ON THIS PAGE ARE REQUIRED TO COMPLETE YOUR APPLICATION

**Indicate the Program Administrator for this Application**

☐ Berkshire Gas ☐ Cape Light Compact ☐ Columbia Gas ☒ Eversource ☐ Liberty Utilities ☐ National Grid ☐ Unitil

## CUSTOMER/ACCOUNT HOLDER INFORMATION

| COMPANY NAME | CONTACT PERSON | APPLICATION DATE |
|---|---|---|
| Town of Stoneham | Dennis Sheehan | 10/02/20 |

| INSTALL SITE | PHONE | FAX NUMBER |
|---|---|---|
| Unknown | 781-279-2600 | |

| EMAIL ADDRESS | SQUARE FEET (COVERED BY THIS APPLICATION) |
|---|---|
| dsheehan@stoneham-ma.gov | 200,000 |

| STREET ADDRESS | CITY | STATE | ZIP |
|---|---|---|---|
| Town Hall, 35 Central Street | Stoneham | MA | 02180 |

| MAILING ADDRESS (IF DIFFERENT) | CITY | STATE | ZIP |
|---|---|---|---|
| | | | |

| ELECTRIC COMPANY NAME | ELECTRIC ACCOUNT NUMBER |
|---|---|
| Eversource (Eastern MA) | |

| GAS COMPANY NAME | GAS ACCOUNT NUMBER |
|---|---|
| National Grid | |

**BUILDING TYPE (PLEASE PLACE "X" IN APPROPRIATE BALLOT BOX)**

| | | | | | |
|---|---|---|---|---|---|
| ☐ ASSEMBLY | ☐ FAST FOOD | ☐ HOTEL | ☐ MULTI STORY RETAIL | ☐ RELIGIOUS | ☐ SMALL RETAIL |
| ☐ AUTOMOTIVE | ☐ FULL SERVICE RESTAURANT | ☐ LARGE REFRIGERATED SPACE | ☐ MULTIFAMILY HIGH-RISE | ☐ K-12 SCHOOL | ☐ UNIVERSITY |
| ☐ BIG BOX | ☐ GROCERY | ☐ LARGE OFFICE | ☐ MULTIFAMILY LOW-RISE | ☐ SMALL OFFICE | ☐ WAREHOUSE |
| ☐ COMMUNITY COLLEGE | ☐ HEAVY INDUSTRIAL | ☐ LIGHT INDUSTRIAL | ☒ OTHER: | | |
| ☐ DORMITORY | ☐ HOSPITAL | ☐ MOTEL | | | |

## PAYMENT METHOD (PAYEE MUST SUBMIT A W-9 FORM)

| PAYMENT TO: | CUSTOMER — TAX ID# (REQUIRED) | VENDOR/INSTALLER — TAX ID# (REQUIRED IF RECEIVING INCENTIVE) |
|---|---|---|
| ☐ CUSTOMER<br>☒ VENDOR/INSTALLER | | |

| CHECK PAYABLE TO: | CUSTOMER COMPANY TYPE: | VENDOR COMPANY TYPE: |
|---|---|---|
| Thornton Tomasetti | ☐ INC. ☐ NOT INCORP. ☐ EXEMPT | ☐ INC. ☐ NOT INCORP. ☐ EXEMPT |

## ENGINEER INFORMATION

| ENGINEERING FIRM | CONTACT NAME |
|---|---|
| Thornton Tomasetti | Vamshi Gooje |

| STREET ADDRESS | CITY | STATE | ZIP |
|---|---|---|---|
| 386 Fore Street, Suite 401 | Portland | ME | 04101 |

| PHONE | EMAIL ADDRESS |
|---|---|
| 207-776-5808 | vgooje@thontontomasetti.com |

## PROGRAM

☒ NEW CONSTRUCTION ☐ RETROFIT ☐ SMALL BUSINESS

## END USE (check all that apply)

☒ LIGHTING ☒ HVAC ☒ MOTOR ☐ PROCESS ☐ REFRIGERATION ☐ COMPRESSED AIR
☒ VARIABLE SPEED DRIVES ☒ ENERGY MANAGEMENT SYSTEM ☐ OTHER: New Building

## PROJECT INFORMATION

**BRIEFLY DESCRIBE PROJECT:**

Provide early engagement Path 1 New Construction ZNE services during feasibility, SD and DD for new Stoneham High School intended as a ZNE school with low (25 or below) EUI.



## Engineering Services Project Information and Deliverables

Detailed proposal must include a brief description of the following for each Energy Efficiency Measure (EEM):

- Existing Systems and proposed changes (retrofit)
- Base case / code assumptions and proposed system (New Construction)
- Estimated study cost per task
- Estimated hours to complete each task and the staff assigned to each task
- Estimated schedule to complete each task
- Proposed methodology for analysis
- Estimated potential energy savings

After approval, Engineer will supply the Program Administrator (PA) with the following deliverables:

- Draft report for review & comment (include estimated costs, energy and demand savings by EEM)
- Final report (both hard copy and electronic copy) upon sign off of Draft Report
- Electronic copies of all appendices, building simulation outputs and any additional supporting documentation
- Completed Energy Efficiency Program application forms
- Completed MRD (Minimum Requirements Document)

## Engineer Acknowledgement

**PROPOSED ENGINEERING COST:** $ 19,000.00

I certify to the company that I will review the measures and calculations proposed in this study. They will be in my professional opinion appropriate for the type and purpose of the facility in which they will be installed. The information contained in this study will be true, accurate and complete to the best of my knowledge.

| NAME (print) | ENGINEER SIGNATURE | DATE |
|---|---|---|
| Vamshi Gooje | Vamshi Gooje | 10/06/20 |

## Customer Acknowledgement (pre-approval)

**PROPOSED CUSTOMER CONTRIBUTION:** $ 9,500.00

Payment shall be due whether the customer elects to pursue any of the energy savings opportunities identified. I certify that all statements made in this application are correct to the best of my knowledge and that I have read and agree to the terms and conditions on the back of this form including those provisions regarding warranties. I further understand and acknowledge that the offer to pay incentives is subject to those Terms and Conditions.

| NAME (print) | CUSTOMER SIGNATURE | DATE |
|---|---|---|
| | | |

## FOR PROGRAM ADMINISTATORS ONLY

| Approval | Contribution | Date | Program Manager |
|---|---|---|---|
| Electric | | | |
| Gas | | | |



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Thornton Tomasetti

Via: Willingham, Ryan A <ryan.willingham@eversource.com>

Ryan Willingham
Project Engineer, Energy Efficiency

Eversource
247 Station Drive, SW360
Westwood, MA 02090

RE: STONEHAM HIGH SCHOOL – ZERO NET ENERGY SERVICES

Dear Ryan,

Based on our discussions with Eversource and the design team, Thornton Tomasetti, Inc. (TT) is pleased to submit this Proposal to provide Zero Net Energy consulting services to help further the high performance goals of the project through SD for the new Stoneham High School. The project is approximately 200,000 SF with an anticipated schedule for SD in July 2021.

## A. SCOPE OF SERVICES

**Purpose:** Assist the design team in evaluating high performance goals relevant to Net Zero Energy (ZNE), low Energy Use Intensity (EUI) and other sustainability aspirations of the project. Provide optimized solutions that guide the design team to achieving the project's sustainability goals.

### A. Load Reduction Analysis

i) Provide radiation benefit analysis and energy analysis of building massing options (2).

ii) Provide parametric energy analysis (up to 40 hours) of the selected building mass and provide specific recommendations for the envelope systems such as window-to-wall ratio, insulation levels, infiltration, shading strategies, glazing properties with goals of load reduction, optimized daylighting and meeting the EUI target. Metrics such as heating and cooling peak loads and annual demand will be used to evaluate the performance. TT will communicate the analysis in an interactive data visualization tool that will provide real-time feedback to the design team to make faster design decisions. After this exercise, TT recommends the design team to create two or three tiered high performance options for understanding the capital costs of these options.

iii) Document recommended load reduction strategies in a memo.





### B. HVAC System Selection Analysis:

i) Collaborate with the HVAC engineers to provide energy analysis (including recommendations to optimize) for up to three (3) HVAC system options based on the selected high performance envelop tier described in Section B.ii.

ii) Show expected building EUIs under all HVAC scenarios analyzed.

iii) Provide a simple cost benefit analysis if the team is able to provide capital costs for each option.

### C. Owners Project Requirements (OPR)

i) Support the owner and the design team to incorporate measurable energy performance goals within the OPR such as, but not limited to, EUI target, ZNE goals, design and operational strategies.

ii) Review and provide one set of comments on Design at Key Milestones - SD, mid-DD, 100% DD to ensure the design team has incorporated strategies recommended to achieve the target EUI and that modeling assumptions are supportable.

**Meetings-** Participate in 7 meetings with the design team to review assumptions, results, and progress of design.

**Deliverables-** Provide summary reports and/or memos at the completion of scope items: B.i (report), B.ii (a report and follow up memo), C.i (a report and follow up memo), D.i, D.ii (3 memos).

## B. FEES

a. Basic Fee

We propose to perform the scope of work described in Section A for the base fee of **$19,000** (NINETEEN THOUSAND DOLLARS). Please note that our fees are bundled together as a package to maximize efficiencies. If one or more of the services are not included, we reserve the right to adjust other service areas accordingly.

TT invoices for the Basic Fee will be will be invoiced twice at completion of TT's Scope of Work once after scope item C (completion of SD - $15,000) and the last invoice after completion of scope item D (completion of DD-$4,000)



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Thornton Tomasetti

Mr. Ryan Willingham
RE: Stoneham High School
ZERO NET ENERGY CONSULTING SERVICES

Revision 1: October 7, 2020 Page 3 of 4

b. Expenses

1. No out of town expenses are anticipated. TT will attend meetings via conference calls.

c. Payment

TT will invoice the Client on a monthly cycle for fees and expenses. Payments will be due from the Client to TT within 30 days of the invoice date.

**C. CLIENT RESPONSIBILITY**

To facilitate the smooth progression of the project, TTs proposal is based on the assumption that the Client will provide the following information:

A. Provide all applicable drawings, specifications and other data, including design drawings of other disciplines.

B. Provide copies of all pertinent letters and memoranda pertaining to design of the various disciplines and Owner's requirements on timely manner.

C. It is understood that TT has the right to rely upon the accuracy and completeness of all data furnished to it.

**D. ASSUMPTIONS AND LIMITATIONS**

a. Due to circumstances that are beyond the control and scope of TT, we cannot guarantee achieving a targeted building energy performance.

b. There are several unknown factors in the design phases that vary under real operating conditions. Due to this reason, the results of analysis should be considered in the context of relative performance only and not for comparison with actual data.

c. Energy model inputs must not be used as inputs for purposes other than the scope listed here. The design team is responsible to follow the drawings and specifications.

Right to Stop Work: If payment is not received by TT on the due date listed on each invoice, and if such default continues for 20 days, TT may elect to stop work until all amounts owed are received.



Thornton Tomasetti

Mr. Ryan Willingham
RE: Stoneham High School
ZERO NET ENERGY CONSULTING SERVICES

Revision 1: October 7, 2020 Page 4 of 4

**E. TERMS AND CONDITIONS**

Upon authorization to proceed, unless notified otherwise in writing, we will provide our services under the Eversource Energy's General Terms & Conditions executed between TT and Eversource on 8/25/2020.

We look forward to your favorable response and an opportunity to provide our services. Please call if you have any questions. If the above meets with your agreement, kindly sign and return one copy of this letter agreement, keeping the second copy for your records.

Very truly yours,

**THORNTON TOMASETTI, INC.**

Vamshi Gooje, CEM, BEMP, LEED AP BD+C
Associate Principal

**ACCEPTED BY:**

**EVERSOURCE**

BY: _____

DATE: _____



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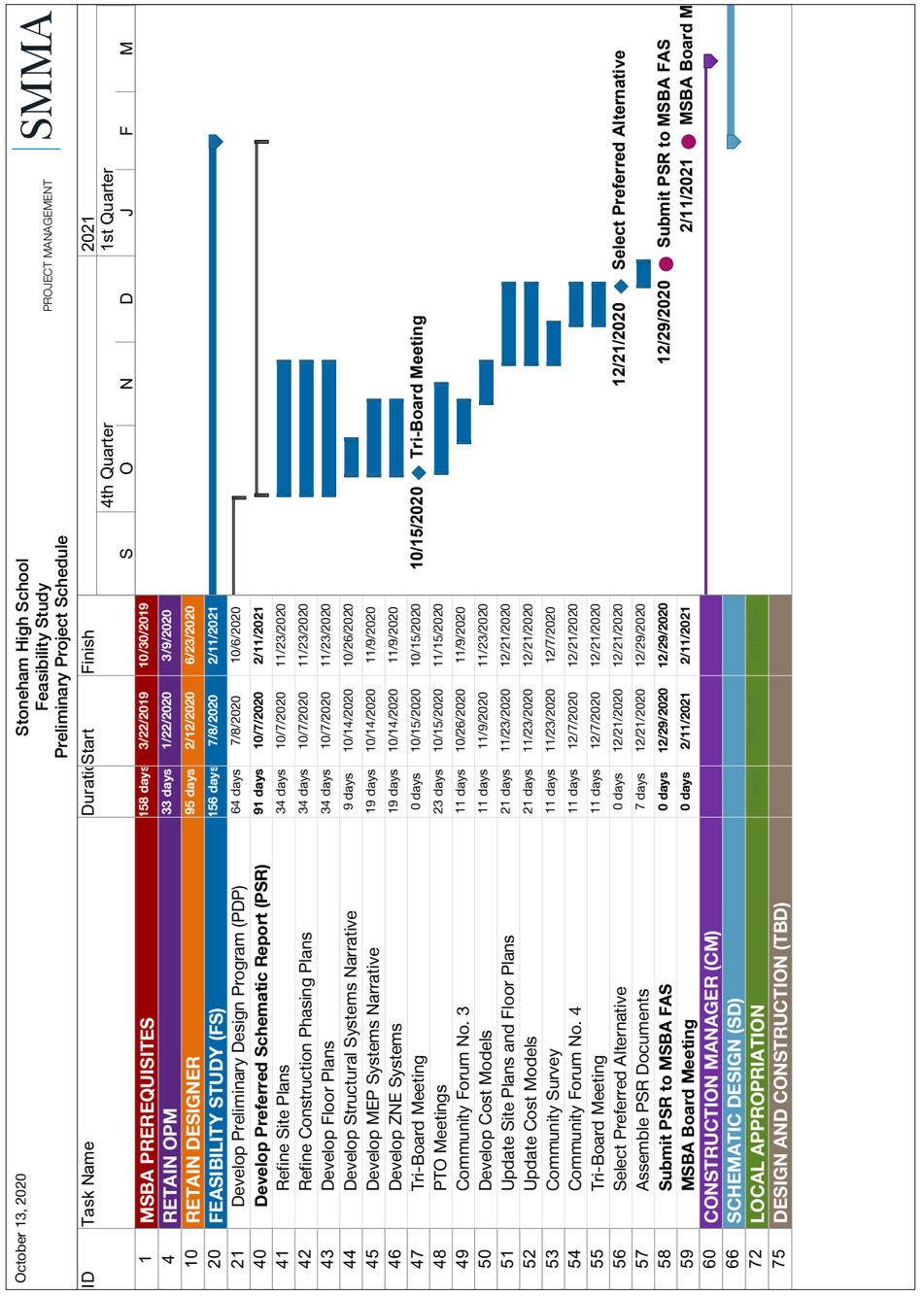
**STONEHAM HIGH SCHOOL FEASIBILITY STUDY**
**SCHOOL BUILDING COMMITTEE**

**MEETINGS SCHEDULE AND AGENDAS**
**September 8, 2020** ***Revised October 9, 2020***

| DATE | AGENDA |
|---|---|
| ***Feasibility Study Phase (PSR)*** | |
| October 13, 2020 | SCHOOL BUILDING COMMITTEE MEETING - *TUESDAY* |
| | Review PSR Phase Schedule |
| | Review PSR Phase Goals |
| | Decide Construction Delivery Method |
| | Prepare for Tri-Board Meeting |
| | |
| October 15, 2020 | TRI-BOARD MEETING - 7:00 PM at the High School Gymnasium |
| | |
| October 26, 2020 | SCHOOL BUILDING COMMITTEE MEETING |
| | Update on Construction Alternatives and Phasing |
| | Structural Narrative Review |
| | Review MSBA Comments on PDP Submission |
| | Prepare for Community Forum No. 3 |
| | |
| TBD | COMMUNITY FORUM NO. 3 - 6:30 PM |
| | |
| November 9, 2020 | SCHOOL BUILDING COMMITTEE MEETING |
| | Update on Construction Alternatives |
| | MEP Systems Narrative Review |
| | Update on Sustainable Design |
| | |
| TBD | PTO PRESENTATIONS |
| | |
| November 23, 2020 | SCHOOL BUILDING COMMITTEE MEETING |
| | Update on Construction Alternatives and Phasing |
| | Review Cost Models |
| | Preliminary Options Evaluation |
| | |
| December 7, 2020 | SCHOOL BUILDING COMMITTEE MEETING |
| | Update on Construction Alternatives |
| | Update on Sustainable Design |
| | Review Cost Models |
| | Options Evaluation |
| | Discuss the One Preferred Option |
| | Prepare for Community Forum No. 4 |
| | |
| TBD | COMMUNITY FORUM NO. 4 - 6:30 PM |
| | |
| TBD | TRI-BOARD MEETING |
| | |
| December 21, 2020 | SCHOOL BUILDING COMMITTEE MEETING |
| | Decide the One Preferred Construction Alternative |
| | Vote to Submit Preferred Schematic Report to MSBA |
| | |
| *December 29, 2020* | *SUBMIT PREFERRED SCHEMATIC REPORT PACKAGE TO MSBA* |
| | |
| | ADDITIONAL MEETINGS TO BE SCHEDULED |
| | |



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SMMA
Project Management

# Stoneham High School Feasibility Study

Stoneham, MA
10/4/20

## PREFERRED SCHEMATIC STUDY AND REPORT (PSR) REQUIREMENTS

**Submission Date: December 29, 2020**

| REFERENCE | ITEM | RESPONSIBILITY |
|---|---|---|
| | ➢ **TRANSMITTAL LETTER** | SMMA |
| | ➢ **COVER** | P&W |
| | ➢ **TABLE OF CONTENTS** | P&W |
| MSBA 3.3.1 | ➢ **INTRODUCTION / EXECUTIVE SUMMARY** | |
| | ❑ Overview of process undertaken to arrive at the Preferred Alternative | P&W |
| | ❑ Project Schedule Summary, including: | SMMA |
| | o Projected MSBA Board of Directors Meeting for approval of Project Scope & Budget Agreement (PFA) | |
| | o Projected Town vote for Project Funding | |
| | o Anticipated start of Construction | |
| | o Target Move-in Date | |
| | ❑ Summary of Final Evaluation of Existing Conditions | P&W |
| | ❑ Summary of Final Evaluation of Alternatives | P&W |
| | ❑ Summary of the District's Preferred Alternative | P&W |
| MSBA 3.3.2 | ➢ **EVALUATION OF EXISTING CONDITIONS** | |
| | ❑ Narrative (w/graphics if required) of additional evaluations or new information. Indicate additional testing recommendations in future phases. | P&W |
| MSBA 3.3.3 | ➢ **FINAL EVALUATION OF ALTERNATIVES** | |
| | ❑ Provide at least three (3) potential Alternatives | P&W |
| | **Provide the following for each Alternative, where appropriate** | |
| | ❑ Analysis of each prospective site | P&W |
| | o Evaluation of construction impact on students | |
| | o Measures taken to mitigate student impact | |
| | ❑ Conceptual Architectural Drawings | P&W |
| | ❑ Conceptual Site Drawings | P&W |
| | ❑ Narrative of Structural Systems | P&W |
| | ❑ Narrative of the source, capabilities and method of obtaining all utilities | P&W |
| | ❑ Narrative of MEP and Technology Systems with estimated MEP loads | P&W |
| | ❑ Estimated Total Project Budget | SMMA |
| | ❑ Construction Cost Estimate (Uniformat Level 2, minimum) | P&W |
| | ❑ Narrative of Permitting requirements and estimated time to acquire them | P&W |
| | ❑ Proposed Project Design and Construction Schedule. | SMMA |
| | ❑ Cost Comparison Matrix - Table 1 Summary of Preliminary Design Pricing – page 14 | SMMA |
| MSBA 3.3.4 | ➢ **PREFERRED SOLUTION** | |
| | ❑ Provide an updated Educational Program | District - *John/Bryan* |
| | ❑ Provide the Preferred Alternative Space Summary | District -*John/Bryan* |
| | ❑ Summary Description of the District's Preferred Alternative including how it meets the following: | P&W |
| | o District's updated Educational Program | |
| | o Key Educational Adjacencies | |
| | o Programmatic Spaces | |
| | ❑ Preferred Alternative Space Summary Variances | P&W |
| | o Description of variances between PDP Space Template & Preferred Alternative Space Template | |
| | ❑ Sustainable Design Goals | P&W |
| | o LEED-S scorecard | |
| | o Sustainable Design — Signed Certification Statement – page 16 | |

1000 Massachusetts Avenue
Cambridge, MA 02138
617.547.5400

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SMMA
Project Management

Stoneham High School Feasibility Study

Stoneham, MA
10/4/20

PREFERRED SCHEMATIC STUDY AND REPORT (PSR) REQUIREMENTS

Submission Date: December 29, 2020

| REFERENCE | ITEM | RESPONSIBILITY |
|---|---|---|
| | ❑ Conceptual Floor Plans | P&W |
| | o Provide Color Plans | |
| | o Label All Spaces | |
| | ❑ Conceptual Site Plans | P&W |
| | o Structures and Boundaries | |
| | o Site Access and Circulation | |
| | o Parking and Paving | |
| | o Zoning setbacks and limitations | |
| | o Easements and environmental buffers | |
| | o Emergency vehicle access | |
| | o Utilities | |
| | o Athletic fields and outdoor educational spaces (existing and proposed). | |
| | o Site orientation | |
| | ❑ Project Budget | SMMA |
| | o Estimated Total Construction Cost | |
| | o Estimated Total Project Cost | |
| | o District's not to exceed Total Project Budget | |
| | ❑ Estimated Funding Capacity | District - *Dennis* |
| | o List of other municipal projects currently underway | |
| | o Description of Local process for authorization and funding of the Proposed Project | |
| | o Estimated impact to local property tax | |
| | ❑ Budget Statement | District - *John* |
| | o Budget Statement — Expenditures (Appendix 3E) | |
| | o Budget Statement — Revenue (Appendix 3E) | |
| | ❑ Updated Project Schedule | SMMA |
| | o MSBA Board of Directors meeting for proceeding into SD | |
| | o MSBA Board of Directors meeting for PFA | |
| | o Town vote for Project Funding | |
| | o Design Submission Milestones | |
| | o Construction Start | |
| | o Substantial Completion | |
| | o Move-in date | |
| MSBA 3.3.5 | ➢ **LOCAL ACTIONS AND APPROVAL LETTER; to include the following:** | |
| | ❑ Signed Local Actions and Approval Certification | District – *Dennis, John, Jaime* |
| | ❑ SBC Meeting Minutes, with Vote to Submit Feasibility Study | SMMA |
| | ❑ List of SBC Meetings | SMMA |
| | ❑ List of Public meetings | SMMA |
| | ❑ Identify location of where material is for public review. | SMMA |
| MSBA 3.3.6 | ➢ **Appendix** | |
| | ❑ MSBA Preliminary Design Program Comments and District's Response | P&W |
| | ❑ Preferred Alternative Plans (Half-size set bound separately) | P&W |

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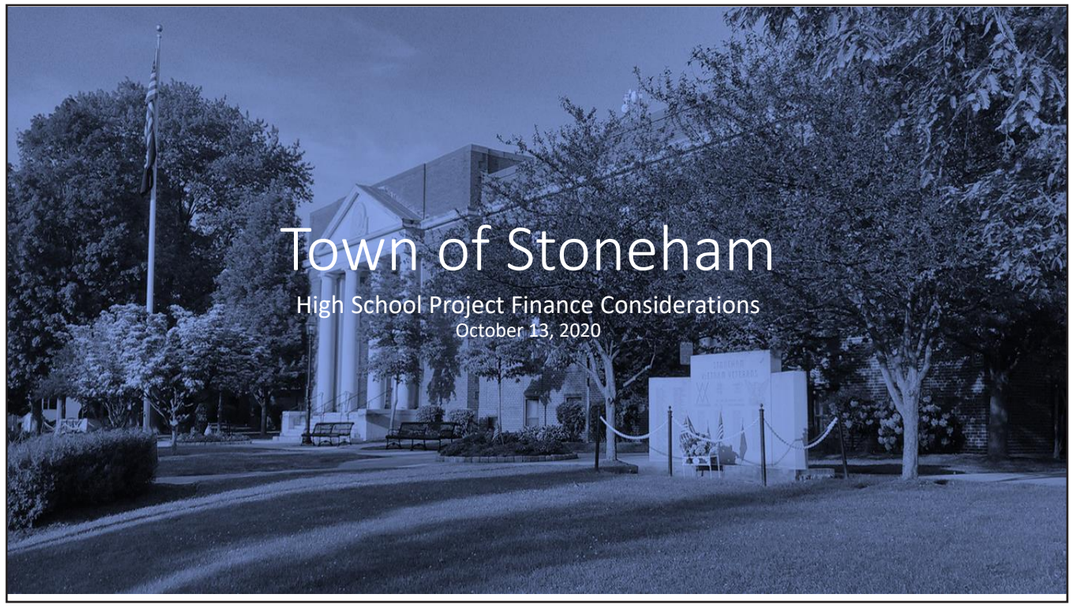
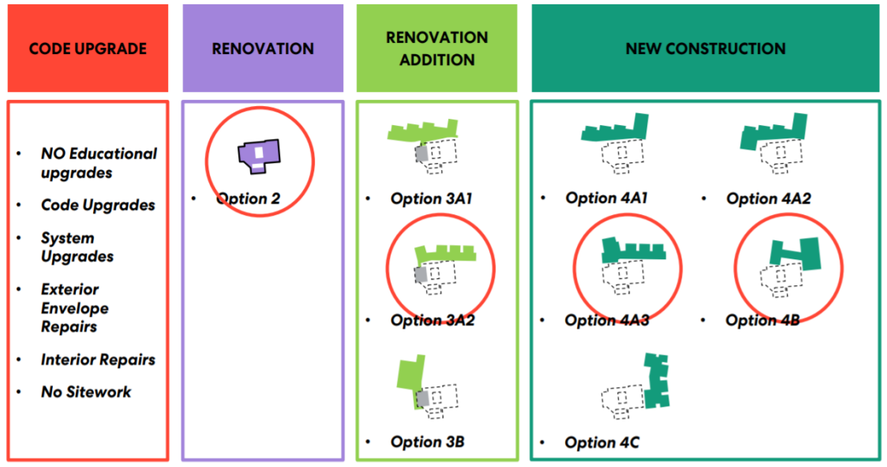



## Design Options Summary






## Total Project Cost and Approximate Cost to Stoneham




| | Repairs Only | Renovation Only | Reno /Add Option 3A2 | New Contr. Option 4A3 | New Contr. Option 4B |
|---|---|---|---|---|---|
| Total Project Cost | $114,967,198 | $173,446,250 | $175,193,556 | $174,779,683 | $172,897,860 |
| Approximate MSBA Reimbursement | $0 | $61,945,728 | $54,915,452 | $51,046,210 | $50,911,806 |
| **Approximate Cost to the Town** | **$114,967,198** | **$111,500,522** | **$120,278,104** | **$123,733,473** | **$121,986,054** |

Costs subject to change as Feasibility Study progresses.

## Recent MSBA High School Projects

| Project | | Students | SF | Total Project Budget | Reimb Rate | Grant | Effective Reimb Rate | Delta Reimb Rate |
|---|---|---|---|---|---|---|---|---|
| **Belmont High School** | Renovation/Addition | 2,215 | 445,100 | $295,159,189 | 40.66% | $80,644,278 | 27.32% | *13.34%* |
| **Arlington High School** | New | 1,755 | 408,590 | $290,851,820 | 49.72% | $86,019,645 | 29.58% | *20.14%* |
| **Central Berkshire High School** | New | 460 | 122,760 | $72,721,109 | 59.44% | $31,311,527 | 43.06% | *16.38%* |
| **Lowell High School** | Renovation/Addition | 3,520 | 622,777 | $343,399,220 | 80.00% | $215,992,406 | 62.90% | *17.10%* |
| **Pentucket High School** | New | 965 | 211,700 | $146,332,328 | 57.63% | $54,118,605 | 36.98% | *20.65%* |
| **Sharon High School** | New | 1,250 | 240,204 | $163,000,000 | 48.95% | $53,823,005 | 33.02% | *15.93%* |
| **Nausett High School** | Renovation/Addition | 905 | 214,250 | $131,825,665 | 43.39% | $36,676,476 | 27.82% | *15.57%* |
| **Waltham High School** | New | 1,830 | 414,854 | $374,567,387 | 65.71% | $122,302,271 | 32.65% | *33.06%* |
| **Worcester Doherty High School*** | New | 1,670 | 420,000 | $293,825,418 | | | 0.00% | *0.00%* |
| **Stoneham High School**** | **TBD** | **695** | **204,107** | **$172,897,860** | **55.06%** | **$50,911,806** | **29.45%** | ***25.61%*** |

*MSBA PS&B Meeting projected
** Based on Option 4B, all costs are approximate

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## Single Family Tax Calculation Assumptions

- Impact Date -Fiscal Year 2023
- Levy Estimate Trended from FY21
- 2.5% increases in Tax Levy
- New Growth ***
- FY23 Debt Exclusion Payment Used
- RO and CIP Value Percentages Remain Consistent from FY21

## Tax Impact

| | Code Repair Only Option 1 | Renovation Only Option 2 | Renovation/ Addition Option 3A2 | New Construction Option 4A3 | New Construction Option 4B |
|---|---|---|---|---|---|
| ***Stoneham Share*** | **$114,967,198** | **$111,500,522** | **$120,278,104** | **$123,733,473** | **$121,986,054** |
| Rate | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% |
| Term (years) | 20 | 20 | 20 | 20 | 20 |
| Yearly Payment-20 yr Average | $ 7,727,602 | $ 7,494,586 | $ 8,084,578 | $ 8,316,833 | $ 8,199,379 |
| Average Home Value | $ 577,700 | $ 577,700 | $ 577,700 | $ 577,700 | $ 577,700 |
| **Annual Tax Increase Average Home-20 yr Average** | **$ 895** | **$ 868** | **$ 937** | **$ 964** | **$ 950** |
| Annual Tax Increase per $1,000 Valuation | $ 1.55 | $ 1.50 | $ 1.62 | $ 1.67 | $ 1.65 |

Assumptions: Tax rate based on Fiscal 2023 assessed valuation and AVERAGE house value of $577,700
Yearly impact will change based upon subsequent year tax rates and valuations.

Costs subject to change as Feasibility Study progresses.



## Tax Impact Comparison

| Assessed Value | No Debt Exclusion Estimated Tax Bill | Option 4B 20 Years 3.0% | | Option 4B 30 Years 3.5% | |
|---|---|---|---|---|---|
| 1,200,000 | 13,597 | $15,572 | $1,975 | $15,195 | $1,598 |
| 1,100,000 | 12,464 | $14,275 | $1,811 | $13,929 | $1,465 |
| 1,000,000 | 11,331 | $12,977 | $1,646 | $12,663 | $1,332 |
| 900,000 | 10,198 | $11,679 | $1,482 | $11,396 | $1,199 |
| 800,000 | 9,065 | $10,382 | $1,317 | $10,130 | $1,065 |
| 700,000 | 7,932 | $9,084 | $1,152 | $8,864 | $932 |
| 600,000 | 6,799 | $7,786 | $988 | $7,598 | $799 |
| **577,195** | **6,540** | **$7,490** | **$950** | **$7,309** | **$769** |
| 500,000 | 5,665 | $6,489 | $823 | $6,331 | $666 |
| 400,000 | 4,532 | $5,191 | $658 | $5,065 | $533 |
| 300,000 | 3,399 | $3,893 | $494 | $3,799 | $400 |

## Tax Impact Comparison Surrounding Communities

**Why average single family tax bill used as a basis of comparison?**

1. Variation in the level of assessment
2. Variation in percentage of Residential and Commercial classes
3. Variation in CIP Shift Percentages

| Town | FY20 Avg SF TB | FY23 |
|---|---|---|
| Woburn | $4,677 | $5,037 |
| Peabody | $4,751 | $5,116 |
| Saugus | $5,368 | $5,781 |
| Burlington | $5,466 | $5,886 |
| Billerica | $5,522 | $5,947 |
| **Stoneham w/ No Debt Exlcusion** | **$6,098** | **$6,540** |
| Danvers | $6,451 | $6,947 |
| **Stoneham - 4B 30 Yr** | **$6,098** | **$7,309** |
| Wilmington | $6,873 | $7,401 |
| Tewksbury | $6,921 | $7,453 |
| **Stoneham - 4B 20 YR** | **$6,098** | **$7,490** |
| Melrose | $7,015 | $7,554 |
| Wakefield | $7,099 | $7,645 |
| Chelmsford | $7,362 | $7,928 |
| North Andover | $7,608 | $8,193 |
| Middleton | $8,585 | $9,245 |
| Reading | $8,748 | $9,421 |
| Lynnfield | $9,055 | $9,751 |
| Westford | $9,238 | $9,948 |
| North Reading | $9,381 | $10,102 |
| Bedford | $9,769 | $10,520 |
| Andover | $10,223 | $11,009 |
| Winchester | $14,298 | $15,397 |
| Lexington | $15,547 | $16,742 |

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Questions





Stoneham High School Feasibility Study
Preliminary PDP Total Project Cost Estimate Comparison
9/25/2020 (updated 9/29/20)

PROJECT MANAGEMENT SMMA

PM&C Estimate
Dated 9/25/20

| SF | Option | Project Costs | | Project Cost/SF |
|---|---|---|---|---|
| 208,113 | **Repairs Only Option 1** | Construction Cost | $88,047,467 | |
| | | Building Cost | $78,183,395 | |
| | | Site Cost | $3,795,310 | |
| | | Concession/Locker Room Building | $0 | |
| | | Demo/HazMat Cost | $6,068,762 | |
| | | Temporary Classroom Modulars | $5,600,000 | |
| | | Fees,Testing, Utilities, and Expenses | $15,156,408 | |
| | | FFE/Technology | $0 | |
| | | Contingencies | $6,163,323 | |
| | | **total** | **$114,967,198** | **$552** |
| 208,113 | **Renovation Only Option 2** | Construction Cost | $134,079,253 | |
| | | Building Cost | $101,123,150 | |
| | | Site Cost | $24,824,019 | |
| | | Concession/Locker Room Building | $2,250,000 | |
| | | Demo/HazMat Cost | $5,882,084 | |
| | | Temporary Classroom Modulars | $5,600,000 | |
| | | Fees,Testing, Utilities, and Expenses | $22,036,949 | |
| | | FFE/Technology | $2,502,000 | |
| | | Contingencies | $9,228,048 | |
| | | **total** | **$173,446,250** | **$833** |
| 204,107 | **Renovation/Addition Option 3A2** | Construction Cost | $140,176,603 | |
| | | Building Cost | $102,795,319 | |
| | | Site Cost | $28,287,704 | |
| | | Concession/Locker Room Building | $2,250,000 | |
| | | Demo/HazMat Cost | $6,843,580 | |
| | | Fees,Testing, Utilities, and Expenses | $22,860,091 | |
| | | FFE/Technology | $2,502,000 | |
| | | Contingencies | $9,654,862 | |
| | | **total** | **$175,193,556** | **$858** |
| 204,107 | **New Construction Option 4A3** | Construction Cost | $139,833,139 | |
| | | Building Cost | $102,795,502 | |
| | | Site Cost | $28,051,645 | |
| | | Concession/Locker Room Building | $2,250,000 | |
| | | Demo/HazMat Cost | $6,735,992 | |
| | | Fees,Testing, Utilities, and Expenses | $22,813,724 | |
| | | FFE/Technology | $2,502,000 | |
| | | Contingencies | $9,630,820 | |
| | | **total** | **$174,779,683** | **$856** |
| 204,107 | **New Construction Option 4B** | Construction Cost | $138,271,461 | |
| | | Building Cost | $101,572,664 | |
| | | Site Cost | $27,709,717 | |
| | | Concession/Locker Room Building | $2,250,000 | |
| | | Demo/HazMat Cost | $6,739,080 | |
| | | Fees,Testing, Utilities, and Expenses | $22,602,897 | |
| | | FFE/Technology | $2,502,000 | |
| | | Contingencies | $9,521,502 | |
| | | **total** | **$172,897,860** | **$847** |

Costs subject to change as Feasibility Study progresses

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PROJECT MANAGEMENT

Stoneham High School Feasibility Study
Preliminary PDP Approximate Reimbursement Comparison
9/25/2020 (updated 9/29/20)

**DRAFT**

PM&C Estimate
Dated 9/25/20

| | Code Repair Only Option 1 | Renovation Only Option 2 | Renovation/ Addition Option 3A2 | New Construction Option 4A3 | New Construction Option 4B |
|---|---|---|---|---|---|
| **Total Project Cost** | $114,967,198 | $173,446,250 | $175,193,556 | $174,779,683 | $172,897,860 |
| **Approximate MSBA Reimbursement** | $0 | $61,945,728 | $54,915,452 | $51,046,210 | $50,911,806 |
| **Approximate Cost to the Town** | **$114,967,198** | **$111,500,522** | **$120,278,104** | **$123,733,473** | **$121,986,054** |
| **Summary of Approximate Ineligible Costs** | | | | | |
| **Temporary Classroom Modulars** | na | $5,600,000 | $0 | $0 | $0 |
| **Site Costs above 8% Cap** | na | $16,924,259 | $20,241,418 | $20,000,426 | $19,756,593 |
| **Concession/Locker Room Building** | na | $2,250,000 | $2,250,000 | $2,250,000 | $2,250,000 |
| **Building Costs above $333/SF Cap** | na | $39,911,373 | $43,051,313 | $43,051,511 | $41,730,846 |
| **Building Costs Ineligible SF** | na | $0 | $5,984,343 | $8,651,007 | $8,651,007 |
| **OPM and Designer Fees on Ineligible SF** | na | $0 | $217,855 | $947,260 | $936,508 |
| **Asbestos Flooring Abatement** | na | $412,000 | $412,000 | $412,000 | $412,000 |
| **FFE/Technology over $2,400/student** | na | $834,000 | $834,000 | $834,000 | $834,000 |
| **Legal Fees, Moving Expenses, Contingencies** | na | $4,374,878 | $4,557,798 | $5,923,326 | $5,860,858 |
| | $0 | $70,306,510 | $77,548,727 | $82,069,530 | $80,431,812 |

Costs subject to change as Feasibility Study progresses





SMMA

Project Management

# Memorandum

To: Stoneham School Building Committee
From: Joel G. Seeley
Project: Stoneham High School Feasibility Study
Re: District Offices Program and Cost
Distribution: Stoneham School Building Committee (MF)

Date: 10/11/2020
Project No.: 20033

The Space Summary for the District Offices defines 3,900 Square Feet. The list of spaces is shown below:

| | | | |
|---|---|---|---|
| District Offices- Superintendent/PPS | | | |
| District Offices- Superintendent **(Total Net SF 2,600sf/ Gross SF 3,900sf** | | | |
| Superinendent w/ meeting area | 250 | 1 | 250 |
| Secretary w/ waiting | 200 | 1 | 200 |
| Conference Room | 450 | 1 | 450 |
| Assistant Superintendent | 150 | 1 | 150 |
| Human Resources | 150 | 1 | 150 |
| Special Education | | | |
| Assistant Superintendent w/ meeting | 250 | 1 | 250 |
| Secretaries (2) w/ waiting | 125 | 2 | 250 |
| Conference Room | 450 | 1 | 450 |
| Business Office | | | |
| Budget Director | 150 | 1 | 150 |
| Payroll | 150 | 1 | 150 |
| Accounts Payable | 150 | 1 | 150 |

The building-only construction cost per square feet for Option 4B is $498 per square feet. Using $498 per square feet as the cost model, the District Offices construction cost would equate to $1,942,200 (3,900 x $498). This construction cost would calculate to $2,340,351 total project cost, once factoring in fees and contingencies. The District Offices cost would not be reimbursable.

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## DESIGN BID BUILD V. CONSTRUCTION MANAGEMENT AT RISK CONTRACTING STRUCTURE

### DESIGN BID BUILD

1. DBB is a Single Phase "Fixed Price" Construction Contracting Method.
2. Under DBB, a Public Owner must procure an Owner's Project Manager to act as its Representative during the Design and Construction of the Project and a Designer to prepare the Project Design.
3. When the Design is complete, the Owner openly solicits Public Bids from every General Contractor that meets a list of statutorily defined public bidding eligibility requirements.
4. The Bid Solicitation requires a single Lump Sum Bid Price to complete all of the Work included in the Design.
5. The Owner must award the Construction Contract to the Lowest Responsible Eligible Bidder.

### CONSTRUCTION MANAGEMENT AT RISK

1. CMR is a Two Phase "Cost Plus" Construction Contracting Method.
2. When using a CMR, a Public Owner must procure an Owner's Project Manager to act as its Representative during the Design and Construction of the Project and a Designer to prepare the Project Design.
3. Before the Design is prepared, the Owner retains a CMR through a systematic Qualifications Based Procurement Process.
4. The CMR provides advice during the Design Phase regarding constructability and budget and then Constructs the Project, as designed.
5. The CMR Contract Price will be the sum of the CMR's Cost to Construct the Work plus the General Conditions (CMR's Costs that are not incorporated into the Project) and a negotiated CM Fee, as compensation.
6. When the Design is at least 60% complete, the Owner and the CMR will agree upon a Guaranteed Maximum Price ("GMP") as a cap for the Contract Price. Once the GMP is established, the CMR will be paid the lesser of the Contract Price or the GMP.

Attachment A

## DISADVANTAGES

### DESIGN BID BUILD

1. A DBB General Contractor is not available to help identify Design conflicts and omissions prior to construction. Any significant conflicts and/or omissions that are not corrected prior to construction will adversely impact the Project Schedule and/or lead to claims for additional compensation.
2. With DBB, an Owner must solicit Public Bids from every General Contractor that meets the statutorily defined public bidding eligibility requirements and award the construction contract to the "Lowest Responsible Eligible Bidder". However, that bidder may not be the best choice to construct the Project. If a Project is complex, an Owner will likely want to identify Contractors that are the most capable of constructing the Project and choose a Contractor to construct the Project from that pool. DBB does not have a legal mechanism to achieve that objective.
3. With DBB, a Designer prepares the Design, General Contractors Bid on that Design, and the "Lowest Responsible Eligible Bidder" constructs the Project. This "linear" process restricts the Owner's ability to creatively progress the Project through methods such as having the Contractor begin construction before the Design is completed.

### CONSTRUCTION MANAGEMENT AT RISK

1. Subject to the GMP, a CMR is reimbursed for the Cost of Work and paid a fee as compensation. This places the risk for the cost of completing the work up to the amount of the GMP upon the Owner.
2. Massachusetts Law requires the Owner of a DBB Public Building Construction Project to solicit separate competitive bids from Subcontractors for work that is included in eighteen (18) key sub-trade categories. The Sub-Bid Solicitation is not issued until the Design of the work is completed and each Sub-Bidder is required to submit a single Lump Sum Bid Price to complete all of the Work that is included in a sub-trade category. A list of those Sub-Bids is provided to General Bidders prior to the date of the General Bid Opening and the General Bidders are required to include separate sub-bid fixed prices for the 18 sub-trade categories in their General Bids. With some differences, the law is also applicable to CMR contracting. Given the significant fixed price cost liability for subcontract work, a GMP for a CMR Contract under GL c. 149A will not typically be set until the entire Design is completed. That delay transfers most of the risk for the cost of completing the work to the Owner, obviating the potential for any cost savings that may have been available through competition.

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## ADVANTAGES

### DESIGN BID BUILD

1) Competitive Bidding is the hallmark of DBB contracting and, assuming the Project Design is clear and complete and all Prequalified Bidders are capable of effectively completing the work, that competition should produce the best available price.
2) A DBB General Contractor is obligated to construct all of the Work that is delineated in the Project Design for a single, Lump Sum Fixed Price. This places the risk for the cost of completing the Work included in the Design entirely on the General Contractor.
3) The Work and the Schedule to complete that Work are narrowly defined in a DBB General Contract and that simplicity should concomitantly simplify management of the Project, provided the Design is clear and straight forward.

### CONSTRUCTION MANAGEMENT AT RISK

1) Qualifications Based Procurement is the hallmark of CMR contracting and that ability allows the Owner to identify CMRs that are the most capable of constructing the Owner's Project and to choose a CMR for the Project from that pool.
2) A CMR is available during the Design Phase to work with the Designer to identify Design conflicts and omissions prior to construction. Any significant Design conflicts and/or omissions that are not identified and corrected prior to construction will adversely impact the Project Schedule and/or lead to claims for additional compensation. The CMR's assistance during the Design Phase should drastically reduce that possibility.
3) The CMR contracting process is flexible and provides an Owner with the ability to creatively progress a Project through methods such as having the CMR begin construction before a Design is completed.

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## CONCLUSIONS

### DESIGN BID BUILD

1) The process is best suited to projects with straight forward Designs.

### CONSTRUCTION MANAGEMENT AT RISK

1. The contracting process is best suited to projects with complicated Designs and/or strict schedule limitations.

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**Company Name**

# Memo

***To:*** Stoneham School Building Committee

***From:*** SSBC Public Relations Committee

***Date:*** September 30, 2020

***Re:*** Branding

---

Following the September 28 SSBC meeting, several of the PR Committee members briefly discussed how to best invite more community engagement as we move into the next phase of the project.

Based on individual input from the PR Committee members on a one-to-one basis, we would like to present this information for your consideration:

Three words - Envision Engage Execute

We are thinking that these three words could drive our public relations campaign as we move forward in the process.

Envision – the phase we are currently in, in which the SSBC and the Community share ideas for what we would like our future high school complex to be, whom we would like it to serve and how we imagine it will happen based on the designs we choose. We should consider the best vehicles for reaching the broadest possible audience to invite the highest degree of interaction as we formulate our wish list.

Engage – the next phase, which would begin when we are ready to seek community input for a final design decision and as we move toward a community vote on the expenditure. We should again consider the best vehicle for reaching the broadest possible community audience on a more one-to-one basis to encourage investment in the plan we would like to see move forward.

Execute – the final phase, in which we bring the final design to the community and seek support for the decision and the expenditure, leading to the actual construction of the building. ***[What we need to do should go here – open to suggestions.]***



We would like to have a brief discussion about this plan at the October 13 meeting to hear the Committee's thoughts on this plan and how best to move forward. We know that we need to get the community engaged and enthusiastic about the project and want to hear from our Committee members on the best way to accomplish it based on previous experiences with Stoneham's other school building committees and with Perkins and Will's and SMMA's past experience.



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Updated: 10/08/20

## Stoneham High School Feasibility Study
### Stoneham High School Building Committee

### FAQs

1. Why are we performing a Feasibility Study?

   The 52 year-old Stoneham High School, originally constructed as a Junior High School, has served the community well. The school has reached a point that it no longer meets today's building codes, has inefficient and inoperable systems and does not support the educational curriculum. The Massachusetts School Building Authority (MSBA) has visited the school and agrees. The Feasibility Study is to investigate these conditions and develop a cost effective, sustainable and educationally appropriate solution to the aging Stoneham High School. The Stoneham School Building Committee (SSBC) has no preconceived solutions and will investigate renovation, renovation with addition, and new construction options. The MSBA process is rigorous and transparent, and with the approval of the MSBA, the state will provide a grant to support the cost of the project.

2. How long has the Feasibility Study been underway?

   This process commenced over seven years ago with the submission of the initial Statement of Interest (SOI) for the Stoneham High School to the MSBA by the Select Board and School Committee. The MSBA deferred the SOI, as well as subsequent submissions for five successive years until the March 2018 submission, which MSBA reviewed and approved in December 2018, agreeing that a Feasibility Study should be undertaken on the Stoneham High School. The Town and the MSBA executed an agreement for the Feasibility Study in February 2020, which is being overseen by the SSBC.

3. What is the role of the Massachusetts School Building Authority (MSBA)?

   The MSBA is the state authority that administers and funds a program of grants for Massachusetts public school projects. The MSBA mandates a multi-step rigorous study and approval process encompassed within the Feasibility Study.

4. What options have been studied?

   Ten design alternatives were discussed and evaluated over the course of nine (9) SSBC meetings and two (2) community forums. The committee focused on the following criteria when developing the options: educational benefits, cost, minimal disruption during construction, sustainability, community use and traffic. The ten design alternatives explored were:

   - *Option 1 – Code Repair Only*
   - *Option 2 – Renovation Only*
   - *Option 3A1 – Renovation with Addition*
   - *Option 3A2 – Renovation with Addition*
   - *Option 3B – Renovation with Addition*





   - *Option 4A1 – New Construction*
   - *Option 4A2 – New Construction*
   - *Option 4A3 – New Construction*
   - *Option 4B – New Construction*
   - *Option 4C – New Construction*

The SSBC, on September 28, 2020 narrowed the options down to five options, with the final selection scheduled to be made the end of December 2020.

These five options are:

- *Option 1 – Code Repair Only*
  This option only repairs the existing building to meet current building codes. There are no changes to the building for educational improvements.

- *Option 2 – Renovation Only*
  This option renovates the existing building, including renovations for educational improvements. There are no building additions included. Temporary classroom modulars are required during construction for swing space.

- *Option 3A2 – Renovation with Addition*
  This option renovates the existing gymnasium only and constructs a new addition to the north of the existing building housing all other school functions, including auditorium, cafeteria, classrooms and administration offices.

- *Option 4A3 – New Construction*
  All new two-story construction located to the north of the existing building.

- *Option 4B – New Construction*
  All new two-story construction located to the north and east of the existing building.



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5. What will the options cost?

The estimated Total Project Cost and approximate cost to Stoneham, after MSBA reimbursement, for each option is as follows:



| | Code Repair Only Option 1 | Renovation Only Option 2 | Renovation/ Addition Option 3A1 | Renovation/ Addition Option 3A2 | Renovation/ Addition Option 3B | New Construction Option 4A1 | New Construction Option 4A2 | New Construction Option 4A3 | New Construction Option 4B | New Construction Option 4C |
|---|---|---|---|---|---|---|---|---|---|---|
| Approximate Total Project Cost | $115.0M | $173.4M | $175.7M | $175.2M | $174.6M | $177.7M | $180.6M | $174.8M | $172.9M | $173.7M |
| Approximate Cost to Stoneham | $115.0M | $111.5M | $120.7M | $120.3M | $119.7M | $126.4M | $129.2M | $123.7M | $122.0M | $122.8M |

6. What is included in the total project cost?

The total project cost estimate includes all construction costs – site work, playfields and demolition of the existing school. It also includes design fees, construction-related testing costs, construction contingencies and new furniture and educational technology equipment.

7. How much input will the community have in the ultimate design of the high school?

The SSBC will ensure that all community members have the opportunity to share in the design process through a variety of methods. The SSBC has hosted two community listening sessions or forums so far in the Feasibility Study process and is planning to host many more. Additionally, the Committee's bi-weekly meetings are posted and open to the public and all project information is posted on the Town of Stoneham SSBC webpage: https://www.stoneham-ma.gov/hsbc.

8. How was the 695 student Design Enrollment determined?

The Feasibility Study commenced over 7 years ago with the submission of the initial Statement of Interest for the Stoneham High School to the MSBA. The MSBA invited the Town into the Eligibility Period in December 2018 based on the conditions identified in the Statement of Interest. The Eligibility Period is a 270-day period during which the Town is required to complete certain preliminary requirements. One of these requirements is to agree on the amount of students a revitalized Stoneham High School is to be designed to house.

The process entailed Stoneham providing enrollment, housing, and development information to the MSBA. The MSBA then develops a 10-year enrollment projection for the school. In a collaborative process, the MSBA and the Town participated in a Design Enrollment conference to review the MSBA's projection, which calculated a 660 student



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Stoneham High School. The Town responded that key aspects of proposed housing developments and potential reductions in student out-migration may not have been adequately factored in and the MSBA increased their projection to 695 students. In September 2019, the Town and MSBA agreed that a revitalized Stoneham High School is to be designed to house 695 grades 9-12 students.

9. Will the final decision be to renovate the existing building or build a new building and who will make that decision?

Once the Feasibility Study is completed, the SSBC will analyze the pros and cons of renovating versus building new. With all the information gathered, the Committee will consider all options and make a final recommendation to Town Meeting.

10. What happens if the Massachusetts School Building Authority (MSBA) doesn't want to fund everything we want?

Any aspects of a build/renovation for the high school that are not approved for reimbursement by the MSBA will have to be funded entirely by the Town.

11. How will the unreimbursed cost be funded?

All costs, both reimbursable and non-reimbursable, will be funded through the Town via a vote at Town Meeting to approve a debt-exclusion ballot question for the total cost.

12. When will the school construction be completed?

The building construction for the renovation with addition option and the new construction options is estimated to be completed for the school year 2024, with the existing building demolition and sitework following thereafter. The repair only and renovation only options are estimated to take a year longer due to swing space requirements. The construction schedules will be further refined as the Feasibility Study progresses.

13. The School Department already had a feasibility study done for the high school, why do we need another one?

Town Meeting authorized its own feasibility study that was completed in 2018. The information from that study was used to successfully obtain an invitation from the MSBA to participate in the program. Once Stoneham was invited into the program, MSBA requires a more detailed Feasibility Study which includes more information than the initial study provided. The MSBA funds the feasibility study at the same rate, currently 52.06%.

14. What if the project is not approved by the Town?

The Town would lose millions of dollars in State grant funding to resolve the deteriorating conditions of the 52-year-old Stoneham High School. The Town would still have to spend significant dollars on capital improvements in the upcoming years to address deficiencies and bring the building up to current building codes without addressing educational programming. One hundred percent of these costs would be paid by the Town.



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15. If funding approval for the proposed project does not pass at Town Meeting, can we use the State money to just repair the existing building?

    No, reimbursement from the MSBA is only intended for use on a building project that meets the MSBA requirements.

16. When will the Town be voting to approve the project?

    A Town Meeting is anticipated in Fall 2021 to approve the funding for the project. The ballot vote is anticipated thereafter to approve the exclusion of the costs from the so-called Proposition 2 ½.

17. What happens if the project is approved by the taxpayers?

    The project is moved into the design development phase during which the design and drawings are further refined. This is followed by the construction documents phase when the construction bid documents are prepared by the architect. Construction completion dates will depend on the approved solution.

18. Will ongoing use of Stoneham High School be impacted during construction?

    No, if a new construction option is selected, the distance between construction activity and the day-to-day functions of the existing school will be designed to be adequate to ensure safety and no disruption of the educational process. A fenced-off construction zone, with a dedicated construction vehicles access, will be constantly monitored for safety. If a renovation and addition option is chosen, the construction will be phased and isolated to minimize impact on teaching and learning.

19. Will traffic be affected?

    The design of all options includes mitigation measures to improve the traffic along Franklin Street, especially during morning school arrivals. The roadways and parking in each design option have been expanded and redesigned to improve traffic flow and provide more queuing space for cars on site and off of Franklin Street. Additionally, a new traffic signal is being planned for the Stevens Street and Franklin Street intersection, synchronized with the new signal at the school entrance to improve traffic circulation.

20. How can I keep informed of the high school project?

    You can visit https://www.stoneham-ma.gov/hsbc, which provides a complete list of Committee members, contact information and all published documentation.



Project Management | SMMA

# Project Minutes

| | | | |
|---|---|---|---|
| Project: | Stoneham High School Feasibility Study | Project No.: | 20033 |
| Prepared by: | Joel Seeley | Meeting Date: | 9/29/2020 |
| Re: | Green Building Initiatives Meeting | Time: | 10:00am |
| Location: | Remote Locations | Meeting No: | 3 |
| Distribution: | Attendees (MF) | | |

Attendees:

| PRESENT | NAME | AFFILIATION |
|---|---|---|
| ✓ | Marie Christie | Co-Chair, School Building Committee |
| ✓ | Raymie Parker | Chair, Select Board |
| ✓ | Dennis Sheehan | Town Administrator |
| ✓ | John Macero | Superintendent of Schools |
| ✓ | Brian McNeil | Facilities Director |
| ✓ | Erin Wortman | Director, Planning and Community Development |
| | Susan McPhee | Energy Conservation Coordinator |
| ✓ | Kimberly Cullinane | Eversource - Electricity |
| ✓ | Mark Rooney | Eversource - Electricity |
| ✓ | Denise Rouleau | National Grid - Gas |
| ✓ | Vamshi Gooje | Thornton Tomasetti |
| ✓ | Brooke Trivas | Perkins and Will |
| ✓ | Patrick Cunningham | Perkins and Will |
| ✓ | Kevin Caddle | BALA |
| ✓ | Edward Dolan | BALA |
| ✓ | Joel Seeley | SMMA |
| | | |

| Item # | Action | Discussion |
|---|---|---|
| 3.1 | Record | K. Cullinane introduced V. Gooje of Thornton Tomasetti, the MassSave ZNE Expert. |
| 3.2 | Record | P. Cunningham described the building envelope generally as follows: window-to-wall ratio 25% average, triple-glazed fiberglass windows, triple-glazed curtainwall, robust wall insulation-4” foam in stud cavity with 6” XBS outboard of AVB, robust roof insulation. |
| 3.3 | E. Dolan | E. Dolan generally described the two HVAC system alternatives as follows: 1) Geothermal with chilled beams in classrooms, ERUs for large spaces and VRF in administration and 2) Air-cooled VRF with ERU and AHU on VRF for larger spaces. Electrical will have all LED lighting and Plug-Load Management. |

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Meeting Date: 9/29/20
Meeting No.: 3
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| Item # | Action | Discussion |
|---|---|---|
| | | V. Gooje asked if increased ventilation or filtration is being planned for, related to air-born pathogens? E. Dolan indicated the design has not progressed to that point and he will provide direction as the project design progresses. |
| 3.4 | Record | J. Seeley indicated the facility will be designed to receive PV, but the PV system is not included in the capital project. It may be included thru a future PPA. |
| 3.5 | Record | V. Gooje described the type of services the ZNE Expert will provide generally as 1) Facilitate Energy Workshop, 2) Load Reduction Analysis, 3) HVAC System Selection, 4) Life Cycle Cost Analysis, 5) OPR Review, 6) SD, Progress DD and 100% DD Review and 7) attend meetings. The scope will be negotiated based on project need and funding availability.<br><br>K. Cullinane indicated MassSave will require the SD, Progress DD and 100% DD Review services as a minimum.<br><br>V. Gooje indicated in his experience the results of a massing study has minimal effect on the overall EUI. P. Cunningham recommended the massing study should be limited. |
| 3.6 | P. Cunningham<br>V. Gooje | P. Cunningham to forward the Program, Basis-of-Design and Plans documents to V. Gooje. V. Gooje to develop a fee proposal and submit to MassSave by the end of the week. |
| 3.7 | P. Cunningham | D. Rouleau asked if there will be any gas use on the project. P. Cunningham indicated potentially in the kitchen and science rooms and he will provide direction as the project design progresses. |
| 3.8 | E. Dolan | D. Sheehan asked if the emergency generator will be gas fired? E. Dolan indicated the emergency generator is currently being planned for as diesel fired and he will provide direction as the project design progresses. |
| 3.9 | Committee<br>K. Cullinane | K. Cullinane recommended the committee attend the Eversource Zero Net Energy conference being held virtually on 10/8/20, the Acton-Boxborough Douglas-Gates Elementary School project presentation will be relevant to the Stoneham project. J. Seeley forwarded the invite link to the committee.<br><br>K. Cullinane to forward the Lexington Select Board member presentation to the Medfield Select Board on Lexington's Hastings Elementary School. |
| 3.10 | J. Seeley | J. Seeley to schedule a follow-up meeting in two weeks. |

The information herein reflects the understanding reached. Please contact the author if you have any questions or are not in agreement with these Project Minutes

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Project Management SMMA

# Project Minutes

| | | | |
|---|---|---|---|
| Project: | Stoneham High School Feasibility Study | Project No.: | 20033 |
| Prepared by: | Joel Seeley | Meeting Date: | 9/21/2020 |
| Re: | Educational Mission Subcommittee Meeting | Time: | 3:30pm |
| Location: | Middle School Media Center | Meeting No: | 2 |
| Distribution: | Attendees (MF) | | |

Attendees:

| PRESENT | NAME | AFFILIATION |
|---|---|---|
| ✓ | Jeanne Craigie | Town Moderator |
| ✓ | Josephine Thomson | Community Member |
| ✓ | Nicole Nial | School Committee Member |
| ✓ | Lisa Gallagher | Community Member, School Secretary, Past member of Middle School Building Committee |
| ✓ | Sharon Iovanni | Community Member |
| ✓ | John Macero | Superintendent of Schools, Secretary of School Building Committee |
| ✓ | Bryan Lombardi | Stoneham High School Principal |
| By phone | Brooke Trivas | Perkins and Will |
| ✓ | Joel Seeley | SMMA |
| | | |

| Item # | Action | Discussion |
|---|---|---|
| 2.1 | Record | J. Macero provided an overview of the status of the Educational Program and Space Summary. The Design Options and Cost Models presented at the 9/14/20 SSBC meeting were based on the 209,000 SF Space Summary. Since that meeting additional information has been submitted from Pre-K, PE, SPED which has increased the building size to close to 230,000 SF. J. Macero and B. Lombardi have been working with P&W and the Space Summary is now at 201,407 SF. J. Macero asked the Subcommittee for input on any further space adjustments. |
| 2.2 | Record | The progress Educational Program was distributed, attached. B. Lombardi provided an overview of the High School Vision Committee's work in developing the draft: reviewing the MSBA's sample Educational Programs, touring Billerica High School, speaking with other high school principals, reviewing the 2-week Visioning Workshops and meeting weekly since the Workshops. |
| 2.3 | Record | The progress Space Summary was distributed and reviewed, attached.<br><br>Subcommittee Discussion:<br><br>1. Health Classroom to be listed under Core Academic Spaces, not PE. |

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| Item # | Action | Discussion |
|---|---|---|
| | | 2. There is a desire to add the indoor jogging track back into the Space Summary.<br>3. Determine a more descriptive name for the Black Box Theater and list under Core Academic Spaces. |

The information herein reflects the understanding reached. Please contact the author if you have any questions or are not in agreement with these Project Minutes

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Project Management SMMA

# Project Minutes

Project: Stoneham High School Feasibility Study
Prepared by: Joel Seeley
Re: School Building Committee Meeting
Location: Middle School Gymnasium
Distribution: Attendees (MF)

Project No.: 20033
Meeting Date: 10/26/2020
Time: 7:00pm
Meeting No: 12

Attendees:

| PRESENT | NAME | AFFILIATION | VOTING MEMBER |
|---|---|---|---|
| ✓ | Marie Christie | Co-Chair, School Building Committee | **Voting Member** |
| ✓ | David Bois | Co-Chair, School Building Committee; Community Member with Architecture Experience | **Voting Member** |
| ✓ | Nicole Nial | School Committee Member | **Voting Member** |
| ✓ | Raymie Parker | Chair Select Board | **Voting Member** |
| | | Community Member with Building Commissioner Experience | **Voting Member** |
| Attended Remote | Douglas Gove | Community Member with Engineering Experience | **Voting Member** |
| Attended Remote | Stephen O'Neill | Community Member with Engineering Experience | **Voting Member** |
| ✓ | Josephine Thomson | Community Member | **Voting Member** |
| Attended Remote | Jeanne Craigie | Town Moderator | **Voting Member** |
| ✓ | Lisa Gallagher | Community Member, School Secretary, Past member of Middle School Building Committee | **Voting Member** |
| ✓ | Sharon Iovanni | Community Member | **Voting Member** |
| Attended Remote | Cory Mashburn | Community Member, Finance and Advisory Board | **Voting Member** |
| | Paul Ryder | Community Member with Construction Experience | **Voting Member** |
| Attended Remote | David Pignone | Athletic Director, Member knowledgeable in educational mission and function of facility | **Voting Member** |
| | Kevin Yianacopolus | Local Official responsible for Building Maintenance | **Voting Member** |
| ✓ | Dennis Sheehan | Town Administrator / MCPPO Certified | Non-Voting Member |
| | John Macero | Superintendent of Schools, Secretary of School Building Committee | Non-Voting Member |
| | Bryan Lombardi | Stoneham High School Principal | Non-Voting Member |
| ✓ | Brian McNeil | Facilities Director | Non-Voting Member |
| Attended Remote | Brooke Trivas | Perkins and Will | |
| Attended Remote | Patrick Cunningham | Perkins and Will | |
| Attended Remote | Leo Liu | Perkins and Will | |
| Attended Remote | David Warner | Warner Larson | |
| ✓ | Joel Seeley | SMMA | |
| | | | |

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Project: Stoneham High School Feasibility Study
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| Item # | Action | Discussion |
|---|---|---|
| 12.1 | Record | Call to Order, 7:00 PM, meeting opened by roll call. |
| 12.2 | Record | In accordance with the executive order issued by the Governor on March 10, 2020, this meeting will be held in person and via video conference and a recording of such will be posted on the Town's website. |
| 12.3 | Record | A motion was made by N. Nial and seconded by J. Craigie to approve the 9/28/20 School Building Committee meeting minutes. No discussion, motion passed unanimous by roll call vote. |
| 12.4 | Record | A motion was made by S. Iovanni and seconded by J. Craigie to approve the 10/13/20 School Building Committee meeting minutes. No discussion, motion passed unanimous by roll call vote. |
| 12.5 | J. Seeley<br>J. Macero | J. Seeley distributed and reviewed the PSR Phase Meetings and Agenda Schedule, attached.<br>Committee Discussion:<br>1. S. Iovanni asked if the intent is to make a presentation to all five PTO groups?<br>*J. Seeley indicated yes, J. Macero has asked the presidents of each for this opportunity. South ES and the High School are scheduled for 11/4/20, Colonial Park is tentatively scheduled for 11/19/20 and the Middle School and Robin Hood have not yet been scheduled, J. Seeley will follow-up with J. Macero*.<br>2. J. Craigie asked if the PTO meetings will be remote?<br>*J. Seeley indicated yes, they will be remote*.<br>3. J. Craigie asked who will be making the presentation?<br>*J. Seeley indicated M. Christie, D. Bois and J. Macero have been providing the introductions, B. Trivas the education program and design options, J. Seeley the MSBA and cost overview and D. Sheehan the tax impact*. |
| 12.6 | J. Macero | J. Macero to review if there is a Pre-K Guideline that the proposed Pre-K program can be compared to. *(from prior meeting)* |
| 12.7 | J. Macero | J. Macero to review and provide direction on how close the middle school is to capacity and if it will need the space for the potential District Offices in the future? *(from prior meeting)* |
| 12.8 | Record | J. Seeley reviewed the List of CM at Risk Prequalification and Selection Committee volunteers, attached. |

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Project: Stoneham High School Feasibility Study
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| Item # | Action | Discussion |
|---|---|---|
| | | A motion was made by R. Parker and seconded by N. Nial to appoint M. Christie, D. Bois, D. Gove, S. O'Neill, J. Craigie, P. Ryder, D. Sheehan, B. McNeil and J. Macero to the CM at Risk Prequalification and Selection Committee. No discussion, motion passed unanimous by roll call vote. |
| 12.9 | B. Trivas<br>Committee | P. Cunningham presented and reviewed Site Plans, Floor Plans, Building Sections and a Massing Study for Renovation/Addition Option 3A, attached.<br>Committee Discussion:<br>1. J. Craigie asked if the baseball field is being rotated for safety, why isn't the football field?<br>*D. Warner indicated that there is no safety issue with the current orientation of the football field as the hill and trees to the west of the field provide a solar block*.<br>2. D. Pignone asked where are the locker rooms, team rooms and PE spaces, that are currently in the Lower Level, located on the plans?<br>*B. Trivas indicated those spaces are located on the Level 1 floor and in the Concession/Locker Room building.*<br>3. D. Pignone expressed concern that the amount of locker room and PE space shown on the plans is not enough.<br>*B. Trivas explained that the plans reflect the amount and size of locker room and PE spaces that are defined in the Space Summary*.<br>4. D. Sheehan asked if the existing gymnasium is expanded?<br>*B. Trivas indicated no, the existing 16,000 s.f. gymnasium is existing*.<br>5. D. Bois asked B. Trivas to describe the quality of the spaces located under the gymnasium on the Lower Level?<br>*B. Trivas indicated the Video Production, Biomedical and Engineering Labs have a poor location relative to the academic wings*.<br>6. D. Bois asked B. Trivas to discuss the sprawl of the floor plan.<br>*B. Trivas indicated the spawl of the plan is dictated by the location of the existing gymnasium*.<br>7. D. Bois asked B. Trivas to discuss any issues that can be expected due to renovating the approximate 48,000 sf gymnasium wing.<br>*B. Trivas indicated demolishing the rest of the building around the existing gymnasium structure without damaging it, shoring and seismically reinforcing the existing gymnasium structure and the duration of time the school will be without a gymnasium while the demolition, abatement and renovation activities are underway, are a few of the issues*. |

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| Item # | Action | Discussion |
|---|---|---|
| | | 8. J. Thomson asked what is the schedule to present the rest of the Options?<br>*B. Trivas indicated the Renovation Option and one of the New Construction Options will be presented at the 11/9/20 SSBC meeting*.<br>The Committee to email J. Seeley any additional comments, who will consolidate and issue. |
| 12.10 | Record | J. Seeley reviewed the updated Project Cost, Construction Cost Comparison, Reimbursement, Cost to Stoneham and Tax Impact for Code Repair Only Option 1 and Recent High School Project Comparison, attached.<br>Committee Discussion:<br>1. D. Bois asked if any of the playfield upgrades or Franklin Street traffic signals are included in the Code Repair Only Option 1?<br>*J. Seeley indicated no, there are no football, soccer, softball or baseball playfield upgrades, no tennis court upgrades, no parking or roadway upgrades, and no traffic signals, included in the Code Repair Only Option 1. The sitework is limited to code-related repairs only, predominantly accessibility upgrades*. |
| 12.11 | B. Trivas<br>J. Seeley | J. Seeley reviewed the Summary of Major Cost Components related to Approximate Reimbursement Assumptions, attached.<br>Committee Discussion:<br>1. D. Bois indicated the Life-Cycle Cost analysis for the Building ZNE Related costs needs to be determined before the Committee can make any decisions related to these costs.<br>*J. Seeley indicated the Green Building Initiatives meeting was held on 10/26/20 and discussed presenting the preliminary LCC findings at the 12/7/20 SSBC meeting*.<br>2. D. Bois indicated P. Ryder indicated in his email that there may be rental offsets for the Site Related Costs, particularly the lit synthetic turf soccer fields, that need to explored. |
| 12.12 | B. Trivas | J. Seeley reviewed the Community Forum No. 3 Flyer, attached.<br>Committee Discussion:<br>1. R. Parker asked if the Renovation/Addition Option 3A presented herein, should be presented at the Community Forum No. 3.<br>*D. Bois indicated the SSBC should see and provide feedback to Perkins & Will before presenting to the community. Community Forum No. 4 will have all the updated Options presented*. |

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Project: Stoneham High School Feasibility Study
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| Item # | Action | Discussion |
|---|---|---|
| | | 2. N. Nial asked if the font color for the words “clicking” and “calling” can be changed to be more visible?<br>*B. Trivas indicated yes and will change*. |
| 12.13 | Committee<br>PR<br>Subcommittee | **Subcommittee Updates**<br>**Public Relations Subcommittee**<br>1. S. Iovanni reviewed the 10/19/20 PR Subcommittee Meeting minutes, the draft Communication Strategy, draft Information Flyer, Press Release for the PDP Submission, and the Press Release for Community Forum No. 3, all attached. The Committee approves the Press Releases.<br>2. The Committee to provide S. Iovanni any feedback they hear on the Press Releases or the project.<br>**Green Building Initiatives**<br>1. J. Seeley provided an update on the 10/26/20 Green Building Initiatives Meeting. |
| 12.14 | Record | **Committee Questions** - none |
| 12.15 | Record | **Old or New Business** - none |
| 12.16 | Record | **Public Comment** - none |
| 12.17 | Record | Next **SBC Meeting: November 9, 2020 at 7:00 pm.** |
| 12.18 | Record | A Motion was made by S. Iovanni and seconded by J. Thomson to adjourn the meeting. No discussion, motion passed unanimous by roll call vote. |

Attachments: Agenda, PSR Phase Meetings and Agenda Schedule, Approximate PDP Total Project Costs, List of CM at Risk Prequalification and Selection Committee Volunteers, Project Cost, Construction Cost Comparison, Reimbursement, Cost to Stoneham and Tax Impact for Code Repair Only Option 1 and Recent High School Project Comparison, Major Cost Components related to Approximate Reimbursement Assumptions, Community Forum No. 3 Flyer, 10/19/20 PR Subcommittee Meeting minutes, the draft Communication Strategy, draft Information Flyer, Press Release for the PDP Submission, and the Press Release for Community Forum No. 3, Powerpoint

The information herein reflects the understanding reached. Please contact the author if you have any questions or are not in agreement with these Project Minutes

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# PROJECT MEETING SIGN-IN SHEET

| | | | |
|---|---|---|---|
| Project: | Stoneham High School Feasibility Study | Project No.: | 20033.00 |
| Prepared by: | Joel Seeley | Meeting Date: | 10/26/2020 |
| Re: | School Building Committee Meeting | Time: | 7:00pm |
| Location: | Middle School Gymnasium | Meeting No: | 12 |
| Distribution: | Attendees, (MF) | | |

| SIGNATURE | ATTENDEES | EMAIL | AFFILIATION |
|---|---|---|---|
| Attended | Marie Christie | mariechristie@comcast.net | Co-Chair, Past Member of the School Committee/Middle School Building Committee |
| Attended | David Bois | bois@arrowstreet.com | Co-Chair, Community Member with Architecture Experience |
| Attended | Nicole Nial | nicole.nial@stonehamschools.org | School Committee Member |
| Attended | Raymie Parker | rparker@stoneham-ma.gov | Select Board Member |
| | | | Community Member with Building Commissioner Experience |
| Attended Remote | Douglas Gove | goved11@gmail.com | Community Member with Engineer Experience |
| Attended Remote | Stephen O'Neill | soneill@hayner-swanson.com | Community Member with Engineer Experience |
| Attended | Josephine Thomson | Jjthomson315@yahoo.com | Community Member, Middle School Faculty |
| Attended Remote | Jeanne Craigie | jcraigie@stoneham-ma.gov | Town Moderator |
| Attended | Lisa Gallagher | lgallagher@stonehamschools.org | Community Member, School Secretary, Past member of Middle School Building Committee |
| Attended | Sharon Iovanni | sharon.iovanni@stonehambank.com | Community Member |
| Attended Remote | Cory Mashburn | cory.mashburn910@gmail.com | Community Member, Finance and Advisory Board |
| | Paul Ryder | pryder52@icloud.com | Community Member with Construction Experience |
| Attended Remote | David Pignone | dpignone@stonehamschools.org | Athletic Director, Member knowledgeable in educational mission and function of facility |
| | Kevin Yianacopolus | kyianacopolus@stonehamschools.org | Local Official responsible for Building Maintenance |
| Attended | Dennis Sheehan | DSheehan@stoneham-ma.gov | Town Administrator / MCPPO Certified |
| | John Macero | jmacero@stonehamschools.org | Superintendent of Schools, Secretary of School Building Committee |
| | Bryan Lombardi | blombardi@stonehamschools.org | Stoneham High School Principal |
| Attended | Brian McNeil | bmcneil@stonehamschools.org | Facilities Director |
| Attended Remote | Brooke Trivas | brooke.trivas@perkinswill.com | Perkins and Will |
| Attended Remote | Patrick Cunningham | Patrick.cunningham@perkinswill.com | Perkins and Will |
| Attended Remote | Leo Liu | xi.liu@perkinswill.com | Perkins and Will |
| Attended Remote | David Warner | DWarner@warnerlarson.com | Warner Larson |
| Attended | Joel Seeley | jseeley@smma.com | SMMA |

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# Agenda

| | | | |
|---|---|---|---|
| Project: | Stoneham High School Feasibility Study | Project No.: | 20033 |
| Re: | School Building Committee Meeting | Meeting Date: | 10/26/2020 |
| Prepared by: | Joel Seeley | Meeting Time: | 7:00 PM |
| Location: | Middle School Gymnasium and Remote Participation | | |
| Distribution: | Attendees (MF) | | |

1. Call to Order
2. SSBC Membership Update
3. Approval of Minutes: September 28, 2020 and October 13, 2020
4. Approval of Invoices and Commitments
5. Schedule and Budget Update
6. Appoint CM at Risk Prequalification and Selection Subcommittee
7. Construction Alternatives Update
8. Project Cost Components Review
9. Review MSBA Comments on PDP Submission
10. Prepare for Community Forum No. 3
11. Subcommittee Updates
12. New or Old Business
13. Committee Questions
14. Public Comments
15. Next Meeting: November 9, 2020
16. Adjourn

**Join GoToMeeting:**
https://global.gotomeeting.com/join/280251341

**Dial-In:** +1 (872) 240-3412

**Access Code:** 280-251-341

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**STONEHAM HIGH SCHOOL FEASIBILITY STUDY**
**SCHOOL BUILDING COMMITTEE**

**MEETINGS SCHEDULE AND AGENDAS**
**September 8, 2020** ***Revised October 20, 2020***

| DATE | AGENDA |
|---|---|
| ***Feasibility Study Phase (PSR)*** | |
| | |
| October 13, 2020 | SCHOOL BUILDING COMMITTEE MEETING - *TUESDAY* |
| | Review PSR Phase Schedule |
| | Review PSR Phase Goals |
| | Decide Construction Delivery Method |
| | Prepare for Tri-Board Meeting |
| | |
| October 15, 2020 | TRI-BOARD MEETING - 7:00 PM at the High School Gymnasium |
| | |
| October 26, 2020 | SCHOOL BUILDING COMMITTEE MEETING |
| | Update on Construction Alternatives and Phasing |
| | Structural Narrative Review |
| | Review MSBA Comments on PDP Submission |
| | Prepare for Community Forum No. 3 |
| | |
| November 2, 2020 | CM PREQUALIFICATION COMMITTEE MEETING - 7:00 PM |
| | |
| November 4, 2020 | PTO PRESENTATION - 6:30 PM - SOUTH ELEMENTARY SCHOOL & STONEHAM HIGH SCHOOL |
| | |
| November 7, 2020 | COMMUNITY FORUM NO. 3 - 10:00 AM - SATURDAY |
| | |
| November 9, 2020 | SCHOOL BUILDING COMMITTEE MEETING |
| | Update on Construction Alternatives |
| | MEP Systems Narrative Review |
| | Update on Sustainable Design |
| | |
| November 23, 2020 | SCHOOL BUILDING COMMITTEE MEETING |
| | Update on Construction Alternatives and Phasing |
| | Review Cost Models |
| | Preliminary Options Evaluation |
| | |
| December 7, 2020 | SCHOOL BUILDING COMMITTEE MEETING |
| | Update on Construction Alternatives |
| | Update on Sustainable Design |
| | Review Cost Models |
| | Options Evaluation |
| | Discuss the One Preferred Option |
| | Prepare for Community Forum No. 4 |
| | |
| December 9, 2020 | COMMUNITY FORUM NO. 4 - 6:30 PM |
| | |
| TBD | TRI-BOARD MEETING |
| | |
| December 21, 2020 | SCHOOL BUILDING COMMITTEE MEETING |
| | Decide the One Preferred Construction Alternative |
| | Vote to Submit Preferred Schematic Report to MSBA |
| | |
| *December 29, 2020* | *SUBMIT PREFERRED SCHEMATIC REPORT PACKAGE TO MSBA* |
| | |
| | ADDITIONAL MEETINGS TO BE SCHEDULED |
| | |
| | |



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# Memorandum

| | | | |
|---|---|---|---|
| To: | Stoneham School Building Committee | Date: | 10/21/2020 |
| From: | Joel G. Seeley | Project No.: | 20033 |
| Project: | Stoneham High School Feasibility Study | | |
| Re: | CM at Risk Prequalification and Selection Committee | | |
| Distribution: | Stoneham School Building Committee (MF) | | |

The following SSBC members have volunteered to serve on the CM at Risk Prequalification and Selection Committee:

Marie Christie, David Bois, Douglas Gove, Stephen O'Neill, Jeanne Craigie, Paul Ryder, Dennis Sheehan, Brian McNeil, and John Macero

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JGS/sat /P:\2020\20033\10-BID\10.3 CMR\CM Prequal And Selection Committee.Docx



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Perkins&Will

# STONEHAM HIGH SCHOOL
# Building Committee Meeting

10.26.2020

## AGENDA

1\ Design Options Update
Option 3A – Renovation + Addition

2\ Project Cost Components Review



→ Aerial View of Stoneham High School

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Project Management



Perkins&Will

# Design Options Update

Building Committee Meeting

## Design Options Summary

| CODE UPGRADE | RENOVATION | RENOVATION ADDITION | NEW CONSTRUCTION |
|---|---|---|---|
| *Option 1A*<br>• *NO Educational upgrades*<br>• *Code Upgrades*<br>• *System Upgrades*<br>• *Exterior Envelope Repairs*<br>• *Interior Repairs*<br>• *No Sitework* | *Option 2A* | *Option 3A* | *Option 4A*<br>*Option 4B* |

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## Design Options Summary

| CODE UPGRADE | RENOVATION | RENOVATION ADDITION | NEW CONSTRUCTION |
|---|---|---|---|
| *Option 1A*<br>• *NO Educational upgrades*<br>• *Code Upgrades*<br>• *System Upgrades*<br>• *Exterior Envelope Repairs*<br>• *Interior Repairs*<br>• *No Sitework* | *Option 2A* | *Option 3A* | *Option 4A*<br>*Option 4B* |







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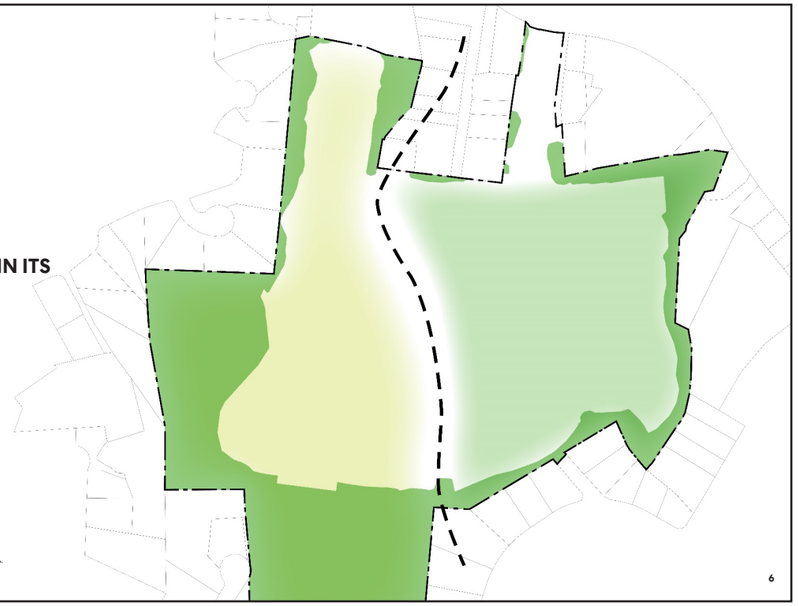
## Option 3A - Site Concept

STONEHAM IS UNIQUE IN ITS LANDSCAPE



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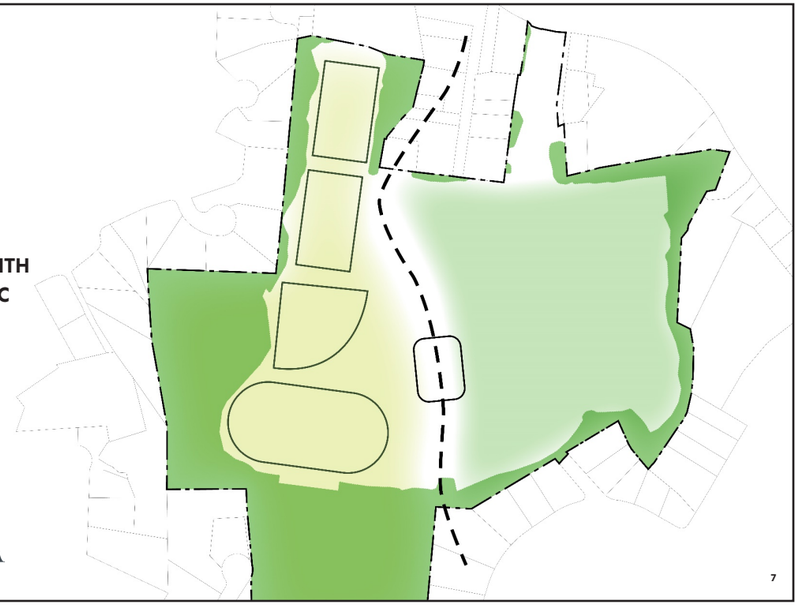
## Option 3A - Site Concept

ATHELETICS REMAIN WITH ARRIVAL AT A DYNAMIC TRANSITION



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## Option 3A - Site Concept

ATHELETICS REMAIN WITH ARRIVAL AT A DYNAMIC TRANSITION




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## Option 3A - Site Concept

CIVIC HEART AT THE CENTER OF THE SITE




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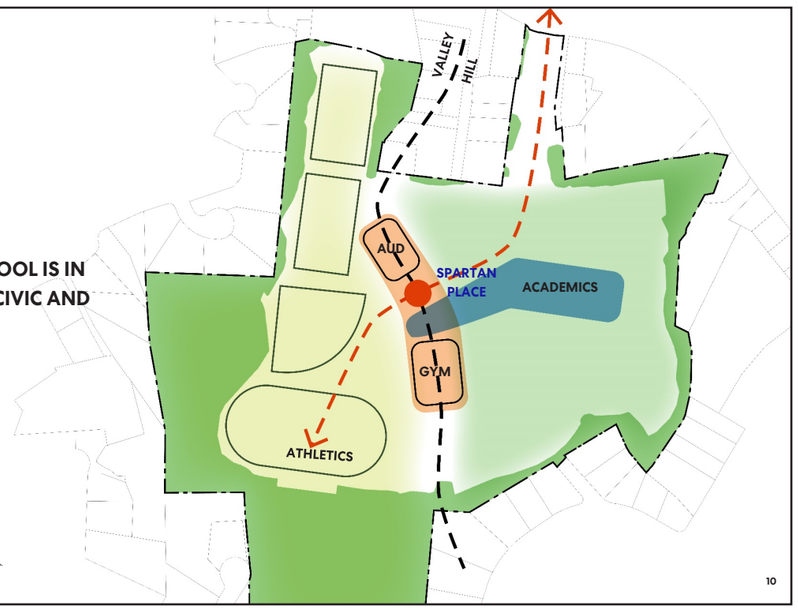
## Option 3A - Site Concept

THE HEART OF THE SCHOOL IS IN THE INTERSECTION OF CIVIC AND ACADEMIC LIFE

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## Option 3A - Site Plan

### Considerations:

- Visibility of new building from Franklin St
- Minimized change to existing athletic fields
- Gateway to major athletics
- Central turf field as commons
- Optimized building orientation for daylighting/ZNE
- Pedestrian/bike path from Franklin Street crossing vehicular path
- Existing fields upgraded to regulation size
- Utilities relocation required to keep existing in operation during construction




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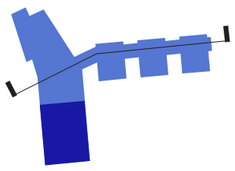
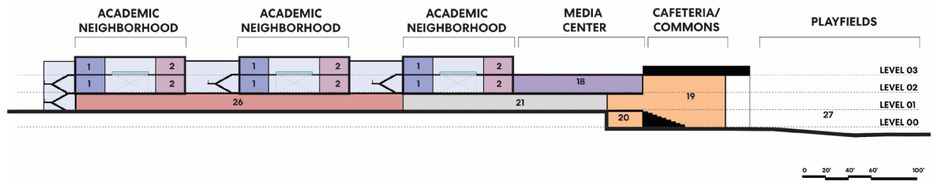
## Option 3A - Section / Through Academic Core






**CORE ACADEMIC**
1/ CLASSROOM
2/ SPED
3/ SCIENCE
4/ TEACHER PLANNING

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18/ MEDIA CENTER

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20/ KITCHEN

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21/ ADMIN

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24/ LOADING

**OTHER**
25/ DISTRICT OFFICE
26/ PRE-K
27/ PLAYFIELDS





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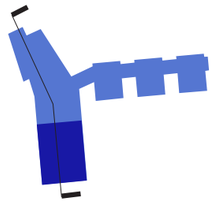
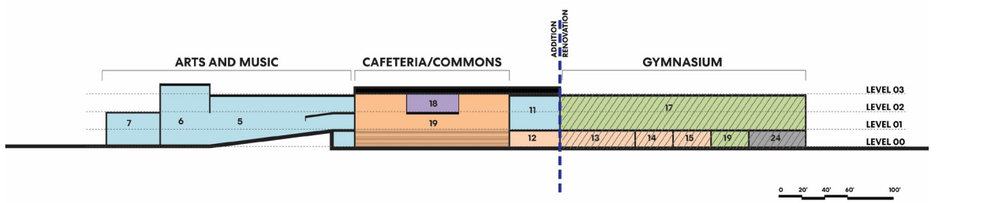
## Option 3A - Section / Through Civic Wing






**CORE ACADEMIC**
1/ CLASSROOM
2/ SPED
3/ SCIENCE
4/ TEACHER PLANNING

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## Option 3A - Floor Plans






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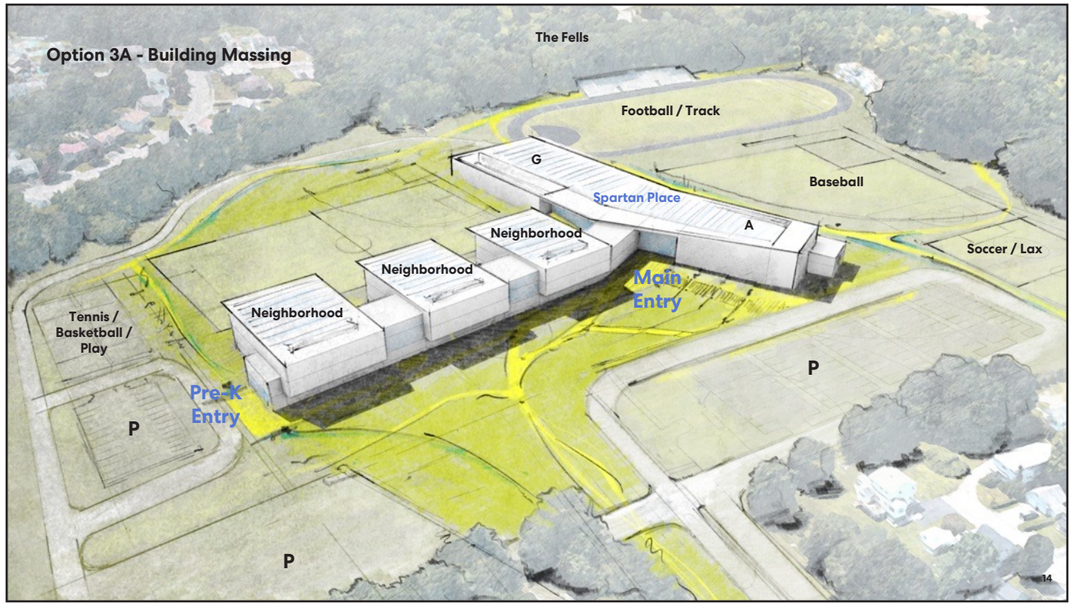


## Option 3A - Floor Plan / Level 01

**CORE ACADEMIC**
1/ CLASSROOM
2/ SPED
3/ SCIENCE
4/ TEACHER PLANNING

**ART & MUSIC**
5/ AUDITORIUM
6/ STAGE
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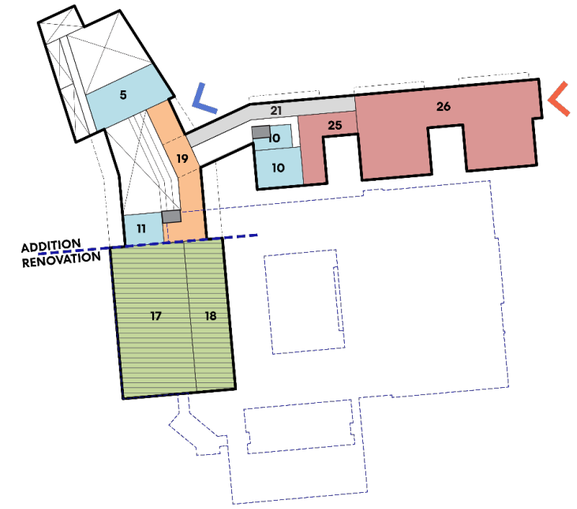
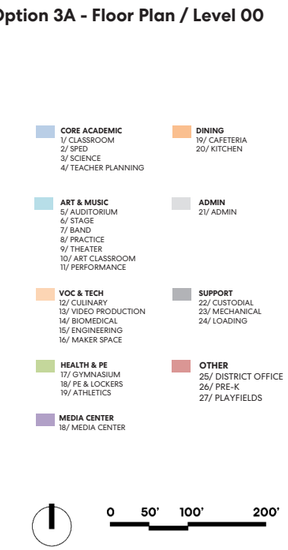
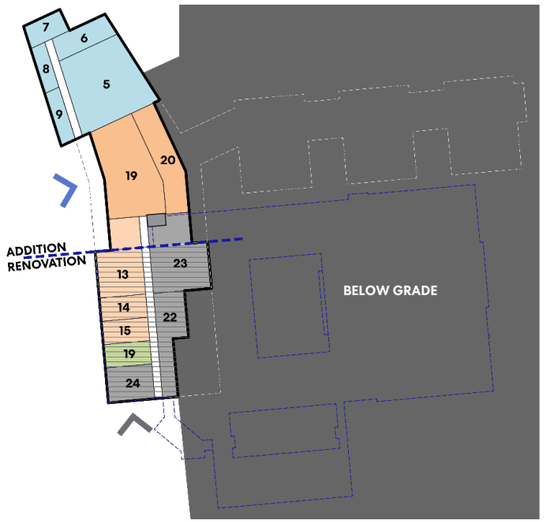


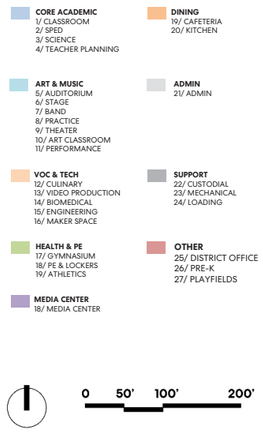
## Option 3A - Floor Plan / Level 00






## Option 3A - Floor Plan / Level 02



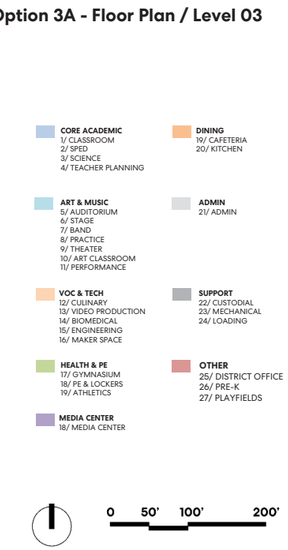








## Option 3A - Floor Plan / Level 03

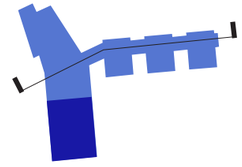


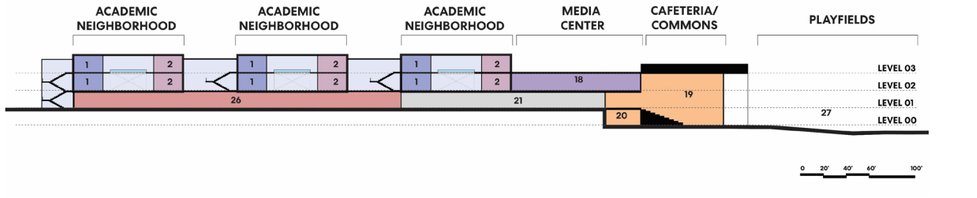






## Option 3A - Section / Through Academic Core













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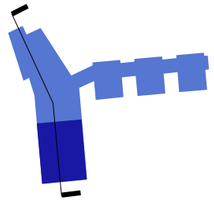
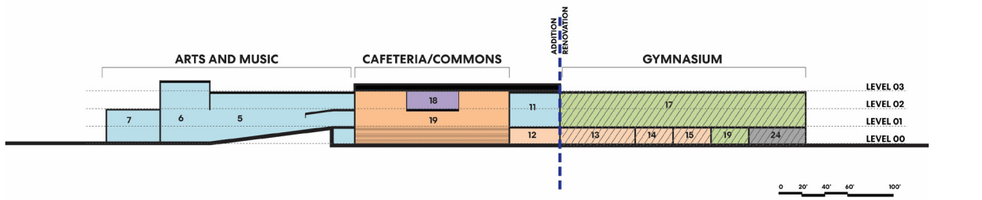
## Option 3A - Section / Through Civic Wing






**CORE ACADEMIC**
1/ CLASSROOM
2/ SPED
3/ SCIENCE
4/ TEACHER PLANNING

**ART & MUSIC**
5/ AUDITORIUM
6/ STAGE
7/ BAND
8/ PRACTICE
9/ THEATER
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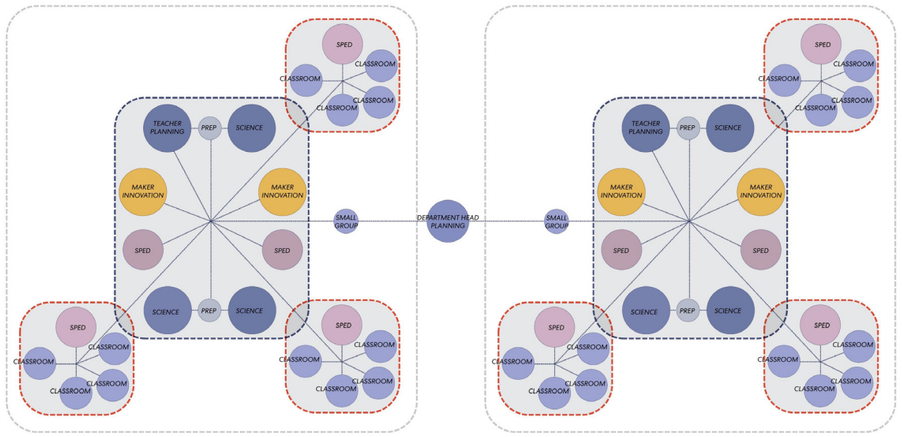
## Option 3A - Academic Core / Neighborhood Structure



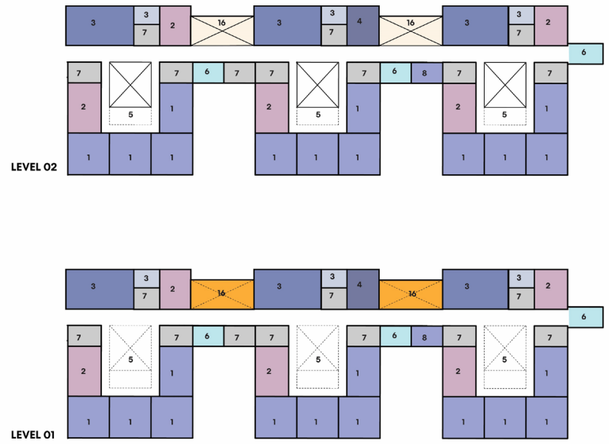

NEIGHBORHOOD A

NEIGHBORHOOD B





## Option 3A - Academic Core / Neighborhood Plans



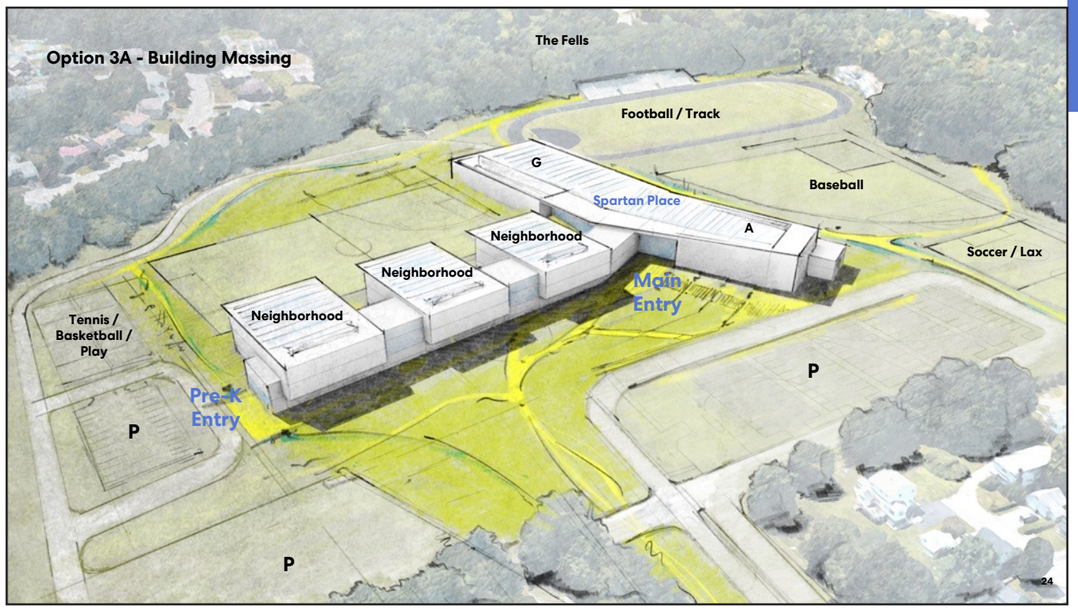

**CORE ACADEMIC**

1/ CLASSROOM
2/ SPED
3/ SCIENCE
4/ TEACHER PLANNING
5/ BREAKOUT SPACE
6/ VERTICAL CIRCULATION
7/ TOILET AND SERVICES
8/ SMALL GROUP
16/ MAKER SPACE

0 20' 40' 60' 100'



## Option 3A - Building Massing





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Perkins&Will

# Project Cost Components Review

**Building Committee Meeting**

## Cost Estimate



| | Code Repair Only Option 1 | Renovation Only Option 2 | Renovation/ Addition Option 3A2 | New Construction Option 4A3 | New Construction Option 4B |
|---|---|---|---|---|---|
| Approximate Total Project Cost | $115.0M | $173.4M | $175.2M | $174.8M | $172.9M |
| Approximate Cost to Stoneham | $ 61.0M | $111.5M | $120.3M | $123.7M | $122.0M |

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## Tax Impact

| | Code Repair Only Option 1 | Renovation Only Option 2 | Renovation/ Addition Option 3A2 | New Construction Option 4A3 | New Construction Option 4B |
|---|---|---|---|---|---|
| ***Stoneham Share*** | **$ 61,024,855** | **$111,500,522** | **$120,278,104** | **$123,733,473** | **$121,986,054** |
| Rate | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% |
| Term (years) | 20 | 20 | 20 | 20 | 20 |
| Yearly Payment-20 yr Average | $ 4,101,829 | $ 7,494,586 | $ 8,084,578 | $ 8,316,833 | $ 8,199,379 |
| Average Home Value | $ 577,700 | $ 577,700 | $ 577,700 | $ 577,700 | $ 577,700 |
| **Annual Tax Increase Average Home-20 yr Average** | **$ 475** | **$ 868** | **$ 937** | **$ 964** | **$ 950** |
| Annual Tax Increase per $1,000 Valuation | $ 0.82 | $ 1.50 | $ 1.62 | $ 1.67 | $ 1.65 |

Assumptions: Tax rate based on Fiscal 2023 assessed valuation and AVERAGE house value of $577,700
Yearly impact will change based upon subsequent year tax rates and valuations.
Code Repair Only Option 1 does not include any site and playing field work or any educational improvement work in building.
Costs subject to change as Feasibility Study progresses.

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## Summary of Major Cost Components Related to Approximate Reimbursement Assumptions

| Cost Components | Construction Cost | Total Project Cost |
|---|---|---|
| **Site Related** | **$15,416,512** | **$18,576,897** |
| Two Synthetic Soccer Fields | $2,682,720 | $3,232,678 |
| Sports Lighting Two Soccer Fields | $1,104,000 | $1,330,320 |
| Synthetic Football Field | $1,490,648 | $1,796,231 |
| Sports Lighting Football Field | $883,200 | $1,064,256 |
| Synthetic Track | $833,520 | $1,004,392 |
| Stadium Grading, Bleachers, Drainage, Walks | $2,032,424 | $2,449,071 |
| Concession Stand/Locker Rooms | $2,250,000 | $2,711,250 |
| Traffic Signals | $4,140,000 | $4,988,700 |

| Cost Options | | | *Net Reduction* |
|---|---|---|---|
| Two Natural Turf Soccer Fields | $966,000 | $1,164,030 | **$2,068,648** |
| Natural Turf Football Field | $690,000 | $831,450 | **$964,781** |

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**Summary of Major Cost Components**
**Related to Approximate Reimbursement Assumptions**

| Cost Components | Construction Cost | Total Project Cost |
|---|---|---|
| **Building ZNE Related** | **$8,076,692** | **$9,732,413** |
| Building Envelope Above Standard | $1,035,000 | $1,247,175 |
| HVAC System Above Standard | $7,041,692 | $8,485,238 |
| **Building Size above MSBA Guideline Related*** | **$12,937,542** | **$15,589,738** |
| Core Academic | $4,855,500 | $5,850,878 |
| Vocational & Technical | $1,434,240 | $1,728,259 |
| Health and PE | $3,987,984 | $4,805,521 |
| Media Center | $298,800 | $360,054 |
| Auditorium | $1,191,714 | $1,436,015 |
| Dining | $213,144 | $256,839 |
| Medical | $134,460 | $162,024 |
| Custodial | $373,500 | $450,068 |
| Other (School Store) | $448,200 | $540,081 |
| **Total** | **$36,430,746** | **$43,899,049** |
| **District Offices*** | **$1,942,200** | **$2,340,351** |
| District Offices | $1,942,200 | $2,340,351 |

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# Discussion

**Building Committee Meeting**





Stoneham High School Feasibility Study
Preliminary PDP Total Project Cost Estimate Comparison
9/25/2020 (updated 10/18/20)

PROJECT MANAGEMENT SMMA

**DRAFT**

PM&C Estimate
Dated 9/25/20

| SF | Option | Project Costs | | Project Cost/SF |
|---|---|---|---|---|
| 208,113 | **Repairs Only** | Construction Cost | $88,047,467 | |
| | **Option 1** | Building Cost | $78,183,395 | |
| | | Site Cost | $3,795,310 | |
| | | Concession/Locker Room Building | $0 | |
| | | Demo/HazMat Cost | $6,068,762 | |
| | | Temporary Classroom Modulars | $5,600,000 | |
| | | Fees,Testing, Utilities, and Expenses | $15,156,408 | |
| | | FFE/Technology | $0 | |
| | | Contingencies | $6,163,323 | |
| | | **total** | **$114,967,198** | **$552** |
| 208,113 | **Renovation Only** | Construction Cost | $134,079,253 | |
| | **Option 2** | Building Cost | $101,123,150 | |
| | | Site Cost | $24,824,019 | |
| | | Concession/Locker Room Building | $2,250,000 | |
| | | Demo/HazMat Cost | $5,882,084 | |
| | | Temporary Classroom Modulars | $5,600,000 | |
| | | Fees,Testing, Utilities, and Expenses | $22,036,949 | |
| | | FFE/Technology | $2,502,000 | |
| | | Contingencies | $9,228,048 | |
| | | **total** | **$173,446,250** | **$833** |
| 204,107 | **Renovation/Addition** | Construction Cost | $140,176,603 | |
| | **Option 3A2** | Building Cost | $102,795,319 | |
| | | Site Cost | $28,287,704 | |
| | | Concession/Locker Room Building | $2,250,000 | |
| | | Demo/HazMat Cost | $6,843,580 | |
| | | Fees,Testing, Utilities, and Expenses | $22,860,091 | |
| | | FFE/Technology | $2,502,000 | |
| | | Contingencies | $9,654,862 | |
| | | **total** | **$175,193,556** | **$858** |
| 204,107 | **New Construction** | Construction Cost | $139,833,139 | |
| | **Option 4A3** | Building Cost | $102,795,502 | |
| | | Site Cost | $28,051,645 | |
| | | Concession/Locker Room Building | $2,250,000 | |
| | | Demo/HazMat Cost | $6,735,992 | |
| | | Fees,Testing, Utilities, and Expenses | $22,813,724 | |
| | | FFE/Technology | $2,502,000 | |
| | | Contingencies | $9,630,820 | |
| | | **total** | **$174,779,683** | **$856** |
| 204,107 | **New Construction** | Construction Cost | $138,271,461 | |
| | **Option 4B** | Building Cost | $101,572,664 | |
| | | Site Cost | $27,709,717 | |
| | | Concession/Locker Room Building | $2,250,000 | |
| | | Demo/HazMat Cost | $6,739,080 | |
| | | Fees,Testing, Utilities, and Expenses | $22,602,897 | |
| | | FFE/Technology | $2,502,000 | |
| | | Contingencies | $9,521,502 | |
| | | **total** | **$172,897,860** | **$847** |

Costs subject to change as Feasibility Study progresses

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Stoneham High School Feasibility Study
Construction Cost Comparison
9/25/2020 (updated 10/18/20)

PROJECT MANAGEMENT SMMA

**DRAFT**

PM&C Estimate
Dated 9/25/20

| | Code Repair Only Option 1 | Renovation Only Option 2 | Renovation/ Addition Option 3A2 | New Construction Option 4A3 | New Construction Option 4B |
|---|---|---|---|---|---|
| **Building Costs** | | | | | |
| Foundations | $573,250 | $573,250 | $6,651,099 | $3,754,555 | $3,454,715 |
| Superstructure | $1,289,522 | $2,039,522 | $6,131,661 | $8,372,047 | $8,452,866 |
| Exterior Closure | $3,401,022 | $11,117,892 | $7,949,791 | $11,321,945 | $10,907,637 |
| Roofing | $2,826,544 | $3,081,048 | $2,139,556 | $2,953,636 | $2,695,948 |
| Interior Construction | $3,826,957 | $8,405,443 | $6,161,242 | $7,867,827 | $7,867,827 |
| Staircases | $222,000 | $222,000 | $203,149 | $203,149 | $203,149 |
| Interior Finishes | $7,217,986 | $7,217,986 | $5,321,918 | $6,939,638 | $6,939,638 |
| Conveying Systems | $220,000 | $220,000 | $120,000 | $120,000 | $120,000 |
| Plumbing | $3,347,726 | $3,347,726 | $2,504,432 | $3,265,712 | $3,265,712 |
| HVAC | $11,446,215 | $14,567,910 | $10,956,890 | $14,287,490 | $14,287,490 |
| Fire Protection | $1,248,678 | $1,248,678 | $939,162 | $1,224,642 | $1,224,642 |
| Electrical | $8,589,892 | $8,589,892 | $6,404,807 | $8,279,783 | $8,279,783 |
| Equipment | $1,453,600 | $1,453,600 | $1,259,100 | $1,710,100 | $1,710,100 |
| Furnishings | $2,602,634 | $2,602,634 | $1,659,977 | $2,167,305 | $2,163,448 |
| Selective Renovations | $0 | $0 | $12,960,177 | $0 | $0 |
| Selective Demolition | $2,077,436 | $2,493,662 | $0 | $0 | $0 |
| Building Demolition | $0 | $0 | $1,284,264 | $1,248,678 | $1,248,678 |
| Hazardous Materials | $4,025,000 | $4,025,000 | $3,500,000 | $3,500,000 | $3,500,000 |
| Phasing | $1,510,304 | $2,015,437 | $500,000 | $0 | $0 |
| **Subtotal** | **$55,878,766** | **$73,221,680** | **$76,647,225** | **$77,216,507** | **$76,321,633** |
| **Sitework** | | | | | |
| General Sitework | $2,517,173 | $7,445,661 | $9,984,640 | $9,984,640 | $9,734,640 |
| Two Synthetic Soccer Fields | $0 | $1,944,000 | $1,944,000 | $1,944,000 | $1,944,000 |
| Synthetic Stadium Field | $0 | $1,080,180 | $1,080,180 | $1,080,180 | $1,080,180 |
| Sports Lighting - three Fields | $0 | $1,440,000 | $1,440,000 | $1,440,000 | $1,440,000 |
| Stadium Renovation - New Track and Bleachers | $0 | $2,076,771 | $2,076,771 | $2,076,771 | $2,076,771 |
| Two New Traffic Signals | $0 | $3,000,000 | $3,000,000 | $3,000,000 | $3,000,000 |
| Temporary Utilities | $0 | $0 | $250,000 | $250,000 | $250,000 |
| **Subtotal** | **$2,517,173** | **$16,986,612** | **$19,775,591** | **$19,775,591** | **$19,525,591** |
| **Mark-ups** | | | | | |
| Escalation | $3,503,756 | $5,412,498 | $5,785,369 | $5,819,526 | $5,750,833 |
| Design Contingency | $9,284,954 | $14,343,119 | $15,331,228 | $15,421,744 | $15,239,709 |
| General Conditions | $7,680,000 | $7,680,000 | $6,400,000 | $5,280,000 | $5,280,000 |
| General Requirements | $3,559,232 | $5,498,195 | $4,701,577 | $4,729,335 | $4,673,511 |
| Bonds | $711,846 | $1,099,639 | $1,175,394 | $1,182,334 | $1,168,378 |
| Insurance | $996,585 | $1,539,495 | $1,645,552 | $1,655,267 | $1,635,729 |
| Permit | $0 | $0 | $0 | $0 | $0 |
| Temporary Classrooms | $5,600,000 | $5,600,000 | $0 | $0 | $0 |
| CM Fee | $1,779,616 | $2,749,098 | $2,938,485 | $2,955,834 | $2,920,944 |
| CM Contingency | $2,135,539 | $3,298,917 | $3,526,182 | $3,547,001 | $3,505,133 |
| **Subtotal** | **$35,251,528** | **$47,220,961** | **$41,503,787** | **$40,591,041** | **$40,174,237** |
| **Concession/Locker Room** | **$0** | **$2,250,000** | **$2,250,000** | **$2,250,000** | **$2,250,000** |
| **TOTAL** | **$93,647,467** | **$139,679,253** | **$140,176,603** | **$139,833,139** | **$138,271,461** |



Stoneham High School Feasibility Study
Preliminary PDP Approximate Reimbursement Comparison
9/25/2020 (updated 10/18/20)

PROJECT MANAGEMENT SMMA

**DRAFT**

PM&C Estimate
Dated 9/25/20

| | Code Repair Only Option 1 | Renovation Only Option 2 | Renovation/ Addition Option 3A2 | New Construction Option 4A3 | New Construction Option 4B |
|---|---|---|---|---|---|
| **Total Project Cost** | $114,967,198 | $173,446,250 | $175,193,556 | $174,779,683 | $172,897,860 |
| **Approximate MSBA Reimbursement** | $53,942,343 | $61,945,728 | $54,915,452 | $51,046,210 | $50,911,806 |
| **Approximate Cost to the Town** | **$61,024,855** | **$111,500,522** | **$120,278,104** | **$123,733,473** | **$121,986,054** |
| **Summary of Approximate Ineligible Costs** | | | | | |
| **Temporary Classroom Modulars** | $5,600,000 | $5,600,000 | $0 | $0 | $0 |
| **Site Costs above 8% Cap** | $0 | $16,924,259 | $20,241,418 | $20,000,426 | $19,756,593 |
| **Concession/Locker Room Building** | na | $2,250,000 | $2,250,000 | $2,250,000 | $2,250,000 |
| **Building Costs above $333/SF Cap** | $16,079,683 | $39,911,373 | $43,051,313 | $43,051,511 | $41,730,846 |
| **Building Costs Ineligible SF** | $0 | $0 | $5,984,343 | $8,651,007 | $8,651,007 |
| **OPM and Designer Fees on Ineligible SF** | $0 | $0 | $217,855 | $947,260 | $936,508 |
| **Asbestos Flooring Abatement** | $412,000 | $412,000 | $412,000 | $412,000 | $412,000 |
| **FFE/Technology over $2,400/student** | na | $834,000 | $834,000 | $834,000 | $834,000 |
| **Legal Fees, Moving Expenses, Contingencies** | $3,061,424 | $4,374,878 | $4,557,798 | $5,923,326 | $5,860,858 |
| | $25,153,107 | $70,306,510 | $77,548,727 | $82,069,530 | $80,431,812 |

Costs subject to change as Feasibility Study progresses
Code Repair Only Option 1 does not include any site and playing field work or any educational improvement work in the building



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Stoneham High School Feasibility Study
Average Homeowner Tax Impact
October 5, 2020 (updated 10/18/20)

PROJECT MANAGEMENT SMMA

**DRAFT - FOR DISCUSSION PURPOSES ONLY**

| | Code Repair Only Option 1 | Renovation Only Option 2 | Renovation/ Addition Option 3A2 | New Construction Option 4A3 | New Construction Option 4B |
|---|---|---|---|---|---|
| ***Stoneham Share*** | **$61,024,855** | **$111,500,522** | **$120,278,104** | **$123,733,473** | **$121,986,054** |
| | | | | | |
| Rate | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% |
| Term (years) | 20 | 20 | 20 | 20 | 20 |
| Yearly Payment-20 yr Average | $ 4,101,829 | $ 7,494,586 | $ 8,084,578 | $ 8,316,833 | $ 8,199,379 |
| Average Home Value | $ 577,700 | $ 577,700 | $ 577,700 | $ 577,700 | $ 577,700 |
| **Annual Tax Increase Average Home-20 yr Average** | **$ 475** | **$ 868** | **$ 937** | **$ 964** | **$ 950** |
| Annual Tax Increase per $1,000 Valuation | $ 0.82 | $ 1.50 | $ 1.62 | $ 1.67 | $ 1.65 |

Assumptions: Tax rate based on Fiscal 2023 assessed valuation and AVERAGE house value of $577,700.
Yearly impact will change based upon subsequent year tax rates and valuations.
Code Repair Only Option 1 does not include any site and playing field work or any educational improvement work in the building.
Costs subject to change as Feasibility Study progresses.





Stoneham High School Feasibility Study
Summary of Major Cost Components Related to Approximate Reimbursement Assumptions
10/20/20

PROJECT MANAGEMENT SMMA

**DRAFT**
PM&C Estimate
Dated 9/25/20

| Cost Components | Construction Cost | Total Project Cost |
|---|---|---|
| **Site Related** | **$15,416,512** | **$18,576,897** |
| Two Synthetic Soccer Fields | $2,682,720 | $3,232,678 |
| Sports Lighting Two Soccer Fields | $1,104,000 | $1,330,320 |
| Synthetic Football Field | $1,490,648 | $1,796,231 |
| Sports Lighting Football Field | $883,200 | $1,064,256 |
| Synthetic Track | $833,520 | $1,004,392 |
| Stadium Grading, Bleachers, Drainage, Walks | $2,032,424 | $2,449,071 |
| Concession Stand/Locker Rooms | $2,250,000 | $2,711,250 |
| Traffic Signals | $4,140,000 | $4,988,700 |
| **Building ZNE Related** | **$8,076,692** | **$9,732,413** |
| Building Envelope Above Standard | $1,035,000 | $1,247,175 |
| HVAC System Above Standard | $7,041,692 | $8,485,238 |
| **Building Size above MSBA Guideline Related*** | **$12,937,542** | **$15,589,738** |
| Core Academic | $4,855,500 | $5,850,878 |
| Vocational & Technical | $1,434,240 | $1,728,259 |
| Health and PE | $3,987,984 | $4,805,521 |
| Media Center | $298,800 | $360,054 |
| Auditorium | $1,191,714 | $1,436,015 |
| Dining | $213,144 | $256,839 |
| Medical | $134,460 | $162,024 |
| Custodial | $373,500 | $450,068 |
| Other (School Store) | $448,200 | $540,081 |
| **Total** | **$36,430,746** | **$43,899,049** |
| **District Offices*** | **$1,942,200** | **$2,340,351** |
| District Offices | $1,942,200 | $2,340,351 |

| Cost Options | Construction Cost | Total Project Cost | *Net Reduction* |
|---|---|---|---|
| Two Natural Turf Soccer Fields | $966,000 | $1,164,030 | **$2,068,648** |
| Natural Turf Football Field | $690,000 | $831,450 | **$964,781** |

*Costs based on building-only cost per square feet for Option 4B - $498/sf

SMMA
Project Management

**Stoneham High School Feasibility Study**
8/10/2020 (updated 9/25/20)

| Recent MSBA High School Projects | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Project | | Students | SF | Total Project Budget | Reimb Rate | Grant | Effective Reimb Rate | Delta Reimb Rate | Cost per SF | Escalated Cost per SF |
| Belmont High School | Renovation/Addition | 2,215 | 445,100 | $295,159,189 | 40.66% | $80,644,278 | 27.32% | *13.34%* | $663 | **$765** |
| Arlington High School | New | 1,755 | 408,590 | $290,851,820 | 49.72% | $86,019,645 | 29.58% | *20.14%* | $712 | **$797** |
| Central Berkshire High School | New | 460 | 122,760 | $72,721,109 | 59.44% | $31,311,527 | 43.06% | *16.38%* | $592 | **$664** |
| Lowell High School | Renovation/Addition | 3,520 | 622,777 | $343,399,220 | 80.00% | $215,992,406 | 62.90% | *17.10%* | $551 | **$618** |
| Pentucket High School | New | 965 | 211,700 | $146,332,328 | 57.63% | $54,118,605 | 36.98% | *20.65%* | $691 | **$774** |
| Sharon High School | New | 1,250 | 240,204 | $163,000,000 | 48.95% | $53,823,005 | 33.02% | *15.93%* | $679 | **$743** |
| Nausett High School | Renovation/Addition | 905 | 214,250 | $131,825,665 | 43.39% | $36,676,476 | 27.82% | *15.57%* | $615 | **$663** |
| Waltham High School | New | 1,830 | 414,854 | $374,567,387 | 65.71% | $122,302,271 | 32.65% | *33.06%* | $903 | **$974** |
| Worcester Doherty High School* | New | 1,670 | 420,000 | $293,825,418 | | | 0.00% | *0.00%* | $700 | **$725** |
| **Stoneham High School**** | **TBD** | **695** | **204,107** | **$172,897,860** | **55.06%** | **$50,911,806** | **29.45%** | ***25.61%*** | | **$847** |

* MSBA PS&B Meeting projected
** Based on Option 4B, all costs are approximate



# Stoneham High School Feasibility Study

# Community Forum 03

## Hosted by the Stoneham School Building Committee (SSBC)

Join us for a community meeting to learn about and share your thoughts on a new or renovated school project! We **WANT** to hear from you - **I like...**, **I wish...**, **I wonder...**!

### 1/ QUICK RECAP

Catch up on what you might have missed:

- Feasibility Study process and schedule
- Condition of the facilities
- Educational vision of the future
- Zero Net Energy Goals

### 2/ REVIEW DESIGN OPTIONS /

Give feedback on ideas for:

- Site and Playfield Design
- Renovation
- Renovation and addition
- New construction

### 3/ LEARN ABOUT PROJECT COST

Evaluate the preliminary cost models:

- Information on the cost for each option
- Discuss State Reimbursement and Town Share
- Projection of Tax Impact

### 4/ SHARE YOUR THOUGHTS

Tell us what you think of the options:

- What are the advantages and disadvantages
- Which meet the educational and community needs best

Perkins&Will

**Join us by CLICKING on the link:**
https://global.gotomeeting.com/join/116556029

**or CALLING** +1 (408) 650-3123 Access Code 116-556-029

**Follow on FacebookLIVE!:** http://facebook.com/StonehamTV/live/

**Watch on StonehamTV:** www.stonehamtv.org/ondemand

**10:00am** **Sat, Nov 7, 2020** **Online**

email: SSBC@Stoneham-Ma.gov
website: Stoneham-Ma.Gov/hsbc

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Project Management | SMMA

# Project Minutes

| | | | |
|---|---|---|---|
| Project: | Stoneham High School Feasibility Study | Project No.: | 20033 |
| Prepared by: | Joel Seeley | Meeting Date: | 10/19/2020 |
| Re: | PR Subcommittee Meeting | Time: | 1:00pm |
| Location: | Remote Locations | Meeting No: | 2 |
| Distribution: | Attendees (MF) | | |

Attendees:

| PRESENT | NAME | AFFILIATION |
|---|---|---|
| ✓ | Sharon Iovanni | Chair PR Subcommittee, Community Member |
| ✓ | Marie Christie | Co-Chair School Building Committee |
| ✓ | Nicole Nial | School Committee Member |
| ✓ | Raymie Parker | Chair, Select Board |
| ✓ | Lisa Gallagher | Community Member, School Secretary, Past member of Middle School Building Committee |
| | David Bois | Co-Chair School Building Committee |
| ✓ | John Macero | Superintendent of Schools |
| ✓ | Bryan Lombardi | Principal |
| | Brooke Trivas | Perkins and Will |
| ✓ | Joel Seeley | SMMA |
| | | |

| Item # | Action | Discussion |
|---|---|---|
| 2.1 | S. Iovanni<br>J. Seeley<br>B. Trivas | The dates for the virtual Community Forums during the PSR Phase were discussed and agreed as follows:<br>1. Community Forum No. 3 – Saturday November 7, 2020 at 10:00am<br>2. Community Forum No. 4 – Wednesday December 9, 2020 at 6:30pm<br>The following actions were agreed upon:<br>1. J. Seeley to obtain the GoToMeeting link from A. Brough Palmerino.<br>2. S. Iovanni to submit press release to local newspaper.<br>3. J. Seeley to draft text for Flyer for Community Forum No. 3. B. Trivas to brand the flyer and send to Subcommittee for issuance.<br>4. A Menti survey should be set up for both forums.<br>5. J. Seeley to coordinate with A. Brough Palmerino for Facebook Live setup. |
| 2.2 | J. Seeley<br>B. Trivas | B. Trivas and J. Seeley to develop an Informational Flyer to be hardcopy and electronically distributed.<br>The following actions were agreed upon: |

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| Item # | Action | Discussion |
|---|---|---|
| | | 1. S. Iovanni to confirm with the Town Clerk on any restrictions to distributing hard copies at Town Hall on election day.<br>2. The flyer should include the options, costs, timeline, select FAQs, a listing of upcoming presentations and a link to the SSBC website. |
| 2.3 | J. Seeley<br>Subcommittee | J. Seeley reviewed a draft Communication Strategy, attached.<br>The following actions were agreed upon:<br>1. J. Seeley to forward to L. Gallagher to create a Google Doc for the Subcommittee to use.<br>2. Subcommittee members to research community activities, meetings, organizations and add to the Google Doc.<br>3. Subcommittee members to research additional email groups and social media locations to provide project information to and add to the Google Doc. |
| 2.4 | J.Seeley<br>B.Trivas | B. Trivas and J. Seeley to develop a draft Community-Wide Survey that can be electronically distributed for Subcommittee review. |
| 2.5 | R. Parker | R. Parker to contact A. Brough Palmerino to ask if Stoneham TV can develop an Informational PSA. J. Macero and B. Lombardi to participate. |
| 2.6 | J. Macero | J. Macero to contact the Council on Aging and the Senior Center for possible virtual presentations. |

The information herein reflects the understanding reached. Please contact the author if you have any questions or are not in agreement with these Project Minutes

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Project Management

# Memorandum

| | | | |
|---|---|---|---|
| To: | Public Relations Subcommittee | Date: | 10/17/2020 |
| From: | Joel Seeley | Project No.: | 20033 |
| Project: | Stoneham High School Feasibility Study | | |
| Re: | Communication Strategy | | |
| Distribution: | PR Subcommittee (MF) | | |

The following describes the communication strategy for the Public Relations Subcommittee.

## 1. MISSION

***Purpose***

Create and execute a strategy to keep the voters and community informed about this project, its impact on the Town and the future of its children.

***Goal***

Approval of the Stoneham High School project by the residents of Stoneham.

***Tactics***

- Distribute the right information
- Facilitate easy access to the right information
- Build awareness among the community and key stakeholders
- Establish key stakeholder partnerships who can help share project updates and meetings
- Other

***Create the Message***

The Stoneham High School has reached the end of its useful life. Now is the time for Stoneham to provide its children with a high school building that will prepare them for the 21st century.

***Organize the Message***

- Consistent
- Clear
- Accessible

## 2. AUDIENCE

- Voters
- Government Leadership
- School Personnel
- Parents
- Future parents
- Empty-nesters
- Senior citizens

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- Recent graduates/voting students
- Local Business'
- Real Estate Professionals
- Other

## 3. CHANNELS

*Board Meetings*

- Select Board
- School Committee
- Finance and Advisory
- Other

*Community Meetings*

- Community Forums
- Town-wide Meetings
- Neighborhood Meetings
- Civic Associations
- Other

*Community Organizations*

- Council on Aging
- PTOs
- Stoneham Public Library
- YMCA and Boys' and Girls' Club
- Other

*Community Activities*

- Sporting Events
- Community Events
- Other

*Email Groups*

- Visioning Group Contact List
- School Contacts List
- Personal Contact Networks
- Other

*Social Media*

- Project Website
- Stoneham Public Schools Facebook - https://www.facebook.com/stonehampublicschools
- Stoneham Sun Facebook – https://facebook.com/wickedlocalstoneham/
- Stoneham Community Group Facebook - https://www.facebook.com/groups/745216992166677/
- Stoneham B & G Club Facebook - https://www.facebook.com/BGCStonehamWakefield
- Stoneham Parents Facebook - https://www.facebook.com/groups/StonehamParents/
- Stoneham Chamber of Commerce Facebook - https://www.facebook.com/StonehamChamber
- Stoneham Public Library Facebook - https://www.facebook.com/StonehamLibrary

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To: Public Relations Subcommittee
Date: 10/17/2020

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- Stoneham Senior Center Facebook - https://www.facebook.com/StonehamSeniorCenter
- Friends of Stoneham Facebook - https://www.facebook.com/groups/1008835222502972
- SPS Twitter
- Other

*Surveys*

- Community-wide Surveys

*Flyers/Posters*

- Electronic Backpack Flyers
- Mailers
- Posters in key buildings
- Other

*Press*

- Newspapers
  - Stoneham Independent
  - Stoneham Sun/Wicked Local
  - Patch
- StonehamTV
- Local Radio Stations

**TIMELINE**

*October*

- **Tri-Board Meeting**
- **School Committee Meeting**
- **Community Forum No. 3**
- **Town Events**
- **Other**

*November*

- **Issue Informational Flyer**
- **PTO Meetings**
- **Town-wide Survey**
- **Town Events**
- **Other**

*December*

- **Tri-Board Meeting**
- **Community Forum No. 4**
- **Town Events**
- **Other**

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*FINAL*
*10/22/2020*

# INFORMATION ABOUT THE STONEHAM HIGH SCHOOL FEASIBILITY STUDY

October 2020

The Stoneham School Building Committee (SSBC) is comprised of municipal employees from the School and Town departments, elected representatives from the Select Board, School Committee and Finance and Advisory Board and citizens with a variety of talents and skills suited to the work of bringing a 21st century high school to the students and community of Stoneham. Since being appointed in early 2019, the SSBC has led the development of the Feasibility Study.

## Next Steps

SSBC meetings are every two weeks. Meetings and agendas are posted on the project website.

## Upcoming Meetings

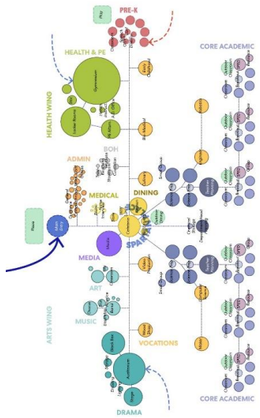
- **October 26, 2020**
- **November 9, 2020**
- **November 23, 2020**
- **December 7, 2020**
- **December 21, 2020**

## Upcoming Milestones

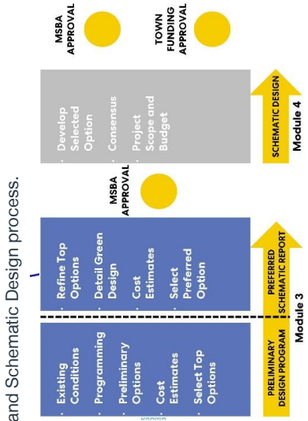
- **November 7, 2020** – Community Forum No. 3
- **November 2020** – PTO Presentations
- **December 9, 2020** – Community Forum No. 4
- **December 2020** – Tri-Board Meeting
- **December 21, 2020** – SSBC Vote to Select Preferred Option and Submit Preferred Schematic Report (PSR) to MSBA
- **December 29, 2020** – Submit Preferred Schematic Report (PSR) to MSBA
- **July 7, 2021** – Submit Schematic Design (SD) document to MSBA
- **August 25, 2021** – MSBA Board meeting vote to approve project
- **Fall 2021** – Town Vote

For information on the project, please visit the project website (https://www.stoneham-ma.gov/hsbc).

The SSBC hosted 8 project visioning sessions with community members, elected officials, teachers, staff and students to explore, discuss and influence the guiding principles, educational program and essential characteristics of a revitalized Stoneham High School. The graph below suggests the formation of core educational, fine arts and special education learning pods with staff planning areas, student support and administrative offices.




The Town is partnering with the Massachusetts School Building Authority (MSBA) which has a rigorous and detailed multistep Feasibility Study and Schematic Design process.

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FOR IMMEDIATE RELEASE:
Contact: Sharon Iovanni
781-248-9754
siovanni01@gmail.com

STONEHAM, Ma - The Stoneham School Building Committee recently completed the next step in its journey toward bringing a 21st century high school complex to the students and community of Stoneham with the submission to the Massachusetts School Building Authority (MSBA) of the Preliminary Design Program (PDP) on October 6, 2020.

The PDP, a 1,400 page product of the last six months of meetings and community forums for groups of stakeholders - teachers, students, community members and municipal and business representatives - visioning sessions, written education plans, considerations of more than ten proposed design alternatives, engagements with specialists and ultimately the decision to choose five of the ten proposed designs to move forward to the next decision process, which will be completed in December 2020, with the submission of the Preferred Schematic Report to the MSBA. Participants were guided through the process by the OPM for the project, Symmes Maini & McKee Associates, and the architect, Perkins and Will.

"It's a huge milestone to get to this point, however," says SSBC Co-Chair David Bois. "This is just one of a series of significant steps as we move toward a detailed plan for the building. Stoneham is fortunate to have an extremely talented design and project management team in Perkins and Will and Symmes Maini McKee Associates – they have gone above and beyond in presenting the Building Committee with information and options. Through the work of the School Department, the Town, the Building Committee and community members to date, we are well positioned to deliver Stoneham the high school project that will bring lasting benefits to the community and students for years to come."

Among the many decisions required of the SSBC over the last few months was the choice to participate in a Zero Net Energy (ZNE) program, which means that the resulting complex will produce as much clean, renewable energy on the building and surrounding grounds in a given period as it uses from the electric provider in the same time period. This is important to Stoneham as the high school complex will be the single largest energy user in town and being ZNE will reduce Town costs over the decades of the building's use.

"As someone whose children attended Stoneham High School and whose grandchildren will be among the first students to attend the future Stoneham High School, I am excited to be working with such an amazing group of individuals whose sole goal is to create a structure that will serve our future high school students and the community for years to come," says SSBC member Sharon Iovanni. "We are envisioning a complex that will offer not only education for our students, but for our community, from Pre-K to senior citizen, a complex that will provide wellness and creativity opportunities both inside and outside of the building's walls and a complex that will represent the best of our community to everyone who sees it."



Over the next two months, the SSBC will work on preparation of the next document to be submitted to the MSBA – the Preferred Schematic Report which will identify the final choice for the future high school project. The Committee continues to seek community input on this aspect of the work and encourages everyone to participate in community forums as they are held and in bi-weekly meetings. Upcoming meetings will be held on October 26, November 9, November 23, December 7 and December 21. Community Forum #3 will be held on November 7 and Community Forum #4 will be held on December 9.

Stoneham Community TV broadcasts the Forums and Stoneham School Building Committee meetings, which can be viewed on their website. The previous Stoneham School Building Committee meetings and Community Forums can be found on Stoneham TV's Education Channel in the OnDemand section of the website. This and other meetings can be viewed either on television, computer or mobile device, using the OnDemand feature on the SC TV website.

A list of upcoming meetings, agenda and minutes, timelines and information can be found at the SSBC webpage - https://www.stoneham-ma.gov/627/School-Building-Committee. Residents can also submit emails with questions and comments to SSBC@stoneham-ma.gov.

Details for connecting to the bi-weekly remote meetings will be posted to the SSBC webpage link listed above.

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FOR IMMEDIATE RELEASE
Contact: Sharon Iovanni
siovanni01@gmail.com
781-248-9754

Stoneham High School Feasibility Study Community Forum 03 November 7th
Hosted by the Stoneham School Building Committee

Stoneham, MA – The Stoneham School Building Committee (SSBC) will host the third in a series of Community Forums to update the community on the Stoneham High School project and to hear residents' visions for a new or renovated building. The virtual Forum is planned for Saturday, November 7, 2020 at 10:00 a.m. to allow those who cannot attend a weekday or evening meetings to participate in what will be an exciting discussion on potential options for the future Stoneham High School complex.

The forum will include a brief recap of what the SSBC has accomplished to date, the design options currently under consideration and their associated estimated project costs.

Participants will also have an opportunity to share what they like, what they wish for, what they wonder about, what they see as the advantages or disadvantages in the options presented and which options they believe best meets Stoneham's educational and community needs.

The forum will be held virtually using the GoToMeeting app and can be accessed on a laptop, mobile device or by phone. Those wishing can also view the meeting on Facebook Live.

Join the Forum online by using this URL: https://global.gotomeeting.com/join/116556029 or calling +1 (408) 650-3123 and using Access Code: 116-556-029. You can also follow the Forum on FacebookLIVE! – http://facebook.com/StonehamTV/live/ .



The Forum will also be broadcast by Stoneham TV On Demand at https://www.stonehamtv.org/ondemand and search for School Building Committee.

For more detailed information about the SSBC including meeting minutes, presentations and upcoming meetings, visit http://www.stoneham-ma.gov/627/School-Building-Committee .

DRAFT

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Project Management | SMMA

# Project Minutes

| | | | |
|---|---|---|---|
| Project: | Stoneham High School Feasibility Study | Project No.: | 20033 |
| Prepared by: | Joel Seeley | Meeting Date: | 11/9/2020 |
| Re: | School Building Committee Meeting | Time: | 7:00pm |
| Location: | Remote Participation | Meeting No: | 13 |
| Distribution: | Attendees (MF) | | |

Attendees:

| PRESENT | NAME | AFFILIATION | VOTING MEMBER |
|---|---|---|---|
| Attended Remote | Marie Christie | Co-Chair, School Building Committee | **Voting Member** |
| Attended Remote | David Bois | Co-Chair, School Building Committee; Community Member with Architecture Experience | **Voting Member** |
| Attended Remote | Nicole Nial | School Committee Member | **Voting Member** |
| Attended Remote | Raymie Parker | Chair Select Board | **Voting Member** |
| | | Community Member with Building Commissioner Experience | **Voting Member** |
| Attended Remote | Douglas Gove | Community Member with Engineering Experience | **Voting Member** |
| Attended Remote | Stephen O'Neill | Community Member with Engineering Experience | **Voting Member** |
| Attended Remote | Josephine Thomson | Community Member | **Voting Member** |
| Attended Remote | Jeanne Craigie | Town Moderator | **Voting Member** |
| Attended Remote | Lisa Gallagher | Community Member, School Secretary, Past member of Middle School Building Committee | **Voting Member** |
| Attended Remote | Sharon Iovanni | Community Member | **Voting Member** |
| Attended Remote | Cory Mashburn | Community Member, Finance and Advisory Board | **Voting Member** |
| Attended Remote | Paul Ryder | Community Member with Construction Experience | **Voting Member** |
| Attended Remote | David Pignone | Athletic Director, Member knowledgeable in educational mission and function of facility | **Voting Member** |
| Attended Remote | Kevin Yianacopolus | Local Official responsible for Building Maintenance | **Voting Member** |
| Attended Remote | Dennis Sheehan | Town Administrator / MCPPO Certified | Non-Voting Member |
| Attended Remote | John Macero | Superintendent of Schools, Secretary of School Building Committee | Non-Voting Member |
| Attended Remote | Bryan Lombardi | Stoneham High School Principal | Non-Voting Member |
| Attended Remote | Brian McNeil | Facilities Director | Non-Voting Member |
| Attended Remote | Brooke Trivas | Perkins and Will | |
| Attended Remote | Patrick Cunningham | Perkins and Will | |
| | Leo Liu | Perkins and Will | |
| Attended Remote | David Warner | Warner Larson | |
| Attended Remote | Joel Seeley | SMMA | |
| | | | |

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Project: Stoneham High School Feasibility Study
Meeting Date: 11/9/20
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| Item # | Action | Discussion |
|---|---|---|
| 13.1 | Record | Call to Order, 7:00 PM, meeting opened by roll call. |
| 13.2 | Record | In accordance with the executive order issued by the Governor on March 10, 2020, this meeting will be held via video conference and a recording of such will be posted on the Town's website. |
| 13.3 | Record | A motion was made by N. Nial and seconded by R. Parker to approve the 10/26/20 School Building Committee meeting minutes. No discussion, motion passed unanimous by roll call vote. |
| 13.4 | Record | J. Seeley reviewed the Budget Status Report, dated 10/31/20, attached. |
| 13.5 | Record | J. Seeley indicated P&W has requested to change their Traffic Consultant and reviewed Designer Amendment No. 4, dated 11/9/20 voiding Designer Amendment No. 2 for (-$18,150.00), Designer Amendment No. 5, dated 11/9/20 adding the PDP Phase Traffic Consultancy Services for $4,166.14 and Designer Amendment No. 6, dated 11/9/20 adding the PSR and SD Phase Traffic Consultancy Services for $13,970.00 to be charged against ProPay Budget Code 0003-0000, which will have a balance of $88,266.36 once executed, attached.<br><br>Committee Discussion:<br>1. J. Craigie asked if Vanasse & Associates was retained by the Town in the Wiess Farm matter? D. Sheehan indicated yes.<br><br>A motion was made by R. Parker and seconded by L. Gallagher to approve Designer Amendment No. 4, in the amount of (-$18,150.00), Designer Amendment No. 5, in the amount of $4,166.14 and Designer Amendment No. 6, in the amount of $13,970.00 and recommend signature by D. Sheehan. No discussion, motion passed unanimous by roll call vote. |
| 13.6 | J. Seeley | J. Seeley reviewed Warrant No. 5, attached.<br><br>A motion was made by N. Nial and seconded by C. Mashburn to approve Warrant No. 5. No discussion, motion passed unanimous by roll call vote.<br><br>J. Seeley to forward Warrant No. 5 to D. Bois for signature. |
| 13.7 | Record | J. Seeley distributed and reviewed the PSR Phase Meetings and Agenda Schedule, attached. |
| 13.8 | J. Macero | J. Macero to review if there is a Pre-K Guideline that the proposed Pre-K program can be compared to. *(from prior meeting)* |
| 13.9 | J. Macero | J. Macero to review and provide direction on how close the middle school is to capacity and if it will need the space for the potential District Offices in the future? *(from prior meeting)* |

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| Item # | Action | Discussion |
|---|---|---|
| 13.10 | J. Seeley | Community Forum No. 3, held on Saturday 11/7/20, feedback was reviewed.<br>Committee Discussion:<br>1. D. Bois indicated there was a good turnout and a good discussion by a community member encouraging the SSBC to continue to assess the economic impact of a high school project on Stoneham's seniors.<br>2. D. Sheehan indicated the SSBC will continue to work with the Director of Council on Aging on ways to provide the seniors with information on the Feasibility Study.<br>3. R. Parker asked how many community members attended?<br>*J. Macero indicated the Forum had about 10 – 12 community members*.<br>4. J. Craigie indicated the call-in phone number did not work and S. Iovanni indicated the link was having a connection problem.<br>*J. Seeley will follow-up with A. Brough Palmerino*. |
| 13.11 | P. Cunningham<br>B. Trivas<br>D. Warner | P. Cunningham presented and reviewed Site Plans, Floor Plans, Building Sections and Massing Studies for Renovation Only Option 2A and New Construction Option 4A, and Progress PSR Comments and Responses Spreadsheet, attached.<br>Committee Discussion:<br>1. B. Trivas provided an overview of the Athletic Interior and Exterior Program meeting held on 11/15/20 and the scope of exterior program that is included in each option.<br>2. B. Trivas indicated the existing parking lots accommodate approximately 350 parking spaces. Options 2A and 4A accommodate approximately 275 parking spaces.<br>3. J. Macero indicated reducing parking spaces is a concern.<br>4. J. Macero asked how is the Auditorium accessed in Option 4A?<br>*P. Cunningham indicated the Auditorium can be accessed at the back of the seating area, at its second level, from the Level 1 Main Lobby, or from the front, at the stage area, from the Level 00 Spartan Place/Cafeteria*.<br>5. J. Macero indicated concern with the location of the PreK playground not being adjacent to the building.<br>6. D. Bois asked if emergency access is being provided around the building in Option 4A?<br>*P. Cunningham indicated the landscaped pathway could be designed to accommodate emergency vehicle access*. |

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| Item # | Action | Discussion |
|---|---|---|
| | | 7. D. Sheehan indicated the Chief Grafton had requested a separate emergency access onto the site.<br>*P. Cunningham will indicate the location on the site plans*.<br>8. D. Bois indicated concern with the cost and logistics impact of constructing classrooms over the long-span Gymnasium structure in Option 4A.<br>*P. Cunningham will review modifying the classroom floors to be more of a "Y" form to follow the main floor structure*.<br>9. D. Bois asked P&W to determine the cost impact of relocating the Football/Track complex versus keeping the Football/Track complex in its current location.<br>*B. Trivas to provide a cost analysis for the next Committee meeting*.<br>10. J. Craigie asked if angled parking spaces can be added to the entry drive?<br>*D. Warner indicated that day-to-day parking along the entry drive would not be recommend due to the potential impact to the flow of traffic during drop-off and pick-up. Angled parking along the entry drive for events would be recommended*.<br>11. P. Ryder asked what is the intended use of the half-sized field?<br>*D. Pignone indicated the half-sized field provides space for practice, particularly during soccer season when there are potentially six soccer teams needing fields for practice at the same time.*<br>12. J. Macero asked how will visitors access their bleachers at the Football Field?<br>*B. Trivas indicated visitors could access their bleachers from the parking lot along the walkway that extends around the north side of the field*.<br>13. D. Sheehan indicated the site plan feels very athletic heavy, are there any opportunities for providing outdoor learning spaces?<br>*P. Cunningham indicated yes, spaces for outdoor learning can be accommodated in the plan*.<br>14. S. Iovanni asked if a community garden can be accommodated in the plan, as was requested by a community member at Community Forum No. 2?<br>*D. Warner indicated yes, a space for a community garden can be accommodated in the plan*.<br>15. M. Christie asked if an elevated parking deck could be an option to increase the parking spaces to 350?<br>*D. Bois indicated the cost for an elevated parking deck would be prohibitively expensive*. |

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| Item # | Action | Discussion |
|---|---|---|
| | | 16. J. Craigie indicated 350 parking spaces should be provided and the PreK playground should be moved closer to the building.<br>17. J. Macero indicated dedicated parking for the PreK parents to park and walk their children into the building also needs to be provided.<br>*B. Trivas will calculate the PreK spaces required and show on the site plan*.<br>18. D. Bois asked if parking on the stepped terraces of the existing tennis courts is efficient?<br>*D. Warner indicated the parking lot has been laid out, following the terraces, and the spaces are included in the 275 parking spaces count*.<br>19. S. O'Neill asked P&W review the Zoning Bylaw for the required amount of parking spaces.<br>*J. Craigie indicated parking counts may be exempt by the Dover Amendment.*<br>*D. Warner will review the Zoning Bylaw and provide direction at the next Committee meeting.*<br>The Committee gave the following direction: 1) provide a minimum of 350 parking spaces, 2) eliminate the half-size playfield, and 3) locate the PreK playground adjacent to the building and provide dedicated PreK parking. |
| 13.12 | J. Seeley | J. Seeley reviewed the updated Summary of Major Cost Components related to Approximate Reimbursement Assumptions, attached.<br>Committee Discussion:<br>1. D. Bois asked for the list to be modified to break out the costs in a series of categories: Base High School Project followed by a listing of the Community Related Enhancements such as the synthetic playfields, concession/locker room building, traffic signals, PreK Program, District Offices, Larger Auditorium, Larger Gymnasium, District Kitchen.<br>*J. Seeley to update for the next Committee meeting*.<br>2. D. Bois indicated the potential revenue offsets for playfield rental and operating cost offsets for the ZNE need to be determined. |
| 13.13 | B. Lombardi<br>J. Macero<br>B. Trivas<br>J. Seeley | J. Seeley distributed and reviewed the MSBA Comments on the PDP Submission, dated 11/6/20 and provided an overview of the conference call held with MSBA and B. Lombardi, J. Macero, B. Trivas, and J. Seeley on 11/2/20. B. Lombardi, J. Macero, B. Trivas, and J. Seeley are developing the District's response to the comments, which is due 11/20/20.<br>Committee Discussion: |

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| Item # | Action | Discussion |
|---|---|---|
| | | 1. S. Iovanni asked if the MSBA comments were typical for the PDP phase?<br>*J. Seeley indicated yes, the comments are typical and the spaces MSBA has indicated as ineligible for reimbursement are similar to what had been factored in the PDP Cost and Reimbursement models, with the exception of the PreK Program, which MSBA has indicated potentially only the PreK classrooms may be reimbursable*. |
| 13.14 | D. Sheehan<br>B. Trivas<br>J. Seeley | J. Seeley indicated a discussion relative to the high school being a shelter was brought up at the last Green Building Initiatives meeting on 10/26/20 and P&W needs to be provided further direction on the extent and scope of the shelter program. D. Sheehan, B. Trivas and J. Seeley to develop a potential extent and scope for Committee review. |
| 13.15 | PR Subcommittee | **Subcommittee Updates**<br>**Public Relations Subcommittee**<br>1. S. Iovanni asked for confirmation from the SSBC that the PR Subcommittee has the authority to issue press releases, information and surveys without receiving formal prior SSBC approval on such, with the stipulation that all such press releases, information and surveys will be copied to the SSBC for record.<br>*M. Christie and D. Bois indicated the PR Subcommittee has the authority and if the PR Subcommittee has any doubt on the documents, contact M. Christie or D. Bois for review*.<br>2. S. Iovanni reviewed the 10/28/20 PR Subcommittee Meeting minutes and Community-Wide Survey No. 1, which is currently underway, will close on 11/12/20, and the results of which will be reviewed at the 11/23/20 SSBC Meeting. Community-Wide Survey No. 2 will be released on 12/8/20, close on 12/15/20 and the results of which will be reviewed at the 12/16/20 SSBC meeting.<br>**Green Building Initiatives**<br>1. J. Seeley reviewed the 10/26/20 Green Building Initiatives Meeting minutes, attached.<br>**CM at Risk Prequalification Committee**<br>1. J. Seeley indicated the CM at Risk Prequalification Committee met on 11/2/20, reviewed the Application to the Inspector General Office, the prequalification and selection timeline, and the draft RFQ. The RFQ will be issued on 11/11/20 with Qualification packages due 12/2/20. |
| 13.16 | Record | **Committee Questions** - none |

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Project: Stoneham High School Feasibility Study
Meeting Date: 11/9/20
Meeting No.: 13
Page No.: 7

| Item # | Action | Discussion |
|---|---|---|
| 13.17 | Record | **Old or New Business** - none |
| 13.18 | Record | **Public Comment** - none |
| 13.19 | Record | Next **SBC Meeting: November 23, 2020 at 7:00 pm.** |
| 13.20 | Record | A Motion was made by S. Iovanni and seconded by L. Gallagher to adjourn the meeting. No discussion, motion passed unanimous by roll call vote. |

Attachments: Agenda, Budget Status Report, Designer Amendment No. 4, Designer Amendment No. 5, Designer Amendment No. 6, Warrant No. 5, PSR Phase Meetings and Agenda Schedule, Email from Community Member from Community Forum No.3, Major Cost Components related to Approximate Reimbursement Assumptions, MSBA Comments on the PDP Submission, dated 11/6/20, 10/28/20 PR Subcommittee Meeting minutes, 10/26/20 Green Building Initiatives Meeting minutes, Powerpoint

The information herein reflects the understanding reached. Please contact the author if you have any questions or are not in agreement with these Project Minutes

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Project Management SMMA

# Agenda

| | | | |
|---|---|---|---|
| Project: | Stoneham High School Feasibility Study | Project No.: | 20033 |
| Re: | School Building Committee Meeting | Meeting Date: | 11/9/2020 |
| Prepared by: | Joel Seeley | Meeting Time: | 7:00 PM |
| Location: | Remote Participation | | |
| Distribution: | Attendees (MF) | | |

1. Call to Order
2. Approval of Minutes
3. Approval of Invoices and Commitments
4. Schedule and Budget Update
5. Feedback from Community Forum No. 3
6. Construction Alternatives Update
7. Cost Model Follow-up
8. Review MSBA Comments on PDP Submission
9. Emergency Shelter Review
10. Subcommittee Updates
    - Review Authority of Subcommittee
11. New or Old Business
12. Committee Questions
13. Public Comments
14. Next Meeting: November 23, 2020
15. Adjourn

**Join GoToMeeting:**
https://global.gotomeeting.com/join/259038333
**Dial-In:** +1 (669) 224-3412
**Access Code:** 259-038-333

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10/31/2020

Stoneham High School Feasibility Study
Stoneham, Massachusetts

FEASIBILITY STUDY BUDGET STATUS REPORT

| ProPay Code | Description | Total Project Budget | Authorized Changes | Revised Total Budget | Total Committed | % Comtd to Date | Budget Balance | Actual Spent to Date | % Spent to Date | Projected Expenditure/ Commitments | Balance to Spend |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | FEASIBILITY STUDY AGREEMENT | | | | | | | | | | |
| 0001-0000 | OPM Feasibility Study/Schematic Design | $ 187,500.00 | $ (57,500.00) | $ 130,000.00 | $ 130,000.00 | 100% | $ - | $ 28,000.00 | 22% | $ 102,000.00 | $ 102,000.00 |
| 0002-0000 | A/E Feasibility Study/Schematic Design | $ 465,000.00 | $ (45,000.00) | $ 420,000.00 | $ 420,000.00 | 100% | $ - | $ 75,000.00 | 18% | $ 345,000.00 | $ 345,000.00 |
| 0003-0000 | Environmental & Site | $ 60,000.00 | $ 100,000.00 | $ 160,000.00 | $ 71,733.64 | 45% | $ 88,266.36 | $ 13,750.00 | 19% | $ 57,983.64 | $ 146,250.00 |
| 0004-0000 | Other | $ 37,500.00 | $ 2,500.00 | $ 40,000.00 | $ 8,114.08 | 20% | $ 31,885.92 | $ 614.08 | 8% | $ 7,500.00 | $ 39,385.92 |
| | SUBTOTAL | $ 750,000.00 | | $ 750,000.00 | $ 629,847.72 | | $ 120,152.28 | $ 117,364.08 | 19% | $ 512,483.64 | $ 632,635.92 |

** Committed from Other

| | | Amount |
|---|---|---|
| Stoneham Independent | $ | 230.81 Advertisement in Stoneham Independent for Designer Procurement |
| Andrew T. Johnson / SMMA | $ | 383.27 Designer Proposal Production for Designer Procurement |
| MassSave ZNE Expert ESA | $ | 7,500.00 Cost Share for Thornton Tomasetti |
| | $ | 8,114.08 |

SMMA
PROJECT MANAGEMENT





SMMA
Project Management

# Memorandum

| | | | |
|---|---|---|---|
| To: | Stoneham School Building Committee | Date: | 11/9/2020 |
| From: | Joel G. Seeley | Project No.: | 20033 |
| Project: | Stoneham High School Feasibility Study | | |
| Re: | Designer Amendment No. 4: Voids Designer Amendment No. 2 for Traffic Consulting Services | | |
| Distribution: | Stoneham School Building Committee (MF) | | |

**DESIGNER AMENDMENT NO. 4: VOID DESIGNER AMENDMENT NO. 2 FOR TRAFFIC CONSULTING SERVICES**

**FEE:** ($18,150.00)

**REASON:** Void Designer Amendment No. 2 – Traffic Consulting Services. The Designer has requested to change the traffic consulting firm. Traffic services will be performed under Designer Amendment Nos. 5 and 6 issued under separate cover.

**BUDGET AVAILABILITY:** The Environmental & Site Survey Budget, ProPay Code 0003-0000, which has a current balance of $88,252.50, will be increased by $18,150.00.

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JGS/sat /P:\2020\20033\00-INFO\0.6 Designer Procurement And Contract\0.2 Designer Amendments\Amendment No. 4 - Traffic Credit\M_Designercontractamendment4_Traffic Credit_9November2020.Docx

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# ATTACHMENT F

**CONTRACT FOR DESIGNER SERVICES**

**AMENDMENT NO. 4**

**WHEREAS**, the Town of Stoneham ("Owner") and Perkins & Will, (the "Designer") (collectively, the "Parties") entered into a Contract for Designer Services for the Stoneham High School Project (Project Number 201802840505) at the Stoneham High School on July 10, 2020 "Contract"; and

**WHEREAS**, effective as of November 9, 2020, the Parties wish to amend the Contract:

**NOW, THEREFORE**, in consideration of the promises and the mutual covenants contained in this Amendment, and other good and valuable consideration, the receipt and legal sufficiency of which are hereby acknowledged, the Parties, intending to be legally bound, hereby agree as follows:

1. The Owner hereby authorizes the Designer to perform services for the Design Development Phase, the Construction Phases, and the Final Completion Phase of the Project, pursuant to the terms and conditions set forth in the Contract, as amended.

2. For the performance of services required under the Contract, as amended, the Designer shall be compensated by the Owner in accordance with the following Fee for Basic Services:

**Fee for Basic Services:**

| | Original Contract | Prior Amendments | This Amendment | After this Amendment |
|---|---|---|---|---|
| Feasibility Study Phase | $ 175,000.00 | $ 71,747.50 | ($ 18,150.00) | $ 228,597.50 |
| Schematic Design Phase | $ 245,000.00 | $ 0.00 | $ 0.00 | $ 245,000.00 |
| Design Development Phase | $ 0.00 | $ 0.00 | $ 0.00 | $ 0.00 |
| Construction Document Phase | $ 0.00 | $ 0.00 | $ 0.00 | $ 0.00 |
| Bidding Phase | $ 0.00 | $ 0.00 | $ 0.00 | $ 0.00 |
| Construction Phase | $ 0.00 | $ 0.00 | $ 0.00 | $ 0.00 |
| Completion Phase | $ 0.00 | $ 0.00 | $ 0.00 | $ 0.00 |
| **Total Fee** | **$420,000.00** | **$ 71,747.50** | **($ 18,150.00)** | **$ 473,597.50** |

This Amendment is a result of: Void Amendment No. 2 for Traffic Consulting Services.



3. The Construction Budget shall be as follows:
   Original Budget: $ NA
   Amended Budget $ NA

4. The Project Schedule shall be as follows:
   Original Schedule: NA
   Amended Schedule NA

5. This Amendment contains all of the terms and conditions agreed upon by the Parties as amendments to the original Contract. No other understandings or representations, oral or otherwise, regarding amendments to the original Contract shall be deemed to exist or bind the Parties, and all other terms and conditions of the Contract remain in full force and effect.

IN WITNESS WHEREOF, the Owner, with the prior approval of the Authority, and the Designer have caused this Amendment to be executed by their respective authorized officers.

OWNER
Dennis J. Sheehan
(print name)
Town Administrator, Town of Stoneham
(print title)
By _____
(signature )
Date _____

DESIGNER
Robert Brown, AIA, IIDA, LEED AP
(print name)
Managing Director, Principal, Perkins & Will
(print title)
By _____
(signature)
Date _____

SMMA

Project Management

# Memorandum

| | | | |
|---|---|---|---|
| To: | Stoneham School Building Committee | Date: | 11/9/2020 |
| From: | Joel G. Seeley | Project No.: | 20033 |
| Project: | Stoneham High School Feasibility Study | | |
| Re: | Designer Amendment No. 5: Traffic Consulting Services | | |
| Distribution: | Stoneham School Building Committee (MF) | | |

**DESIGNER AMENDMENT NO. 5: TRAFFIC CONSULTING SERVICES**

**FEE:** $4,166.14

**REASON:** This Amendment No. 5 is for the PDP Phase related Traffic Consultancy Services performed by Nelson Nygaard. The balance of the Traffic Consulting Services will be performed Vanasse & Associates, Inc. under Designer Amendment No. 6.

**BUDGET AVAILABILITY:** This Amendment would be funded out of the Environmental & Site Survey Budget, ProPay Code 0003-0000, which has the current balance of $106,402.50.

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# ATTACHMENT F

**CONTRACT FOR DESIGNER SERVICES**

**AMENDMENT NO. 5**

**WHEREAS**, the Town of Stoneham ("Owner") and Perkins & Will, (the "Designer") (collectively, the "Parties") entered into a Contract for Designer Services for the Stoneham High School Project (Project Number 201802840505) at the Stoneham High School on July 10, 2020 "Contract"; and

**WHEREAS**, effective as of November 9, 2020, the Parties wish to amend the Contract:

**NOW, THEREFORE**, in consideration of the promises and the mutual covenants contained in this Amendment, and other good and valuable consideration, the receipt and legal sufficiency of which are hereby acknowledged, the Parties, intending to be legally bound, hereby agree as follows:

1. The Owner hereby authorizes the Designer to perform services for the Design Development Phase, the Construction Phases, and the Final Completion Phase of the Project, pursuant to the terms and conditions set forth in the Contract, as amended.

2. For the performance of services required under the Contract, as amended, the Designer shall be compensated by the Owner in accordance with the following Fee for Basic Services:

**Fee for Basic Services:**

| | Original Contract | Prior Amendments | This Amendment | After this Amendment |
|---|---|---|---|---|
| Feasibility Study Phase | $ 175,000.00 | $ 53,597.50 | $ 4,166.14 | $ 232,763.64 |
| Schematic Design Phase | $ 245,000.00 | $ 0.00 | $ 0.00 | $ 245,000.00 |
| Design Development Phase | $ 0.00 | $ 0.00 | $ 0.00 | $ 0.00 |
| Construction Document Phase | $ 0.00 | $ 0.00 | $ 0.00 | $ 0.00 |
| Bidding Phase | $ 0.00 | $ 0.00 | $ 0.00 | $ 0.00 |
| Construction Phase | $ 0.00 | $ 0.00 | $ 0.00 | $ 0.00 |
| Completion Phase | $ 0.00 | $ 0.00 | $ 0.00 | $ 0.00 |
| **Total Fee** | **$420,000.00** | **$ 53,597.50** | **$ 4,166.14** | **$ 477,763.64** |

This Amendment is a result of: Providing Traffic Consulting Services to be funded out of MSBA ProPay 0003-0000.

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3. The Construction Budget shall be as follows:

   Original Budget: $ NA

   Amended Budget $ NA

4. The Project Schedule shall be as follows:

   Original Schedule: NA

   Amended Schedule NA

5. This Amendment contains all of the terms and conditions agreed upon by the Parties as amendments to the original Contract. No other understandings or representations, oral or otherwise, regarding amendments to the original Contract shall be deemed to exist or bind the Parties, and all other terms and conditions of the Contract remain in full force and effect.

IN WITNESS WHEREOF, the Owner, with the prior approval of the Authority, and the Designer have caused this Amendment to be executed by their respective authorized officers.

OWNER

Dennis J. Sheehan
(print name)

Town Administrator, Town of Stoneham
(print title)

By _____
(signature )

Date _____

DESIGNER

Robert Brown, AIA, IIDA, LEED AP
(print name)

Managing Director, Principal, Perkins & Will
(print title)

By _____
(signature)

Date _____



SMMA

Project Management

# Memorandum

| | | | |
|---|---|---|---|
| To: | Stoneham School Building Committee | Date: | 11/9/2020 |
| From: | Joel G. Seeley | Project No.: | 20033 |
| Project: | Stoneham High School Feasibility Study | | |
| Re: | Designer Amendment No. 6: Traffic Consulting Services | | |
| Distribution: | Stoneham School Building Committee (MF) | | |

**DESIGNER AMENDMENT NO. 6: TRAFFIC CONSULTING SERVICES**

**FEE:** $13,970.00

**REASON:** This Amendment is for the PSR Phase and Schematic Design Phase Traffic Consulting Services to be performed by Vanasse & Associates, Inc.

**BUDGET AVAILABILITY:** This Amendment would be funded out of the Environmental & Site Survey Budget, ProPay Code 0003-0000, which has the current balance of $102,236.36.

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# ATTACHMENT F

**CONTRACT FOR DESIGNER SERVICES**

**AMENDMENT NO. 6**

**WHEREAS**, the Town of Stoneham ("Owner") and Perkins & Will, (the "Designer") (collectively, the "Parties") entered into a Contract for Designer Services for the Stoneham High School Project (Project Number 201802840505) at the Stoneham High School on July 10, 2020 "Contract"; and

**WHEREAS**, effective as of November 9, 2020, the Parties wish to amend the Contract:

**NOW, THEREFORE**, in consideration of the promises and the mutual covenants contained in this Amendment, and other good and valuable consideration, the receipt and legal sufficiency of which are hereby acknowledged, the Parties, intending to be legally bound, hereby agree as follows:

1. The Owner hereby authorizes the Designer to perform services for the Design Development Phase, the Construction Phases, and the Final Completion Phase of the Project, pursuant to the terms and conditions set forth in the Contract, as amended.

2. For the performance of services required under the Contract, as amended, the Designer shall be compensated by the Owner in accordance with the following Fee for Basic Services:

**Fee for Basic Services:**

| | Original Contract | Prior Amendments | This Amendment | After this Amendment |
|---|---|---|---|---|
| Feasibility Study Phase | $ 175,000.00 | $ 57,763.64 | $ 13,970.00 | $ 246,733.64 |
| Schematic Design Phase | $ 245,000.00 | $ 0.00 | $ 0.00 | $ 245,000.00 |
| Design Development Phase | $ 0.00 | $ 0.00 | $ 0.00 | $ 0.00 |
| Construction Document Phase | $ 0.00 | $ 0.00 | $ 0.00 | $ 0.00 |
| Bidding Phase | $ 0.00 | $ 0.00 | $ 0.00 | $ 0.00 |
| Construction Phase | $ 0.00 | $ 0.00 | $ 0.00 | $ 0.00 |
| Completion Phase | $ 0.00 | $ 0.00 | $ 0.00 | $ 0.00 |
| **Total Fee** | **$420,000.00** | **$ 57,763.64** | **$ 13,970.00** | **$ 491,733.64** |

This Amendment is a result of: Providing Traffic Consulting Services to be funded out of MSBA ProPay 0003-0000.

3. The Construction Budget shall be as follows:

   Original Budget: $ NA
   Amended Budget $ NA

4. The Project Schedule shall be as follows:

   Original Schedule: NA
   Amended Schedule NA

5. This Amendment contains all of the terms and conditions agreed upon by the Parties as amendments to the original Contract. No other understandings or representations, oral or otherwise, regarding amendments to the original Contract shall be deemed to exist or bind the Parties, and all other terms and conditions of the Contract remain in full force and effect.

IN WITNESS WHEREOF, the Owner, with the prior approval of the Authority, and the Designer have caused this Amendment to be executed by their respective authorized officers.

OWNER
Dennis J. Sheehan
(print name)
Town Administrator, Town of Stoneham
(print title)
By _____
(signature )
Date _____

DESIGNER
Robert Brown, AIA, IIDA, LEED AP
(print name)
Managing Director, Principal, Perkins & Will
(print title)
By _____
(signature)
Date _____

# Perkins&Will

11.6.2020

**Mr. Dennis J. Sheehan, Town Administrator**
**Stoneham Town Hall**
**35 Central Street, Second Floor**
**Stoneham, MA 02180**

**Re: Stoneham High School / Additional Services #4 Attachment F**

Dear Mr. Sheehan,

As requested, and required, attached and noted herein, are the additional services for the Traffic Engineering and Transportation Planning Services. We have attached the Vanasse & Associates Proposal dated November 6, 2020 for the Stoneham High School which is currently in the Feasibility Study phase. Nelson Nygaard completed the scope of services for the PDP phase, and those expenses are not reflected in this proposal and will be paid to Nelson Nygaard outside of this Attachment F, Additional Services #4.

**Project Overview**

The additional service request is for the Traffic Engineering and Transportation Planning Services and report required for Modular 3/ PSR and SD Phase of the Stoneham Project. We understand that you reviewed and approved the scope of services as outlined in the proposal attached to this letter dated 11.6.2020.

**Schedule**

The consultants will been notified that they will commence work as approved by the Town and School and under the guidelines of the COVID-19 requirements within the most expedient deadline.

**Compensation**

Based on the scope and schedule outlined herein and attached we propose a lump sum fee with a 10% mark up as allowed per contract. The following outlines the total compensation per additional service request which includes the 10% mark up: Any deviations to the attached will be at an additional charge to the defined scope.

| | |
|---|---|
| **PSR/ SD Traffic Engineering + Transportation** | **$ 13,970** |

225 Franklin Street, Suite 1100
Boston, Massachusetts 02110

www.perkinswill.com



Perkins&Will

11.6.2020
Stoneham High School /
Additional Services #4
Attachment F

Please see the attached proposal from Vanasse & Associates

Thank you,

**Brooke Trivas**
Principal, Practice Leader for Perkins and Will

cc; Joel Seely – SMMA, file



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Vanasse & Associates inc
Transportation Engineers & Planners

35 New England Business Center Drive
Suite 140
Andover, MA 01810

Ref: 8793

November 6, 2020

Ms. Brooke Trivas
Practice Leader, Principal
Perkins & Will
225 Franklin Street, Suite 1100
Boston, MA 02110

Re: New Stoneham High School
149 Franklin Street
Stoneham, Massachusetts

Dear Brooke:

Vanasse & Associates, Inc. (VAI) is pleased to submit this proposal for providing Traffic Engineering and Transportation Planning Services in support of the proposed new Stoneham High School to be located at 149 Franklin Street in Stoneham, Massachusetts. Our work effort has been designed to meet the requirements of the Town and will be completed in accordance with the Massachusetts Department of Transportation (MassDOT) *Transportation Impact Assessment (TIA) Guidelines*.

The enclosed Scope of Services describes the elements for the initial phases of work. The results of our work effort will be summarized in a report submitted to you for review. We envision a multiple-element work program with the municipality and State which is summarized below by element, phase and task.

| | | Phase/Task |
|---|---|---|
| Element I | 1.0 | Feasibility Study (FS) – Traffic (Module 3) – *Enclosed* |
| | 2.0 | Schematic Design (SD) - Traffic (Module 4) – *Enclosed* |
| | 3.0 | Project and Public Meetings – *Enclosed* |
| Element II | 4.0 | Environmental Notification Form (ENF) Traffic Component – *Not Required* |
| | 5.0 | Draft Environmental Impact Report (Draft EIR) Traffic Component – *Not Required* |
| | 6.0 | Final Environmental Impact Report (Final EIR) Traffic Component – *Not Required* |
| | 7.0 | Section 61 Finding – *Not Required* |
| | 8.0 | State Highway Access Permit Application – *Not Required* |
| Element III | 9.0 | Construction Documents – *To be Submitted When Requested* |
| | 9.1 | Construction Services – *To be Submitted When Requested* |

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We propose to complete the Scope of Services as described within a maximum fee for labor as follows.

| Phase | Element I - Tasks | Fee | Schedule | Payment Method |
|---|---|---|---|---|
| 1.0 | FS – Traffic (Module 3) | $ 1,700 | 2 Weeks | Lump Sum |
| 2.0 | SD – Traffic (Module 4) | 6,000 | 4 Weeks | Lump Sum |
| 3.0 | Project and Public Meetings (up to 5 meetings) | 5,000 | As Required | T&M |
| | Element II - Tasks | | | |
| 4.0 | ENF - Traffic Component | Not Required | | |
| 5.0 | Draft EIR - Traffic Component | Not Required | | |
| 6.0 | Final EIR - Traffic Component | Not Required | | |
| 7.0 | Section 61 Finding | Not Required | | |
| 8.0 | State Highway Access Permit Application | Not Required | | |
| | Element III - Tasks | | | |
| 9.0 | Construction Documents | To be Submitted When Requested | | |
| 9.1 | Construction Services | To be Submitted When Requested | | |
| | Data Collection (Phases 1.0 and 2.0) | Included | | |
| | Direct Expenses (Phases 1.0, 2.0 and 3.0) | Included | | |
| | TOTAL Phases 1.0, 2.0 and 3.0 | $ 12,700 | | |

T&M = Time and materials

The total fee to complete the Feasibility Study (Phase 1.0) is $1,700 and the subsequent Schematic Design (Phase 2.0) is $6,000, including data collection (traffic counts and field measurements) and direct expenses. An initial budget of $5,000 has been established for the participation in up to five (5) meetings in support of the project. Meeting costs will be billed on a time and materials basis in accordance with the attached billing rates. Our attendance at meetings is at your direction and discretion.

We are prepared to initiate work and complete the enclosed effort after receipt of the signed agreement. Written authorization must be received before work can begin. If you are in agreement with the attached Scope of Services and terms and conditions of the Agreement, please countersign the original and return it to our office.

We look forward to assisting you with this project. If you should have any questions regarding this agreement or the enclosed materials, please feel free to contact me.

Sincerely,

VANASSE & ASSOCIATES, INC.

Jeffrey S. Dirk

Jeffrey S. Dirk, P.E., PTOE, FITE
Managing Partner

Enclosure

cc: DRB

G:\8793 Stoneham, MA\Contract\New Stoneham HS Traffic Study Proposal 11.06.20.docx



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**AGREEMENT FOR PROFESSIONAL SERVICES**

**BETWEEN**

**VANASSE & ASSOCIATES, INC.**

**AND**

**PERKINS & WILL**

**NOVEMBER 6, 2020**

This Agreement is composed of Part I and Part II. Part I includes details of the services to be performed, client-furnished information, timing of the services, and compensation. Part II (attached) contains the Terms and Conditions of Agreement, which are the general terms of the engagement between Perkins & Will, hereinafter called the CLIENT, and Vanasse & Associates, Inc. (VAI).

**PART I**

**PROJECT DESCRIPTION**

VAI will provide Traffic Engineering and Transportation Planning Services in support of the proposed new Stoneham High School to be located at 149 Franklin Street in Stoneham, Massachusetts. The study area will be limited to the roadways in the vicinity of the project site as defined herein.

**SCOPE OF SERVICES**

**1.0 Feasibility Study (FS) - Traffic (Module 3)**

VAI will provide the following services in support of the Feasibility Study for the project:

- Review previous studies of the area, including studies by other consultants, the state, regional planning agencies, and the local community, in addition to any past VAI efforts.
- Consult with the development team to determine permitting strategy and timelines, evaluate local and state requirements, and review the history and previous efforts, if any, at the site and adjacent properties.
- Visit the site to update available information and observe factors that can affect access, circulation and the selection of potential improvement strategies.
- With prior approval of CLIENT, consult with local and state officials to review permitting procedures, submission requirements and design standards.



- Obtain from available sources manual turning-movement and vehicle classification counts for a three-hour weekday morning period (6:00 to 9:00 AM) and two-hour weekday evening period (4:00 to 6:00 PM) at the following intersections:
  - Franklin Street at Stevens Street
  - Franklin Street at Franklin Place
- Existing traffic volumes will be seasonally adjusted to average-month conditions, if necessary, in accordance with MassDOT requirements and further adjusted to 2020 conditions to the extent that historic traffic count data is used. If supplemental traffic count data is required, the collected data will be adjusted following MassDOT's guidance for the use of traffic counts conducted during the COVID-19 pandemic and the Governor's phased "Reopening Massachusetts" strategy.

**2.0 Schematic Design (SD) - Traffic (Module 4)**

VAI will provide the following services in support of the Schematic Design phase for the project:

- Estimate future No-Build traffic volumes from historic traffic counts and from information on recently approved or proposed projects. Increases in background traffic growth will then be established and applied to the existing traffic-flow networks to develop the base future No-Build analysis networks. The future conditions horizon year shall be established as a 7-year projection from the base year (existing condition) in accordance with MassDOT guidelines.
- Estimate traffic generated by the project based on trip-generation data available from the Institute of Transportation Engineers (ITE)[1] or other appropriate source for each analysis period (average weekday and weekday morning and evening peak hours). Traffic volumes expected to be generated by the project will be added to the future No-Build traffic volumes to establish the Build condition traffic volumes.
- Assess volume-to-capacity ratios, level of service, and vehicle queuing for existing and future conditions at the intersections of Franklin Street at Franklin Place and Franklin Street at Stevens Street. The traffic analysis will be based on the existing street system and any planned roadway improvements. The extent and nature of any system deficiencies will also be identified. The analysis will be formatted using the accepted Highway Capacity Manual (HCM)[2] methodology and associated software. The following analysis conditions will be examined:
  - Future conditions without the proposed project (No-Build condition) – 2027
  - Future conditions with the proposed project (Build condition) – 2027 unmitigated
  - Future conditions with the proposed project (Build condition) – 2027 mitigated
- Define at a conceptual level off-site transportation infrastructure improvements that may be necessary to: i) provide safe and efficient access to the project; ii) address current deficiencies; and iii) accommodate project-related traffic (motor vehicles, pedestrians and bicyclists, as appropriate). Up to two (2) conceptual designs will be developed for improvements at the Franklin Street/Franklin Place intersection. Preliminary construction cost estimates will be developed for identified roadway/intersection improvements for CLIENT use.

[1] *Trip Generation*, 10th Edition; Institute of Transportation Engineers; Washington, DC; 2017.
[2] *Highway Capacity Manual*, National Academy of Sciences, Transportation Research Board; Washington, D.C.; 2010.



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- Assist the project team in the design of circulation within the project site, including student drop-off/pick-up, school bus circulation, parking layout and pedestrian and bicycle accommodations.
- Prepare a draft report summarizing the results of the analysis for CLIENT review and comment.
- Prepare a final report, upon CLIENT review and approval of the draft, which incorporates pertinent comments for use in submitting to the project approval process.

**3.0 Project and Public Meetings**

VAI will participate in up to five (5) project team meetings and/or public presentations with local and state officials as requested by the CLIENT. Services include preparation, travel, attendance and supporting graphics. Meeting costs will be billed on a time and materials basis.

**4.0 Environmental Notification Form (ENF) (Not Required)**

**5.0 Draft Environmental Impact Report (Not Required)**

**6.0 Final Environmental Impact Report (Not Required)**

**7.0 Section 61 Finding (Not Required)**

**8.0 State Highway Access Permit Application (Not Required)**

**9.0 Construction Documents (To be Submitted When Requested)**

**9.1 Construction Services (To be Submitted When Requested)**

## CLIENT-FURNISHED INFORMATION

It is understood that VAI will perform services under the sole direction of the CLIENT. In the performance of these services, VAI will coordinate its efforts with CLIENT and other consultants retained by the CLIENT, as required. The CLIENT shall provide or authorize VAI to obtain on CLIENT's behalf project-related technical data including, but not limited to, the following as may be applicable to the project:

- Site plans in electronic (AutoCad) format
- Engineering survey of the property in electronic (AutoCad) format
- Roadway plans in electronic (AutoCad) format
- Prior traffic studies and/or plans prepared in support of the project
- Information related to the prior or approved use of the site as available
- Prior conditions of approval issued for the project site

VAI will rely upon the accuracy and completeness of CLIENT-furnished information in connection with the performance of services under this Agreement.



## SCHEDULE

VAI will require four (4) each weeks to complete the Feasibility Study and Schematic Design phase for CLIENT review. This schedule begins on the date written authorization to proceed is received. The schedule is also subject to timely delivery of information promised by the CLIENT and is exclusive of CLIENT and local review of interim products. If the CLIENT requests that work under this Agreement be stopped, the schedule and fee are subject to re-negotiation when written authorization to proceed is received.

## COMPENSATION

VAI will perform the Scope of Services as outlined in this Agreement for up to $12,700 as follows:

| Phase | Element I - Tasks | Fee | Schedule | Payment Method |
|---|---|---|---|---|
| 1.0 | FS – Traffic (Module 3) | $ 1,700 | 2 Weeks | Lump Sum |
| 2.0 | SD – Traffic (Module 4) | 6,000 | 4 Weeks | Lump Sum |
| 3.0 | Project and Public Meetings (up to 5 meetings) | 5,000 | As Required | T&M |
| | Element II - Tasks | | | |
| 4.0 | ENF - Traffic Component | Not Required | | |
| 5.0 | Draft EIR - Traffic Component | Not Required | | |
| 6.0 | Final EIR - Traffic Component | Not Required | | |
| 7.0 | Section 61 Finding | Not Required | | |
| 8.0 | State Highway Access Permit Application | Not Required | | |
| | Element III - Tasks | | | |
| 9.0 | Construction Documents | To be Submitted When Requested | | |
| 9.1 | Construction Services | To be Submitted When Requested | | |
| | Data Collection (Phases 1.0 and 2.0) | Included | | |
| | Direct Expenses (Phases 1.0, 2.0 and 3.0) | Included | | |
| | TOTAL Phases 1.0, 2.0 and 3.0 | $ 12,700 | | |

T&M = Time and materials

A separate budget has been established for meetings to facilitate the tracking of meeting costs internally. Meetings costs will be billed on a time and materials basis in accordance with the attached billing rates. Our attendance at meetings is at CLIENT's direction and discretion.

In addition to the above labor compensation, VAI shall be reimbursed for expenditures made specifically for the project, such as printing and reprographics, travel and subsistence, data collection, telephone charges, shipping, postage, and courier service charges, purchase of maps and similar documents, etc. These direct expenses will be billed at cost. An estimate of anticipated direct expenses for the project is included in the above table for budgeting purposes.



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**SERVICES NOT INCLUDED**

The following services may be required at a future date but are not included in this Agreement at this time:

- Preparation of an Environmental Notification Form (ENF); Notice of Project Change (NPC); Draft Environmental Impact Report (DEIR); and/or Final Environmental Impact Report (FEIR).
- Preparation of any detailed engineering design or permit applications.
- Analysis of Existing Conditions or additional intersections and/or scenarios not specified as a part of the scope of work contained herein.

When services are required in these areas, or areas not previously described, we will prepare a proposal or amendment, at the CLIENT's request, that contains the Scope of Services, fee, and schedule required to complete the additional items.

**CLIENT CONFIRMATION AND AUTHORIZATION**

CLIENT agrees with and accepts this proposal for professional services. CLIENT also agrees with the Terms and Conditions of Agreement, which is attached, and acknowledges this as being received. Together these constitute the entire agreement between Vanasse & Associates, Inc. and CLIENT.

CLIENT certifies that funds or financing are available to meet their financial commitments and maintain the payment schedule under the terms and conditions of this Agreement.

Agreed and Accepted for:

**PERKINS & WILL**

By:_____
Authorized Agent

Title:_____

Date:_____

Total Upset Limit: $12,700

| Phase | Fee |
|---|---|
| 1.0 | $ 1,700 |
| 2.0 | 6,000 |
| 3.0 | 5,000 |
| LABOR TOTAL | $ 12,700 |
| Data Collection | Included |
| Direct Expenses (Estimated) | Included |
| TOTAL | $ 12,700 |

**VANASSE & ASSOCIATES, INC. AUTHORIZATION**

By: Jeffrey S. Dirk
Jeffrey S. Dirk, P.E., PTOE, FITE

Title: Managing Partner

Date: 11/6/20



**PART II**

**VANASSE & ASSOCIATES, INC. (VAI)**
**TERMS AND CONDITIONS OF AGREEMENT**

The engagement of Vanasse & Associates, Inc. (VAI) by CLIENT is under the following terms and conditions and is an integral part of the collective Agreement between CLIENT and VAI.

1. The fee estimate for the proposed Scope of Services, attached hereto as Part I and incorporated herein by reference, is valid for sixty (60) days from the date of the proposal.

2. Full and timely payment of all amounts due and owing to VAI is the sole responsibility of CLIENT and may not be subject to any third-party agreements.

3. The CLIENT may terminate this Agreement at any time by giving VAI ten (10) days written notice. In such event, all finished or unfinished documents prepared by VAI shall at the option of the CLIENT become the CLIENT's property, subject to the Terms and Conditions of paragraph 12 of this Agreement. In the event of termination, VAI will be paid for all services performed up to the date of termination, including those expenditures necessary for the orderly termination of work, and all costs of settling or discharging outstanding obligations incurred by VAI with respect to the terminated services and work under this Agreement.

4. All time schedules set forth in Part I shall commence upon receipt of a signed Agreement and a retainer in the amount set forth below. All retainer amounts will be applied to the final invoice. A RETAINER OF $0.00 IS REQUIRED BEFORE WORK CAN COMMENCE UNDER THE AGREEMENT.

5. VAI is not obligated to perform any services not explicitly set forth in Part I. Should CLIENT request that VAI perform any services in addition to those explicitly set forth in Part I, VAI may, in its sole discretion, agree to perform such additional services. Before VAI will begin performance of any such additional services, VAI and CLIENT must enter into a written agreement regarding the scope of, and the compensation to be paid for, such additional services.

6. VAI will render invoices monthly. All invoices are due upon receipt by CLIENT. Any invoice outstanding for more than thirty (30) days after the date of the invoice will be subject to financing charge of 1.5 percent per month. VAI will render all invoices on a VAI standard form.

7. Should it become necessary to utilize legal or other resources to collect any or all monies rightfully due for services rendered under this Agreement, VAI shall be entitled to full reimbursement of all such costs, including reasonable attorney's fees, as part of this Agreement.

8. Invoice payments must be kept current for work to continue. If CLIENT fails to pay any invoice due and owing VAI within fifteen (15) days of the date of CLIENT's receipt of the invoice, VAI may, in its sole discretion and without waiving any other claim or right against CLIENT, pursue, without limitation, any course of action available at law or in equity, and/or any one or more of the following courses of action:

   (a) Suspend all services under this Agreement until CLIENT has paid all amounts due and owing VAI and/or any of its Consultants or Subcontractors;



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(b) Withhold any documents prepared by VAI and/or any of its Consultants or Subcontractors pursuant to this Agreement from CLIENT and/or any third-party;

(c) Notify any third-party to which any documents prepared by VAI and/or any of its Consultants or Subcontractors pursuant to this Agreement of CLIENT's failure to pay all amounts due and owing to VAI;

(d) Request the immediate return of all documents prepared by VAI and/or any of its Consultants or Subcontractors under this Agreement from CLIENT and/or any third-party; and/or

(e) Deliver a statement to any one or more persons it selects withdrawing support for any documents prepared by VAI and/or any of its Consultants or Subcontractors under this Agreement.

In the event that CLIENT fails to pay VAI, CLIENT agrees to return all documents furnished to it by VAI under this Agreement within fifteen (15) days of a request for such made by VAI.

9. VAI agrees to carry the following insurance during the term of this Agreement: Workers' Compensation, General Liability, Professional Liability, and Comprehensive Automobile Liability. VAI shall maintain during the performance of this Agreement insurance coverage as follows:

General Liability
$2,000,000 per occurrence;
$4,000,000 aggregate for products and completed operations;
$4,000,000 general aggregate.

Automobile Liability
$1,000,000 per accident for bodily injury and property damage.

Umbrella Liability
$5,000,000 per occurrence and aggregate

Employer's Liability
$1,000,000 per accident for bodily injury or disease.

Worker's Compensation
Statutory.

Professional Liability
$2,000,000 per claim and aggregate limit.

Insurance coverage shall be provided by a company or companies licensed to do business in the State of Massachusetts. Such insurance shall name the CLIENT as additional insured.

Certificates of Insurance will be furnished upon request. If the CLIENT requires insurance coverage or limits in excess of VAI's normal policies, and it is available, CLIENT agrees to reimburse VAI for such additional expenses.



**PART II (Continued)**

**VANASSE & ASSOCIATES, INC. (VAI)**
**TERMS AND CONDITIONS OF AGREEMENT**

10. VAI agrees, to the fullest extent permitted by law, to indemnify and hold harmless CLIENT, its officers, directors and employees (collectively, the CLIENT) against all damages, liabilities or costs, including reasonable attorneys' fees and defense costs, to the extent caused by VAI's negligent performance of professional services under this Agreement and that of its subconsultants or anyone for whom VAI is legally liable.

CLIENT agrees, to the fullest extent permitted by law, to indemnify and hold harmless VAI, its officers, directors, employees and subconsultants against all damages, liabilities or costs, including reasonable attorneys' fees and defense costs, to the extent caused by the CLIENT's negligent acts in connection with the Project and the acts of its contractors, subcontractors or consultants or anyone for whom the CLIENT is legally liable.

Neither the CLIENT nor VAI shall be obligated to indemnify the other party in any manner whatsoever for the other party's own negligence.

11. VAI shall not be responsible for any damages arising from failure to perform, or delay in the performance of, services identified in Part I which failure or delay arises out of causes beyond VAI's control or without negligence on the part of VAI. VAI shall not be responsible for any consequential damages, including, without limitation, any delay or expense arising out of the exercise by VAI or any right provided to VAI under this Agreement, including, without limitation, the rights to suspend services, withhold documents, and withdraw support as described in paragraph 8. VAI's liability under this Agreement is limited to the total of all fees paid to VAI by CLIENT under this Agreement.

12. All documents including, without limitation, all Drawings and Specifications, prepared by VAI and/or any of its Consultants or Subcontractors pursuant to this Agreement are the property of VAI; provided, however, that CLIENT shall have full ownership of all documents, including without limitation, all Drawings and Specifications, prepared by VAI and/or any of its Consultants or Subconsultants under this Agreement once CLIENT has paid for the same.

VAI does not represent that any documents prepared by VAI and/or any of its Consultants or Subcontractors pursuant to this Agreement are suitable for use in connection with any extension of the current Project or any other project.

If CLIENT uses any such documents in violation of this paragraph, CLIENT shall:

(a) Be liable for, and indemnify and hold harmless VAI from, all claims, damages, losses, and expenses, including attorney's fees, arising out of or resulting from such use, and

(b) In addition to paying all invoices due and owing for services provided under this Agreement, pay VAI the amount of the fee estimate set forth in Part I as liquidated damages presenting a reasonable estimate of the compensation to which VAI would be entitled for generating documents for such use.



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**PART II (Continued)**

**VANASSE & ASSOCIATES, INC. (VAI)**
**TERMS AND CONDITIONS OF AGREEMENT**

13. This Agreement may only be modified in writing and signed by CLIENT and VAI. No act or failure to act by VAI waives any rights provided to VAI under this Agreement or by operation of law.

14. This Agreement constitutes the entire agreement between CLIENT and VAI regarding the services specified in Part I. In entering into this Agreement, CLIENT has not relied upon any warranties, representations, or statements not set forth herein. No verbal warranties, representations, or statements shall be considered a part of this Agreement or a basis upon which CLIENT relied in entering into this Agreement.



**VANASSE & ASSOCIATES, INC.**
**PROJECT SPECIFIC HOURLY BILLING RATES**

| EMPLOYEE | TITLE | HOURLY RATES |
|---|---|---|
| Jeffrey S. Dirk, P.E., PTOE, FITE | Managing Partner | $150.00 |
| Daniel A. DeRoche, Jr., P.E. | Senior Highway Engineer | $135.00 |
| Bernard Guen | Senior Transportation Engineer | $125.00 |
| Jamie T. Gregory | Associate - Graphics Manager | $105.00 |
| Theodore W. O'Hagan, E.I.T. | Highway Engineer | $105.00 |
| Andrew J. Arseneault | Transportation Engineer | $105.00 |
| Derek I. Roach, E.I.T. | Transportation Engineer | $105.00 |
| Michael Martin | Senior Engineer | $100.00 |
| Mitchell P. Page | Highway Engineer | $100.00 |
| Jennifer S. Conners | Transportation Engineer | $100.00 |
| Ian J. Sherriff | Highway Engineer | $ 95.00 |
| Rana Eslamifard | Transportation Engineer | $ 90.00 |
| Andrea L. Gaudreau | CAD Technician | $ 85.00 |
| Andrea T. Gaudet | Technical Assistant | $ 85.00 |
| Scott R. Frontain | Field Operations Manager | $ 70.00 |
| Mary Ellen Fennessy | Executive Assistant | $ 65.00 |

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Project Management | SMMA

# Warrant No. 5

| | | | |
|---|---|---|---|
| Project: | Stoneham High School, Stoneham, Massachusetts | Project No.: | 20033 |
| Prepared by: | Joel G. Seeley, AIA | Date: | 11/9/2020 |

School Building Committee for the Stoneham High School hereby authorizes to draw against funds for the obligations incurred for value received in services and for materials shown below:

| Vendor | Invoice No. | Invoice Date | Invoice Amount | ProPay Code | Balance After Invoice |
|---|---|---|---|---|---|
| SMMA | 53638 | 11/02/2020 | $ 7,000.00 | 0001-0000 | $ 95,000.00 |
| Perkins & Will | 0178789 | 11/02/2020 | $ 25,000.00 | 0002-0000 | $ 320,000.00 |
| | | **Total** | **$ 32,000.00** | | |

Marie Christie

David Bois

Nicole Nial

Raymie Parker

Douglas Gove

Stephen O'Neill

Josephine Thomson

Jeanne Craigie

Lisa Gallagher

Sharon Iovanni

Cory Mashburn

Paul Ryder

David Pignone

Approved on _____

p:\2020\20033\00-info\0.8 warrants\warrant no. 5 - november 9, 2020\warrant no. 5.docx

1000 Massachusetts Avenue
Cambridge, MA 02138
617.547.5400

www.smma.com



SMMA

Mr. Dennis Sheehan
Town Administrator
Town Administrator, Town of Stoneham
35 Central St
Stoneham, MA 02180

November 2, 2020
Project No: 20033.00
Invoice No: 0053816

Project 20033.00 Stoneham High School OPM Services

**Professional Services from October 3, 2020 to October 30, 2020**

**Fee**

| Billing Phase | Fee | Percent Complete | Earned | Previous Fee Billing | Current Fee Billing |
|---|---|---|---|---|---|
| Feasibility Study | 56,000.00 | 62.50 | 35,000.00 | 28,000.00 | 7,000.00 |
| Schematic Design | 49,000.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total Fee | 105,000.00 | | 35,000.00 | 28,000.00 | 7,000.00 |
| | | | | **Total Fee** | **7,000.00** |
| | | | | **Total this Invoice** | **$7,000.00** |

**Outstanding Invoices**

| Number | Date | Balance |
|---|---|---|
| 0053146 | 6/30/2020 | 7,230.81 |
| 0053302 | 7/28/2020 | 7,000.00 |
| 0053473 | 9/3/2020 | 7,383.27 |
| 0053638 | 10/8/2020 | 7,000.00 |
| **Total** | | **28,614.08** |

**Billings to Date**

| | Current | Prior | Total |
|---|---|---|---|
| Fee | 7,000.00 | 28,000.00 | 35,000.00 |
| Expense | 0.00 | 614.08 | 614.08 |
| **Totals** | **7,000.00** | **28,614.08** | **35,614.08** |

**Authorized By: Joel Seeley**

1000 Massachusetts Avenue
Cambridge, MA 02138

275 Promenade Street, Suite 275
Providence, RI 02908

617.547.5400
www.smma.com



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Perkins&Will

# Invoice

November 2, 2020
Project No: 153010.000
Invoice No: 0178789

Dennis Sheehan
Town of Stoneham
Town Hall
35 Central St
Stoneham, MA 02180

Stoneham High School - FS-SD

**Professional Services: through October 30, 2020**

**Fee**

| Billing Phase | Fee | Percent Complete | Earned | Previous Fee Billing | Current Fee Billing |
|---|---|---|---|---|---|
| Feasibility Phase | 175,000.00 | 57.1429 | 100,000.00 | 75,000.00 | 25,000.00 |
| Schematic Design | 245,000.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Survey/Wetlands | 27,500.00 | 100.00 | 27,500.00 | 27,500.00 | 0.00 |
| Phase 1 ESA | 2,970.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Geotechnical Services | 16,417.50 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hazardous Materials | 4,950.00 | 100.00 | 4,950.00 | 4,950.00 | 0.00 |
| Hydrant Flow Testing | 1,760.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Traffic Analysis | 18,150.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total Fee | 491,747.50 | | 132,450.00 | 107,450.00 | 25,000.00 |

**Total Fee** **25,000.00**

**Total this Invoice** **$25,000.00**

**Outstanding Invoices**

| Number | Date | Balance |
|---|---|---|
| 0178394 | 10/9/2020 | 107,450.00 |
| **Total** | | **107,450.00** |

**Total Now Due** **$132,450.00**

**REMIT PAYMENTS TO** Perkins&Will, Inc.
PO Box 71181
Chicago, IL 60694-1181

**WIRE/ACH TO** BMO Harris Bank
ABA# 071000288, Acct# 3769601
SWIFT HATRUS44

**TERMS** Net 30 Days

225 Franklin Street, Suite 1100, Boston, MA 02110 t 617.478.0300 perkinswill.com



**STONEHAM HIGH SCHOOL FEASIBILITY STUDY**
**SCHOOL BUILDING COMMITTEE**

**MEETINGS SCHEDULE AND AGENDAS**
**September 8, 2020** ***Revised November 2, 2020***

| DATE | AGENDA |
|---|---|
| ***Feasibility Study Phase (PSR)*** | |
| October 13, 2020 | SCHOOL BUILDING COMMITTEE MEETING - *TUESDAY* |
| | Review PSR Phase Schedule |
| | Review PSR Phase Goals |
| | Decide Construction Delivery Method |
| | Prepare for Tri-Board Meeting |
| October 15, 2020 | TRI-BOARD MEETING - 7:00 PM |
| October 20, 2020 | ROTARY CLUB OF STONEHAM - 12:00 PM |
| October 26, 2020 | SCHOOL BUILDING COMMITTEE MEETING |
| | Update on Construction Alternatives and Phasing |
| | Structural Narrative Review |
| | Prepare for Community Forum No. 3 |
| November 2, 2020 | CM PREQUALIFICATION COMMITTEE MEETING - 7:00 PM |
| November 4, 2020 | PTO PRESENTATION - 6:30 PM - SOUTH ELEMENTARY SCHOOL & STONEHAM HIGH SCHOOL |
| November 7, 2020 | COMMUNITY FORUM NO. 3 - 10:00 AM - SATURDAY |
| November 9, 2020 | SCHOOL BUILDING COMMITTEE MEETING |
| | Update on Construction Alternatives |
| | Update on Sustainable Design |
| | Review MSBA Comments on PDP Submission |
| November 10, 2020 | PTO PRESENTATION - 7:00 PM - ROBIN HOOD ELEMENTARY & CENTRAL MIDDLE SCHOOL |
| November 19, 2020 | PTO PRESENTATION - 7:00 PM - COLONIAL PARK SCHOOL |
| November 23, 2020 | SCHOOL BUILDING COMMITTEE MEETING |
| | Update on Construction Alternatives and Phasing |
| | Preliminary Options Evaluation |
| December 7, 2020 | CM PREQUALIFICATION COMMITTEE MEETING - 6:00 PM |
| December 7, 2020 | SCHOOL BUILDING COMMITTEE MEETING |
| | Update on Construction Alternatives |
| | Update on Sustainable Design |
| | MEP Systems Narrative Review |
| | Review Cost Models |
| | Options Evaluation |
| | Discuss the One Preferred Option |
| | Prepare for Community Forum No. 4 |
| December 9, 2020 | COMMUNITY FORUM NO. 4 - 6:30 PM |
| December 15, 2020 | TRI-BOARD MEETING - 7:00 PM |
| December 16, 2020 | SCHOOL BUILDING COMMITTEE MEETING |
| | Decide the One Preferred Construction Alternative |
| | Vote to Submit Preferred Schematic Report to MSBA |
| *December 23, 2020* | *SUBMIT PREFERRED SCHEMATIC REPORT PACKAGE TO MSBA* |
| | ADDITIONAL MEETINGS TO BE SCHEDULED |

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PROJECT MANAGEMENT SMMA

**From:** Edward Giordano <edwardgiordanope@gmail.com>
**Sent:** Saturday, November 7, 2020 11:16 AM
**To:** SSBC@Stoneham-MA.gov
**Cc:** Carol Giordano
**Subject:** Stoneham High School Feasibility Study - Community Forum 03

All

Thank you for a wonderful presentation today of the excellent work you have been doing in in evaluating all of the technical and economic impacts of a much needed new Stoneham High School.

I encourage you to continue to assess the economic impact of our seniors who live on a fixed income and would very much like to continue to live in Stoneham which they have supported for so long. I applaud your desire to include the seniors into these most important discussions. Know that we heard about this meeting through Maureen Canova from the Stoneham Senior Center.

Finally, please let me know if I can assist you in any way other then attending and participating in these most important meetings.

Edward (Ed) Giordano
--
**Edward S. Giordano PE**
**Giordano Engineering Services**
**781-658-0121**
**edwardgiordanope@gmail.com**
**https://www.linkedin.com/in/edwardgiordanope/**

1





Perkins&Will

# STONEHAM HIGH SCHOOL
# Building Committee Meeting

11.09.2020

## AGENDA

**Design Options Update**
- **Option 2A – Renovation Only**
- **Option 4A – New Construction**



Aerial View of Stoneham High School

Perkins&Will | SMMA Project Management

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# Design Options Update

Building Committee Meeting

## Design Options Summary

| CODE UPGRADE | RENOVATION | RENOVATION ADDITION | NEW CONSTRUCTION |
|---|---|---|---|
| *Option 1A* ☑<br>• *NO Educational upgrades*<br>• *Code Upgrades*<br>• *System Upgrades*<br>• *Exterior Envelope Repairs*<br>• *Interior Repairs*<br>• *No Sitework* | *Option 2A* | *Option 3A* ☑ | *Option 4A*<br>*Option 4B*<br>*Review Next Meeting* |

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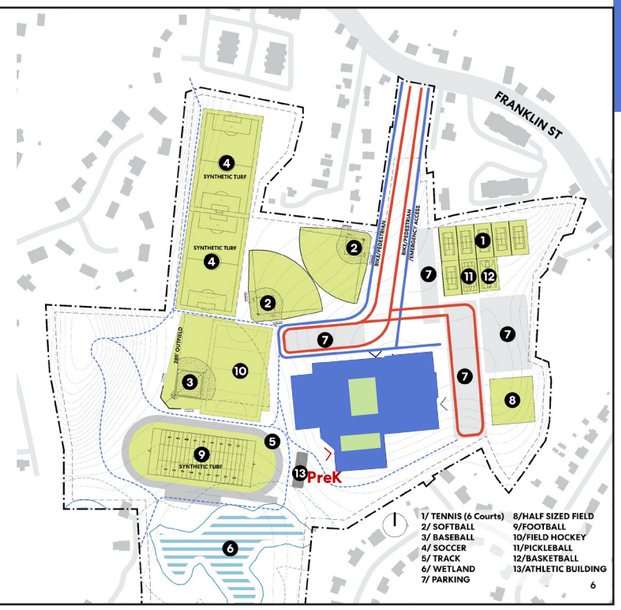
# Option 2A – Renovation Only

Building Committee Meeting

## Option 2A - Site Plan

### Considerations:

- Variations from Approved Educational Program:
  - District Offices do not fit
  - Larger average classroom size
  - Reduction in MEP spaces
- On-site temporary classrooms required during phased construction
- Minimized change to field layout
- Upgrade existing fields to regulation size fields; Stadium & (2) Soccer/LAX to be turf
- Reorient baseball field
- Pedestrian/bike path from Franklin Street crossing vehicular path
- Improvements to traffic flow

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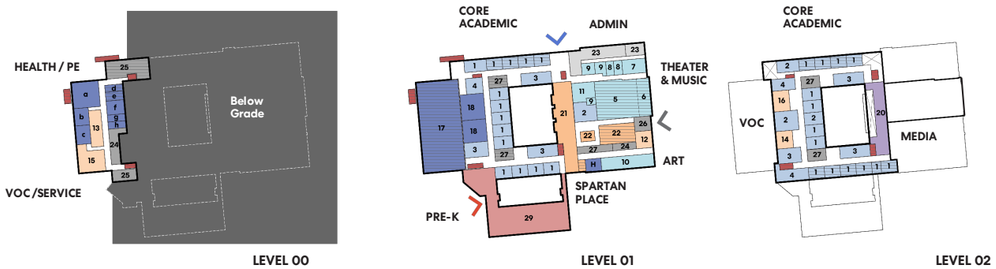
## Option 2A - Floor Plans




0 50' 100' 200'



## Option 2A - Floor Plan / Level 00

**CORE ACADEMIC**
1/ CLASSROOM
2/ SPED
3/ SCIENCE
4/ TEACHER PLANNING

**ART & MUSIC**
5/ AUDITORIUM
6/ STAGE
7/ BAND
8/ PRACTICE
9/ THEATER
10/ ART CLASSROOM
11/ PERFORMANCE

**VOC & TECH**
12/ CULINARY
13/ VIDEO PRODUCTION
14/ BIOMEDICAL
15/ ENGINEERING
16/ MAKER SPACE

**HEALTH & PE**
17/ GYMNASIUM
18/ PE & LOCKERS
19/ ATHLETICS

**DINING**
21/ CAFETERIA
22/ KITCHEN

**MEDIA CENTER**
20/ MEDIA CENTER

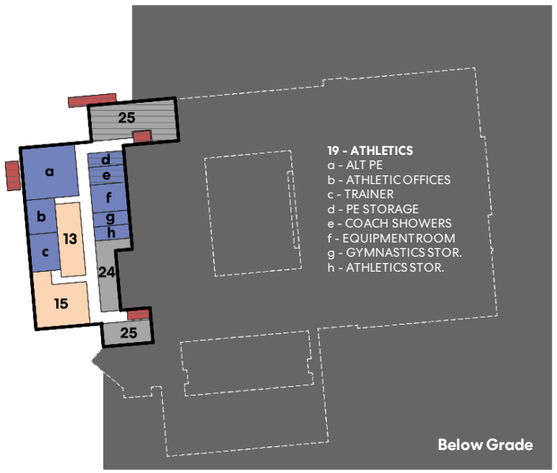
**ADMIN**
23/ ADMIN

**SUPPORT**
24/ CUSTODIAL
25/ MECHANICAL
26/ LOADING
27/ RESTROOMS

**OTHER**
28/ DISTRICT OFFICE
29/ PRE-K

**STAIR**

**MAINTAINS EXISTING LOCATION**




0 50' 100' 200'





## Option 2A - Floor Plan / Level 01

**CORE ACADEMIC**
1/ CLASSROOM
2/ SPED
3/ SCIENCE
4/ TEACHER PLANNING

**ART & MUSIC**
5/ AUDITORIUM
6/ STAGE
7/ BAND
8/ PRACTICE
9/ THEATER
10/ ART CLASSROOM
11/ PERFORMANCE

**VOC & TECH**
12/ CULINARY
13/ VIDEO PRODUCTION
14/ BIOMEDICAL
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22/ KITCHEN

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20/ MEDIA CENTER

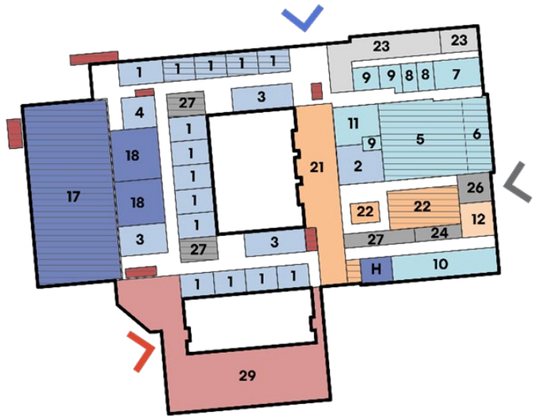
**ADMIN**
23/ ADMIN

**SUPPORT**
24/ CUSTODIAL
25/ MECHANICAL
26/ LOADING
27/ RESTROOMS

**OTHER**
28/ DISTRICT OFFICE
29/ PRE-K

**STAIR**

**MAINTAINS EXISTING LOCATION**



0 50' 100' 200'



## Option 2A - Floor Plan / Level 02

**CORE ACADEMIC**
1/ CLASSROOM
2/ SPED
3/ SCIENCE
4/ TEACHER PLANNING

**ART & MUSIC**
5/ AUDITORIUM
6/ STAGE
7/ BAND
8/ PRACTICE
9/ THEATER
10/ ART CLASSROOM
11/ PERFORMANCE

**VOC & TECH**
12/ CULINARY
13/ VIDEO PRODUCTION
14/ BIOMEDICAL
15/ ENGINEERING
16/ MAKER SPACE

**HEALTH & PE**
17/ GYMNASIUM
18/ PE & LOCKERS
19/ ATHLETICS

**DINING**
21/ CAFETERIA
22/ KITCHEN

**MEDIA CENTER**
20/ MEDIA CENTER

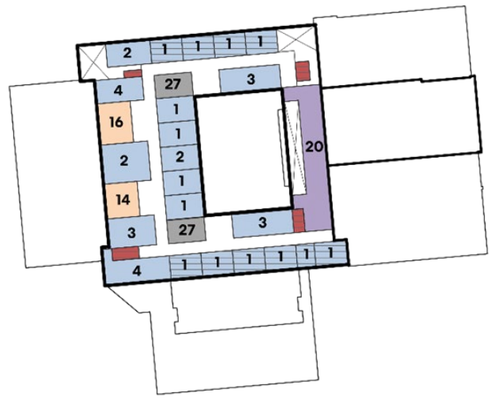
**ADMIN**
23/ ADMIN

**SUPPORT**
24/ CUSTODIAL
25/ MECHANICAL
26/ LOADING
27/ RESTROOMS

**OTHER**
28/ DISTRICT OFFICE
29/ PRE-K

**STAIR**

**MAINTAINS EXISTING LOCATION**



0 50' 100' 200'





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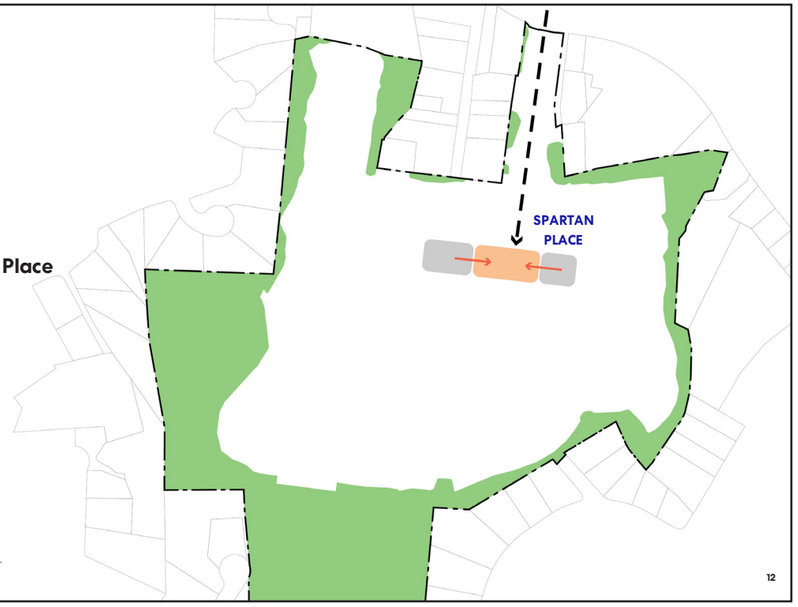
# Option 4A – New Construction

Building Committee Meeting

Option 4A - Site Concept

Arriving at the Spartan Place

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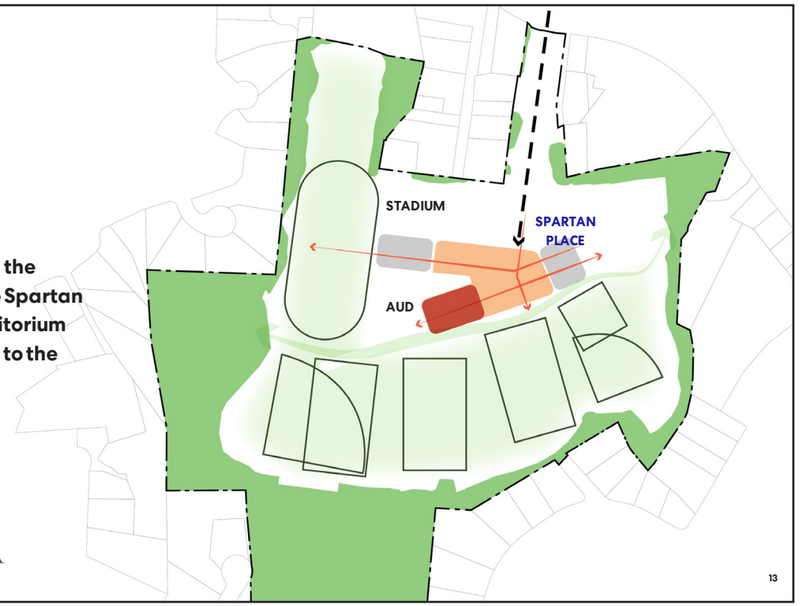
Option 4A - Site Concept

Different accesses from the entrance expanded the Spartan Place to create the auditorium volume and connection to the Stadium

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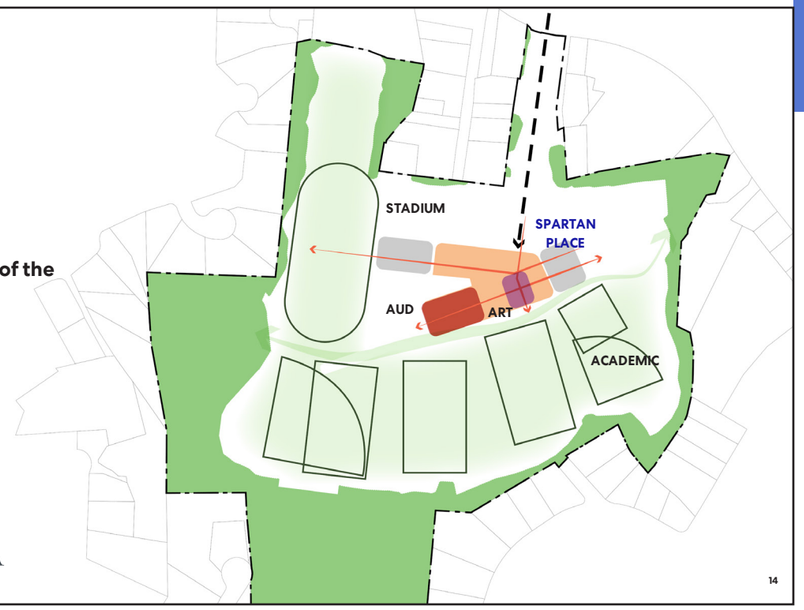
Option 4A - Site Concept

Art spaces at the heart of the Spartan Place

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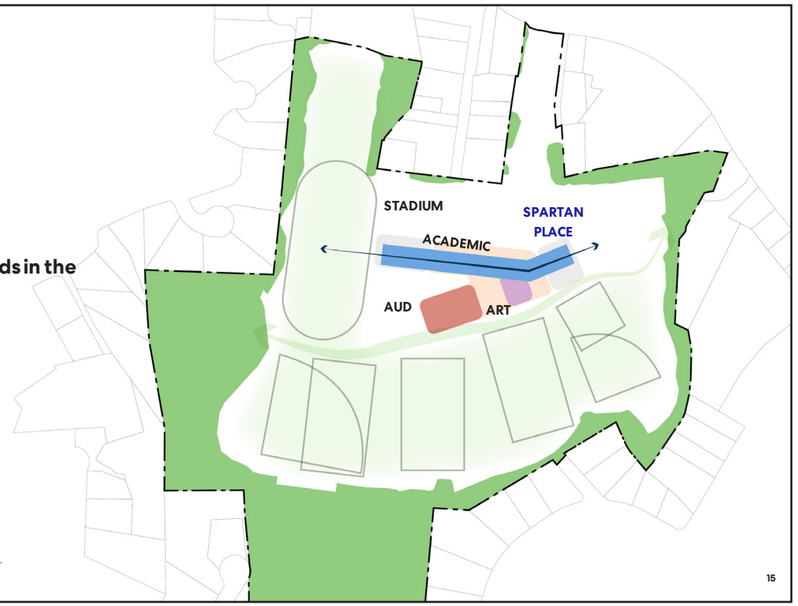
## Option 4A - Site Concept

Academic neighborhoods in the upper floors

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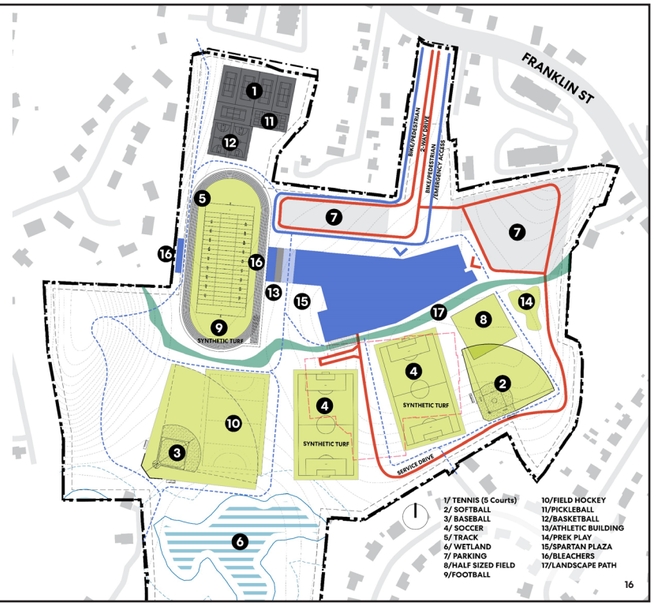
## Option 4A - Site Plan

### Considerations:

- Visibility of new building from Franklin St
- Optimized orientation of the stadium
- Connection of building facilities to stadium
- Gateway to major athletics
- Soccer/ LAX fields as geoexchange fields
- Spartan Place central to site and building
- Optimized building orientation for daylighting/ZNE
- Pedestrian/bike path from Franklin Street crossing vehicular path
- Existing fields upgraded to regulation size
- Utilities relocation required to keep existing in operation during construction

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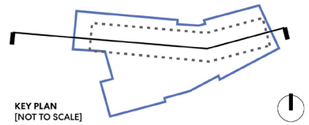
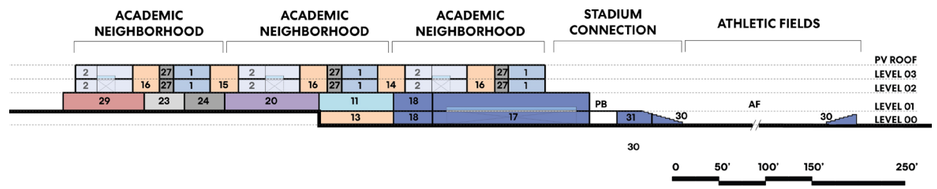
## Option 4A - Section / Through Academic Bar & Gym




CORE ACADEMIC
1/ CLASSROOM
2/ SPED
3/ SCIENCE
4/ TEACHER PLANNING

ART & MUSIC
5/ AUDITORIUM
6/ STAGE
7/ BAND
8/ PRACTICE
9/ THEATER
10/ ART CLASSROOM
11/ PERFORMANCE

VOC & TECH
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13/ VIDEO PRODUCTION
14/ BIOMEDICAL
15/ ENGINEERING
16/ MAKER SPACE

HEALTH & PE
17/ GYMNASIUM
18/ PE & LOCKERS
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31/ ATHL/WC FACILITY (BELOW SEATING)
AF/ ATHLETIC FIELDS
PB/ PRESS BOX

MEDIA CENTER
20/ MEDIA CENTER

DINING
21/ CAFETERIA
22/ KITCHEN

ADMIN
23/ ADMIN

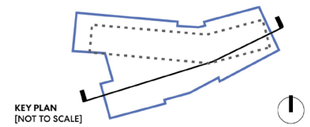
SUPPORT
24/ CUSTODIAL
25/ MECHANICAL
26/ LOADING
27/ RESTROOMS

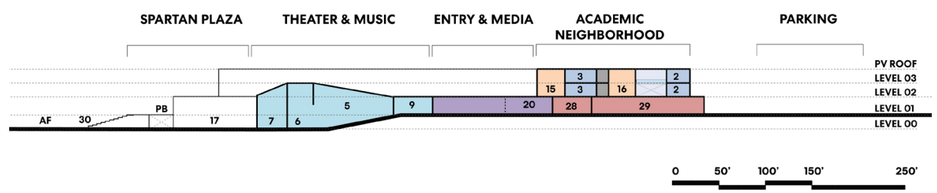
OTHER
28/ DISTRICT OFFICE
29/ PRE-K

STAIR



## Option 4A - Section / Through Auditorium




CORE ACADEMIC
1/ CLASSROOM
2/ SPED
3/ SCIENCE
4/ TEACHER PLANNING

ART & MUSIC
5/ AUDITORIUM
6/ STAGE
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STAIR





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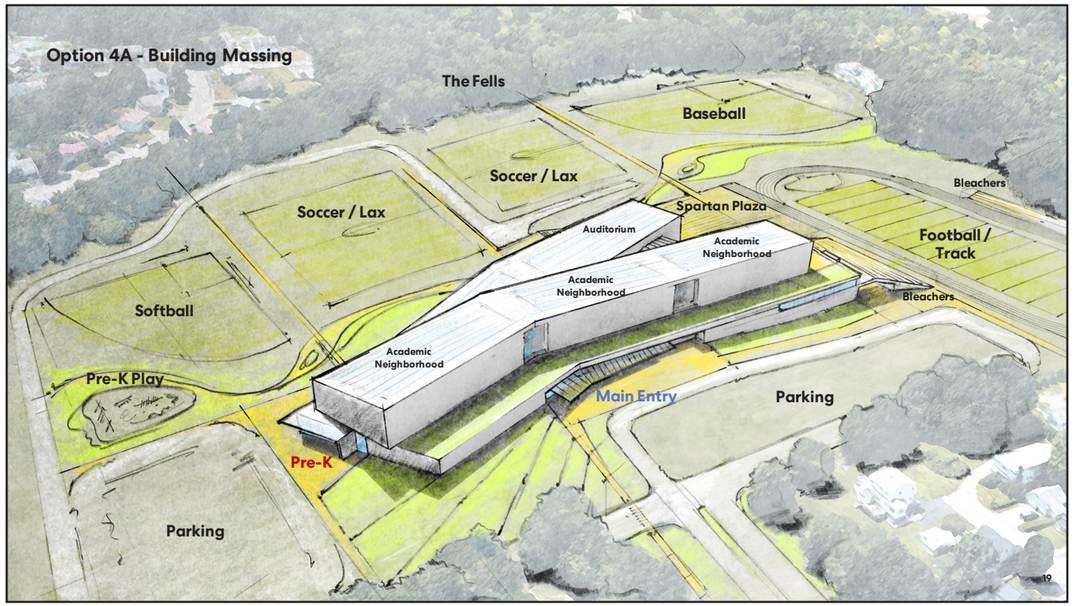


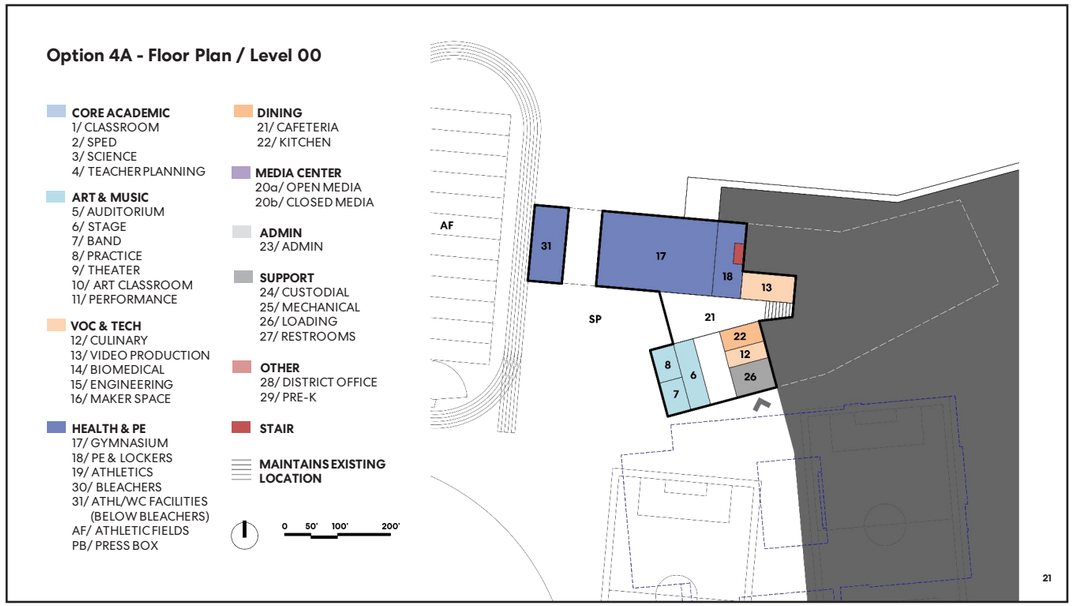


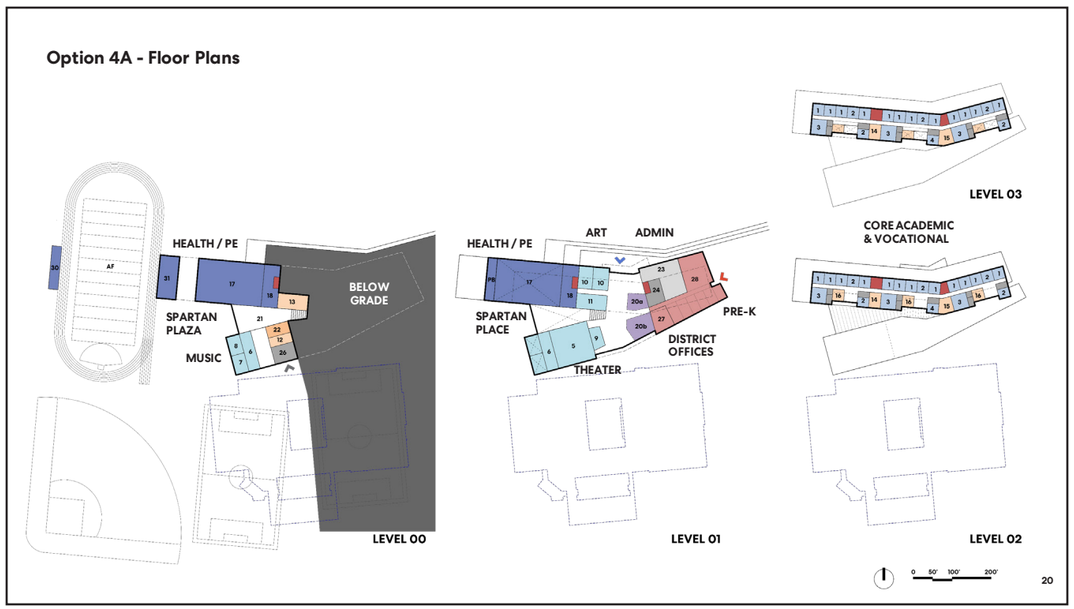


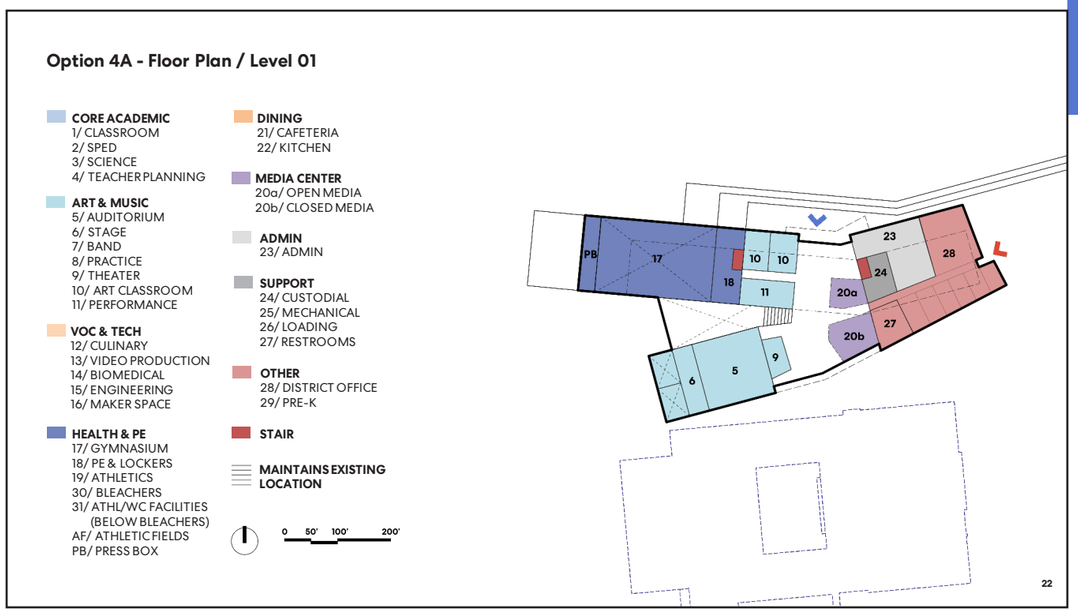


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## Option 4A - Floor Plan / Level 02

**CORE ACADEMIC**
1/ CLASSROOM
2/ SPED
3/ SCIENCE
4/ TEACHER PLANNING

**ART & MUSIC**
5/ AUDITORIUM
6/ STAGE
7/ BAND
8/ PRACTICE
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PB/ PRESS BOX

**DINING**
21/ CAFETERIA
22/ KITCHEN

**MEDIA CENTER**
20a/ OPEN MEDIA
20b/ CLOSED MEDIA

**ADMIN**
23/ ADMIN

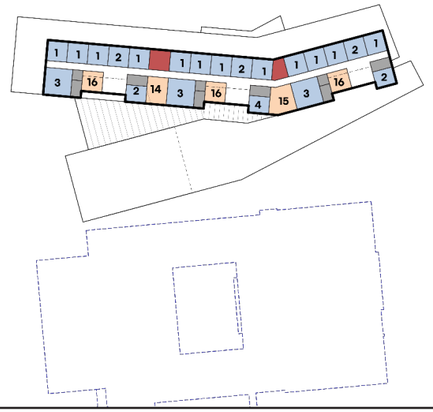
**SUPPORT**
24/ CUSTODIAL
25/ MECHANICAL
26/ LOADING
27/ RESTROOMS

**OTHER**
28/ DISTRICT OFFICE
29/ PRE-K

**STAIR**

**MAINTAINS EXISTING LOCATION**

0 50' 100' 200'



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## Option 4A - Floor Plan / Level 03

**CORE ACADEMIC**
1/ CLASSROOM
2/ SPED
3/ SCIENCE
4/ TEACHER PLANNING

**ART & MUSIC**
5/ AUDITORIUM
6/ STAGE
7/ BAND
8/ PRACTICE
9/ THEATER
10/ ART CLASSROOM
11/ PERFORMANCE

**VOC & TECH**
12/ CULINARY
13/ VIDEO PRODUCTION
14/ BIOMEDICAL
15/ ENGINEERING
16/ MAKER SPACE

**HEALTH & PE**
17/ GYMNASIUM
18/ PE & LOCKERS
19/ ATHLETICS
30/ BLEACHERS
31/ ATHL/WC FACILITIES (BELOW BLEACHERS)
AF/ ATHLETIC FIELDS
PB/ PRESS BOX

**DINING**
21/ CAFETERIA
22/ KITCHEN

**MEDIA CENTER**
20a/ OPEN MEDIA
20b/ CLOSED MEDIA

**ADMIN**
23/ ADMIN

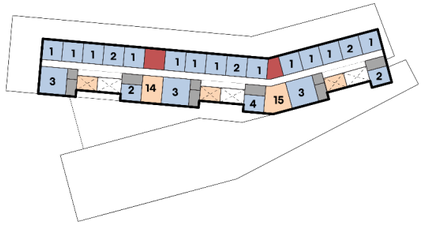
**SUPPORT**
24/ CUSTODIAL
25/ MECHANICAL
26/ LOADING
27/ RESTROOMS

**OTHER**
28/ DISTRICT OFFICE
29/ PRE-K

**STAIR**

**MAINTAINS EXISTING LOCATION**

0 50' 100' 200'



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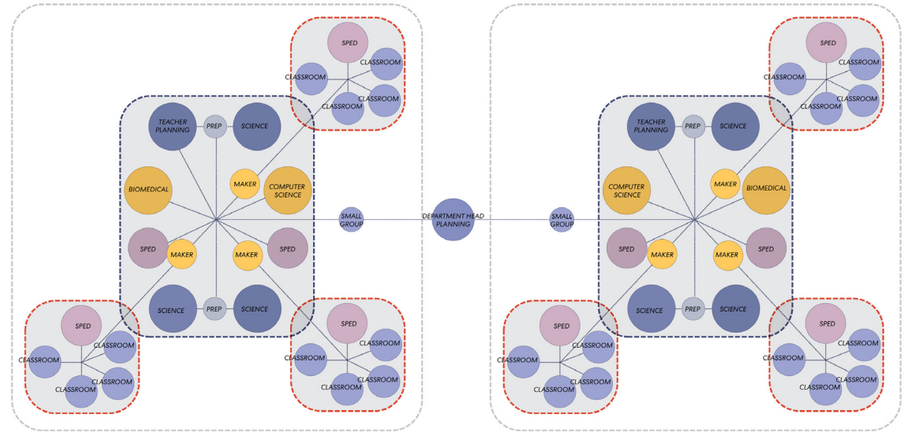
## Option 4A - Academic Core / Neighborhood Structure




NEIGHBORHOOD A

NEIGHBORHOOD B

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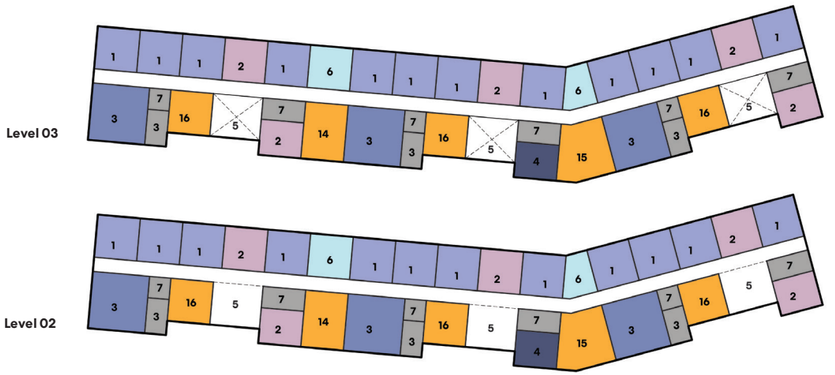
## Option 4A - Academic Core / Neighborhood Plans




0 20' 40' 60' 100'

**CORE ACADEMIC**

1/ CLASSROOM
2/ SPED
3/ SCIENCE AND PREP ROOM
4/ TEACHER PLANNING
5/ BREAKOUT SPACE
6/ VERTICAL CIRCULATION
7/ TOILET AND SERVICES
8/ SMALL GROUP
14/ BIOMEDICAL
15/ ENGINEERING
16/ MAKER SPACE

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# Discussion

**Building Committee Meeting**





**Stoneham High School Feasibility Study**
**Design Options Review**
**Progress PSR Comments and Responses**

*October 27, 2020*
*Update: November 9, 2020*

| No. | Date | SSBC Member | Comment | P&W Response |
|---|---|---|---|---|
| 1 | 10/28/2020 | Doug Gove | I thought the presentation the PW team made on the Renovation / Addition option was great. I realize it is early in the process, but has the team looked into the feasibility of maintaining the normal high school functions during construction and have these costs been incorporated into the cost estimate? I remained concerned about egress into and out of the existing building, parking, vehicular and student flow through the site. While I recognize that there will be some disruption to normal routine during construction, it is important that we provide a safe and functional learning environment for the kids attending school during this period. This comment applies to the new high school options as well --- i think we need to factor in student experience during construction when laying out these options. | |
| 2 | 10/28/2020 | Doug Gove | Building on my first comment, since traffic patterns onsite will be disrupted during construction, will there be enough queue length to avoid gridlock on Franklin Street. Would it be possible to have an early milestone in the project to implement traffic recommendations to ease the gridlock? | |
| 3 | 10/28/2020 | Doug Gove | There was a discussion on parking during the meeting and providing at least the same parking spots as the existing school. Has the PW team considered the parking available along both sides of Franklin Place and will this be available post project? Cars take advantage of this parking for big events at the high school. | |
| 4 | 10/28/2020 | Doug Gove | There was discussion of having one of the new high school alternatives available for next meeting along with the renovation option. Can we prioritize differently so we have both new high school options and push off development of the renovation option until after our next meeting? | |
| 5 | 10/28/2020 | David Bois | Comments on Option 3A2<br>Civic Presence / Siting:<br>If having the front door visible from Franklin St is important, this option does not achieve that goal. The front door is well to the west of the entry drive – which is centered on one of the neighborhood pods. | |





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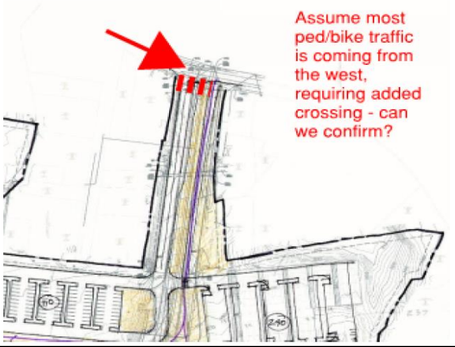
October 27, 2020
*Update: November 9, 2020*

**Stoneham High School Feasibility Study**
**Design Options Review**
**Progress PSR Comments and Responses**

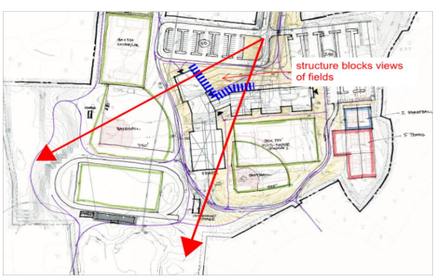
| No. | Date | SSBC Member | Comment | P&W Response |
|---|---|---|---|---|
| 6 | 10/28/2020 | David Bois | The addition of the bike/ pedestrian path is a good design element – has this been evaluated with traffic to determine best location / operational efficiencies? Bike path is to the east of the vehicular drive – have we determined whether most pedestrians and bikes are coming from the east or are they more likely to arrive from the west (downtown direction) which would require an extra interaction between bikes, peds and cars?   | |
| 7 | 10/28/2020 | David Bois | Pedestrian plaza at the front of the school is nice, but is north facing and separates the entry from the parking / dropoff. Is there program for this or would this space better serve the school and academic programs on the south side of the building? The addition of the field at the south is a good feature, two comments,<br>o has this been included in the current budgets or is this an add to those numbers?<br>o Since this is on the site of the existing school, it would seem as though this could be incorporated into any of the new build options as well | |
| 8 | 10/28/2020 | David Bois | Front entry court dominated by parking – this may be unavoidable – assume we will landscape this area, include stormwater management (rain gardens, etc.) – has this been included in budget assumptions to date? Assume pervious paving is not anticipated due to maintenance concerns. | |





October 27, 2020
*Update: November 9, 2020*

**Stoneham High School Feasibility Study**
**Design Options Review**
**Progress PSR Comments and Responses**

| No. | Date | SSBC Member | Comment | P&W Response |
|---|---|---|---|---|
| 9 | 10/28/2020 | David Bois | The T shape building required by the renovation of the existing gym isolates the fields and blocks views of these from the entry and parking. Fields feel isolated and, with limited visibility, may be less inviting to the community. Note, tennis also more separated from public access.   | |

October 27, 2020
*Update: November 9, 2020*

**Stoneham High School Feasibility Study**
**Design Options Review**
**Progress PSR Comments and Responses**

| No. | Date | SSBC Member | Comment | P&W Response |
|---|---|---|---|---|
| 10 | 10/28/2020 | David Bois | Building Design<br>The desire to keep the existing gym in this option results in significant "sprawl" to this plan. PW has done a nice job creating a workable option, however, it is my opinion that there are significant flaws in this approach:<br><br>It appears that travel distances from the most remote classroom neighborhood to Spartan Place exceed 400' and are in excess of 500' to the gym and auditorium.<br><br>  | |
| 11 | 10/28/2020 | David Bois | With the long travel distances, do we have a sense of how this impacts the need for additional elevators? | |
| 12 | 10/28/2020 | David Bois | Spartan Place – is a dramatic feature of the design, however, with the need for the plan to stretch to connect to the gym, it is remote and not at the core of the design – alternate plans (not requiring connection to the existing gym) could locate this space more centrally connected to the neighborhoods. | |
| 13 | 10/28/2020 | David Bois | The "basement" classrooms locate program that was discussed as core academics to support our students into the future are remote and disconnected. | |
| 14 | 10/28/2020 | David Bois | Construction / Budget<br><br>The building is extremely close to the existing school – this is a result of reusing the existing gym – however there are significant concerns over the impacts of building this close to an active school. The project will impact at least two active school years, the quality of the learning environment, along with necessary exits / access and safety need to be considered a design element that guides our selection of the preferred option. In my opinion, this option will likely result in costs for logistics and temporary conditions that do not impact the quality of the new school long term. | |





October 27, 2020
*Update: November 9, 2020*

**Stoneham High School Feasibility Study**
**Design Options Review**
**Progress PSR Comments and Responses**

| No. | Date | SSBC Member | Comment | P&W Response |
|---|---|---|---|---|
| 15 | 10/28/2020 | David Bois | Renovation of the existing gym will result in a loss of use of that facility for some period of time – 6 months (or basically one school year) was mentioned, the committee has suggested that the least amount of impact on the fields (to allow for the continuation of normal sports seasons) should be a priority during construction – the gym should be considered in the same way. | |
| 16 | 10/28/2020 | David Bois | We still need to consider budget management as a core responsibility of this committee. We reviewed some breakouts of the very preliminary budget and ineligible costs – the plan /program shown raises some additional questions:<br><br>The Pre-K program is a significant portion of the project – as show by the plans – are there other alternatives or is this a community / educational mandate?<br><br>Core academics over MSBA are listed as nearly $6M – can we get more detail about what is included in this program?<br><br>The School Store is a $500K+ project element?<br><br>As discussed, we should review ZNE systems in relationship to life-cycle costs, not just initial costs.<br><br>Also, in relation to turf vs natural grass fields, can we look at ongoing operation costs: maintenance (mowing, repair etc.) , utility (water) as well as potential revenue opportunities for the turf fields?<br><br>Traffic signals are listed at nearly $5M – how many signals are included and how is this cost derived? Are there other funding sources for this as this is a community benefit and not related to any significant program change on site. | |
| 17 | 10/29/2020 | Sharon Iovanni | Have we taken into consideration how many spaces will be need for construction site workers? Can we identify a nearby offsite parking area from which construction site workers or students could be ferried to the high school site? | |
| 18 | 11/3/2020 | Jeanne Craigie | My major concern with what was presented was access to old building by students when that area appears directly in front of the old one. This is an accident waiting to happen . Now , will it be staged in sections which seems more costly , staged earth work , stage steel all of those are costly when not efficiently done all at once. | |
| 19 | 11/3/2020 | Jeanne Craigie | Spartan Space is nice but it is not necessary to have that big a foot print when we are losing lockerroom space and athletic storage. Also the gentlemen who describe this plan kept using field house / gym as same thing?? We have no field house or did I miss it?? | |
| 20 | 11/3/2020 | Jeanne Craigie | The only advantage to this one is a gymnasium larger than MSBA will not reimburse. | |

**Stoneham High School Feasibility Study**
**Design Options Review**
**Progress PSR Comments and Responses**

*October 27, 2020*
*Update: November 9, 2020*

| No. | Date | SSBC Member | Comment | P&W Response |
|---|---|---|---|---|
| 21 | 11/3/2020 | Jeanne Craigie | The length of the building is truly a draw back to passing time and ability to travel in an efficient way for staff and students. | |
| 22 | 11/3/2020 | Jeanne Craigie | I still don't buy the argument to relocate a baseball field for sun glare and ignore it on a football field ... ask him to go play on it! | |
| 23 | 11/8/2020 | Josephine Thomson | Does anyone have any idea of the lifespan of a turf field?<br>Best base for the artificial turf field?<br>Maintenance of the turf field? Such as watering - anything else?<br>What is the disposal process when the turf field has to be replaced? Where will it be disposed?<br>Is the artificial turf field hotter than the natural grass fields?<br>Safety concerns? Are there increased risks of injuries to the players? Respiratory concerns?<br>Any information on research into new species of natural grass (greater density)?<br>Feedback from other towns that have turf fields? | |



Stoneham High School Feasibility Study
Summary of Major Cost Components Related to Approximate Reimbursement Assumptions
10/20/20 (updated 11/2/20)

PROJECT MANAGEMENT SMMA

**DRAFT**
PM&C Estimate
Dated 9/25/20

| Cost Components | Construction Cost | Total Project Cost |
|---|---|---|
| **Site Related** | **$15,416,512** | **$18,576,897** |
| Two Synthetic Soccer Fields | $2,682,720 | $3,232,678 |
| Sports Lighting Two Soccer Fields | $1,104,000 | $1,330,320 |
| Synthetic Football Field | $1,490,648 | $1,796,231 |
| Sports Lighting Football Field | $883,200 | $1,064,256 |
| Synthetic Track | $833,520 | $1,004,392 |
| Stadium Grading, Bleachers, Drainage, Walks | $2,032,424 | $2,449,071 |
| Concession Stand/Locker Rooms | $2,250,000 | $2,711,250 |
| Traffic Signals | $4,140,000 | $4,988,700 |
| **Building ZNE Related** | **$8,076,692** | **$9,732,413** |
| Building Envelope Above Standard | $1,035,000 | $1,247,175 |
| HVAC System Above Standard | $7,041,692 | $8,485,238 |
| **Building Size above MSBA Guideline Related*** | **$11,985,366** | **$14,442,366** |
| Core Academic | $4,855,500 | $5,850,878 |
| *Collaboration Space - 4,500 gsf* | | |
| *Department Head Planning - 1,050 gsf* | | |
| *Book Storage - 750 gsf* | | |
| *Multi-Purpose Room - 3,000 gsf* | | |
| *Huddle Rooms - 450 gsf* | | |
| Art, Music, Vocational & Technical | $482,064 | $580,887 |
| *Combined between all - 968 gsf above guideline* | | |
| Health and PE | $3,987,984 | $4,805,521 |
| *Gym - 4,000 nsf above guideline* | | |
| *Storage - 1,600 nsf above guideline* | | |
| *Locker Room/Team Room - 608 nsf above guideline* | | |
| *Offices - 1,100 nsf above guideline* | | |
| *Training Room - 700 nsf* | | |
| Media Center | $298,800 | $360,054 |
| *History Lab - 600 gsf* | | |
| Auditorium | $1,191,714 | $1,436,015 |
| *Seating Area - 1,367 nsf above guideline* | | |
| *Stage - 700 nsf above guideline* | | |
| *Storage - 176 nsf above guideline* | | |
| *Sound Room - 150 nsf* | | |
| Dining | $213,144 | $256,839 |
| *District Wide Freezer - 428 gsf* | | |
| Medical | $134,460 | $162,024 |
| *Toilet Room - 90 gsf* | | |
| *Mothers Room 180 gsf* | | |
| Custodial | $373,500 | $450,068 |
| *General Storage - 750 gsf* | | |
| Other | $448,200 | $540,081 |
| *School Store - 900 gsf* | | |
| **Total** | **$35,478,570** | **$42,751,677** |
| **District Offices*** | **$1,942,200** | **$2,340,351** |
| District Offices | $1,942,200 | $2,340,351 |

*Costs based on building-only cost per square feet for Option 4B - $498/sf
*Note: Non-Classroom spaces in Pre-K Program may also be ineligible - 6,563 gsf*



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# Massachusetts School Building Authority

**Deborah B. Goldberg**
*Chairman, State Treasurer*

**James A. MacDonald**
*Chief Executive Officer*

**John K. McCarthy**
*Executive Director / Deputy CEO*

November 6, 2020

Mr. Dennis Sheehan
Stoneham Town Administrator
Stoneham Town Hall
35 Central Street, Second Floor
Stoneham, MA 02180

Re: Town of Stoneham, Stoneham High School

Dear Mr. Flanagan:

The Massachusetts School Building Authority (the "MSBA") is forwarding review comments for the Module 3 Feasibility Study Preliminary Design Program submission for the Stoneham High School project in the Town of Stoneham, received by the MSBA on October 6, 2020.

Responses to the attached comments shall be forwarded to the assigned Project Coordinator, Jennifer Flynn (Jennifer.Flynn@MassSchoolBuildings.org), through the Owner's Project Manager. Please review and return responses within 14 days of receipt of this letter.

If you have any questions or comments, please do not hesitate to contact Christina Forde (Christina.Forde@massschoolbuildings.org) at 617-720-4466.

Sincerely,

Mary Pichetti
Director of Capital Planning

Attachments: Attachment 'A' – Module 3 Preliminary Design Program Review Comments
Space Summary Guideline Revision Recommendations Memo

Cc: Legislative Delegation
Raymie Parker, Chair, Stoneham Select Board
Nicole Nial, Chair, Stoneham School Committee
John Macero, Superintendent, Stoneham Public Schools
Joel G. Seeley, Owner's Project Manager, Symmes Maini & McKee Associates, Inc.
Robert Brown, Perkins+Will
Brooke Trivas, Perkins+Will
File: 10.2 Letters (Region 3)



## ATTACHMENT A
## MODULE 3 – PRELIMINARY DESIGN PROGRAM REVIEW COMMENTS

**District:** Town of Stoneham
**School:** Stoneham High School
**Owner's Project Manager:** SMMA
**Designer Firm:** Perkins +Will Architects
**Submittal Due Date:** November 3, 2020
**Submittal Received Date**: October 6, 2020
**Review Date**: October 6-November 3, 2020
**Reviewed by**: M. Esdale, C. Forde, C. Alles, J. Jumpe

### MSBA REVIEW COMMENTS

The following comments[1] on the Preliminary Design Program ("PDP") submittal are issued pursuant to a review of the project submittal document for the proposed project presented as a part of the Feasibility Study submission in accordance with the MSBA Module 3 Guidelines.

### 3.1 PRELIMINARY DESIGN PROGRAM

| Overview of the Preliminary Design Program Submittal | Complete | Provided; *Refer to comments following each section* | Not Provided; *Refer to comments following each section* | Receipt of District's Response; *To be filled out by MSBA Staff* |
|---|---|---|---|---|
| OPM Certification of Completeness and Conformity | ☒ | ☐ | ☐ | ☐ |
| Table of Contents | ☒ | ☐ | ☐ | ☐ |
| 3.1.1 Introduction | ☒ | ☐ | ☐ | ☐ |
| 3.1.2 Educational Program | ☐ | ☒ | ☐ | ☐ |
| 3.1.3 Initial Space Summary | ☐ | ☒ | ☐ | ☐ |
| 3.1.4 Evaluation of Existing Conditions | ☐ | ☒ | ☐ | ☐ |
| 3.1.5 Site Development Requirements | ☐ | ☒ | ☐ | ☐ |
| 3.1.6 Preliminary Evaluation of Alternatives | ☐ | ☒ | ☐ | ☐ |
| 3.1.7 Local Actions and Approvals Certification(s) | ☒ | ☐ | ☐ | ☐ |
| 3.1.8 Appendices | ☒ | ☐ | ☐ | ☐ |

[1] The written comments provided by the MSBA are solely for purposes of determining whether the submittal documents, analysis process, proposed planning concept and any other design documents submitted for MSBA review appear consistent with the MSBA's guidelines and requirements, and are not for the purpose of determining whether the proposed design and its process may meet any legal requirements imposed by federal, state or local law, including, but not limited to, zoning ordinances and by-laws, environmental regulations, building codes, sanitary codes, safety codes and public procurement laws or for the purpose of determining whether the proposed design and process meet any applicable professional standard of care or any other standard of care. Project designers are obligated to implement detailed planning and technical review procedures to effect coordination of design criteria, buildability, and technical adequacy of project concepts. Each city, town and regional school district shall be solely responsible for ensuring that its project development concepts comply with all applicable provisions of federal, state, and local law. The MSBA recommends that each city, town and regional school district have its legal counsel review its development process and subsequent bid documents to ensure that it is in compliance with all provisions of federal, state and local law, prior to bidding. The MSBA shall not be responsible for any legal fees or costs of any kind that may be incurred by a city, town or regional school district in relation to MSBA requirements or the preparation and review of the project's planning process or plans and specifications.



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### 3.1.1 INTRODUCTION

| | Provide the following Items | Complete; *No response required* | Provided; *District's response required* | Not Provided; *District's response required* | Receipt of District's Response; *To be filled out by MSBA Staff* |
|---|---|---|---|---|---|
| 1 | Summary of the Facility Deficiencies and Current S.O.I. | ☒ | ☐ | ☐ | ☐ |
| 2 | Date of invitation to conduct a Feasibility Study and MSBA Board Action Letter | ☒ | ☐ | ☐ | ☐ |
| 3 | Executed Design Enrollment Certification | ☒ | ☐ | ☐ | ☐ |
| 4 | Narrative of the Capital Budget Statement and Target Budget | ☒ | ☐ | ☐ | ☐ |
| 5 | Project Directory with contact information | ☒ | ☐ | ☐ | ☐ |
| 6 | Updated Project Schedule | ☒ | ☐ | ☐ | ☐ |

**MSBA Review Comments:**

*No review comments for this section.*

### 3.1.2 EDUCATIONAL PROGRAM

Provide a summary and description of the existing educational program, and the new or expanded educational vision, specifications, process, teaching philosophy statement, as well as the District's curriculum goals and objectives of the program. Include description of the following items:

| | Provide the following Items | Complete; *No response required* | Provided; *District's response required* | Not Provided; *District's response required* | Receipt of District's Response; *To be filled out by MSBA Staff* |
|---|---|---|---|---|---|
| 1 | Grade and School Configuration Policies | ☒ | ☐ | ☐ | ☐ |
| 2 | Class Size Policies | ☒ | ☐ | ☐ | ☐ |
| 3 | School Scheduling Method | ☒ | ☐ | ☐ | ☐ |
| 4 | Teaching Methodology and Structure | | | | |
| | a) Administrative and Academic Organization/Structure | ☒ | ☐ | ☐ | ☐ |
| | b) Curriculum Delivery Methods and Practices | ☐ | ☐ | ☒ | ☐ |
| | c) English Language Arts/Literacy | ☒ | ☐ | ☐ | ☐ |
| | d) Mathematics | ☒ | ☐ | ☐ | ☐ |
| | e) Science | ☒ | ☐ | ☐ | ☐ |
| | f) Social Studies | ☒ | ☐ | ☐ | ☐ |
| | g) World Languages | ☒ | ☐ | ☐ | ☐ |
| | h) Academic Support Programming Spaces | ☒ | ☐ | ☐ | ☐ |
| | i) Student Guidance and Support Services | ☒ | ☐ | ☐ | ☐ |
| 5 | Teacher Planning and Professional Development | ☒ | ☐ | ☐ | ☐ |
| 6 | Pre-kindergarten | ☒ | ☐ | ☐ | ☐ |
| 7 | Kindergarten | ☐ | ☐ | ☐ | ☐ |
| 8 | Lunch Programs | ☒ | ☐ | ☐ | ☐ |
| 9 | Technology Instruction Policies and Program Requirements | ☐ | ☒ | ☐ | ☐ |
| 10 | Media Center/Library | ☒ | ☐ | ☐ | ☐ |
| 11 | Visual Arts Programs | ☒ | ☐ | ☐ | ☐ |
| 12 | Performing Arts Programs | ☒ | ☐ | ☐ | ☐ |
| 13 | Physical Education Programs | ☒ | ☐ | ☐ | ☐ |
| 14 | Special Education Programs | ☒ | ☐ | ☐ | ☐ |
| 15 | Vocation and Technology Programs | | | | |
| | a) Non-Chapter 74 Programming | ☒ | ☐ | ☐ | ☐ |
| | b) Chapter 74 Programming | ☐ | ☐ | ☐ | ☐ |
| 16 | Transportation Policies | ☒ | ☐ | ☐ | ☐ |
| 17 | Functional and Spatial Relationships | ☒ | ☐ | ☐ | ☐ |
| 18 | Security and Visual Access Requirements | ☐ | ☒ | ☐ | ☐ |

**MSBA Review Comments:**

*4b) In response to these review comments, please describe the District's curriculum delivery methods and practices.*

*9) The MSBA suggests the District consider providing assisted listening technology in each classroom, as well as general use throughout educational spaces within the proposed project for hearing impaired accessibility. Please acknowledge.*

*18) In response to these review comments, please confirm that first responding emergency representatives will be consulted in the planning process and associated requirements will be incorporated into the preferred schematic.*

*Please note additional comments may be forthcoming.*

### 3.1.3 INITIAL SPACE SUMMARY

| | Provide the following Items | Complete; *No response required* | Provided; *District's response required* | Not Provided; *District's response required* | Receipt of District's Response; *To be filled out by MSBA Staff* |
|---|---|---|---|---|---|
| 1 | Space summary; one per approved design enrollment | ☐ | ☒ | ☐ | ☐ |
| 2 | Floor plans of the existing facility | ☒ | ☐ | ☐ | ☐ |
| 3 | Narrative description of reasons for all variances (if any) between proposed net and gross areas as compared to MSBA guidelines | ☐ | ☒ | ☐ | ☐ |

**MSBA Review Comments:**

*1) The MSBA has performed a preliminary review of the new construction space summary for 695 students in grades 9-12 and offers the following:*

- ***Core Academic*** *– The proposed square footage for this category exceeds the MSBA guidelines by 8,500 nsf. Per the information provided, the following spaces will be proposed in order for the District to deliver its educational program:*

| ***Anticipated Core Academic Spaces*** | ***Grades 9-12 for 695 students*** | | |
|---|---|---|---|
| | *Proposed No. Rooms* | *MSBA Guidelines No. Rooms* | *Variance* |
| *Classroom - General* | *23* | *23* | *0* |
| *Collaboration Space per Neighborhood* | *6* | *0* | *+6* |
| *Teacher Planning* | *23* | *23* | *0* |
| *Small Group Seminar (20-30 seats)* | *2* | *2* | *0* |
| *Science Classroom / Lab* | *6* | *6* | *0* |
| *Prep Room* | *6* | *6* | *0* |
| *Central Chemical Storage Room* | *1* | *1* | *0* |
| *Department Head Planning Area (max 8)* | *1* | *0* | *+1* |
| *Book Storage* | *1* | *0* | *+1* |
| *Interdisciplinary Project and Performance Room* | *1* | *0* | *+1* |
| *Health Classroom* | *1* | *0* | *+1* |
| *Huddle Rooms for Quiet Space* | *6* | *0* | *+6* |

*The following spaces are variations to the MSBA guidelines:*

  - ***Classroom – General –*** *The District is proposing (23) 900 nsf General Classrooms totaling 20,700 nsf, which exceeds the MSBA guidelines by 1,150 nsf. Based on the information provided the MSBA accepts this variation to the guidelines. No further preliminary comments.*
  - ***Teacher Planning*** *– The District is proposing (23) 100 nsf Teacher Planning areas totaling 2,300 nsf, which meets the MSBA guidelines. In response to these review comments, please provide information that describes the proposed location and adjacencies of the (23) Teacher Planning areas.*
  - ***Collaboration Space per Neighborhood –*** *The District is proposing (6) 500 nsf Collaboration Space per Neighborhood totaling 3,000 nsf in excess of the MSBA guidelines. Based on the information, and the proposed size of the General Classrooms compared to the square foot range allowed in the MSBA guidelines, the MSBA may participate in a portion of the overall proposed square footage associated with the Collaboration Space per Neighborhood. In response to these review comments, please provide additional information that demonstrates how these spaces will be scheduled, staffed, and supervised.*
  - ***Department Head Planning Area –*** *The District is proposing (1) 700 nsf Department Head Planning Area in excess of the MSBA guidelines. The information provided states: "The school's vision for the future is to have one central Department Head Planning Area of 700 sf to promote interdisciplinary collaboration between department heads. This would also eliminate the needs for any Department Offices." Please relocate this area to the 'Administration and Guidance' category. Additionally, note any square footage exceeding MSBA guidelines in the 'Administration and Guidance' category will be considered ineligible for reimbursement. Please acknowledge.*
  - ***Book Storage –*** *The District is proposing (1) 500 nsf Book Storage area in excess of the MSBA guidelines. The information provided states: "A book storage area is needed near the Department Head Planning Area." Please relocate this area to the 'Administration and Guidance category or include it as part of the grossing area of the proposed building if it can be provided for within the MSBA's upper limit of 1.50. Additionally, note any square footage exceeding MSBA guidelines in the 'Administration and Guidance' category will be considered ineligible for reimbursement. Please acknowledge.*
  - ***Interdisciplinary Project and Performance Room –*** *The District is proposing (1) 2,000 nsf Interdisciplinary Project and Performance Room in excess of the MSBA guidelines. The information provided indicates this space is intended "to support student performance, guest speakers, seminars, interdisciplinary collaborative activities and presentation and showcasing of student work". In response to these review comments, please provide additional information that demonstrates how this space will be scheduled, staffed, and supervised. Additionally, please relocate this space to the 'Vocations and Technology' category.*
  - ***Health Classroom –*** *The District is proposing (1) 850 nsf Health Classroom in excess of the MSBA guidelines. Based on the information provided the MSBA accepts this variation to the guidelines. No further preliminary comments.*
  - ***Huddle Rooms for Quiet Space –*** *The District is proposing (6) 50 nsf Huddle Rooms for Quiet Space totaling 300 nsf in excess of the MSBA guidelines. The information provided states: "The District identified need for teachers to have an opportunity to have an heads-down space, outside of the common planning area which tend to be noisy due to collaborative discussions. These huddle rooms/quiet rooms will satisfy the important need to ensure there diverse types of spaces for all personal." Please relocate these spaces to the 'Administration and Guidance' category. Additionally, note any square footage exceeding MSBA guidelines in the 'Administration and Guidance' category will be considered ineligible for reimbursement. Please acknowledge.*

- ***Special Education*** *– The proposed square footage for this category exceeds the MSBA guidelines by 700 nsf. Please relocate the following spaces:*
  - *(4) 150 nsf Offices (School Adjustment Counselor, School Psychologist, SPED Transition Coordinator, and SPED Office), totaling 600 nsf to the 'Administration and Guidance' category. Additionally, note any square footage exceeding MSBA guidelines in the 'Administration and Guidance' category will be considered ineligible for reimbursement. Please acknowledge.*
  - *(1) 900 nsf ESL Services space to the 'Core Academic' category. Please note that based on the information provided the MSBA accepts this variation to the guidelines. No further preliminary comments.*

*Please note that the Special Education program is subject to approval by the Department of Elementary and Secondary Education ("DESE"). The District should provide the required information required with the Schematic Design submittal. Formal approval of*

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*the District's proposed Special Education program by the DESE is a prerequisite for executing a Project Funding Agreement with the MSBA. Please acknowledge.*

- ***Art & Music / Vocations & Technology*** *– The combined proposed square footage for these categories exceeds the MSBA guidelines by 645 nsf. The MSBA encourages the District and its consultants to continue to seek opportunities to increase efficiencies and align with MSBA guidelines. Please note that square footage exceeding MSBA guidelines will be considered ineligible for reimbursement. Please acknowledge.*

- ***Health & Physical Education*** *– The proposed square footage for this category exceeds the MSBA guidelines by 8,008 nsf. The MSBA encourages the District and its consultants to continue to seek opportunities to increase efficiencies and align with MSBA guidelines. Please note that square footage exceeding MSBA guidelines will be considered ineligible for reimbursement. Please acknowledge.*

  *Please refer to the attached memo regarding the MSBA's policy on physical education square footage in excess of the MSBA guidelines. The policy states: "The district may choose to build a gymnasium and related spaces in excess of MSBA guidelines, but in no event shall the gymnasium exceed 18,000 nsf. The MSBA will participate in a gymnasium of up to 12,000 nsf unless adjusted by the MSBA to increase teaching stations for enrollment and/or the educational plan." Additionally, areas in excess of the MSBA guidelines will be at the sole expense of the district; and the MSBA will exclude from its grant the cost of the total gross square foot ("gsf") in excess of the guidelines for these areas.*

- ***Media Center*** *– The proposed square footage for the category exceeds the MSBA guidelines by 400 nsf. The MSBA encourages the District and its consultants to continue to seek opportunities to increase efficiencies and align with MSBA guidelines. Please note that square footage exceeding MSBA guidelines will be considered ineligible for reimbursement. Please acknowledge.*

- ***Auditorium/Drama*** *– The proposed square footage for this category exceeds the MSBA guidelines by 2,393 nsf. The MSBA encourages the District and its consultants to continue to seek opportunities to increase efficiencies and align with MSBA guidelines. Please note that square footage exceeding MSBA guidelines will be considered ineligible for reimbursement. Please acknowledge.*

  *Please refer to the attached memo regarding the MSBA's policy on auditorium square footage in excess of the MSBA guidelines. The policy states: "The district may choose to build an auditorium in excess of MSBA guidelines, but no more than 13,300 net square foot ("nsf") (based upon an upper limit of 1,000 seats). The MSBA funding limit will vary depending on the agreed-upon design enrollment but will not exceed 10,400 nsf." Additionally, areas in excess of the MSBA guidelines will be at the sole expense of the district; and the MSBA will exclude from its grant the cost of the total gross square foot (gsf) in excess of the guidelines for these areas.*

- ***Dining & Food Service*** *– The proposed square footage for this category exceeds the MSBA guidelines by 285 nsf. The MSBA encourages the District and its consultants to continue to seek opportunities to increase efficiencies and align with MSBA guidelines. Please note that square footage exceeding MSBA guidelines will be considered ineligible for reimbursement. Please acknowledge.*

- ***Medical*** *– The proposed square footage for this category exceeds the MSBA guidelines by 180 nsf. Please relocate the (2) 60 nsf Mothers Rooms totaling 120 nsf to the 'Non-Programmed Spaces' category. Currently, incorporating this square footage into the 'Non-Programmed Spaces' category results in a grossing factor of 1.50. Additionally, the MSBA encourages the District and its consultants to continue to seek opportunities to increase efficiencies and align with MSBA guidelines. Please note that square footage exceeding MSBA guidelines will be considered ineligible for reimbursement. Please acknowledge.*

- ***Administration & Guidance*** *– The proposed square footage for this category aligns with the MSBA guidelines. No further preliminary comments.*

- ***Custodial & Maintenance*** *– The proposed square footage for this category exceeds the MSBA guidelines by 500 nsf. The MSBA encourages the District and its consultants to continue to seek opportunities to increase efficiencies and align with MSBA guidelines. Please note that square footage exceeding MSBA guidelines will be considered ineligible for reimbursement. Please acknowledge.*

- ***Other*** *– The District is proposing 14,575 square feet for this category which exceeds the MSBA guidelines. The following spaces are proposed:*

  - ***School Store –*** *The District is proposing (1) 600 nsf School Store in excess of the MSBA guidelines. Please note that square footage exceeding MSBA guidelines will be considered ineligible for reimbursement. Please acknowledge.*

  - ***Pre-School Program (13,975 nsf):***
    - *(8) 1,200 nsf Pre-School Classrooms with toilets/changing (15 students)*
    - *(2) 175 nsf (totaling 350 nsf) Observation Areas: Childcare Development Pathway*
    - *(1) 400 nsf Pre-School OT/PT*
    - *(1) 150 nsf Pre-School Director Office*
    - *(2) 250 nsf (totaling 500 nsf) Pre-School Speech/Language*
    - *(1) 350 nsf Pre-School Conference Room*
    - *(1) 275 nsf Reception Area with Secretary*
    - *(1) 300 nsf Teacher Work Room/ Collaboration*
    - *(1) 600 nsf Student Lunch Room*
    - *(1) 150 nsf Social Worker Office*
    - *(1) 150 nsf BCBA Office*
    - *(1) 350 nsf Nurse*

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- *(1) 350 nsf Conference Room – In response to these review comments, please clarify the use of this conference room and how it differs from the proposed (1) 350 nsf Pre School Conference Room identified above.*
- *(1) 450 nsf Sensory Room*

*The MSBA's participation will be limited to Pre-School classrooms only, and potentially Pre-School spaces dedicated for special education, provided that the District submit additional information that further describes the proposed number of students, daily/weekly schedule, special education program, and space utilization impact on the schools in which these programs are currently housed. Please note that upon selection of a preferred schematic, the District may be required to adjust spaces/square footage that exceeds the MSBA guidelines and is not supported by the Educational Program provided.*

*No further review comments for this section.*

### 3.1.4 EVALUATION OF EXISTING CONDITIONS

| | Provide the following Items | Complete; *No response required* | Provided; *District's response required* | Not Provided; *District's response required* | Receipt of District's Response; *To be filled out by MSBA Staff* |
|---|---|---|---|---|---|
| 1 | Confirmation of legal title to the property. | ☒ | ☐ | ☐ | ☐ |
| 2 | Determination that the property is available for development. | ☒ | ☐ | ☐ | ☐ |
| 3 | Existing historically significant features and any related effect on the project design and/or schedule. | ☒ | ☐ | ☐ | ☐ |
| 4 | Determination of any development restrictions that may apply. | ☒ | ☐ | ☐ | ☐ |
| 5 | Initial Evaluation of building code compliance for the existing facility. | ☒ | ☐ | ☐ | ☐ |
| 6 | Initial Evaluation of Architectural Access Board rules and regulations and their application to a potential project. | ☒ | ☐ | ☐ | ☐ |
| 7 | Preliminary evaluation of significant structural, environmental, geotechnical, or other physical conditions that may impact the cost and evaluations of alternatives. | ☒ | ☐ | ☐ | ☐ |
| 8 | Determination for need and schedule for soils exploration and geotechnical evaluation. | ☐ | ☒ | ☐ | ☐ |
| 9 | Environmental site assessments minimally consisting of a Phase I: Initial Site Investigation performed by a licensed site professional. | ☐ | ☒ | ☐ | ☐ |
| 10 | Assessment of the school for the presence of hazardous materials. | ☐ | ☒ | ☐ | ☐ |
| 11 | Previous existing building and/or site reports, studies, drawings, etc. provided by the district, if any. | ☐ | ☒ | ☐ | ☐ |



**MSBA Review Comments:**

*3) The information provided indicates a Project Notification Form ("PNF") was submitted to the Massachusetts Historical Commission ("MHC") on August 27, 2020, and MHC approval was obtained on September 15, 2020.*

*8) The information provided on page 12-13 of the Preliminary Geotechnical Report prepared by Lahlaf Geotechnical Consulting, Inc. (LGCI), states:*

> *"We recommended performing additional explorations, including soil borings and test pits during the next phase of the project after the proposed building layout, size, and location have been established. We believe that test pits are more suited for areas where the fill contains large cobbles and boulders. We recommend advancing at least (16) additional borings and excavating at least twelve test pits."*

*In response to these review comments, provide a description of how this recommendation will be scheduled in future phases of project.*

*9) Note that costs associated with the removal of fuel storage tanks and associated contaminated soil is considered ineligible for reimbursement. Please acknowledge.*

*10) It should be noted that all costs associated with the removal of asbestos containing floor and ceiling tiles are categorically ineligible for MSBA reimbursement. Additionally, the project team should be aware of the current policies associated with MSBA's participation in the abatement and removal of hazardous materials. Please note that work associated with the removal of associated contaminated soil and materials are considered ineligible for reimbursement.*

*11) In response to these review comments, provide any previous existing building and/or site reports, studies, drawings, etc. provided by the district, if any.*

*No further review comments for this section.*

### 3.1.5 SITE DEVELOPMENT REQUIREMENTS

| | Provide the following Items | Complete; *No response required* | Provided; *District's response required* | Not Provided; *District's response required* | Receipt of District's Response; *To be filled out by MSBA Staff* |
|---|---|---|---|---|---|
| 1 | A narrative describing project requirements related to site development to be considered during the preliminary and final evaluation of alternatives. | ☐ | ☒ | ☐ | ☐ |
| 2 | Existing site plan(s) | ☒ | ☐ | ☐ | ☐ |

**MSBA Review Comments:**

*1) As part of the District's Preferred Schematic Report ("PSR"), provide a site section that illustrates how the preferred schematic sits on the site and how the proposed location impacts access and circulation. Please acknowledge.*

*No further review comments for this section.*



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### 3.1.6 PRELIMINARY EVALUATION OF ALTERNATIVES

| | Provide the following Items | Complete; *No response required* | Provided; *District's response required* | Not Provided; *District's response required* | Receipt of District's Response; *To be filled out by MSBA Staff* |
|---|---|---|---|---|---|
| 1 | Analysis of school district student school assignment practices and available space in other schools in the district | ☐ | ☒ | ☐ | ☐ |
| 2 | Tuition agreement with adjacent school districts | ☒ | ☐ | ☐ | ☐ |
| 3 | Rental or acquisition of existing buildings that could be made available for school use | ☒ | ☐ | ☐ | ☐ |
| 4 | Code Upgrade option that includes repair of systems and/or scope required for purposes of code compliance; with no modification of existing spaces or their function | ☒ | ☐ | ☐ | ☐ |
| 5 | Renovation(s) and/or addition(s) of varying degrees to the existing building(s) | ☒ | ☐ | ☐ | ☐ |
| 6 | Construction of new building and the evaluation of potential locations | ☒ | ☐ | ☐ | ☐ |
| 7 | List of 3 distinct alternatives (including at least 1 renovation and/or addition option) are recommended for further development and evaluation. | ☒ | ☐ | ☐ | ☐ |

**MSBA Review Comments:**

*As part of the Preliminary Evaluation of Alternatives, the District explored the following ten (10) options for grades 9-12 with an enrollment of 695 students at the existing Stoneham High School site:*

- *Option 1: Code Upgrade with an estimated project costs $115 million*
- *Option 2: Renovation with an estimated project cost of $173.4 million*
- *Option 3A1: Addition/Renovation with an estimated project cost of $175.7 million*
- *Option 3A2: Addition/Renovation with an estimated project cost of $175.2 million*
- *Option 3B: Addition/Renovation with an estimated project cost of $174.6 million*
- *Option 4A1: New Construction with an estimated project cost of $177.7 million*
- *Option 4A2: New Construction with an estimated project cost of $180.6 million*
- *Option 4A3: New Construction with an estimated project cost of $174.8 million*
- *Option 4B: New Construction with an estimated project cost of $172.9 million*
- *Option 4C: New Construction with an estimated project cost of $173.7 million*

*1) The information provided indicates there are no available spaces within the District for swing space. As part of the District's PSR, please provide information that describes the anticipated impact to students during an occupied and phased construction project. Please acknowledge.*

*7) The District has indicated further evaluation of the following five (5) options as part of its PSR:*

- *Option 1: Code Upgrade with an estimated project costs $115 million*
- *Option 2: Renovation with an estimated project cost of $173.4 million*



- *Option 3A2: Addition/Renovation with an estimated project cost of $175.2 million*
- *Option 4A3: New Construction with an estimated project cost of $174.8 million*
- *Option 4B: New Construction with an estimated project cost of $172.9 million*

*No further review comments for this section.*

### 3.1.7 LOCAL ACTIONS AND APPROVAL

| | Provide the following Items | Complete; *No response required* | Provided; *District's response required* | Not Provided; *District's response required* | Receipt of District's Response; *To be filled out by MSBA Staff* |
|---|---|---|---|---|---|
| 1 | Signed Local Actions and Approvals Certification: (original) | ☒ | ☐ | ☐ | ☐ |
| 2 | Certified copies of the School Building Committee meeting notes showing specific submittal approval vote language and voting results, and a list of associated School Building Committee meeting dates, agenda, attendees and description of the presentation materials | ☒ | ☐ | ☐ | ☐ |

**MSBA Review Comments:**

*No review comments for this section.*

### 3.1.8 APPENDICES

| | Provide the following Items | Complete; *No response required* | Provided; *District's response required* | Not Provided; *District's response required* | Receipt of District's Response; *To be filled out by MSBA Staff* |
|---|---|---|---|---|---|
| 1 | Current Statement of Interest | ☒ | ☐ | ☐ | ☐ |
| 2 | MSBA Board Action Letter including the invitation to conduct a Feasibility Study | ☒ | ☐ | ☐ | ☐ |
| 3 | Design Enrollment Certification | ☒ | ☐ | ☐ | ☐ |

**MSBA Review Comments:**

*No review comments for this section.*

**Additional Comments:**

*The MSBA issues project advisories from time to time, as informational updates for Districts, Owner's Project Managers ("OPM"), and Designers in an effort to facilitate the efficient and effective administration of proposed projects currently pending review by the MSBA. The advisories can be found on the MSBA's website. In response to these review comments, please confirm that the District's consultants have reviewed all project advisories and they have been incorporated into the proposed project as applicable.*



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**Regarding Past Projects:**

*MSBA records do not indicate previous grants associated with Stoneham High School.*

**End**





**MEMORANDUM**

| | |
|---|---|
| TO: | Board of Directors, Massachusetts School Building Authority |
| FROM: | Maureen G. Valente, Chief Executive Officer<br>John K. McCarthy, Executive Director, Deputy Chief Executive Officer |
| SUBJECT: | Staff Recommendation for policy revisions to allow for auditorium and gymnasium spaces in excess of the MSBA Space Summary Guidelines at the district's sole expense |
| DATE: | November 2, 2016 |

Based upon review of project data and discussions with the Board of Directors, staff is recommending a policy revision to the Massachusetts School Building Authority (the "MSBA") space guidelines specifically for Auditorium and Gymnasium related spaces that are in excess of those included in the MSBA space summary guidelines.

**Background**

Based on project reviews in late fall 2015, the Board of Directors requested that staff provide information regarding the potential to revise the policies for space guidelines to allow for requests by districts for spaces in excess of the MSBA's guidelines at the district's sole expense. Staff presented an overview of current policies and practices at the March 16, 2016 Board of Directors meeting and followed with additional information regarding potential revisions at the March 30, 2016 Board of Directors meeting.

Based on the discussions and input received from the Board members, staff has prepared a Potential Revised Policy, included as Attachment A, which will allow districts to include spaces in excess of the MSBA's space summary guidelines at the district's sole expense for two program areas: auditorium and gymnasium. Staff has received favorable feedback regarding this proposed revision to the MSBA's policies, and as noted at the September 29, 2016 Board of Directors meeting and further reviewed at the October 19, 2016 Facilities Assessment Subcommittee meeting, staff have prepared this recommendation to revise the MSBA's policy for the Board of Directors approval.

**Recommendation**

Specific details are set forth in Attachment A: Potential Revised Policy – Auditorium and Gymnasium spaces above guidelines requested to support community use at district's sole expense.

Key features of the policy revision include:

- Areas in excess of the MSBA guidelines will be at the sole expense of the district;
- Community support must be demonstrated prior to MSBA approval of a district's proposed project scope and budget;
- The MSBA will exclude from its grant the cost of the total gross square foot ("gsf") above guidelines for these areas as shown below in the sample calculation. This amount will not change over the term of the grant even if the bids come in at a lower amount.

- High Schools:
  - Upper limits on allowable nsf in excess of guidelines include:
    - The district may choose to build an auditorium in excess of MSBA guidelines, but no more than 13,300 net square foot ("nsf") (based upon an upper limit of 1,000 seats). The MSBA funding limit will vary depending on the agreed-upon design enrollment but will not exceed 10,400 nsf; and
    - The district may choose to build a gymnasium and related spaces in excess of MSBA guidelines, but in no event shall the gymnasium exceed 18,000 nsf. The MSBA will participate in a gymnasium of up to 12,000 nsf unless adjusted by the MSBA to increase teaching stations for enrollment and/or the educational plan.

- Middle Schools/Elementary Schools:
  - Upper limits on allowable nsf in excess of guidelines include:
    - The district may choose to build an auditorium even though the MSBA space guidelines do not include an auditorium and no portion of the design and construction of an auditorium will be reimbursed, including the stage, regardless of whether the district chooses not to include a stage in its cafetorium or gymnasium. If the district chooses to build an auditorium, the auditorium cannot be larger than 13,300 nsf; and
    - The district may choose to build a gymnasium and related spaces in excess of MSBA guidelines, but in no event shall the gymnasium itself exceed 12,000 nsf. The MSBA will participate in a gymnasium up to no more than 6,000 nsf, unless adjusted by the MSBA to increase teaching stations for enrollment and/or the education plan.

- Sample Calculation for Auditorium space in a high school in excess of guidelines at the district's sole expense:

| | |
|---|---|
| Total net square footage (nsf) requested by the District | 13,300 nsf |
| Total nsf for Auditorium Category allowed as eligible by MSBA space guidelines | 10,400 nsf |
| Excess net square footage equals District request minus net square footage allowable by MSBA space guidelines | 2,900 nsf |
| Gross square foot (gsf) exclusion = Excess net square feet times the project's grossing factor. For illustration purposes, project's sample grossing factor is 1.5 | 2,900 nsf x 1.5 = 4,350 gsf |
| Total cost of exclusion = Gross square foot times the project's total construction cost/square foot. For illustration purposes, project's total construction cost/square foot is $375 per square foot. | 4,350 gsf x $375/gsf = $1,631,250 |
| Total cost of exclusion | $1,631,250 |

**Recommendation**

MSBA staff is recommending a policy revision to the MSBA space guidelines specifically for Auditorium and Gymnasium related spaces that are in excess of those included in the MSBA space summary guidelines. This recommendation would be effective for districts that are approved to proceed into schematic design on or after January 1, 2017.

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Project Management | SMMA

# Project Minutes

| | | | |
|---|---|---|---|
| Project: | Stoneham High School Feasibility Study | Project No.: | 20033 |
| Prepared by: | Joel Seeley | Meeting Date: | 10/28/2020 |
| Re: | PR Subcommittee Meeting | Time: | 3:00pm |
| Location: | Remote Locations | Meeting No: | 3 |
| Distribution: | Attendees (MF) | | |

Attendees:

| PRESENT | NAME | AFFILIATION |
|---|---|---|
| ✓ | Sharon Iovanni | Chair PR Subcommittee, Community Member |
| | Marie Christie | Co-Chair School Building Committee |
| ✓ | Nicole Nial | School Committee Member |
| ✓ | Raymie Parker | Chair, Select Board |
| ✓ | Lisa Gallagher | Community Member, School Secretary, Past member of Middle School Building Committee |
| | David Bois | Co-Chair School Building Committee |
| | John Macero | Superintendent of Schools |
| | Bryan Lombardi | Principal |
| | Brooke Trivas | Perkins and Will |
| ✓ | Joel Seeley | SMMA |
| | | |

| Item # | Action | Discussion |
|---|---|---|
| 3.1 | R. Parker<br>J. Seeley | The dates for upcoming meetings, presentations and community-wide survey were reviewed and agreed as follows:<br>• November 2nd - CM at Risk Prequalification Committee Meeting<br>• November 4th - PTO Presentation - South ES and HS<br>Community-Wide Survey No. 1, run 11/5 to 11/12, results shared with SSBC on 11/23<br>• November 7th - Community Forum No. 3<br>• November 9th- SSBC Meeting - 1 Renovation/ 1 New Option<br>• November 19th - PTO Presentation - Colonial Park<br>• November 23rd - SSBC Meeting - 1 New Option (final options by this date)<br>• December 7th - CM at Risk Prequalification Committee Meeting (6pm)<br>• December 7th - SSBC Meeting - Energy Model, Systems, Costs, Review/Discussions on Options<br>Community-Wide Survey No. 2, run 12/8 to 12/15, results shared with SSBC on 12/16<br>• December 9th - Community Forum No. 4<br>• December 15th - Tri-Board Meeting |

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Project: Stoneham High School Feasibility Study
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| Item # | Action | Discussion |
|---|---|---|
| | | • December 16th – SSBC Meeting - Discussion/ Final Decision/Vote<br>• December 17-23 Final PSR Book<br>The following actions were agreed upon:<br>1. R. Parker to confirm if Select Board meeting on 12/15/20.<br>2. J. Seeley to confirm 12/16/20 SSBC meeting date change with M. Christie and D. Bois. |
| 3.2 | J. Seeley<br>B. Trivas<br>S. Iovanni | The draft Community Survey No. 1, attached, was reviewed.<br>The following actions were agreed upon:<br>1. Add the survey link to the hardcopy<br>2. Determine if the email addresses of responders can be captured<br>3. Change “Parent” to “Parent/Guardian of Student” in Question 1<br>4. Add “Stoneham Town Employee” to Question 1<br>5. Shift order of selections in Question 2<br>6. S. Iovanni to submit press release by 11/2/20<br>7. B.Trivas and J.Seeley to promote survey in PTO and Community Forum No. 3 presentations<br>A motion was made by R. Parker and seconded by N. Nial to approve the Community Survey No. 1 with corrections noted. No discussion, motion passed unanimous by roll call vote.<br>A motion was made by R. Parker and seconded by N. Nial to approve the Press Release for Community Survey No. 1. No discussion, motion passed unanimous by roll call vote. |
| 3.3 | J. Seeley | J. Seeley to add “Review Subcommittee Authority” to the 11/9/20 SSBC meeting agenda. |
| 3.4 | R. Parker | R. Parker to contact A. Brough Palmerino to ask if Stoneham TV can develop an Informational PSA. J. Macero and B. Lombardi to participate. *(from prior meeting)* |
| 3.5 | J. Macero | J. Macero to contact the Council on Aging and the Senior Center for possible virtual presentations. *(from prior meeting)* |

Attachments: Draft Community Forum No. 1 Survey

The information herein reflects the understanding reached. Please contact the author if you have any questions or are not in agreement with these Project Minutes

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## Stoneham High School Feasibility Study

### Stoneham School Building Committee
### Community Survey No. 1

November 5, 2020

As the Stoneham School Building Committee (SSBC) prepares its recommendation for a Preferred Schematic Design to the Massachusetts School Building Authority (MSBA) , it is important that we hear from you. Please complete the following short survey; the results will help guide the decision-making process as the SSBC continues its important work.

1. **Please select all stakeholder groups that apply to you.**
   - ❑ Student
   - ❑ Parent/Guardian of Student
   - ❑ Stoneham Resident
   - ❑ Stoneham Registered Voter
   - ❑ Stoneham Homeowner
   - ❑ Stoneham Business Owner
   - ❑ Stoneham Elected Official
   - ❑ Stoneham Public Schools Employee
   - ❑ Stoneham Town Employee
   - ❑ Other (please specify) _____

2. **What is the most important consideration in the decision-making process for recommending a capital school building project to the Stoneham residents for approval?**
   *Please rank the following priorities with 1 being the most important and 6 being the least important.*

   | | |
   |---|---|
   | | Education – Greatest benefit to all learners |
   | | Traffic – Improves site circulation and neighborhood traffic |
   | | Cost – Minimal impact to taxpayers |
   | | Community Use – Beneficial for community use of school and site |
   | | Construction Impact – Least impact to teaching and learning |
   | | Sustainability – Most energy efficient and green facility |

3. **Is there another important consideration that is not listed above? If so, please explain.**





4. **How do you receive your information on Town and School news?**
   - ❑ Stoneham Independent
   - ❑ Stoneham Sun / Wicked Local
   - ❑ Stoneham Patch
   - ❑ Town of Stoneham Website
   - ❑ Stoneham School Building Committee (SSBC) Website
   - ❑ StonehamTV
   - ❑ Stoneham Public Schools Facebook
   - ❑ Stoneham Parents Facebook
   - ❑ Other Town/School Facebook
   - ❑ Stoneham School PTO
   - ❑ Other (please specify) _____

5. **How can the School Building Committee improve communication with the public regarding this project and state grant?**

**Thank you for participating in Community Survey No. 1.**

*Please be assured that your opinions and contact information are protected and at no time will this information be sold to any third party. This information is strictly for the reference of the SSBC to incorporate your input into the project.*

**Would you like to receive updates and information regarding the Stoneham High School project as the Feasibility Study progresses?**

- ❑ Yes, my name is _____ and
  my email address is: _____
- ❑ No.

For the link to complete this survey electronically and share with your family, friends and neighbors: **https://forms.gle/wkQ6TfxjJqyBgGtQA**



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Project Management | SMMA

# Project Minutes

| | | | |
|---|---|---|---|
| Project: | Stoneham High School Feasibility Study | Project No.: | 20033 |
| Prepared by: | Joel Seeley | Meeting Date: | 10/26/2020 |
| Re: | Green Building Initiatives Meeting | Time: | 10:00am |
| Location: | Remote Locations | Meeting No: | 4 |
| Distribution: | Attendees (MF) | | |

Attendees:

| PRESENT | NAME | AFFILIATION |
|---|---|---|
| | Marie Christie | Co-Chair, School Building Committee |
| | David Bois | Co-Chair, School Building Committee |
| ✓ | Raymie Parker | Chair, Select Board |
| ✓ | Dennis Sheehan | Town Administrator |
| | John Macero | Superintendent of Schools |
| ✓ | Brian McNeil | Facilities Director |
| ✓ | Erin Wortman | Director, Planning and Community Development |
| ✓ | Susan McPhee | Energy Conservation Coordinator |
| | Kimberly Cullinane | Eversource - Electricity |
| | Mark Rooney | Eversource - Electricity |
| | Denise Rouleau | National Grid - Gas |
| ✓ | Vamshi Gooje | Thornton Tomasetti |
| ✓ | Xiaoshu Du | Thornton Tomasetti |
| ✓ | Brooke Trivas | Perkins and Will |
| ✓ | Patrick Cunningham | Perkins and Will |
| ✓ | Kevin Caddle | BALA |
| | Edward Dolan | BALA |
| ✓ | Joel Seeley | SMMA |
| | | |

| Item # | Action | Discussion |
|---|---|---|
| 4.1 | Record | J. Seeley indicated the Path 1 MOU and ESA have been signed and sent to Eversource. The agenda for the meeting is to follow-up on the Eversource Zero Net Energy Conference held on 10/8/20, and establish the deliverables for the PSR Phase. |
| 4.2 | J. Seeley | **Eversource Zero Net Energy Conference**<br>P. Cunningham indicated the Acton-Boxborough (A-B) presentation at the Eversource Zero Net Energy Conference had several take-aways applicable to Stoneham: |

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Project: Stoneham High School Feasibility Study
Meeting Date: 10/26/20
Meeting No.: 4
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| Item # | Action | Discussion |
|---|---|---|
| | | 1. Stoneham should apply for as many applicable energy grants as soon as possible. A-B applied for a $12,000 grant from DOER for technical assistance. This grant funded a consultant that assisted A-B in writing the RFP for the PhotoVoltaic (PV) vender.<br>2. Retain the PV vender as early as possible. A-B retained NexAmp, as their PV vender, thru a Power Purchase Agreement (PPA).<br>3. Plan for battery storage for the PV system to maximize load sharing to reduce overall utility rate.<br>4. The geo-thermal wells will generate a significant amount of surface water during drilling, needs to be factored in CM's construction plan.<br>5. Need community champions to speak on the benefits of ZNE, can't be just the Building Committee members.<br>6. J. Seeley to forward the A-B powerpoint and link to the conference recording once received. |
| 4.3 | E. Wortman | **Photovoltaic (PV) System**<br>1. E. Wortman will contact A-B for more information on their PV RFP and will take the lead with S. McPhee on bringing the PV vender on board.<br>2. E. Wortman indicated the Town is a member of the PowerOptions consortium, who have a PV PPA program, as an option to the RFP process.<br>3. V. Gooje indicated the MassSave Path 1 program is focused on achieving an EUI of 25 or less without PV. The PV would be needed bring the project to ZNE.<br>4. V. Gooje indicated that once the decision to go all-electric is made, the PV component is very important in the economics of the project, as electricity is between 2 ½ to 4 times more expensive than gas on an equivalent basis.<br>5. E. Wortman explained the town's aggregated rate structure for electricity.<br>6. D. Sheehan indicated the high school may be a shelter and asked would the emergency generator need to be natural gas-fired?<br>*P. Cunningham indicated the generator could be diesel fired. The PV battery storage should not be considered for use by the emergency generator.*<br>7. D. Sheehan asked what is generally the percentage between PV arrays on the roof and arrays over the carports?<br>*K. Caddle indicated based on the magnitude of PV array needed for ZNE projects, the ratio is typically 30% roof and 70% carports.* |
| 4.4 | S. McPhee<br>V. Gooje | **Geo-Thermal System**<br>1. D. Sheehan asked when should the geo-thermal test well be performed? |

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Project: Stoneham High School Feasibility Study
Meeting Date: 10/26/20
Meeting No.: 4
Page No.: 3

| Item # | Action | Discussion |
|---|---|---|
| | | *K. Caddle indicated the test well should be performed in the Schematic Design phase*.<br>2. E. Wortman asked if the proximity of the wetlands will impact the decision to use geo-thermal wells?<br>*P. Cunningham indicated no*.<br>3. V. Gooje indicated with an EUI target of 25, geo-thermal wells are likely to be required.<br>4. S. McPhee indicated an elementary school in Long Island recently used a domestic water main heat exchange loop in lieu of geo-thermal wells, which saved significant costs. S. McPhee will forward the report on the school.<br>*V. Gooje will perform a quick calculation on the viability of this option*. |
| 4.5 | P. Cunningham<br>V. Gooje | **PSR Phase Deliverables**<br>1. P. Cunningham will forward the design options, including rhino model, to V. Gooje as they are developed to allow V. Gooje to commence working on the preliminary energy models, operational cost models and LCCA.<br>2. P. Cunningham to provide V. Gooje the construction cost information for each design option. |
| 4.6 | P. Cunningham | P. Cunningham indicated there will potentially be gas use in the kitchen and science rooms and he will provide direction as the project design progresses. |
| 4.7 | J. Seeley | J. Seeley to develop a ZNE decision timeline for the SSBC to use in deciding the final extent of ZNE in the Schematic Design Phase. |
| 4.8 | D. Sheehan | D. Sheehan to schedule a follow-up meeting in two weeks. |

The information herein reflects the understanding reached. Please contact the author if you have any questions or are not in agreement with these Project Minutes

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Project Management SMMA

# Project Minutes

| | | | |
|---|---|---|---|
| Project: | Stoneham High School Feasibility Study | Project No.: | 20033 |
| Prepared by: | Joel Seeley | Meeting Date: | 11/30/2020 |
| Re: | School Building Committee Meeting | Time: | 7:00pm |
| Location: | Remote Participation | Meeting No: | 14 |
| Distribution: | Attendees (MF) | | |

Attendees:

| PRESENT | NAME | AFFILIATION | VOTING MEMBER |
|---|---|---|---|
| Attended Remote | Marie Christie | Co-Chair, School Building Committee | **Voting Member** |
| Attended Remote | David Bois | Co-Chair, School Building Committee; Community Member with Architecture Experience | **Voting Member** |
| Attended Remote | Nicole Nial | School Committee Member | **Voting Member** |
| Attended Remote | Raymie Parker | Chair Select Board | **Voting Member** |
| | | Community Member with Building Commissioner Experience | **Voting Member** |
| Attended Remote | Douglas Gove | Community Member with Engineering Experience | **Voting Member** |
| Attended Remote | Stephen O'Neill | Community Member with Engineering Experience | **Voting Member** |
| Attended Remote | Josephine Thomson | Community Member | **Voting Member** |
| Attended Remote | Jeanne Craigie | Town Moderator | **Voting Member** |
| Attended Remote | Lisa Gallagher | Community Member, School Secretary, Past member of Middle School Building Committee | **Voting Member** |
| Attended Remote | Sharon Iovanni | Community Member | **Voting Member** |
| Attended Remote | Cory Mashburn | Community Member, Finance and Advisory Board | **Voting Member** |
| Attended Remote | Paul Ryder | Community Member with Construction Experience | **Voting Member** |
| Attended Remote | David Pignone | Athletic Director, Member knowledgeable in educational mission and function of facility | **Voting Member** |
| Attended Remote | Kevin Yianacopolus | Local Official responsible for Building Maintenance | **Voting Member** |
| Attended Remote | Dennis Sheehan | Town Administrator / MCPPO Certified | Non-Voting Member |
| Attended Remote | John Macero | Superintendent of Schools, Secretary of School Building Committee | Non-Voting Member |
| Attended Remote | Bryan Lombardi | Stoneham High School Principal | Non-Voting Member |
| Attended Remote | Brian McNeil | Facilities Director | Non-Voting Member |
| Attended Remote | Brooke Trivas | Perkins and Will | |
| Attended Remote | Patrick Cunningham | Perkins and Will | |
| Attended Remote | Leo Liu | Perkins and Will | |
| Attended Remote | David Warner | Warner Larson | |
| Attended Remote | Joel Seeley | SMMA | |
| | | | |

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Project: Stoneham High School Feasibility Study
Meeting Date: 11/30/20
Meeting No.: 14
Page No.: 2

| Item # | Action | Discussion |
|---|---|---|
| 14.1 | Record | Call to Order, 7:00 PM, meeting opened by roll call. |
| 14.2 | Record | In accordance with the executive order issued by the Governor on March 10, 2020, this meeting will be held via video conference and a recording of such will be posted on the Town's website. |
| 14.3 | Record | A motion was made by N. Nial and seconded by S. Iovanni to approve the 11/9/20 School Building Committee meeting minutes. No discussion, motion passed unanimous by roll call vote. |
| 14.4 | J. Macero | J. Macero to review if there is a Pre-K Guideline that the proposed Pre-K program can be compared to. *(from prior meeting)* |
| 14.5 | J. Macero | J. Macero to review and provide direction on how close the middle school is to capacity and if it will need the space for the potential District Offices in the future? *(from prior meeting)* |
| 14.6 | B. Trivas | B. Trivas to determine the cost impact of relocating the Football/Track complex versus keeping the Football/Track complex in its current location. *(from prior meeting)* |
| 14.7 | B. Trivas | B. Trivas to calculate the amount of parking spaces needed to be dedicated for the PreK parents to park and walk their children into the building. *(from prior meeting)* |
| 14.8 | D. Warner | D. Warner to review the Zoning Bylaw for the minimum required amount of parking spaces. *(from prior meeting)* |
| 14.9 | J. Seeley | J. Seeley to break out the costs in a series of categories: Base High School Project followed by a listing of the Community Related Enhancements such as the synthetic playfields, concession/locker room building, traffic signals, PreK Program, District Offices, Larger Auditorium, Larger Gymnasium, District Kitchen. *(from prior meeting)* |
| 14.10 | P. Cunningham<br>B. Trivas<br>D. Warner | P. Cunningham presented and reviewed Site Plans, Floor Plans, Building Sections and Massing Studies for New Construction Option 4B, and refinements to Options 2A, 3A and 4A, attached.<br><br>Committee Discussion:<br><br>1. B. Trivas reviewed the 11/15/20 Athletic Interior and Exterior Program meeting minutes, attached.<br><br>2. D. Pignone indicated he would like to see the gymnasium relocated to the wing and the auditorium relocated to the building.<br><br>3. J. Macero indicated concern with public and scenery access to the auditorium if it is embedded within the building.<br>*P. Cunningham indicated public access could be off main street*. |

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Project: Stoneham High School Feasibility Study
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| Item # | Action | Discussion |
|---|---|---|
| | | 4. J. Craigie asked if both the gymnasium and auditorium could be located in the wing?<br>*P. Cunningham indicated the site grading is limiting the amount of building that can be placed in the wing*.<br><br>5. N. Nial asked how close is the access to the playfields from the gymnasium, if located in the wing or embedded in the building?<br>*B. Trivas indicated access to the playfields would be more direct from the wing*.<br><br>6. D. Bois indicated Option 4B has the best parking and playfield layout, most compact building footprint, least amount of construction impact and nicest entry sequence of all the options reviewed so far.<br><br>7. D. Bois indicated he preferred the gymnasium in the wing, as it provides the most direct public access.<br>*B. Trivas will develop an option with the gymnasium in the wing and send to the Committee for review by 12/2/20*.<br><br>8. J. Thomson asked how close is the building to the neighboring residences to the east?<br>*P. Cunningham indicated the building is angled away from the residences providing a significant buffer between*.<br><br>9. J. Thomson asked if an outdoor amphitheater can be located on the site?<br>*D. Warner indicated he will review, there are several possible locations*.<br><br>10. J. Macero asked if the PSR phase was moving too fast, there are many decisions to make?<br>*D. Bois indicated shifting the fields, adding an amphitheater can be done in the Schematic Design Phase. The location of major building elements, such as the gymnasium and auditorium, should occur in the PSR phase*.<br><br>11. P. Ryder expressed concern with the basketball court adjacent to the neighboring residences.<br><br>12. P. Ryder asked if a community garden can be located on the site?<br>*D. Warner will review and provide direction*.<br><br>13. J. Craigie asked if the outdoor basketball court is required for PE instruction?<br>*D. Pignone indicated no, the basketball court was for community use*.<br><br>14. M. Christie asked how far is the PreK parking lot from the PreK building entrance? |

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Project: Stoneham High School Feasibility Study
Meeting Date: 11/30/20
Meeting No.: 14
Page No.: 4

| Item # | Action | Discussion |
|---|---|---|
| | | *P. Cunningham indicated the PreK building entry is about 100 -150 feet away and he will review shifting the entry closer to the parking lot*.<br>15. M. Christie asked if a fence will be provided behind the building along the east property line at the steep slope?<br>D. *Warner indicated yes, a fence will be provided along the slope*.<br>16. D. Sheehan asked if the synthetic soccer field located adjacent to the building is an appropriate location for a synthetic field?<br>*D. Warner indicated the field could be natural, but there was a request for three synthetic fields*. *D. Pignone indicated the field would be used for soccer in the fall and lacrosse in the spring.*<br>17. N. Nial asked if construction and maintenance costs can be provided comparing synthetic and natural turf fields?<br>*D. Warner indicated yes and will provide for the next Committee meeting*.<br>18. J. Craigie asked if the gymnasium and auditorium can be located on each side of the building entry?<br>*P. Cunningham will review and provide direction*.<br>19. S. Iovanni asked how successful is Option 4B in meeting the educational program goals?<br>*B. Lombardi indicated use of the natural light is good, he was not concerned with having the gymnasium embedded in the building, but understands public access would be improved if located on the wing, he supports outdoor learning spaces and an amphitheater, and is concerned over who will maintain a community garden*.<br>20. D. Sheehan asked if the gymnasium and auditorium location needs to be decided in the PSR phase?<br>*B. Trivas indicated yes*.<br>21. R. Parker asked if Option 4B supports the ZNE goals and PV requirements?<br>*P. Cunningham indicated yes, thru the parking lot layout and building orientation, though the classrooms along the east and west facades will need solar glare control in the mornings and afternoons.*<br>The Committee gave the following direction: 1) develop an option with the Gymnasium in the wing and the auditorium in the building, 2) reposition the PreK building entry and PreK parking lot to be closer, 3) add a community garden, 4) add an outdoor amphitheater, 5) remove the basketball court and half-size playfield if needed. |

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Project: Stoneham High School Feasibility Study
Meeting Date: 11/30/20
Meeting No.: 14
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| Item # | Action | Discussion |
|---|---|---|
| 14.11 | Committee | B. Trivas reviewed the Options Evaluation Form, listing the compliance factors, attached. The Committee to review and email J. Seeley any modifications or additional factors to be used in evaluating each option. |
| 14.12 | Record | B. Trivas reviewed the 11/22/20 PSR Regulatory Review Meeting minutes, attached. |
| 14.13 | PR Subcommittee<br>D. Sheehan | J. Seeley reviewed the Community-Wide Survey No. 1 Results, attached. The PR Subcommittee will be reviewing the Town policies related to creating a Project Facebook page with D. Sheehan. |
| 14.14 | Record | J. Seeley reviewed the District's Response to the MSBA Comments on the PDP Submission, attached. J. Macero asked for Committee direction if the District Offices should be part of the project.<br>Committee Discussion:<br>1. J. Craigie asked if District Offices in other communities, are located in their schools?<br>*L. Gallagher indicated in the surrounding communities, the District Offices range from being in town offices, to schools to separate buildings*.<br>2. J. Craigie indicated she believes the District Offices should be located in the high school.<br>3. D. Bois indicated the location of the offices in the building needs to be reviewed to allow for direct public access.<br>4. D. Bois indicated there will be a cost whether the District Offices are relocated to another location or built in the project.<br>5. R. Parker indicated the District Offices should be in the high school.<br>6. L. Gallagher indicated she did not believe the District Offices could fit in the Middle School and believes they should be located in the high school.<br>After discussion, the consensus of the Committee was to have the District Offices located in the high school. D. Bois indicated the Committee should have a clear outline on why the Committee decided to build the District Offices in the project. |
| 14.15 | PR Subcommittee | **Subcommittee Updates**<br>**Public Relations Subcommittee**<br>1. S. Iovanni reviewed the 11/17/20 PR Subcommittee Meeting minutes, attached, and the Community-Wide Survey No. 1A, which was included in the Council on Aging Newsletter mailing and will be distributed at the Senior Holiday Lunch, the results of which will be reviewed at the 12/16/20 SSBC Meeting. |

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| Item # | Action | Discussion |
|---|---|---|
| | | **Green Building Initiatives**<br>1. J. Seeley indicated the Green Building Initiatives committee met on 11/23/20 in preparation for their ZNA presentation to the Committee at the 12/7/20 meeting.<br>**CM at Risk Prequalification Committee**<br>1. J. Seeley indicated the CM at Risk Prequalification Committee held the Informational Meeting on 11/18/20 and the CM Qualification packages are due on 12/2/20. |
| 14.16 | Record | **Committee Questions** - none |
| 14.17 | Record | **Old or New Business** - none |
| 14.18 | Record | **Public Comment** - none |
| 14.19 | Record | Next **SSBC Meeting: December 7, 2020 at 7:00 pm.** |
| 14.20 | Record | A Motion was made by S. Iovanni and seconded by R. Parker to adjourn the meeting. No discussion, motion passed unanimous by roll call vote. |

Attachments: Agenda, 11/22/20 PSR Regulatory Review Meeting Minutes, Community-Wide Survey No. 1 Results, District's Response to the MSBA Comments on the PDP Submission, 11/17/20 PR Subcommittee Meeting Minutes, Community-Wide Survey No. 1A, Powerpoint

The information herein reflects the understanding reached. Please contact the author if you have any questions or are not in agreement with these Project Minutes

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# Agenda

| | | | |
|---|---|---|---|
| Project: | Stoneham High School Feasibility Study | Project No.: | 20033 |
| Re: | School Building Committee Meeting | Meeting Date: | 11/30/2020 |
| Prepared by: | Joel Seeley | Meeting Time: | 7:00 PM |
| Location: | Remote Participation | | |
| Distribution: | Attendees (MF) | | |

1. Call to Order
2. Approval of Minutes
3. Approval of Invoices and Commitments
4. Schedule and Budget Update
5. Design Options and Phasing Update, Recap All Options
6. Community-Wide Survey No. 1 Findings
7. Response to MSBA PDP Comments
8. Subcommittee Updates
9. New or Old Business
10. Committee Questions
11. Public Comments
12. Next Meeting: December 7, 2020
13. Adjourn

**Join GoToMeeting:**
https://global.gotomeeting.com/join/567470005

**Dial-In:** +1 (786) 535-3211
**Access Code:** 567-470-005

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# STONEHAM HIGH SCHOOL
# Building Committee Meeting

11.30.2020

## AGENDA

**Design Options Update**
- Option 4B – New Construction

**Design Options Recap**
- Option 2A – Renovation Only
- Option 3A – Renovation Addition
- Option 4A – New Construction

**Review Matrix for Decision-Making**



→ Aerial View of Stoneham High School

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# Design Options Update

Building Committee Meeting

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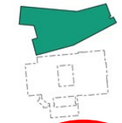
## Design Options Summary

| CODE UPGRADE | RENOVATION | RENOVATION ADDITION | NEW CONSTRUCTION |
|---|---|---|---|
| *Option 1A* ☑ | *Option 2A* ☑ | *Option 3A* ☑ | *Option 4A* ☑ |
| • *NO Educational upgrades*<br>• *Code Upgrades*<br>• *System Upgrades*<br>• *Exterior Envelope Repairs*<br>• *Interior Repairs*<br>• *No Sitework* |  |  |  *Option 4B*  |

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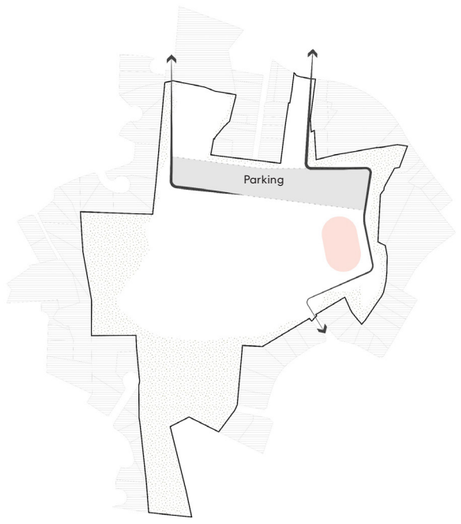
# Option 4B – New Construction

Building Committee Meeting

## Option 4B - Site Concept

Consolidate & extend parking along northern edge of site.

- Evenly distributed access east-west
- Set up for PV
- Utilize Benjamin Terrace for Emergency Access

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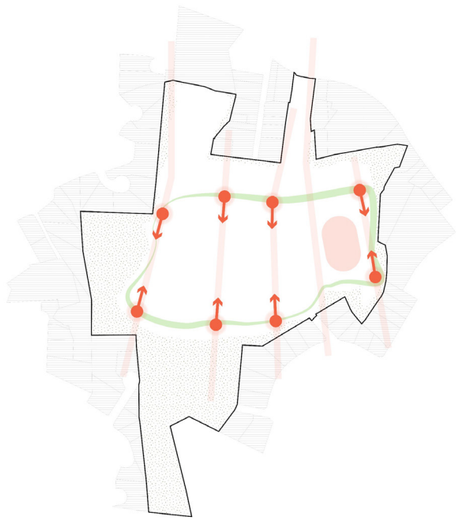
## Option 4B - Site Concept

Pedestrian access and outdoor classrooms are organized at the perimeter of the site, creating a loop that doubles as a nature walk and site hydrology system.

The loop becomes a wider focal promenade where it abuts parking, bringing students and spectators to the school and athletics.

This green promenade becomes the true threshold & mitigates views of the parking lot.



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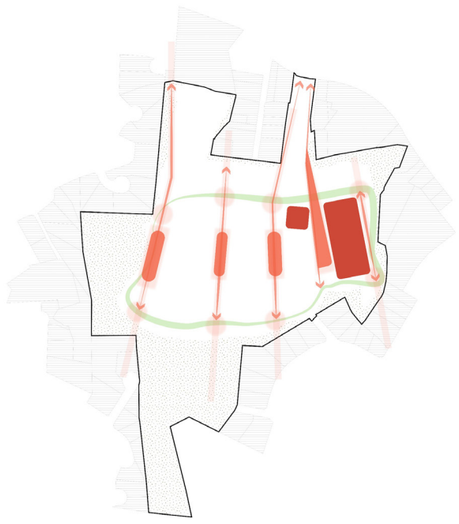
## Option 4B - Site Concept

Efficient North-South paths bring pedestrians deeper into the site, while also serving as emergency access paths.

Spartan Place is on central Franklin Street entrance axis and moves through the building.



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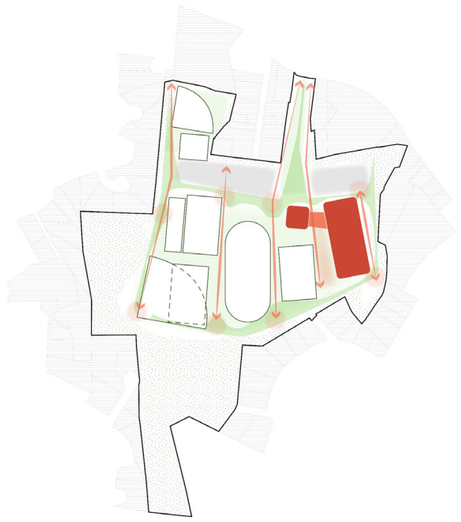
## Option 4B - Site Concept

Stadium and Arts anchor the center of the site.



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## Option 4B - Site Plan

**PROGRAM**

1 - TENNIS (5 Courts)
2 - SOFTBALL
3 - BASEBALL
4 - SOCCER
5 - TRACK
6 - WETLAND
7 - PARKING
8 - HALF SIZED FIELD
9 - FOOTBALL
10 - FIELD HOCKEY
11 - PICKLEBALL
12 - BASKETBALL
13 - ATHLETIC BUILDING
14 - PREK PLAY
15 - SPARTAN PLAZA
16 - HOME BLEACHERS
17 - VISITOR BLEACHERS
18 - LANDSCAPE PATH
19 - OUTDOOR CLASSROOMS
20 - COMMUNITY GARDEN

**CIRCULATION**

- VEHICULAR DRIVE
- LIMITED ACCESS: EMERGENCY, MAINTENANCE, BICYCLES
- SERVICE DRIVE
- BIKE LANE
- ACCESSIBLE PEDESTRIAN PATH
- HIKING TRAIL (NOT ADA ACCESSIBLE)
- LANDSCAPE PEDESTRIAN PATH W/ EMERGENCY VEHICLE ACCESS ABILITY
- NATURE WALK & HYDROLOGY LOOP

**KEY ENTRANCES**

- HS MAIN ENTRY
- PRE-K MAIN ENTRY
- LOADING

**FIELD MATERIAL**

- GRASS
- SYNTHETIC TURF




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## Option 4B – Alternate Site Plan

Stadium maintains existing position

**PROGRAM**

1 - TENNIS (5 Courts)
2 - SOFTBALL
3 - BASEBALL
4 - SOCCER
5 - TRACK
6 - WETLAND
7 - PARKING
8 - HALF SIZED FIELD
9 - FOOTBALL
10 - FIELD HOCKEY
11 - PICKLEBALL
12 - BASKETBALL
13 - ATHLETIC BUILDING
14 - PREK PLAY
15 - SPARTAN PLAZA
16 - HOME BLEACHERS
17 - VISITOR BLEACHERS
18 - LANDSCAPE PATH
19 - OUTDOOR CLASSROOMS

**CIRCULATION**

- VEHICULAR DRIVE
- LIMITED ACCESS: EMERGENCY, MAINTENANCE, BICYCLES
- SERVICE DRIVE
- BIKE LANE
- ACCESSIBLE PEDESTRIAN PATH
- HIKING TRAIL (NOT ADA ACCESSIBLE)
- LANDSCAPE PEDESTRIAN PATH W/ EMERGENCY VEHICLE ACCESS ABILITY
- NATURE WALK & HYDROLOGY LOOP

**KEY ENTRANCES**

- HS MAIN ENTRY
- PRE-K MAIN ENTRY
- LOADING

**FIELD MATERIAL**

- GRASS
- SYNTHETIC TURF




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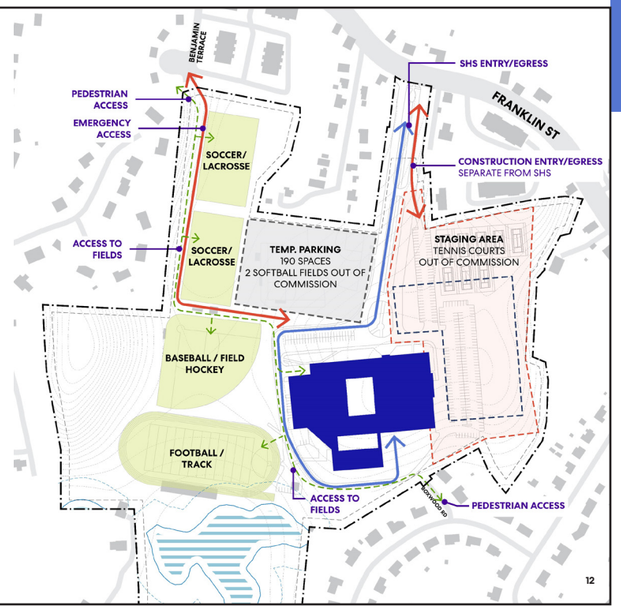
## Option 4B – Construction Phasing

Fields out of Commission:

- (8) Tennis Courts
- (2) Softball Fields

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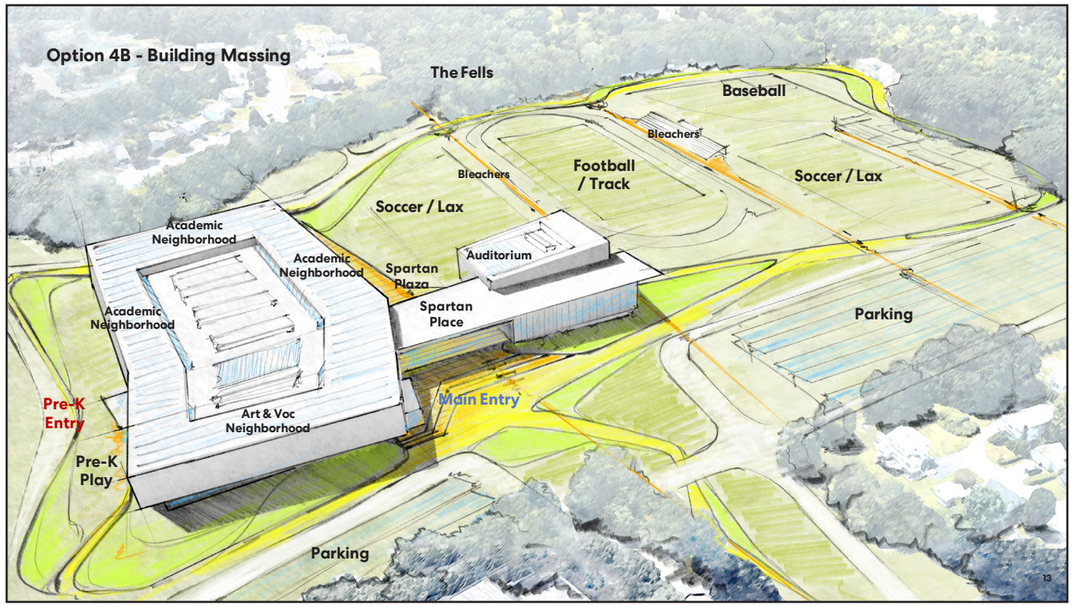



## Option 4B - Floor Plan / Level 01

**CORE ACADEMIC**
1/ CLASSROOM
2/ SPED
3/ SCIENCE
4/ TEACHER PLANNING

BREAK OUT SPACE

**ART & MUSIC**
5/ AUDITORIUM
6/ STAGE
7/ BAND
8/ PRACTICE
9/ THEATER
10/ ART CLASSROOM

**VOC & TECH**
11/ PERFORMANCE
12/ CULINARY
13/ VIDEO PRODUCTION
14/ BIOMEDICAL
15/ ENGINEERING
16/ MAKER SPACE

**DINING**
21/ CAFETERIA
22/ KITCHEN

**MEDIA CENTER**
20a/ OPEN MEDIA
20b/ CLOSED MEDIA

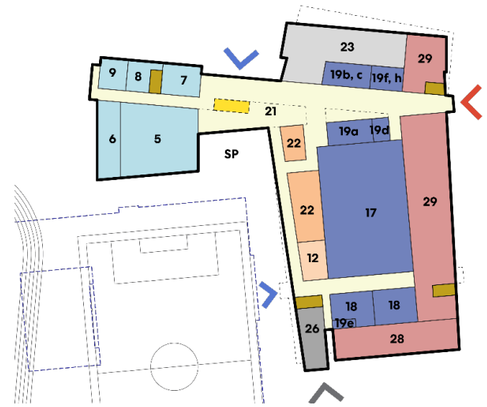
**HEALTH & PE**
17/ GYMNASIUM
18/ PE & LOCKERS
19/ ATHLETICS
a – ALT PE
b – ATHL. OFFICES
c – TRAINER
d – PE STORAGE
e – COACH SHOWERS
f – EQUIPMENT ROOM
g – GYMNASTICS STOR.
h – ATHLETICS STOR.

**ADMIN**
23/ ADMIN

**SUPPORT**
24/ CUSTODIAL
25/ MECHANICAL
26/ LOADING
27/ RESTROOMS

**OTHER**
28/ DISTRICT OFFICE
29/ PRE-K

**CIRCULATION**
**OPEN STAIR**
**CLOSED STAIR**

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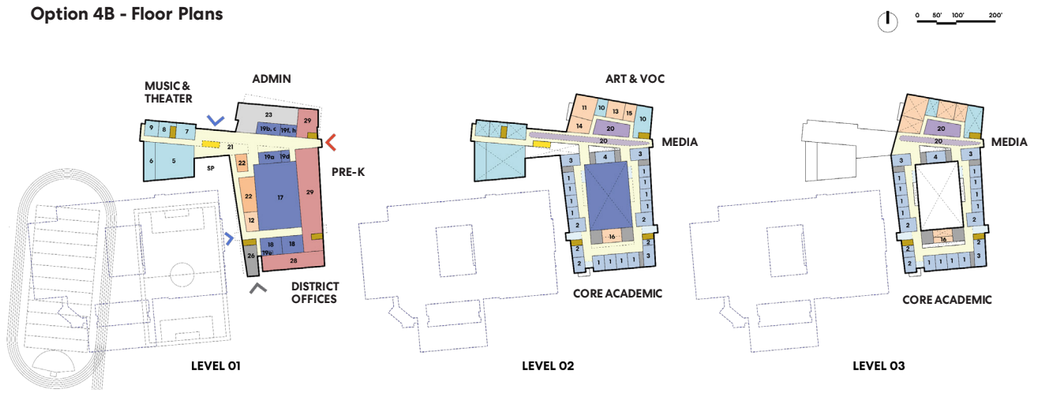
## Option 4B - Floor Plans




**CORE ACADEMIC**
1/ CLASSROOM
2/ SPED
3/ SCIENCE
4/ TEACHER PLANNING

BREAK OUT SPACE

**ART & MUSIC**
5/ AUDITORIUM
6/ STAGE
7/ BAND
8/ PRACTICE
9/ THEATER
10/ ART CLASSROOM

**VOC & TECH**
11/ PERFORMANCE
12/ CULINARY
13/ VIDEO PRODUCTION
14/ BIOMEDICAL
15/ ENGINEERING
16/ MAKER SPACE

**HEALTH & PE**
17/ GYMNASIUM
18/ LOCKERS
SB/STADIUM BLEACHERS
AF/ATHLETIC FIELDS
19/ ATHLETICS
a – ALT PE
b – ATHL. OFFICES
c – TRAINER
d – PE STORAGE
e – COACH SHOWERS
f – EQUIPMENT ROOM
g – GYMNASTICS STOR.
h – ATHLETICS STOR.

**MEDIA CENTER**
20a/ OPEN MEDIA
20b/ CLOSED MEDIA

**DINING**
21/ CAFETERIA
22/ KITCHEN
SP/ SPARTAN PLAZA

**ADMIN**
23/ ADMIN

**SUPPORT**
24/ CUSTODIAL
25/ MECHANICAL
26/ LOADING
27/ RESTROOMS

**OTHER**
28/ DISTRICT OFFICE
29/ PRE-K

**CIRCULATION**
**OPEN STAIR**
**CLOSED EGRESS STAIR**

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## Option 4B - Floor Plan / Level 02

**CORE ACADEMIC**
1/ CLASSROOM
2/ SPED
3/ SCIENCE
4/ TEACHER PLANNING

BREAK OUT SPACE

**ART & MUSIC**
5/ AUDITORIUM
6/ STAGE
7/ BAND
8/ PRACTICE
9/ THEATER
10/ ART CLASSROOM

**VOC & TECH**
11/ PERFORMANCE
12/ CULINARY
13/ VIDEO PRODUCTION
14/ BIOMEDICAL
15/ ENGINEERING
16/ MAKER SPACE

**DINING**
21/ CAFETERIA
22/ KITCHEN

**MEDIA CENTER**
20a/ OPEN MEDIA
20b/ CLOSED MEDIA

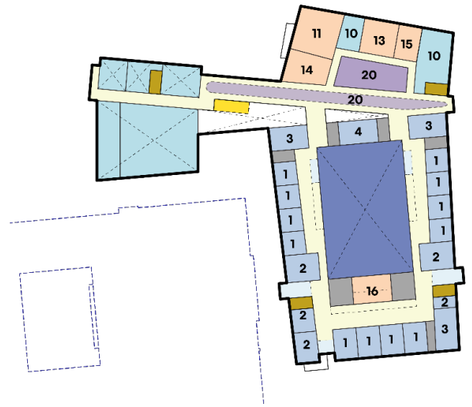
**HEALTH & PE**
17/ GYMNASIUM
18/ PE & LOCKERS
19/ ATHLETICS
a – ALT PE
b – ATHL. OFFICES
c – TRAINER
d – PE STORAGE
e – COACH SHOWERS
f – EQUIPMENT ROOM
g – GYMNASTICS STOR.
h – ATHLETICS STOR.

**ADMIN**
23/ ADMIN

**SUPPORT**
24/ CUSTODIAL
25/ MECHANICAL
26/ LOADING
27/ RESTROOMS

**OTHER**
28/ DISTRICT OFFICE
29/ PRE-K

**CIRCULATION**
**OPEN STAIR**
**CLOSED STAIR**

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## Option 4B - Floor Plan / Level 03

**CORE ACADEMIC**
1/ CLASSROOM
2/ SPED
3/ SCIENCE
4/ TEACHER PLANNING

BREAK OUT SPACE

**ART & MUSIC**
5/ AUDITORIUM
6/ STAGE
7/ BAND
8/ PRACTICE
9/ THEATER
10/ ART CLASSROOM

**VOC & TECH**
11/ PERFORMANCE
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**MEDIA CENTER**
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**HEALTH & PE**
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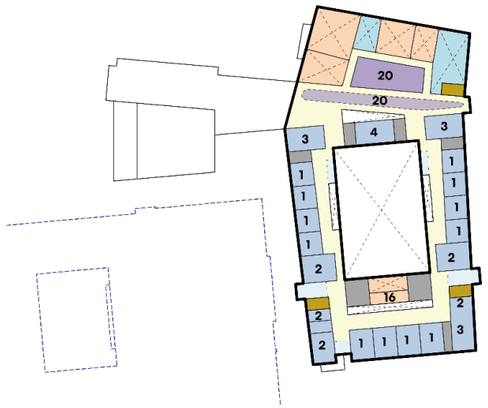
f – EQUIPMENT ROOM
g – GYMNASTICS STOR.
h – ATHLETICS STOR.

**ADMIN**
23/ ADMIN

**SUPPORT**
24/ CUSTODIAL
25/ MECHANICAL
26/ LOADING
27/ RESTROOMS

**OTHER**
28/ DISTRICT OFFICE
29/ PRE-K

**CIRCULATION**
**OPEN STAIR**
**CLOSED STAIR**

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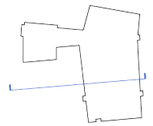
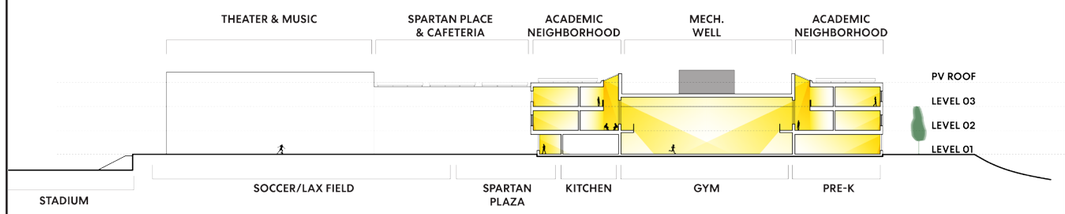
## Option 4B - Section / Daylight Strategy



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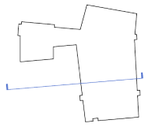
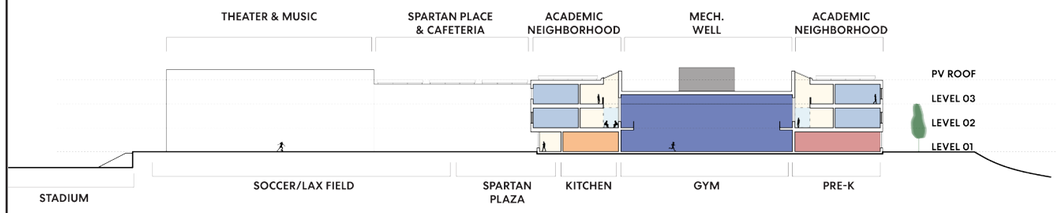
## Option 4B - Section / Through Academic Bar






**CORE ACADEMIC**
1/ CLASSROOM
2/ SPED
3/ SCIENCE
4/ TEACHER PLANNING

BREAK OUT SPACE

**ART & MUSIC**
5/ AUDITORIUM
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**OTHER**
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29/ PRE-K

**CIRCULATION**
**OPEN STAIR**
**CLOSED EGRESS STAIR**

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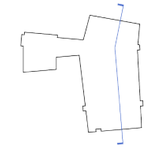
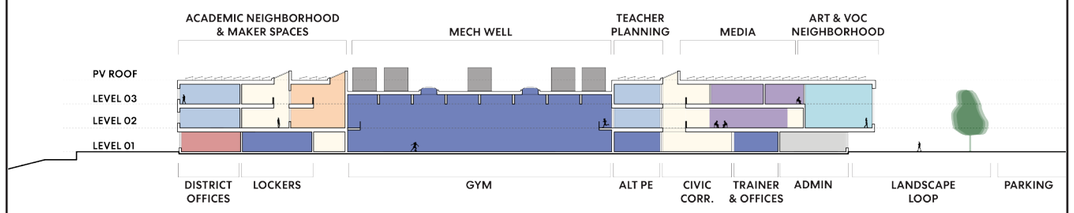
## Option 4B - Section / North-South






**CORE ACADEMIC**
1/ CLASSROOM
2/ SPED
3/ SCIENCE
4/ TEACHER PLANNING

BREAK OUT SPACE

**ART & MUSIC**
5/ AUDITORIUM
6/ STAGE
7/ BAND
8/ PRACTICE
9/ THEATER
10/ ART CLASSROOM

**VOC & TECH**
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12/ CULINARY
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14/ BIOMEDICAL
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16/ MAKER SPACE

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18/ PE & LOCKERS

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h – ATHLETICS STOR.

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22/ KITCHEN

SP/ SPARTAN PLAZA

**ADMIN**
23/ ADMIN

**SUPPORT**
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26/ LOADING
27/ RESTROOMS

**OTHER**
28/ DISTRICT OFFICE
29/ PRE-K

**CIRCULATION**
**OPEN STAIR**
**CLOSED EGRESS STAIR**

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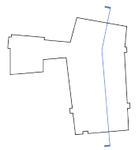
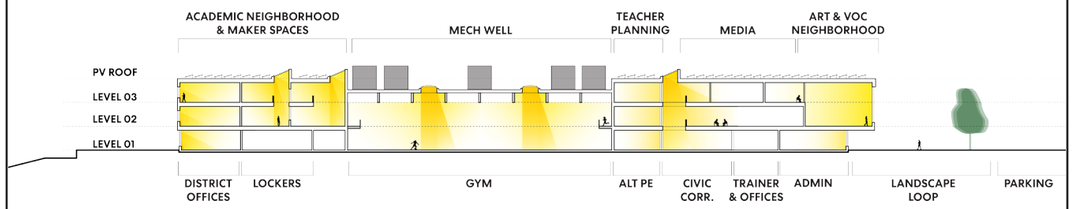
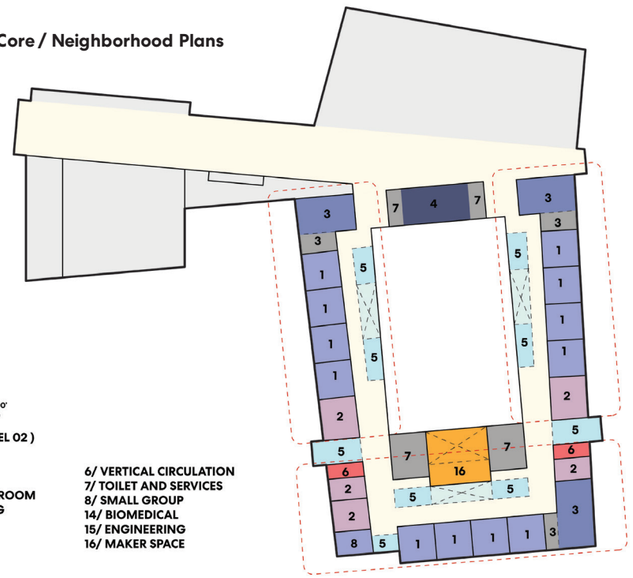
## Option 4B - Section / North-South








## Option 4B - Academic Core / Neighborhood Plans




**CORE ACADEMIC ( LEVEL 02 )**

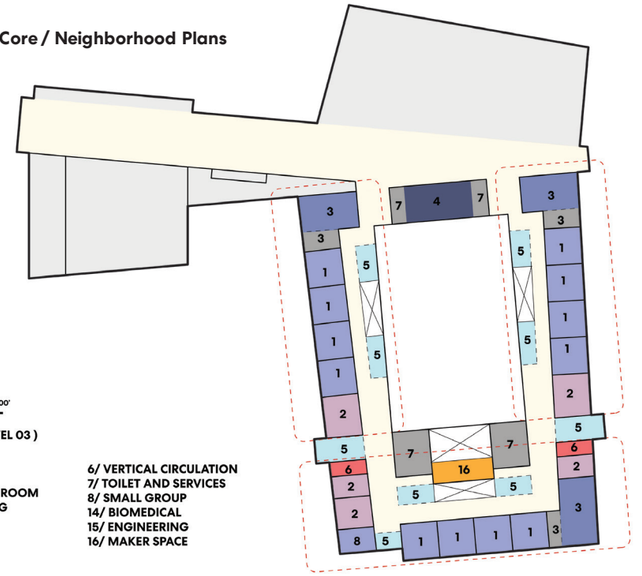
1/ CLASSROOM
2/ SPED
3/ SCIENCE AND PREP ROOM
4/ TEACHER PLANNING
5/ BREAKOUT SPACE

6/ VERTICAL CIRCULATION
7/ TOILET AND SERVICES
8/ SMALL GROUP
14/ BIOMEDICAL
15/ ENGINEERING
16/ MAKER SPACE





## Option 4B - Academic Core / Neighborhood Plans



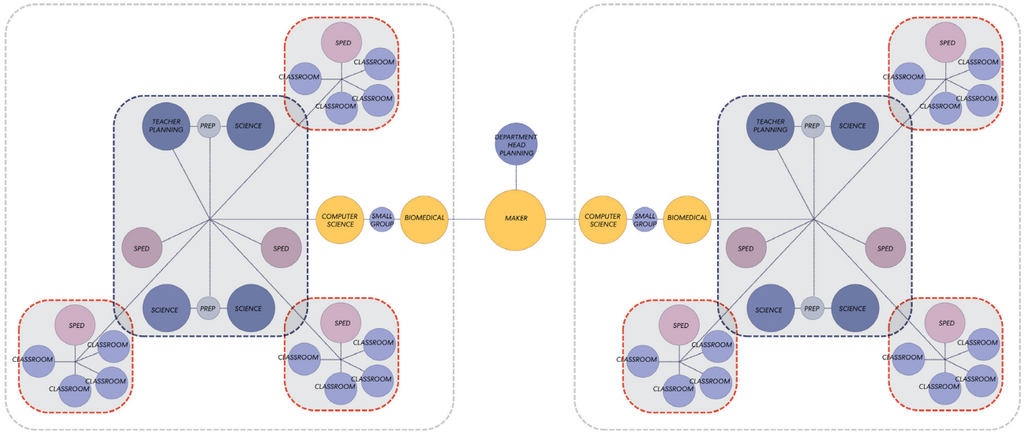

**CORE ACADEMIC ( LEVEL 03 )**

1/ CLASSROOM
2/ SPED
3/ SCIENCE AND PREP ROOM
4/ TEACHER PLANNING
5/ BREAKOUT SPACE

6/ VERTICAL CIRCULATION
7/ TOILET AND SERVICES
8/ SMALL GROUP
14/ BIOMEDICAL
15/ ENGINEERING
16/ MAKER SPACE



## Option 4B - Academic Core / Neighborhood Structure




NEIGHBORHOOD A

NEIGHBORHOOD B





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## Option 4B – Embedding the Gym vs the Auditorium

The Gym can be a transparent center for the academic neighborhoods.

The Auditorium's smaller footprint allows more space for the green pedestrian loop north of the building and for Spartan Plaza on the south.

The Auditorium & Stadium at the center of the site emphasize Stoneham's commitment to both Athletics and the Arts.

The Auditorium is easily accessible by the public for after-school-hours events.




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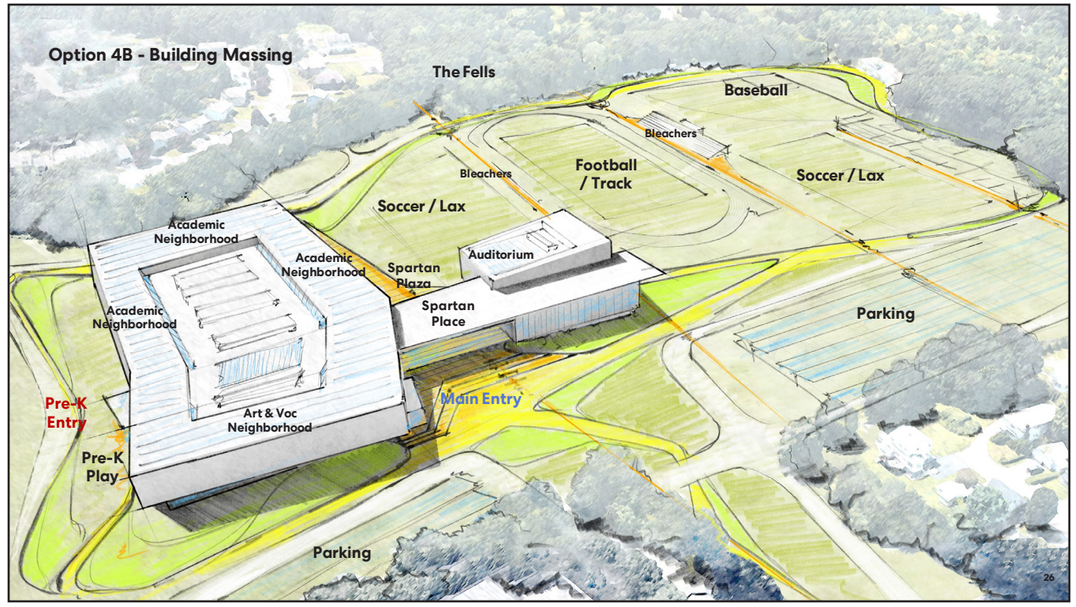


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# Design Options Recap

Building Committee Meeting

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PREFERRED SOLUTION 3.3.4
LOCAL ACTIONS & APPROVALS 3.3.5
APPENDICES

## Design Options Summary

| CODE UPGRADE | RENOVATION | RENOVATION ADDITION | NEW CONSTRUCTION |
|---|---|---|---|
| *Option 1A* ☑<br>• *NO Educational upgrades*<br>• *Code Upgrades*<br>• *System Upgrades*<br>• *Exterior Envelope Repairs*<br>• *Interior Repairs*<br>• *No Sitework* | *Option 2A* ☑ | *Option 3A* ☑ | *Option 4A* ☑<br>*Option 4B* ☑ |

Perkins&Will | SMMA Project Management

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# Option 2A – Renovation Only

Recap

## Option 2A – Site Plan

**PROGRAM**

1 - TENNIS (5 Courts)
2 - SOFTBALL
3 - BASEBALL
4 - SOCCER
5 - TRACK
6 - WETLAND
7 - PARKING
8 - HALF SIZED FIELD
9 - FOOTBALL
10 - FIELD HOCKEY
11 - PICKLEBALL
12 - BASKETBALL
13 - ATHLETIC BUILDING
14 - PREK PLAY
15 - SPARTAN PLAZA
16 - HOME BLEACHERS
17 - PORTABLE VISITOR BLEACHERS

**CIRCULATION**

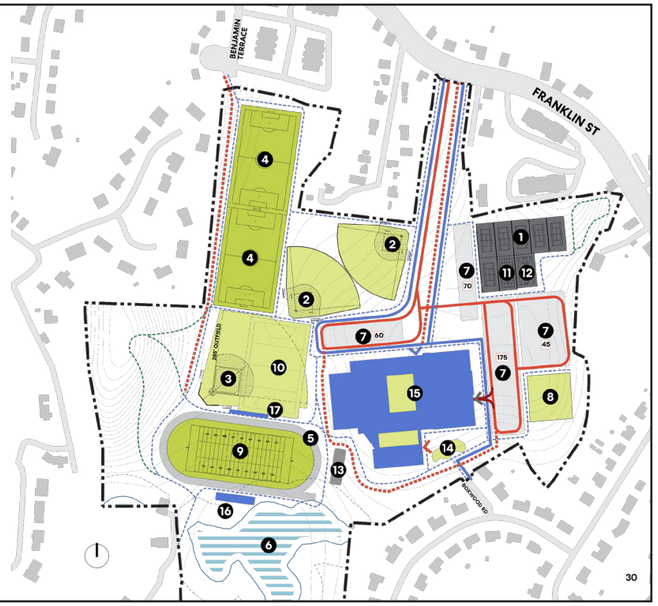
- VEHICULAR DRIVE
- LIMITED ACCESS: EMERGENCY, MAINTENANCE, BICYCLES
- SERVICE DRIVE
- BIKE LANE
- ACCESSIBLE PEDESTRIAN PATH
- HIKING TRAIL (NOT ADA ACCESSIBLE)

**KEY ENTRANCES**

- HS MAIN ENTRY
- PRE-K MAIN ENTRY
- LOADING

**FIELD MATERIAL**

- GRASS
- SYNTHETIC TURF

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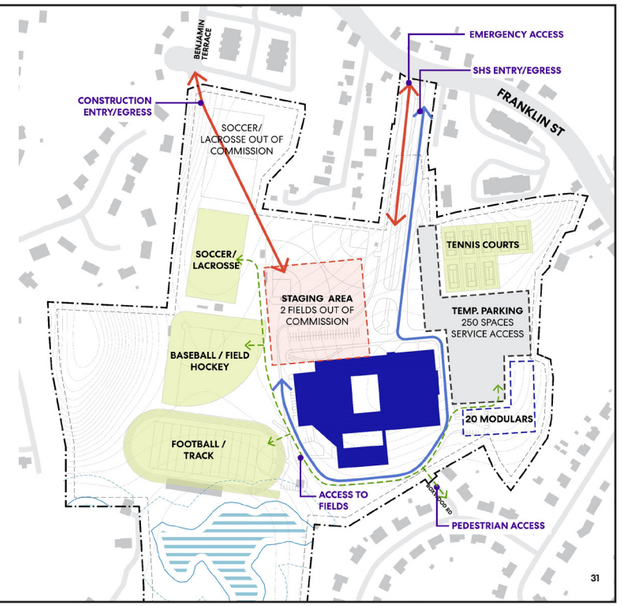
## Option 2A – Construction Phasing

Fields out of Commission:

- (8) Tennis Courts
- (2) Softball Fields

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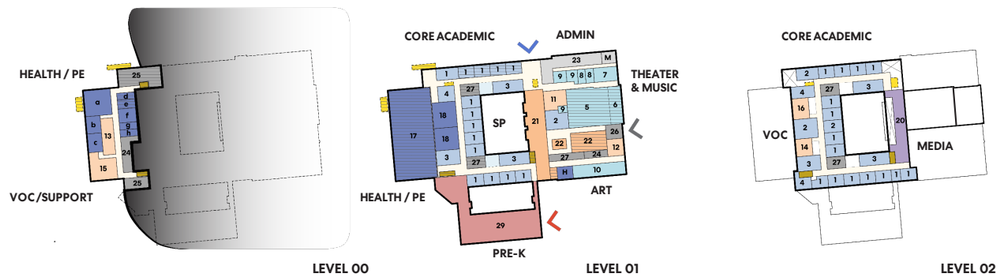
## Option 2A - Floor Plans

District Offices do Not Fit




- CORE ACADEMIC: 1/ CLASSROOM; 2/ SPED; 3/ SCIENCE; 4/ TEACHER PLANNING; BREAK OUT SPACE
- ART & MUSIC: 5/ AUDITORIUM; 6/ STAGE; 7/ BAND; 8/ PRACTICE; 9/ THEATER; 10/ ART CLASSROOM
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- MEDIA CENTER: 20a/ OPEN MEDIA; 20b/ CLOSED MEDIA
- DINING: 21/ CAFETERIA; 22/ KITCHEN; SP/ SPARTAN PLAZA
- ADMIN: 23/ ADMIN
- SUPPORT: 24/ CUSTODIAL; 25/ MECHANICAL; 26/ LOADING; 27/ RESTROOMS
- OTHER: 28/ DISTRICT OFFICE; 29/ PRE-K
- CIRCULATION
- OPEN STAIR
- CLOSED EGRESS STAIR

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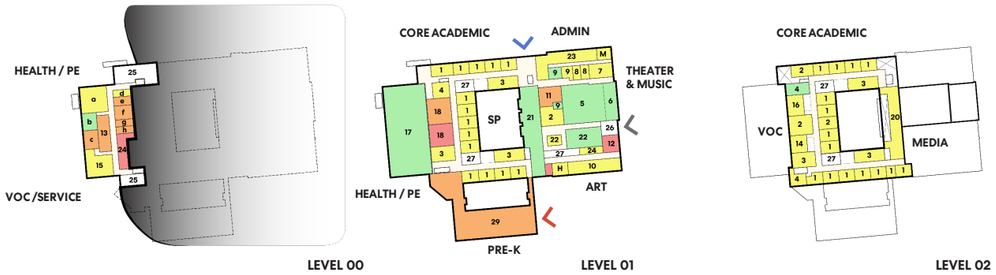
## Option 2A – MSBA Space Summary Analysis

District Offices do Not Fit




- Greater than MSBA Guideline
- Meets MSBA Guideline
- Less than MSBA Guideline
- Proposed variation from MSBA Guideline



## Option 3A – Site Plan

**PROGRAM**

1 - TENNIS (5 Courts)
2 - SOFTBALL
3 - BASEBALL
4 - SOCCER
5 - TRACK
6 - WETLAND
7 - PARKING
8 - PRACTICE FIELD
9 - FOOTBALL
10 - FIELD HOCKEY
11 - PICKLEBALL
12 - BASKETBALL
13 - ATHLETIC BUILDING
14 - PREK PLAY
15 - SPARTAN PLAZA
16 - HOME BLEACHERS
17 - PORTABLE VISITOR BLEACHERS
19 - OUTDOOR CLASSROOMS

**CIRCULATION**

- VEHICULAR DRIVE
- LIMITED ACCESS: EMERGENCY, MAINTENANCE, BICYCLES
- SERVICE DRIVE
- BIKE LANE
- ACCESSIBLE PEDESTRIAN PATH
- HIKING TRAIL (NOT ADA ACCESSIBLE)

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- HS MAIN ENTRY
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- LOADING

**FIELD MATERIAL**

- GRASS
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Perkins&Will

# Option 3A – Renovation Addition

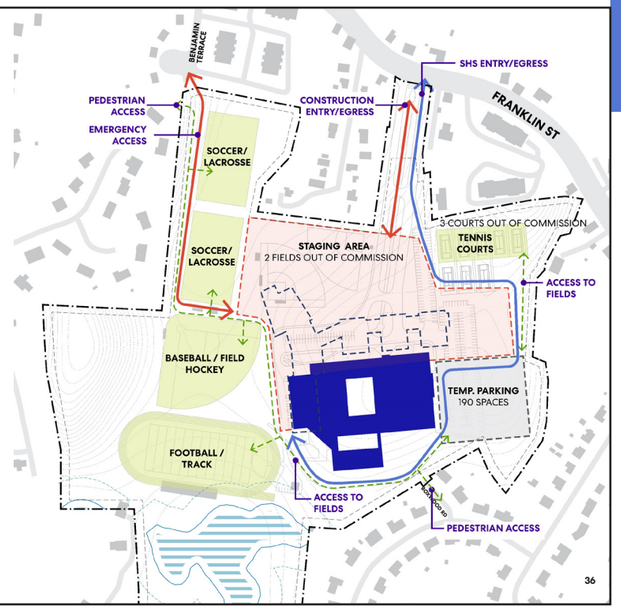
Recap



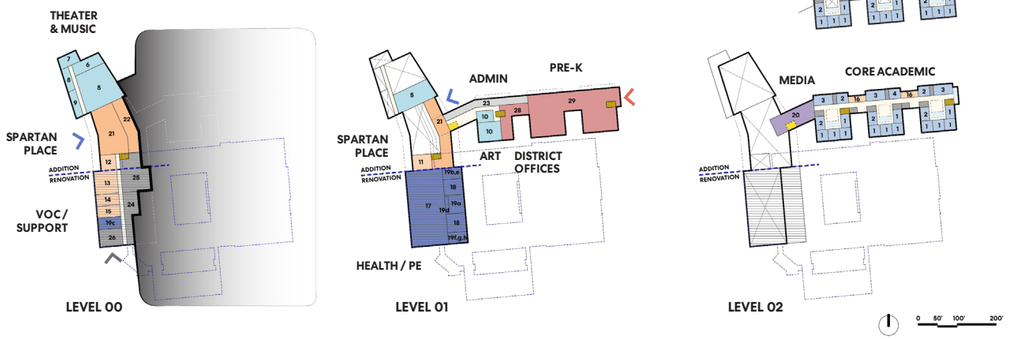
## Option 3A – Construction Phasing

Fields out of Commission:

- (3) Tennis Courts
- (2) Softball Fields



## Option 3A - Floor Plans




**CORE ACADEMIC**
1/ CLASSROOM
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4/ TEACHER PLANNING
BREAK OUT SPACE

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27/ RESTROOMS

**OTHER**
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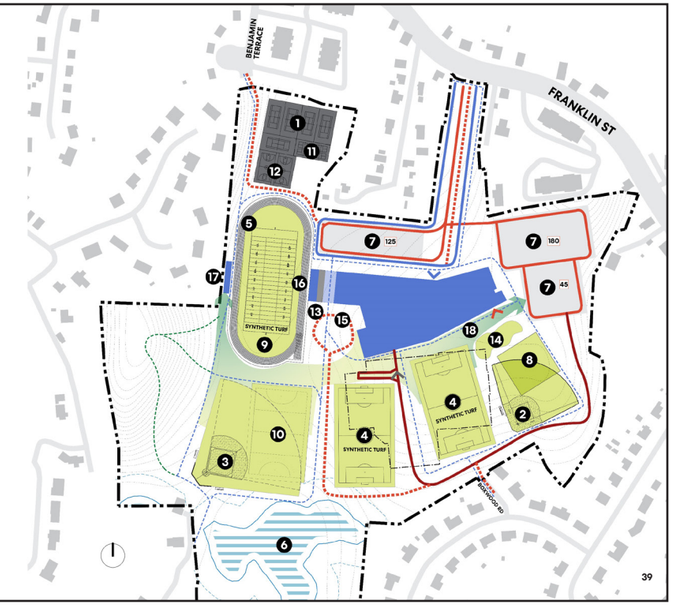
29/ PRE-K

**CIRCULATION**
OPEN STAIR
CLOSED EGRESS STAIR



## Option 4A – Site Plan




**PROGRAM**

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18 - LANDSCAPE PATH

**CIRCULATION**

- VEHICULAR DRIVE
- LIMITED ACCESS: EMERGENCY, MAINTENANCE, BICYCLES
- SERVICE DRIVE
- BIKE LANE
- ACCESSIBLE PEDESTRIAN PATH
- HIKING TRAIL (NOT ADA ACCESSIBLE)
- LANDSCAPE PEDESTRIAN PATH W/ EMERGENCY VEHICLE ACCESS ABILITY

**KEY ENTRANCES**

- HS MAIN ENTRY
- PRE-K MAIN ENTRY
- LOADING

**FIELD MATERIAL**

- GRASS
- SYNTHETIC TURF



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Perkins&Will

# Option 4A – New Construction

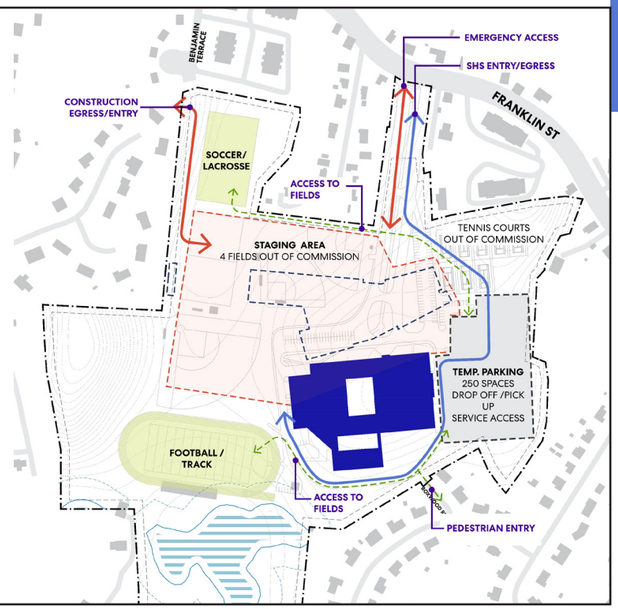
Recap



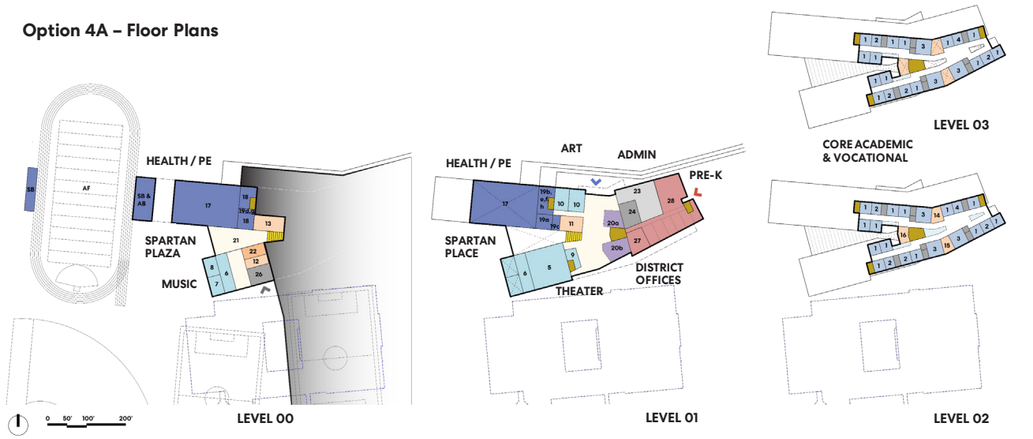
## Option 4A – Construction Phasing

Fields out of Commission:

- (8) Tennis Courts
- (2) Softball Fields
- (1) Baseball Field
- (1) Soccer Field



## Option 4A – Floor Plans

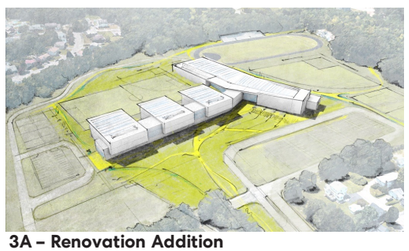




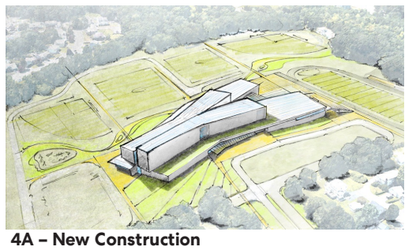

## Building Massing Sketches



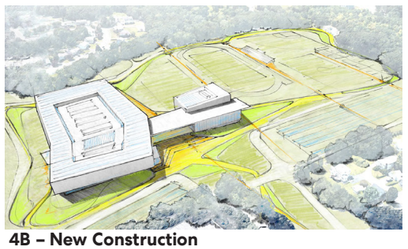
2A – Renovation Only



3A – Renovation Addition



4A – New Construction



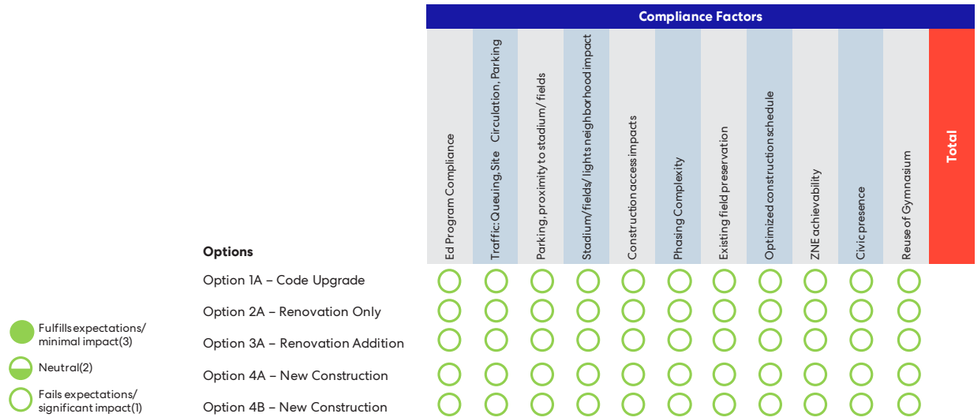
4B – New Construction







## Rating the Options




Perkins&Will | SMMA
Project Management



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Perkins&Will

# Discussion

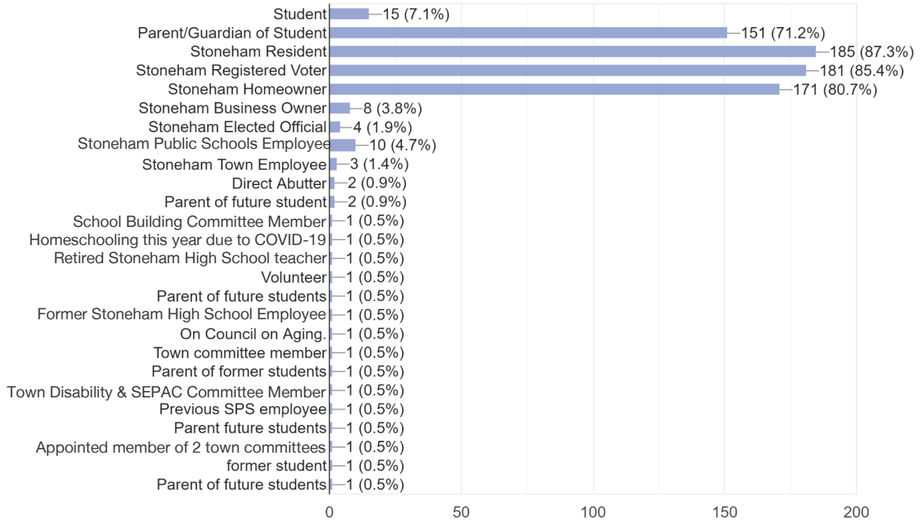
Building Committee Meeting

## STONEHAM HIGH SCHOOL FEASIBILITY STUDY
## COMMUNITY-WIDE SURVEY NO. 1

**NOVEMBER 5, 2020 TO NOVEMBER 12, 2020**

## SURVEY RESULTS

### 1. Please select all stakeholder groups that apply to you.





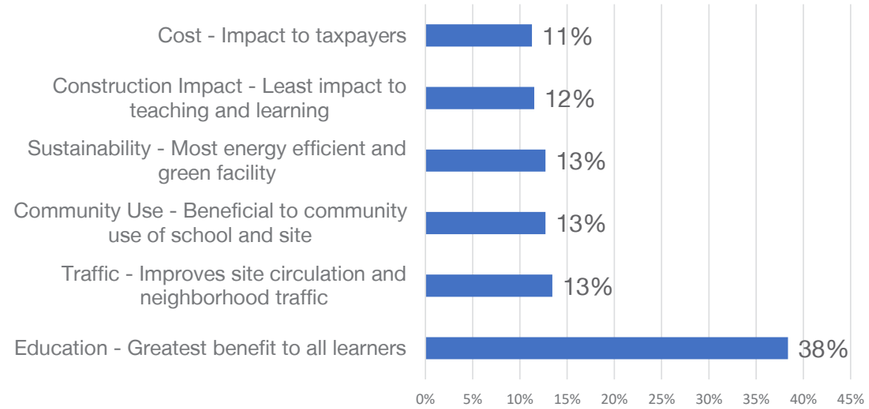



## STONEHAM HIGH SCHOOL FEASIBILITY STUDY
## COMMUNITY-WIDE SURVEY NO. 1

**NOVEMBER 5, 2020 TO NOVEMBER 12, 2020**

## SURVEY RESULTS

### 2. What is the most important consideration in the decision-making process for recommending a capital school building project to the Stoneham residents for approval?





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## STONEHAM HIGH SCHOOL FEASIBILITY STUDY
## COMMUNITY-WIDE SURVEY NO. 1

**NOVEMBER 5, 2020 TO NOVEMBER 12, 2020**

## SURVEY RESULTS

### 3. Is there another important consideration that is not listed above? If so, please explain.

**Educational Benefits**

- Welcoming to neuordiverse learners
- Resources for students
- Theatre, sport fields
- Greatest utility to students and teachers, not only in school but after school, before school, and in the summer.
- Teacher needs
- There is so much room there. a greenhouse—horticulture programming should be considered. Also, I would really have liked to rank "1"'for each of the choices in question 2.
- Thinking long term about evolving educational methods and needs to ensure the design has maximum potential to accommodate that (incorporation of technology, security measures for the building, etc.)
  It would also be lovely to include some 'green' designs the students themselves could learn from (such as solar panels, a rooftop garden, etc.)
- I would really like to see up-to-date high-quality learning opportunities available to all students. Things like STEM labs, good science labs, social spaces, group work spaces, computer labs....I think that overall, Stoneham schools do not do a great job meeting the needs of kids who are academically excelling...I'd like the new high school to be better situated to do this in the future.
- Keeping open outdoor space for students in the new design
- Do the plans reflect the possibility of expanded use of remote learning in the future
- Within the education category - what is the vision for greatest benefit to all learners? There is an opportunity to provide a vision and gather community input on what the future of high school education should/will look like for students - how are we using this an opportunity to leapfrog forward the design of student learning experiences, so that we are bringing new and improved learning experiences to life in the new space? I have not heard much at all about leveraging this school building opportunity to redesign the high school learning experience.

**Athletics**

- Quality of sports fields
- Top notch grass athletic fields for all sports
- Keeping the existing athletic Fields specifically Saul Weiss Memorial Softball Field
- Athletic upgrades
- Priority for Athletic facilities
- Artificial Turf Fields
- Adding turf fields as Stoneham is only town in Middlesex League without a turf field



STONEHAM HIGH SCHOOL FEASIBILITY STUDY
COMMUNITY-WIDE SURVEY NO. 1
NOVEMBER 5, 2020 TO NOVEMBER 12, 2020
SURVEY RESULTS

**Safety and Health**

- Health and safety
- Safety to students
- Safety

**Building Design**

- Needs to fit the character of the Town
- Aesthetics and improving the town's appearance and status
- Modern design and a solid plan for maintenance.
- We need a new high school, not for it to be renovated.
- New construction makes the most sense
- The design of the school and grounds fits into the surrounding existing fabric.

**Cost**

- New High School will bring greater property value to homes in Stoneham
- Maximizing state aid
- Do not be penny wise and pound foolish.

**Schedule**

- Can it be done ASAP?!
- The time it takes to complete
- Get it done asap
- Timing is important. I would want my children to benefit from this as soon as possible
- Speed to completion

**Construction Disruption**

- The renovation should be done as quickly as possible with the least disruption to the students
- Safety of students at the school during construction should be a top priority

**Technology**

- Technology
- Upgrade technology and sports facilities
- Improve technology access and disability access
- Future proofing network infrastructure for technology

**Building Size/Enrollment**

- Planning - make sure there are sufficient classrooms for years to come
- Please consider town growth. Our elementary & middle schools are still considered fairly new & they are bursting @ the seams with students.
- Ensuring this building is planning for the future, not just current needs
- Are some options likely to last for more decades

**Traffic**

- Though traffic is listed, it is a primary concern since it has only one entrance/exit



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## STONEHAM HIGH SCHOOL FEASIBILITY STUDY
## COMMUNITY-WIDE SURVEY NO. 1

**NOVEMBER 5, 2020 TO NOVEMBER 12, 2020**

## SURVEY RESULTS

**Neighborhood/Abutters**

- Impact to abutter and fixed impact to the ecology created by the original building
- Impact to the land and direct abutters during construction

**Sustainability**

- School climate and health. The previous school was viciously hot on some days, and viciously cold on others because many windows did not close, and a few rooms had water marks on the ceiling, and a few other rooms with smells, indicating leaks and possible mold. I think this is especially important now, due to climate change, when the highs and lows of temperature are going to grow more variable. Thank you. (Also, water fountains?)
- Sustainability is important, but please be mindful following LEED certifications: oftentimes you can design to LEED "Silver" or other standard & eliminate administration to save costs. While you will not have the fancy star, you will have the appropriate building!

**Accessibility**

- Accessibility
- Fully accessible to ALL students and visitors and not designed like the middle school. Design ought to be reviewed by the Mass Office on Disability before the Town accepts and construction commences.

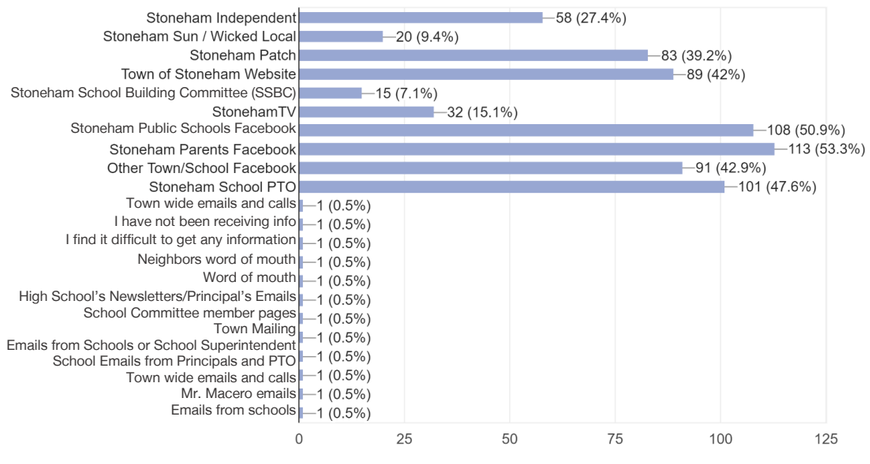


STONEHAM HIGH SCHOOL FEASIBILITY STUDY
COMMUNITY-WIDE SURVEY NO. 1

NOVEMBER 5, 2020 TO NOVEMBER 12, 2020

SURVEY RESULTS

### 4. How do you receive your information on Town and School news?

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## STONEHAM HIGH SCHOOL FEASIBILITY STUDY
## COMMUNITY-WIDE SURVEY NO. 1

**NOVEMBER 5, 2020 TO NOVEMBER 12, 2020**

## SURVEY RESULTS

### 5. How can the School Building Committee improve communication with the public regarding this project and state grant?

**Social Media**

- Stoneham community Facebook group and US Mail
- Perhaps create a FB group or website solely to it. The town of Stoneham email alerts have been helpful
- I think just going on the Community FB page but instead of posting anything lengthy and wordy just explain plainly in layman terms.
- Facebook page for this project
- Email and posting in Stoneham community Facebook page and Stoneham parents Facebook page.
- Email/ Facebook/Website /Stoneham TV
- Create a FB page
- Social media with a link to an efficient website
- Town site and Facebook seem to be top ways to disseminate information.
- Continue advertising on school and town social media sites and emails for all interested parties to be aware.
- Post in Stoneham Community Group and school Facebook Groups. Email to town residents. Newsletters go home with kids from school.
- Post all info in social media. Maybe great its own site to follow
- Is there a Facebook page for the building committee? That could be shared on the school pages. I am sure many parents like myself would follow it! That is a great place to post regular updates or asks of the community. School committee members also have many followers and could maybe post updates? If this is not outside of their purview.
- Reach out on more social media pages
- Specific Facebook Group for this project
- The town website is not user friendly. Social media gets viewed often. An official town Facebook page would be helpful (similar to Somerville).
- Put more on social media

**Email**

- Include updates in school emails
- Emails
- Anyone responding to this survey should be kept up to date on this project via email.
- Create specific email group to send and keep us updates
- Email communication or any other form of communication
- Emails, Direct mailers, Voice messaging. Not everyone is on “Social Media” note do we have “school age children”
- Maybe send it to parents through email
- email list?
- Have the schools distribute information through parent emails



STONEHAM HIGH SCHOOL FEASIBILITY STUDY
COMMUNITY-WIDE SURVEY NO. 1

NOVEMBER 5, 2020 TO NOVEMBER 12, 2020

SURVEY RESULTS

- More email blasts and convenient open forum
- emails from committee or superintendent
- Email blasts
- Email
- emailing parents of students in the Stoneham school system
- More email updates
- email bulletins
- Regular emails
- Email updates to all direct abutters
- Updates via e-mail or possibly broadcast meetings/discussions via zoom
- Emails from the schools
- Regular email communications, once folks have opted-in.
- They are doing a great job now with emails etc.
- Email blast
- Email blast for meetings
- Emails and notices
- They can send email to residents

**Website**

- Setting up a website to track and share progress
- Clear communications and updates (post meetings) which could include public pdfs, videos, or slideshows. It seems scattered and I have tried to figure out the most recent news/meetings a few times with difficulty. Also, when I click the Stoneham TV links to see past meetings, I cannot find them (the link just goes to the website and is not specific). For me it is difficult to make meetings when working and COVID-19 homeschooling and have a spouse who is an essential worker.
- Continue to post info on Website
- Town website updates

**Mailing**

- Send notices with the tax bill or water bill; remind residents to check websites for the up to date info
- Mailings
- Mailing information
- Mailing of important data
- I do like an old-fashioned printed mailer with information, sent to all residents. Not everyone is on Facebook or in tuned to what is going on in the schools if they do not have children in them.
- snail mail
- Direct mailing and signage in key traffic areas in town

**StonehamTV**

- Monthly video updates or interviews with stakeholders about progress
- On Stoneham TV
- Informational YouTube videos, email blasts, newsletter



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## STONEHAM HIGH SCHOOL FEASIBILITY STUDY
## COMMUNITY-WIDE SURVEY NO. 1

**NOVEMBER 5, 2020 TO NOVEMBER 12, 2020**

## SURVEY RESULTS

**Engage the Community**

- Use parents as advocates and ambassadors to get the word out. Reach out to the unengaged: taxpayers who have an older child who previously attended Stoneham schools or those that do not have kids in school but will be impacted. Communicate in plain language. Put context around the data points. Post town meetings on YouTube, not the Stoneham TV site. Post the town meetings in watchable increments labeled with the topic (i.e., do not post a 5hr video of an unedited town meeting. Instead cut each topic and post it separately so people can watch what they want). Use social media more. Underscore importance of the decision. Is this the biggest project to ever impact town voters? If yes, promote it that way so people pay attention. Promoting news and information on the basic Stoneham news platforms (Independent, town meetings, Stoneham TV) is not sufficient, especially with so many dedicated, connected people working on this and our ability to use free digital tools like social media to get the word out. Consider direct mail - using plain language, not stiff, formal "official" speak. Surveys are great. Signage in high traffic locations (post office, banks, grocery stores, gas stations) would help. I'm concerned that if people don't know the ins and outs (taxpayer impact, the importance of making a long term investment, do it once and do it right, etc.), taxpayers will be surprised at the ballot and will pick the cheapest option or reject the project completely.
- Facebook and asking PTO at each school to share information via email/flyer.
- I would say to give more information to PTO's and social media or maybe have a weekly progress report/update posted somewhere
- Update on each step, do mailers with newspapers, do some sort of gallery walkthrough post it session with renderings and ideas, ENGAGE THE STUDENTS and make this part of expanding an interest in architecture and city planning, and be transparent by making a website with polls and status updates and renderings as a central hub
- Engage randomly selected town volunteers to speak about topics
- Engage community

**Surveys**

- Have more community survey. The community forums do not give enough time to talk. They are just giving information and that is it.
- People need to know that decision time is now. Create urgency. Use more social media posts. Create a survey like this that coincides with the layout options and costs. Be VERY clear that we at a minimum must do the reno to bring us up to code

**Phone Calls**

- Robocalls for meeting notices.
- Voicemail reminders/updates via town phone notifications
- Automated calls with important updates



STONEHAM HIGH SCHOOL FEASIBILITY STUDY
COMMUNITY-WIDE SURVEY NO. 1

NOVEMBER 5, 2020 TO NOVEMBER 12, 2020

SURVEY RESULTS

**Video Conferencing**

- Hold public Zoom meetings
- Keep doing google meet or zoom for accessibility. Keep making it descriptive and informative. We are all in it for our benefits!

**Newsletter**

- Send communications through the Colonial park principal's weekly newsletter
- Send out newsletters via email.
- Email newsletter would be great
- Frequent newsletters and updates via email.
- Possibly sending flyers or emails with student population so more parents would see since they are the ones whose children will be impacted and could benefit from this project.
- Is there a subscription site that we can get those on a regular basis
- use a newsletter, have approved messaging sent out over all channels (website, email, Facebook groups, newspaper articles, etc.) at the same time so it reaches a variety of audiences. Also appoint one person as the communication face (spokesperson) of the committee that will answer all public questions and be the go-to for information. Have a designated email address for this project and answer all questions you get.
- Detailed newsletter on a set schedule with updates

**Clear Messaging**

- Transparency
- Communicate the facts clearly and only when this something new to report.
- Provide notice well in advance across different communication channels
- More transparent updates on timeline.
- Have additional opportunities to provide input in an ongoing way and share stakeholder feedback disaggregated by different groups (students, parents, etc.) back with the community.
- Keep Stoneham residents updated periodically.

**Other**

- Control spending to lessen the financial impact on the town
- I think they are doing a great job.
- I think it has been good level of communication
- I have been impressed with the outreach. I have not been able to attend many of the meetings but I especially appreciated the visibility of the exhibit at Town Day 2019 and the ability to speak to Mr. Macero informally there.
- Reach out through multiple channels (newspaper, social media, fliers posted at town hall/library) multiple times. Distill the information once a decision is made so it is not overwhelming to stakeholders.
- Unsure
- Summaries of meetings, that are brief and easy to read, for a quick overview would be helpful
- John Macero's notes to the school community
- Doing well



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## STONEHAM HIGH SCHOOL FEASIBILITY STUDY
## COMMUNITY-WIDE SURVEY NO. 1

**NOVEMBER 5, 2020 TO NOVEMBER 12, 2020**

## SURVEY RESULTS

- I feel well informed about the process.
- Maybe an occasional letter? Maybe Facebook? I am not sure. And I suppose I trust you guys and do not really want more information. And I suppose you don't want 700 people with 700 individual opinions. Living near the current school, I'm thinking of the building noise, but it's a very important project, so I doubt there's not much to be done about that.







SMMA
Project Management

November 20, 2020

Jennifer Flynn
Project Coordinator
Massachusetts School Building Authority
40 Broad Street, Fifth Floor
Boston, Massachusetts 02109

**Re: Stoneham High School** **Stoneham, Massachusetts**
*District's Response to the Preliminary Design Program Review Comments* *SMMA No. 20033*

Dear Jennifer:

Please find the District's Response to the MSBA's Preliminary Design Program Review Comments of November 6, 2020.

Very truly yours,

**SMMA**

Joel G. Seeley
Principal

cc: SSBC (MF)

enclosures: District's Response to the Preliminary Design Program Review Comments

1000 Massachusetts Avenue
Cambridge, MA 02138
617.547.5400

www.smma.com

JGS/sat /P:\2020\20033\03-DESIGN\3.4 Submissions\1-PDP Submission\MSBA Comments\Deliverable\L_Jenniferflynn@MSBA_Pdpsubmissiondistrict'sresponses_20November2020.Docx

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DISTRICT RESPONSE
11/20/2020

**ATTACHMENT A**
**MODULE 3 – PRELIMINARY DESIGN PROGRAM REVIEW COMMENTS**

**District:** Town of Stoneham
**School:** Stoneham High School
**Owner's Project Manager:** SMMA
**Designer Firm:** Perkins +Will Architects
**Submittal Due Date:** November 3, 2020
**Submittal Received Date**: October 6, 2020
**Review Date**: October 6-November 3, 2020
**Reviewed by**: M. Esdale, C. Forde, C. Alles, J. Jumpe

## MSBA REVIEW COMMENTS

The following comments[1] on the Preliminary Design Program ("PDP") submittal are issued pursuant to a review of the project submittal document for the proposed project presented as a part of the Feasibility Study submission in accordance with the MSBA Module 3 Guidelines.

### 3.1 PRELIMINARY DESIGN PROGRAM

| Overview of the Preliminary Design Program Submittal | Complete | Provided; *Refer to comments following each section* | Not Provided; *Refer to comments following each section* | Receipt of District's Response; *To be filled out by MSBA Staff* |
|---|---|---|---|---|
| OPM Certification of Completeness and Conformity | ☒ | ☐ | ☐ | ☐ |
| Table of Contents | ☒ | ☐ | ☐ | ☐ |
| 3.1.1 Introduction | ☒ | ☐ | ☐ | ☐ |
| 3.1.2 Educational Program | ☐ | ☒ | ☐ | ☐ |
| 3.1.3 Initial Space Summary | ☐ | ☒ | ☐ | ☐ |
| 3.1.4 Evaluation of Existing Conditions | ☐ | ☒ | ☐ | ☐ |
| 3.1.5 Site Development Requirements | ☐ | ☒ | ☐ | ☐ |
| 3.1.6 Preliminary Evaluation of Alternatives | ☐ | ☒ | ☐ | ☐ |
| 3.1.7 Local Actions and Approvals Certification(s) | ☒ | ☐ | ☐ | ☐ |
| 3.1.8 Appendices | ☒ | ☐ | ☐ | ☐ |

[1] The written comments provided by the MSBA are solely for purposes of determining whether the submittal documents, analysis process, proposed planning concept and any other design documents submitted for MSBA review appear consistent with the MSBA's guidelines and requirements, and are not for the purpose of determining whether the proposed design and its process may meet any legal requirements imposed by federal, state or local law, including, but not limited to, zoning ordinances and by-laws, environmental regulations, building codes, sanitary codes, safety codes and public procurement laws or for the purpose of determining whether the proposed design and process meet any applicable professional standard of care or any other standard of care. Project designers are obligated to implement detailed planning and technical review procedures to effect coordination of design criteria, buildability, and technical adequacy of project concepts. Each city, town and regional school district shall be solely responsible for ensuring that its project development concepts comply with all applicable provisions of federal, state, and local law. The MSBA recommends that each city, town and regional school district have its legal counsel review its development process and subsequent bid documents to ensure that it is in compliance with all provisions of federal, state and local law, prior to bidding. The MSBA shall not be responsible for any legal fees or costs of any kind that may be incurred by a city, town or regional school district in relation to MSBA requirements or the preparation and review of the project's planning process or plans and specifications.



DISTRICT RESPONSE
11/20/2020

### 3.1.1 INTRODUCTION

| | Provide the following Items | Complete; *No response required* | Provided; *District's response required* | Not Provided; *District's response required* | Receipt of District's Response; *To be filled out by MSBA Staff* |
|---|---|---|---|---|---|
| 1 | Summary of the Facility Deficiencies and Current S.O.I. | ☒ | ☐ | ☐ | ☐ |
| 2 | Date of invitation to conduct a Feasibility Study and MSBA Board Action Letter | ☒ | ☐ | ☐ | ☐ |
| 3 | Executed Design Enrollment Certification | ☒ | ☐ | ☐ | ☐ |
| 4 | Narrative of the Capital Budget Statement and Target Budget | ☒ | ☐ | ☐ | ☐ |
| 5 | Project Directory with contact information | ☒ | ☐ | ☐ | ☐ |
| 6 | Updated Project Schedule | ☒ | ☐ | ☐ | ☐ |

**MSBA Review Comments:**

*No review comments for this section.*

### 3.1.2 EDUCATIONAL PROGRAM

Provide a summary and description of the existing educational program, and the new or expanded educational vision, specifications, process, teaching philosophy statement, as well as the District's curriculum goals and objectives of the program. Include description of the following items:

| | Provide the following Items | Complete; *No response required* | Provided; *District's response required* | Not Provided; *District's response required* | Receipt of District's Response; *To be filled out by MSBA Staff* |
|---|---|---|---|---|---|
| 1 | Grade and School Configuration Policies | ☒ | ☐ | ☐ | ☐ |
| 2 | Class Size Policies | ☒ | ☐ | ☐ | ☐ |
| 3 | School Scheduling Method | ☒ | ☐ | ☐ | ☐ |
| 4 | Teaching Methodology and Structure | | | | |
| | a) Administrative and Academic Organization/Structure | ☒ | ☐ | ☐ | ☐ |
| | b) Curriculum Delivery Methods and Practices | ☐ | ☐ | ☒ | ☐ |
| | c) English Language Arts/Literacy | ☒ | ☐ | ☐ | ☐ |
| | d) Mathematics | ☒ | ☐ | ☐ | ☐ |
| | e) Science | ☒ | ☐ | ☐ | ☐ |
| | f) Social Studies | ☒ | ☐ | ☐ | ☐ |
| | g) World Languages | ☒ | ☐ | ☐ | ☐ |
| | h) Academic Support Programming Spaces | ☒ | ☐ | ☐ | ☐ |
| | i) Student Guidance and Support Services | ☒ | ☐ | ☐ | ☐ |
| 5 | Teacher Planning and Professional Development | ☒ | ☐ | ☐ | ☐ |
| 6 | Pre-kindergarten | ☒ | ☐ | ☐ | ☐ |
| 7 | Kindergarten | ☐ | ☐ | ☐ | ☐ |



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| | Provide the following Items | Complete; *No response required* | Provided; *District's response required* | Not Provided; *District's response required* | Receipt of District's Response; *To be filled out by MSBA Staff* |
|---|---|---|---|---|---|
| 8 | Lunch Programs | ☒ | ☐ | ☐ | ☐ |
| 9 | Technology Instruction Policies and Program Requirements | ☐ | ☒ | ☐ | ☐ |
| 10 | Media Center/Library | ☒ | ☐ | ☐ | ☐ |
| 11 | Visual Arts Programs | ☒ | ☐ | ☐ | ☐ |
| 12 | Performing Arts Programs | ☒ | ☐ | ☐ | ☐ |
| 13 | Physical Education Programs | ☒ | ☐ | ☐ | ☐ |
| 14 | Special Education Programs | ☒ | ☐ | ☐ | ☐ |
| 15 | Vocation and Technology Programs | | | | |
| | a) Non-Chapter 74 Programming | ☒ | ☐ | ☐ | ☐ |
| | b) Chapter 74 Programming | ☐ | ☐ | ☐ | ☐ |
| 16 | Transportation Policies | ☒ | ☐ | ☐ | ☐ |
| 17 | Functional and Spatial Relationships | ☒ | ☐ | ☐ | ☐ |
| 18 | Security and Visual Access Requirements | ☐ | ☒ | ☐ | ☐ |

**MSBA Review Comments:**

*4b) In response to these review comments, please describe the District's curriculum delivery methods and practices.*

**RESPONSE: District's curriculum delivery methods and practices are described in the updated Educational Program, attached.**

*9) The MSBA suggests the District consider providing assisted listening technology in each classroom, as well as general use throughout educational spaces within the proposed project for hearing impaired accessibility. Please acknowledge.*

**RESPONSE: District acknowledges.**

*18) In response to these review comments, please confirm that first responding emergency representatives will be consulted in the planning process and associated requirements will be incorporated into the preferred schematic.*

**RESPONSE: The first responding representatives feedback will be incorporated into the Preferred Schematic.**

*Please note additional comments may be forthcoming.*



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### 3.1.3 INITIAL SPACE SUMMARY

| | Provide the following Items | Complete; *No response required* | Provided; *District's response required* | Not Provided; *District's response required* | Receipt of District's Response; *To be filled out by MSBA Staff* |
|---|---|---|---|---|---|
| 1 | Space summary; one per approved design enrollment | ☐ | ☒ | ☐ | ☐ |
| 2 | Floor plans of the existing facility | ☒ | ☐ | ☐ | ☐ |
| 3 | Narrative description of reasons for all variances (if any) between proposed net and gross areas as compared to MSBA guidelines | ☐ | ☒ | ☐ | ☐ |

**MSBA Review Comments:**

*1) The MSBA has performed a preliminary review of the new construction space summary for 695 students in grades 9-12 and offers the following:*

- ***Core Academic** – The proposed square footage for this category exceeds the MSBA guidelines by 8,500 nsf. Per the information provided, the following spaces will be proposed in order for the District to deliver its educational program:*

| *Anticipated Core Academic Spaces* | *Grades 9-12 for 695 students* | | |
|---|---|---|---|
| | *Proposed No. Rooms* | *MSBA Guidelines No. Rooms* | *Variance* |
| *Classroom - General* | *23* | *23* | *0* |
| *Collaboration Space per Neighborhood* | *6* | *0* | *+6* |
| *Teacher Planning* | *23* | *23* | *0* |
| *Small Group Seminar (20-30 seats)* | *2* | *2* | *0* |
| *Science Classroom / Lab* | *6* | *6* | *0* |
| *Prep Room* | *6* | *6* | *0* |
| *Central Chemical Storage Room* | *1* | *1* | *0* |
| *Department Head Planning Area (max 8)* | *1* | *0* | *+1* |
| *Book Storage* | *1* | *0* | *+1* |
| *Interdisciplinary Project and Performance Room* | *1* | *0* | *+1* |
| *Health Classroom* | *1* | *0* | *+1* |
| *Huddle Rooms for Quiet Space* | *6* | *0* | *+6* |

*The following spaces are variations to the MSBA guidelines:*

  - ***Classroom – General –** The District is proposing (23) 900 nsf General Classrooms totaling 20,700 nsf, which exceeds the MSBA guidelines by 1,150 nsf. Based on the information provided the MSBA accepts this variation to the guidelines. No further preliminary comments.*
  - ***Teacher Planning** – The District is proposing (23) 100 nsf Teacher Planning areas totaling 2,300 nsf, which meets the MSBA guidelines. In response to these review*



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*comments, please provide information that describes the proposed location and adjacencies of the (23) Teacher Planning areas.*

**RESPONSE: The proposed location and adjacencies for the (23) Teacher Planning areas is described in the updated Educational Program, attached.**

- ***Collaboration Space per Neighborhood –*** *The District is proposing (6) 500 nsf Collaboration Space per Neighborhood totaling 3,000 nsf in excess of the MSBA guidelines. Based on the information, and the proposed size of the General Classrooms compared to the square foot range allowed in the MSBA guidelines, the MSBA may participate in a portion of the overall proposed square footage associated with the Collaboration Space per Neighborhood. In response to these review comments, please provide additional information that demonstrates how these spaces will be scheduled, staffed, and supervised.*

  **RESPONSE: The scheduling, staffing and supervision of the (6) collaborative spaces is described in the updated Educational Program, attached.**

- ***Department Head Planning Area –*** *The District is proposing (1) 700 nsf Department Head Planning Area in excess of the MSBA guidelines. The information provided states: "The school's vision for the future is to have one central Department Head Planning Area of 700 sf to promote interdisciplinary collaboration between department heads. This would also eliminate the needs for any Department Offices." Please relocate this area to the 'Administration and Guidance' category.*

  **RESPONSE: See attached Space Summary with revisions.**

  *Additionally, note any square footage exceeding MSBA guidelines in the 'Administration and Guidance' category will be considered ineligible for reimbursement. Please acknowledge.*

  **RESPONSE: District acknowledges.**

- ***Book Storage –*** *The District is proposing (1) 500 nsf Book Storage area in excess of the MSBA guidelines. The information provided states: "A book storage area is needed near the Department Head Planning Area." Please relocate this area to the 'Administration and Guidance category or include it as part of the grossing area of the proposed building if it can be provided for within the MSBA's upper limit of 1.50.*

  **RESPONSE: See attached Space Summary with revisions.**

  *Additionally, note any square footage exceeding MSBA guidelines in the 'Administration and Guidance' category will be considered ineligible for reimbursement. Please acknowledge.*

  **RESPONSE: District acknowledges.**

- ***Interdisciplinary Project and Performance Room –*** *The District is proposing (1) 2,000 nsf Interdisciplinary Project and Performance Room in excess of the MSBA guidelines. The information provided indicates this space is intended "to support student performance, guest speakers, seminars, interdisciplinary collaborative activities and presentation and showcasing of student work". In response to these review comments,*



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*please provide additional information that demonstrates how this space will be scheduled, staffed, and supervised.*

**RESPONSE: The scheduling, staffing and supervision of the Interdisciplinary Project and Performance Room is described in the updated Educational Program, attached.**

*Additionally, please relocate this space to the 'Vocations and Technology' category.*

**RESPONSE: See attached Space Summary with revisions.**

- ***Health Classroom –*** *The District is proposing (1) 850 nsf Health Classroom in excess of the MSBA guidelines. Based on the information provided the MSBA accepts this variation to the guidelines. No further preliminary comments.*

- ***Huddle Rooms for Quiet Space –*** *The District is proposing (6) 50 nsf Huddle Rooms for Quiet Space totaling 300 nsf in excess of the MSBA guidelines. The information provided states: "The District identified need for teachers to have an opportunity to have an heads-down space, outside of the common planning area which tend to be noisy due to collaborative discussions. These huddle rooms/quiet rooms will satisfy the important need to ensure there diverse types of spaces for all personal." Please relocate these spaces to the 'Administration and Guidance' category.*

  **RESPONSE: See attached Space Summary with revisions.**

  *Additionally, note any square footage exceeding MSBA guidelines in the 'Administration and Guidance' category will be considered ineligible for reimbursement. Please acknowledge.*

  **RESPONSE: District acknowledges.**

- ***Special Education*** *– The proposed square footage for this category exceeds the MSBA guidelines by 700 nsf. Please relocate the following spaces:*

  - *(4) 150 nsf Offices (School Adjustment Counselor, School Psychologist, SPED Transition Coordinator, and SPED Office), totaling 600 nsf to the 'Administration and Guidance' category.*

    **RESPONSE: See attached Space Summary with revisions.**

    *Additionally, note any square footage exceeding MSBA guidelines in the 'Administration and Guidance' category will be considered ineligible for reimbursement. Please acknowledge.*

    **RESPONSE: District acknowledges.**

  - *(1) 900 nsf ESL Services space to the 'Core Academic' category.*

    **RESPONSE: See attached Space Summary with revisions.**

    *Please note that based on the information provided the MSBA accepts this variation to the guidelines. No further preliminary comments.*

*Please note that the Special Education program is subject to approval by the Department of Elementary and Secondary Education ("DESE"). The District should provide*



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*the required information required with the Schematic Design submittal. Formal approval of the District's proposed Special Education program by the DESE is a prerequisite for executing a Project Funding Agreement with the MSBA. Please acknowledge.*

**RESPONSE: District acknowledges.**

- ***Art & Music / Vocations & Technology*** *– The combined proposed square footage for these categories exceeds the MSBA guidelines by 645 nsf. The MSBA encourages the District and its consultants to continue to seek opportunities to increase efficiencies and align with MSBA guidelines. Please note that square footage exceeding MSBA guidelines will be considered ineligible for reimbursement. Please acknowledge.*

  **RESPONSE: District acknowledges.**

- ***Health & Physical Education*** *– The proposed square footage for this category exceeds the MSBA guidelines by 8,008 nsf. The MSBA encourages the District and its consultants to continue to seek opportunities to increase efficiencies and align with MSBA guidelines. Please note that square footage exceeding MSBA guidelines will be considered ineligible for reimbursement. Please acknowledge.*

  **RESPONSE: District acknowledges.**

  *Please refer to the attached memo regarding the MSBA's policy on physical education square footage in excess of the MSBA guidelines. The policy states: "The district may choose to build a gymnasium and related spaces in excess of MSBA guidelines, but in no event shall the gymnasium exceed 18,000 nsf. The MSBA will participate in a gymnasium of up to 12,000 nsf unless adjusted by the MSBA to increase teaching stations for enrollment and/or the educational plan." Additionally, areas in excess of the MSBA guidelines will be at the sole expense of the district; and the MSBA will exclude from its grant the cost of the total gross square foot ("gsf") in excess of the guidelines for these areas.*

- ***Media Center*** *– The proposed square footage for the category exceeds the MSBA guidelines by 400 nsf. The MSBA encourages the District and its consultants to continue to seek opportunities to increase efficiencies and align with MSBA guidelines. Please note that square footage exceeding MSBA guidelines will be considered ineligible for reimbursement. Please acknowledge.*

  **RESPONSE: District acknowledges.**

- ***Auditorium/Drama*** *– The proposed square footage for this category exceeds the MSBA guidelines by 2,393 nsf. The MSBA encourages the District and its consultants to continue to seek opportunities to increase efficiencies and align with MSBA guidelines. Please note that square footage exceeding MSBA guidelines will be considered ineligible for reimbursement. Please acknowledge.*

  **RESPONSE: District acknowledges.**

  *Please refer to the attached memo regarding the MSBA's policy on auditorium square footage in excess of the MSBA guidelines. The policy states: "The district may choose to build an auditorium in excess of MSBA guidelines, but no more than 13,300 net square foot ("nsf") (based upon an upper limit of 1,000 seats). The MSBA funding limit will vary*



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*depending on the agreed-upon design enrollment but will not exceed 10,400 nsf." Additionally, areas in excess of the MSBA guidelines will be at the sole expense of the district; and the MSBA will exclude from its grant the cost of the total gross square foot (gsf) in excess of the guidelines for these areas.*

- ***Dining & Food Service*** *– The proposed square footage for this category exceeds the MSBA guidelines by 285 nsf. The MSBA encourages the District and its consultants to continue to seek opportunities to increase efficiencies and align with MSBA guidelines. Please note that square footage exceeding MSBA guidelines will be considered ineligible for reimbursement. Please acknowledge.*

  **RESPONSE: District acknowledges.**

- ***Medical*** *– The proposed square footage for this category exceeds the MSBA guidelines by 180 nsf. Please relocate the (2) 60 nsf Mothers Rooms totaling 120 nsf to the 'Non-Programmed Spaces' category. Currently, incorporating this square footage into the 'Non-Programmed Spaces' category results in a grossing factor of 1.50.*

  **RESPONSE: See attached Space Summary with revisions.**

  *Additionally, the MSBA encourages the District and its consultants to continue to seek opportunities to increase efficiencies and align with MSBA guidelines. Please note that square footage exceeding MSBA guidelines will be considered ineligible for reimbursement. Please acknowledge.*

  **RESPONSE: District acknowledges.**

- ***Administration & Guidance*** *– The proposed square footage for this category aligns with the MSBA guidelines. No further preliminary comments.*

- ***Custodial & Maintenance*** *– The proposed square footage for this category exceeds the MSBA guidelines by 500 nsf. The MSBA encourages the District and its consultants to continue to seek opportunities to increase efficiencies and align with MSBA guidelines. Please note that square footage exceeding MSBA guidelines will be considered ineligible for reimbursement. Please acknowledge.*

  **RESPONSE: District acknowledges.**

- ***Other*** *– The District is proposing 14,575 square feet for this category which exceeds the MSBA guidelines. The following spaces are proposed:*

  - ***School Store –*** *The District is proposing (1) 600 nsf School Store in excess of the MSBA guidelines. Please note that square footage exceeding MSBA guidelines will be considered ineligible for reimbursement. Please acknowledge.*

    **RESPONSE: District acknowledges.**

  - ***Pre-School Program (13,975 nsf):***

    - *(8) 1,200 nsf Pre-School Classrooms with toilets/changing (15 students)*
    - *(2) 175 nsf (totaling 350 nsf) Observation Areas: Childcare Development Pathway*



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- *(1) 400 nsf Pre-School OT/PT*
- *(1) 150 nsf Pre-School Director Office*
- *(2) 250 nsf (totaling 500 nsf) Pre-School Speech/Language*
- *(1) 350 nsf Pre-School Conference Room*
- *(1) 275 nsf Reception Area with Secretary*
- *(1) 300 nsf Teacher Work Room/ Collaboration*
- *(1) 600 nsf Student Lunch Room*
- *(1) 150 nsf Social Worker Office*
- *(1) 150 nsf BCBA Office*
- *(1) 350 nsf Nurse*
- *(1) 350 nsf Conference Room – In response to these review comments, please clarify the use of this conference room and how it differs from the proposed (1) 350 nsf Pre School Conference Room identified above.*

  **RESPONSE: The use of this Conference Room is as described in the updated Educational Program, attached.**

- *(1) 450 nsf Sensory Room*

*The MSBA's participation will be limited to Pre-School classrooms only, and potentially Pre-School spaces dedicated for special education, provided that the District submit additional information that further describes the proposed number of students, daily/weekly schedule, special education program, and space utilization impact on the schools in which these programs are currently housed.*

**RESPONSE: The proposed number of students, scheduling, special education programs and space utilization impact on the existing elementary schools is as described in the updated Educational Program, attached.**

*Please note that upon selection of a preferred schematic, the District may be required to adjust spaces/square footage that exceeds the MSBA guidelines and is not supported by the Educational Program provided.*

*No further review comments for this section.*

### 3.1.4 EVALUATION OF EXISTING CONDITIONS

| | Provide the following Items | Complete; *No response required* | Provided; *District's response required* | Not Provided; *District's response required* | Receipt of District's Response; *To be filled out by MSBA Staff* |
|---|---|---|---|---|---|
| 1 | Confirmation of legal title to the property. | ☒ | ☐ | ☐ | ☐ |
| 2 | Determination that the property is available for development. | ☒ | ☐ | ☐ | ☐ |



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| | Provide the following Items | Complete; *No response required* | Provided; *District's response required* | Not Provided; *District's response required* | Receipt of District's Response; *To be filled out by MSBA Staff* |
|---|---|---|---|---|---|
| 3 | Existing historically significant features and any related effect on the project design and/or schedule. | ☒ | ☐ | ☐ | ☐ |
| 4 | Determination of any development restrictions that may apply. | ☒ | ☐ | ☐ | ☐ |
| 5 | Initial Evaluation of building code compliance for the existing facility. | ☒ | ☐ | ☐ | ☒ |
| 6 | Initial Evaluation of Architectural Access Board rules and regulations and their application to a potential project. | ☒ | ☐ | ☐ | ☐ |
| 7 | Preliminary evaluation of significant structural, environmental, geotechnical, or other physical conditions that may impact the cost and evaluations of alternatives. | ☒ | ☐ | ☐ | ☐ |
| 8 | Determination for need and schedule for soils exploration and geotechnical evaluation. | ☐ | ☒ | ☐ | ☐ |
| 9 | Environmental site assessments minimally consisting of a Phase I: Initial Site Investigation performed by a licensed site professional. | ☐ | ☒ | ☐ | ☐ |
| 10 | Assessment of the school for the presence of hazardous materials. | ☐ | ☒ | ☐ | ☐ |
| 11 | Previous existing building and/or site reports, studies, drawings, etc. provided by the district, if any. | ☐ | ☒ | ☐ | ☐ |

**MSBA Review Comments:**

*3) The information provided indicates a Project Notification Form ("PNF") was submitted to the Massachusetts Historical Commission ("MHC") on August 27, 2020, and MHC approval was obtained on September 15, 2020.*

*8) The information provided on page 12-13 of the Preliminary Geotechnical Report prepared by Lahlaf Geotechnical Consulting, Inc. (LGCI), states:*

> *"We recommended performing additional explorations, including soil borings and test pits during the next phase of the project after the proposed building layout, size, and location have been established. We believe that test pits are more suited for areas where the fill contains large cobbles and boulders. We recommend advancing at least (16) additional borings and excavating at least twelve test pits."*

*In response to these review comments, provide a description of how this recommendation will be scheduled in future phases of project.*

**RESPONSE: The schedule of the recommended explorations will move forward after the PSR final option is determined once the building final footprint is determined. A building footprint**



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**will be established during Schematic Design phase, and the explorations will be completed at that time.**

*9) Note that costs associated with the removal of fuel storage tanks and associated contaminated soil is considered ineligible for reimbursement. Please acknowledge.*

**RESPONSE: Acknowledged**

*10) It should be noted that all costs associated with the removal of asbestos containing floor and ceiling tiles are categorically ineligible for MSBA reimbursement. Additionally, the project team should be aware of the current policies associated with MSBA's participation in the abatement and removal of hazardous materials. Please note that work associated with the removal of associated contaminated soil and materials are considered ineligible for reimbursement.*

*11) In response to these review comments, provide any previous existing building and/or site reports, studies, drawings, etc. provided by the district, if any.*

**RESPONSE:**

1. **Preliminary Design Study by HMFH, attached**
2. **Transportation Impact Study by Nitsch, attached**

*No further review comments for this section.*

### 3.1.5 SITE DEVELOPMENT REQUIREMENTS

| | Provide the following Items | Complete; *No response required* | Provided; *District's response required* | Not Provided; *District's response required* | Receipt of District's Response; *To be filled out by MSBA Staff* |
|---|---|---|---|---|---|
| 1 | A narrative describing project requirements related to site development to be considered during the preliminary and final evaluation of alternatives. | ☐ | ☒ | ☐ | ☐ |
| 2 | Existing site plan(s) | ☒ | ☐ | ☐ | ☐ |

**MSBA Review Comments:**

*1) As part of the District's Preferred Schematic Report ("PSR"), provide a site section that illustrates how the preferred schematic sits on the site and how the proposed location impacts access and circulation. Please acknowledge.*

**RESPONSE: Acknowledged.**

*No further review comments for this section.*

### 3.1.6 PRELIMINARY EVALUATION OF ALTERNATIVES



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| | Provide the following Items | Complete; *No response required* | Provided; *District's response required* | Not Provided; *District's response required* | Receipt of District's Response; *To be filled out by MSBA Staff* |
|---|---|---|---|---|---|
| 1 | Analysis of school district student school assignment practices and available space in other schools in the district | ☐ | ☒ | ☐ | ☐ |
| 2 | Tuition agreement with adjacent school districts | ☒ | ☐ | ☐ | ☐ |
| 3 | Rental or acquisition of existing buildings that could be made available for school use | ☒ | ☐ | ☐ | ☐ |
| 4 | Code Upgrade option that includes repair of systems and/or scope required for purposes of code compliance; with no modification of existing spaces or their function | ☒ | ☐ | ☐ | ☐ |
| 5 | Renovation(s) and/or addition(s) of varying degrees to the existing building(s) | ☒ | ☐ | ☐ | ☐ |
| 6 | Construction of new building and the evaluation of potential locations | ☒ | ☐ | ☐ | ☐ |
| 7 | List of 3 distinct alternatives (including at least 1 renovation and/or addition option) are recommended for further development and evaluation. | ☒ | ☐ | ☐ | ☐ |

**MSBA Review Comments:**

*As part of the Preliminary Evaluation of Alternatives, the District explored the following ten (10) options for grades 9-12 with an enrollment of 695 students at the existing Stoneham High School site:*

- *Option 1: Code Upgrade with an estimated project costs $115 million*
- *Option 2: Renovation with an estimated project cost of $173.4 million*
- *Option 3A1: Addition/Renovation with an estimated project cost of $175.7 million*
- *Option 3A2: Addition/Renovation with an estimated project cost of $175.2 million*
- *Option 3B: Addition/Renovation with an estimated project cost of $174.6 million*
- *Option 4A1: New Construction with an estimated project cost of $177.7 million*
- *Option 4A2: New Construction with an estimated project cost of $180.6 million*
- *Option 4A3: New Construction with an estimated project cost of $174.8 million*
- *Option 4B: New Construction with an estimated project cost of $172.9 million*
- *Option 4C: New Construction with an estimated project cost of $173.7 million*

*1) The information provided indicates there are no available spaces within the District for swing space. As part of the District's PSR, please provide information that describes the anticipated impact to students during an occupied and phased construction project. Please acknowledge.*

**RESPONSE: The District acknowledges.**

*7) The District has indicated further evaluation of the following five (5) options as part of its PSR:*

- *Option 1: Code Upgrade with an estimated project costs $115 million*
- *Option 2: Renovation with an estimated project cost of $173.4 million*



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- *Option 3A2: Addition/Renovation with an estimated project cost of $175.2 million*
- *Option 4A3: New Construction with an estimated project cost of $174.8 million*
- *Option 4B: New Construction with an estimated project cost of $172.9 million*

*No further review comments for this section.*

### 3.1.7 LOCAL ACTIONS AND APPROVAL

| | Provide the following Items | Complete; *No response required* | Provided; *District's response required* | Not Provided; *District's response required* | Receipt of District's Response; *To be filled out by MSBA Staff* |
|---|---|---|---|---|---|
| 1 | Signed Local Actions and Approvals Certification: (original) | ☒ | ☐ | ☐ | ☐ |
| 2 | Certified copies of the School Building Committee meeting notes showing specific submittal approval vote language and voting results, and a list of associated School Building Committee meeting dates, agenda, attendees and description of the presentation materials | ☒ | ☐ | ☐ | ☐ |

**MSBA Review Comments:**

*No review comments for this section.*

### 3.1.8 APPENDICES

| | Provide the following Items | Complete; *No response required* | Provided; *District's response required* | Not Provided; *District's response required* | Receipt of District's Response; *To be filled out by MSBA Staff* |
|---|---|---|---|---|---|
| 1 | Current Statement of Interest | ☒ | ☐ | ☐ | ☐ |
| 2 | MSBA Board Action Letter including the invitation to conduct a Feasibility Study | ☒ | ☐ | ☐ | ☐ |
| 3 | Design Enrollment Certification | ☒ | ☐ | ☐ | ☐ |

**MSBA Review Comments:**

*No review comments for this section.*

**Additional Comments:**

*The MSBA issues project advisories from time to time, as informational updates for Districts, Owner's Project Managers ("OPM"), and Designers in an effort to facilitate the efficient and effective administration of proposed projects currently pending review by the MSBA. The advisories can be found on the MSBA's website. In response to these review comments, please confirm that the District's consultants have reviewed all project advisories and they have been incorporated into the proposed project as applicable.*

**RESPONSE: The Designer and OPM have reviewed the project advisories and have incorporated them in the proposed project as applicable.**



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**Regarding Past Projects:**

*MSBA records do not indicate previous grants associated with Stoneham High School.*

**End**

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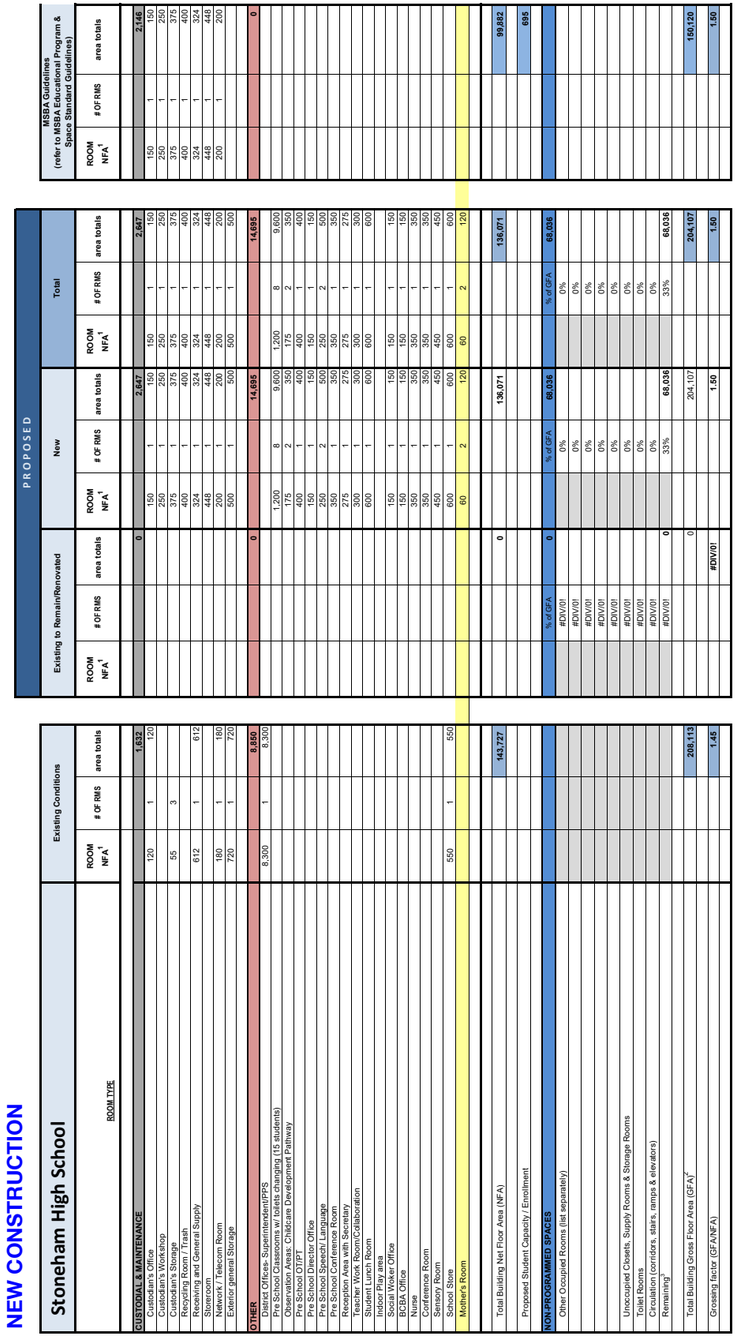
## NEW CONSTRUCTION

| Stoneham High School | Existing Conditions | | | PROPOSED: Existing to Remain/Renovated | | | PROPOSED: New | | | PROPOSED: Total | | | MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ROOM TYPE | ROOM NFA[1] | # OF RMS | area totals | ROOM NFA[1] | # OF RMS | area totals | ROOM NFA[1] | # OF RMS | area totals | ROOM NFA[1] | # OF RMS | area totals | ROOM NFA[1] | # OF RMS | area totals |
| **CORE ACADEMIC SPACES** | | | **38,200** | | | **0** | | | **38,790** | | | **38,790** | | | **32,890** |
| ***(List classrooms of different sizes separately)*** | | | | | | | | | | | | | | | |
| Classroom - General | 800 | 19 | 15,200 | | | | 900 | 23 | 20,700 | 900 | 23 | 20,700 | 850 | 23 | 19,550 |
| Classroom - General | 900 | 2 | 1,800 | | | | | | | | | | | | |
| Classroom - General | 1,000 | 7 | 7,000 | | | | | | | | | | | | |
| Classroom - General | 500 | 1 | 500 | | | | | | | | | | | | |
| Collaboration Space per neighborhood | | | | | | | 500 | 6 | 3,000 | 500 | 6 | 3,000 | | | |
| Teacher Planning | | | | | | | 100 | 23 | 2,300 | 100 | 23 | 2,300 | 100 | 23 | 2,300 |
| Small Group Seminar (20-30 seats) | | | | | | | 500 | 2 | 1,000 | 500 | 2 | 1,000 | 500 | 2 | 1,000 |
| Science Classroom / Lab ( labs that are multi-functional to utalize all science rooms- typical MSBA) | 1,200 | 8 | 9,600 | | | | 1,440 | 6 | 8,640 | 1,440 | 6 | 8,640 | 1,440 | 6 | 8,640 |
| Prep Room | 280 | 5 | 1,400 | | | | 200 | 6 | 1,200 | 200 | 6 | 1,200 | 200 | 6 | 1,200 |
| Department Office | 300 | 4 | 1,200 | | | | | | | | | | | | |
| Department Office | 700 | 1 | 700 | | | | | | | | | | | | |
| Central Chemical Storage Rm | | | | | | | 200 | 1 | 200 | 200 | 1 | 200 | 200 | 1 | 200 |
| World Language Lab | | | | | | | | | | | | | | | |
| Health Classroom | 800 | 1 | 800 | | | | 850 | 1 | 850 | 850 | 1 | 850 | | | |
| ESL Services: 1 CR (full size) @ 900 sf | | | | | | | 900 | 1 | 900 | 900 | 1 | 900 | | | |
| **SPECIAL EDUCATION** | | | **10,144** | | | **0** | | | **7,250** | | | **7,250** | | | **8,050** |
| ***(List classrooms of different sizes separately)*** | | | | | | | | | | | | | | | |
| Self-Contained SPED | | | | | | | | | | | | | 950 | 5 | 4,750 |
| Self-Contained SPED Toilet | | | | | | | | | | | | | 60 | 5 | 300 |
| Resource Room: 2 assessment centers (3-4 people) @150sf, 2General CR @900sf (divider) | 4 | 710 | 2,840 | | | | 2,100 | 1 | 2,100 | 2,100 | 1 | 2,100 | 500 | 3 | 1,500 |
| Small Group Room | 290 | 1 | 290 | | | | | | | | | | 500 | 3 | 1,500 |
| RISE Life Skills: 2 CR @ 900 sf, 150sf Toilet between RISE and STRIDE | 785 | 1 | 785 | | | | 1,950 | 1 | 1,950 | 1,950 | 1 | 1,950 | | | |
| RISE Life Skills (Rise 1 & Rise 2) | 1,234 | 1 | 1,234 | | | | | | | | | | | | |
| STRIDE Social Emotional Learning | 265 | 1 | 265 | | | | | | | | | | | | |
| STRIDE SEL: 1 CR @ 900, (partition) 2 offices @ 150, (suite with common area connect to CR) | 965 | 1 | 965 | | | | 1,050 | 1 | 1,050 | 1,050 | 1 | 1,050 | | | |
| STRIDE Office | 265 | 1 | 265 | | | | | | | | | | | | |
| Central Office | 1,180 | 1 | 1,180 | | | | | | | | | | | | |
| Speech and Language: 1 CR (half size) @ 450 sf, 1 Office @ 150 sf (near Rise) | | | | | | | 600 | 1 | 600 | 600 | 1 | 600 | | | |
| OT/PT: 1 CR @ 650 sf | | | | | | | 650 | 1 | 650 | 650 | 1 | 650 | | | |
| Common Planning Area | 1,180 | 1 | 1,180 | | | | | | | | | | | | |
| Language Based: 2 CR (half size) @ 450 sf (operable wall between) | 790 | 1 | 790 | | | | 450 | 2 | 900 | 450 | 2 | 900 | | | |
| ELL | 350 | 1 | 350 | | | | | | | | | | | | |
| **ART & MUSIC** | | | **8,344** | | | **0** | | | **5,350** | | | **5,350** | | | **6,625** |
| Art Classroom - 25 seats with Ceramics | 1,160 | 3 | 3,480 | | | | 1,200 | 1 | 1,200 | 1,200 | 1 | 1,200 | 1,200 | 2 | 2,400 |
| Art Workroom w/ Storage & kiln | 2,025 | 1 | 2,025 | | | | 150 | 2 | 300 | 150 | 2 | 300 | 150 | 2 | 300 |
| Art Room with divider | | | | | | | 1,500 | 1 | 1,500 | 1,500 | 1 | 1,500 | | | |
| Art Dark Room | 408 | 1 | 408 | | | | | | | | | | | | |
| Band - 50 - 100 seats | 1,858 | 1 | 1,858 | | | | 1,500 | 1 | 1,500 | 1,500 | 1 | 1,500 | 1,500 | 1 | 1,500 |
| Chorus - 50 - 100 seats | | | | | | | | | | | | | 1,500 | 1 | 1,500 |
| Ensemble- Practice | | | | | | | 200 | 1 | 200 | 200 | 1 | 200 | 200 | 1 | 200 |
| Music Practice | 74 | 4 | 296 | | | | 75 | 2 | 150 | 75 | 2 | 150 | 75 | 3 | 225 |
| Music Storage | 277 | 1 | 277 | | | | 500 | 1 | 500 | 500 | 1 | 500 | 500 | 1 | 500 |
| **VOCATIONS & TECHNOLOGY** | | | **4,547** | | | **0** | | | **11,120** | | | **11,120** | | | **7,200** |
| Technology/Engineering Rooms: Computer -Draft | | | | | | | | | | | | | 1,440 | 5 | 7,200 |
| Engineer Lab (exist) New combine Maker, Eng, Robotics, Scene Shop (clean, dirty, fab lab) | 950 | 1 | 950 | | | | 2,800 | 1 | 2,800 | 2,800 | 1 | 2,800 | | | |
| Engineering Rooms: Computer -Draft Project Lead the Way | | | | | | | 1,440 | 1 | 1,440 | 1,440 | 1 | 1,440 | | | |
| Technology Shop: Child Development | | | | | | | | | | | | | | | |
| Technology Shop: Fashion Lab / Child Development | 1,547 | 1 | 1,547 | | | | | | | | | | | | |
| Technology Shop: Culinary | 1,180 | 1 | 1,180 | | | | 1,440 | 1 | 1,440 | 1,440 | 1 | 1,440 | | | |
| Wood-Scene Shop/Theater Arts (in Engineer Lab line 52) | | | | | | | | | | | | | | | |
| Video Production ( 25 computers edit/ graphics, pod cast, studio with green screen, graphic art, stor.) | | | | | | | 2,000 | 1 | 2,000 | 2,000 | 1 | 2,000 | | | |
| Computer Science/ Bio-Medical- Project Lead the Way | 870 | 1 | 870 | | | | 1,440 | 1 | 1,440 | 1,440 | 1 | 1,440 | | | |
| Interdisciplinary Project and Performance Room (2,000 sf) | | | | | | | 2,000 | 1 | 2,000 | 2,000 | 1 | 2,000 | | | |
| **HEALTH & PHYSICAL EDUCATION** | | | **35,560** | | | **0** | | | **28,100** | | | **28,100** | | | **20,092** |
| Gymnasium with Gymnastics (70' valut, beam, matt , uneven bars, track) | 16,000 | 1 | 16,000 | | | | 16,000 | 1 | 16,000 | 16,000 | 1 | 16,000 | 12,000 | 1 | 12,000 |
| Gymnastics Storage | 510 | 1 | 510 | | | | 300 | 1 | 300 | 300 | 1 | 300 | | | |
| PE Alternatives- Fitness, Conditioning, Strength | 2,240 | 1 | 2,240 | | | | 3,000 | 1 | 3,000 | 3,000 | 1 | 3,000 | 3,000 | 1 | 3,000 |
| Athletics Storeroom (indoor track, high jump, BB Scoring, chairs) | 280 | 1 | 280 | | | | 500 | 1 | 500 | 500 | 1 | 500 | 300 | 1 | 300 |
| PE Locker Rooms - 1 Male / 1 Female w/ Toilets (50-60 stud.) | 2,420 | 2 | 4,840 | | | | 1,100 | 2 | 2,200 | 1,100 | 2 | 2,200 | 3,892 | 1 | 3,892 |
| Phys. Ed. Storage | 200 | 2 | 400 | | | | 400 | 1 | 400 | 400 | 1 | 400 | 500 | 1 | 500 |
| Athletic Director's Office, Secretary, Conference Area | 600 | 1 | 600 | | | | 400 | 1 | 400 | 400 | 1 | 400 | 150 | 1 | 150 |



## NEW CONSTRUCTION

| Stoneham High School | Existing Conditions | | | PROPOSED: Existing to Remain/Renovated | | | PROPOSED: New | | | PROPOSED: Total | | | MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ROOM TYPE | ROOM NFA[1] | # OF RMS | area totals | ROOM NFA[1] | # OF RMS | area totals | ROOM NFA[1] | # OF RMS | area totals | ROOM NFA[1] | # OF RMS | area totals | ROOM NFA[1] | # OF RMS | area totals |
| Health Instructor's Office w/ Shower & Toilet | | | | | | | | | | | | | 250 | 1 | 250 |
| Team Room (male 170 large lockers w/ toilets showers) | 2,650 | 1 | 2,650 | | | | 1,150 | 1 | 1,150 | 1,150 | 1 | 1,150 | | | |
| Team Room (female 180 regular lockers w/ toilets showers) | 2,570 | 1 | 2,570 | | | | 1,150 | 1 | 1,150 | 1,150 | 1 | 1,150 | | | |
| PE Office Male and Female (2 staff each) | 150 | 2 | 300 | | | | 250 | 2 | 500 | 250 | 2 | 500 | | | |
| Male Athletic Coaches (1 -off/ 8 coaches) shower+toilet | 350 | 2 | 700 | | | | 300 | 1 | 300 | 300 | 1 | 300 | | | |
| Female Athletic Coaches (2 offices/ 3 coaches) toilet + Shower | 120 | 1 | 120 | | | | 300 | 1 | 300 | 300 | 1 | 300 | | | |
| Training Room w/ storage | 1,060 | 1 | 1,060 | | | | 700 | 1 | 700 | 700 | 1 | 700 | | | |
| Equiptment Room, laundry, store sports equipt. storage | 860 | 1 | 860 | | | | 1200 | 1 | 1,200 | 1,200 | 1 | 1,200 | | | |
| Team Meeting Rooms (60 students) | 1,880 | 1 | 1,880 | | | | | | | | | | | | |
| Official's Room | 250 | 2 | 500 | | | | | | | | | | | | |
| Ticketing | 50 | 1 | 50 | | | | | | | | | | | | |
| **MEDIA CENTER** | | | **5,965** | | | **0** | | | **4,644** | | | **4,644** | | | **4,244** |
| Media Center / Reading Room *(cyber café, student help desk)* | 3,710 | 1 | 3,710 | | | | 4,244 | 1 | 4,244 | 4,244 | 1 | 4,244 | 4,244 | 1 | 4,244 |
| Computer Lab | 785 | 1 | 785 | | | | | | | | | | | | |
| Storage | | | | | | | | | | | | | | | |
| History Lab in Media Area (in media center) | 240 | 1 | 240 | | | | 400 | 1 | 400 | 400 | 1 | 400 | | | |
| Media Center Meeting Room | 220 | 1 | 220 | | | | | | | | | | | | |
| Media Center Office | 270 | 1 | 270 | | | | | | | | | | | | |
| Technology Integration | 740 | 1 | 740 | | | | | | | | | | | | |
| **AUDITORIUM / DRAMA** | | | **11,245** | | | **0** | | | **9,850** | | | **9,850** | | | **7,457** |
| Auditorium (600 seats) | 8,820 | 1 | 8,820 | | | | 6,000 | 1 | 6,000 | 6,000 | 1 | 6,000 | 4,633 | 1 | 4,633 |
| Stage | 1,975 | 1 | 1,975 | | | | 2,300 | 1 | 2,300 | 2,300 | 1 | 2,300 | 1,600 | 1 | 1,600 |
| Auditorium Storage | 350 | 1 | 350 | | | | 600 | 1 | 600 | 600 | 1 | 600 | 424 | 1 | 424 |
| Make-up / Dressing Rooms | | | | | | | 300 | 2 | 600 | 300 | 2 | 600 | 300 | 2 | 600 |
| Sound room | | | | | | | 150 | 1 | 150 | 150 | 1 | 150 | | | |
| Controls / Lighting / Projection | 100 | 1 | 100 | | | | 200 | 1 | 200 | 200 | 1 | 200 | 200 | 1 | 200 |
| **DINING & FOOD SERVICE** | | | **12,530** | | | **0** | | | **7,103** | | | **7,103** | | | **6,818** |
| Cafeteria / Student Lounge / Break-out | 8,000 | 1 | 8,000 | | | | 3,475 | 1 | 3,475 | 3,475 | 1 | 3,475 | 3,475 | 1 | 3,475 |
| Chair / Table Storage | 220 | 1 | 220 | | | | 324 | 1 | 324 | 324 | 1 | 324 | 324 | 1 | 324 |
| Scramble Serving Area | | | | | | | 600 | 1 | 600 | 600 | 1 | 600 | 600 | 1 | 600 |
| Kitchen: 394 Robin Hood/ 355 South/ 264 Colonial Park (1,013) | 3,040 | 1 | 3,040 | | | | 2,000 | 1 | 2,000 | 2,000 | 1 | 2,000 | 1,995 | 1 | 1,995 |
| Staff Lunch Room | 990 | 1 | 990 | | | | 424 | 1 | 424 | 424 | 1 | 424 | 424 | 1 | 424 |
| District External Freezer (28Lx10Wx9H) | 280 | 1 | 280 | | | | 280 | 1 | 280 | 280 | 1 | 280 | | | |
| **MEDICAL** | | | **800** | | | **0** | | | **770** | | | **770** | | | **710** |
| Medical Suite Toilet | | | | | | | 60 | 2 | 120 | 60 | 2 | 120 | 60 | 1 | 60 |
| Nurses' Office / Waiting Room | 400 | 1 | 400 | | | | 250 | 1 | 250 | 250 | 1 | 250 | 250 | 1 | 250 |
| Interview Room | | | | | | | 100 | 1 | 100 | 100 | 1 | 100 | 100 | 1 | 100 |
| Examination Room / Resting | 400 | 1 | 400 | | | | 100 | 3 | 300 | 100 | 3 | 300 | 100 | 3 | 300 |
| **ADMINISTRATION & GUIDANCE** | | | **5,910** | | | **0** | | | **5,752** | | | **5,752** | | | **3,651** |
| General Office / Waiting Room / Toilet | 855 | 1 | 855 | | | | 348 | 1 | 348 | 348 | 1 | 348 | 348 | 1 | 348 |
| Teachers' Mail and Time Room | 140 | 1 | 140 | | | | 100 | 1 | 100 | 100 | 1 | 100 | 100 | 1 | 100 |
| Duplicating Room | 400 | 1 | 400 | | | | 200 | 1 | 200 | 200 | 1 | 200 | 200 | 1 | 200 |
| Records Room | | | | | | | 200 | 1 | 200 | 200 | 1 | 200 | 200 | 1 | 200 |
| Principal's Office w/ Conference Area | 290 | 1 | 290 | | | | 375 | 1 | 375 | 375 | 1 | 375 | 375 | 1 | 375 |
| Principal's Secretary / Waiting | | | | | | | 125 | 1 | 125 | 125 | 1 | 125 | 125 | 1 | 125 |
| Assistant Principal's Office - AP1 | 385 | 1 | 385 | | | | 150 | 1 | 150 | 150 | 1 | 150 | 150 | 1 | 150 |
| Assistant Principal's Office - AP2 | | | | | | | | | | | | | 150 | 0 | - |
| Supervisory / Spare Office | | | | | | | 120 | 1 | 120 | 120 | 1 | 120 | 120 | 1 | 120 |
| Conference Room | 250 | 3 | 750 | | | | 450 | 1 | 450 | 450 | 1 | 450 | 450 | 1 | 450 |
| Guidance Office | 96 | 5 | 480 | | | | 150 | 4 | 600 | 150 | 4 | 600 | 150 | 4 | 600 |
| Guidance Waiting Room | 910 | 1 | 910 | | | | 100 | 1 | 100 | 100 | 1 | 100 | 100 | 1 | 100 |
| Guidance Storeroom | 90 | 1 | 90 | | | | 100 | 1 | 100 | 100 | 1 | 100 | 100 | 1 | 100 |
| Career Center | | | | | | | 324 | 1 | 324 | 324 | 1 | 324 | 324 | 1 | 324 |
| Records Room | | | | | | | 112 | 1 | 112 | 112 | 1 | 112 | 112 | 1 | 112 |
| Teachers' Work Room | 360 | 1 | 360 | | | | 348 | 1 | 348 | 348 | 1 | 348 | 348 | 1 | 348 |
| Business Office | 790 | 1 | 790 | | | | | | | | | | | | |
| Counselor Office | 160 | 2 | 320 | | | | | | | | | | | | |
| Kitchenette | 140 | 1 | 140 | | | | | | | | | | | | |
| Department Head Planning Area (Max8) | | | | | | | 700 | 1 | 700 | 700 | 1 | 700 | | | |
| (ELA, Math, Science, World Lang, History, Fine Arts, Spec. Ed, technology | | | | | | | | | | | | | | | |
| Book Storage (6,000 books) near Department Head Planning Area | | | | | | | 500 | 1 | 500 | 500 | 1 | 500 | | | |
| Huddle Rooms for Quiet Space | | | | | | | 50 | 6 | 300 | 50 | 6 | 300 | | | |
| Offices: School Adjustment Counselor, School Psych., SPED Transition Coordinator/SPED Office | 130 | 4 | 520 | | | | 150 | 4 | 600 | 150 | 4 | 600 | | | |



| Stoneham High School | Existing Conditions | | |
|---|---|---|---|
| ROOM TYPE | ROOM NFA[1] | # OF RMS | area totals |
| **CUSTODIAL & MAINTENANCE** | | | **1,632** |
| Custodian's Office | 120 | 1 | 120 |
| Custodian's Workshop | | | |
| Custodian's Storage | 55 | 3 | |
| Recycling Room / Trash | | | |
| Receiving and General Supply | 612 | 1 | 612 |
| Storeroom | | | |
| Network / Telecom Room | 180 | 1 | 180 |
| Exterior general Storage | 720 | 1 | 720 |
| **OTHER** | | | **8,850** |
| District Office- Superintendent/PPS | 8,300 | 1 | 8,300 |
| Pre School Classrooms w/ toilets changing (15 students) | | | |
| Observation Areas. Childcare Development Pathway | | | |
| Pre School OT/PT | | | |
| Pre School Director Office | | | |
| Pre School Speech Language | | | |
| Pre School Conference Room | | | |
| Reception Area with Secretary | | | |
| Teacher Work Room/Collaboration | | | |
| Student Lunch Room | | | |
| Indoor Play area | | | |
| School Nurse office | | | |
| BCBA Office | | | |
| Nurse | | | |
| Conference Room | | | |
| Sensory Room | | | |
| School Store | 550 | 1 | 550 |
| Mother's Room | | | |
| Total Building Net Floor Area (NFA) | | | 143,727 |
| Proposed Student Capacity / Enrollment | | | |
| **NON-PROGRAMMED SPACES** | | | |
| Other Occupied Rooms (list separately) | | | |
| Unoccupied Closets, Supply Rooms & Storage Rooms | | | |
| Toilet Rooms | | | |
| Circulation (corridors, stairs, ramps & elevators) | | | |
| Remaining[3] | | | |
| Total Building Gross Floor Area (GFA)[4] | | | 208,113 |
| Grossing factor (GFA/NFA) | | | 1.45 |

NEW CONSTRUCTION

| PROPOSED | Existing to Remain/Renovated | | | New | | | Total | | | NSBA Guidelines (refer to NSBA Educational Program & Space Standard Guidelines) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ROOM TYPE | ROOM NFA[1] | # OF RMS | area totals | ROOM NFA[1] | # OF RMS | area totals | ROOM NFA[1] | # OF RMS | area totals | ROOM NFA[1] | # OF RMS | area totals |
| **CUSTODIAL & MAINTENANCE** | | | **0** | | | **2,647** | | | **2,647** | | | **2,146** |
| Custodian's Office | | | | 150 | 1 | 150 | 150 | 1 | 150 | 150 | 1 | 150 |
| Custodian's Workshop | | | | 250 | 1 | 250 | 250 | 1 | 250 | 250 | 1 | 250 |
| Custodian's Storage | | | | 375 | 1 | 375 | 375 | 1 | 375 | 375 | 1 | 375 |
| Recycling Room / Trash | | | | 400 | 1 | 400 | 400 | 1 | 400 | 400 | 1 | 400 |
| Receiving and General Supply | | | | 324 | 1 | 324 | 324 | 1 | 324 | 324 | 1 | 324 |
| Storeroom | | | | 448 | 1 | 448 | 448 | 1 | 448 | 448 | 1 | 448 |
| Network / Telecom Room | | | | 200 | 1 | 200 | 200 | 1 | 200 | 200 | 1 | 200 |
| Exterior general Storage | | | | 500 | 1 | 500 | 500 | 1 | 500 | | | |
| **OTHER** | | | **0** | | | **14,695** | | | **14,695** | | | **0** |
| District Office- Superintendent/PPS | | | | 1,200 | 8 | 9,600 | 1,200 | 8 | 9,600 | | | |
| Pre School Classrooms w/ toilets changing (15 students) | | | | 175 | 2 | 350 | 175 | 2 | 350 | | | |
| Observation Areas. Childcare Development Pathway | | | | 400 | 1 | 400 | 400 | 1 | 400 | | | |
| Pre School OT/PT | | | | 150 | 1 | 150 | 150 | 1 | 150 | | | |
| Pre School Director Office | | | | 250 | 2 | 500 | 250 | 2 | 500 | | | |
| Pre School Speech Language | | | | 350 | 1 | 350 | 350 | 1 | 350 | | | |
| Pre School Conference Room | | | | 275 | 1 | 275 | 275 | 1 | 275 | | | |
| Reception Area with Secretary | | | | 300 | 1 | 300 | 300 | 1 | 300 | | | |
| Teacher Work Room/Collaboration | | | | 600 | 1 | 600 | 600 | 1 | 600 | | | |
| Student Lunch Room | | | | | | | | | | | | |
| Indoor Play area | | | | | | | | | | | | |
| School Nurse office | | | | 150 | 1 | 150 | 150 | 1 | 150 | | | |
| BCBA Office | | | | 150 | 1 | 150 | 150 | 1 | 150 | | | |
| Nurse | | | | 350 | 1 | 350 | 350 | 1 | 350 | | | |
| Conference Room | | | | 350 | 1 | 350 | 350 | 1 | 350 | | | |
| Sensory Room | | | | 350 | 1 | 350 | 350 | 1 | 350 | | | |
| School Store | | | | 450 | 1 | 450 | 450 | 1 | 450 | | | |
| Mother's Room | | | | 600 | 1 | 600 | 600 | 1 | 600 | | | |
| | | | | 60 | 2 | 120 | 60 | 2 | 120 | | | |
| Total Building Net Floor Area (NFA) | | | 0 | | | 136,071 | | | 136,071 | | | 99,882 |
| Proposed Student Capacity / Enrollment | | | | | | | | | | | | 695 |
| **NON-PROGRAMMED SPACES** | | | | % of GFA | | **68,036** | % of GFA | | **68,036** | | | |
| Other Occupied Rooms (list separately) | | | | #DIV/0! | | 0% | #DIV/0! | | 0% | | | |
| | | | | #DIV/0! | | 0% | #DIV/0! | | 0% | | | |
| | | | | #DIV/0! | | 0% | #DIV/0! | | 0% | | | |
| | | | | #DIV/0! | | 0% | #DIV/0! | | 0% | | | |
| | | | | #DIV/0! | | 0% | #DIV/0! | | 0% | | | |
| | | | | #DIV/0! | | 0% | #DIV/0! | | 0% | | | |
| | | | | #DIV/0! | | 0% | #DIV/0! | | 0% | | | |
| | | | | #DIV/0! | | 0% | #DIV/0! | | 0% | | | |
| Unoccupied Closets, Supply Rooms & Storage Rooms | | | | | | | | | | | | |
| Toilet Rooms | | | | | | | | | | | | |
| Circulation (corridors, stairs, ramps & elevators) | | | | | | | | | | | | |
| Remaining[3] | | | | | | | | | | | | |
| | | | 0 | | | 204,107 | | | 204,107 | | | 150,120 |
| Total Building Gross Floor Area (GFA)[4] | | | | | | | | | | | | |
| Grossing factor (GFA/NFA) | | | #DIV/0! | | | 1.50 | | | 1.50 | | | 1.50 |



Project Management | SMMA

# Project Minutes

| | | | |
|---|---|---|---|
| Project: | Stoneham High School Feasibility Study | Project No.: | 20033 |
| Prepared by: | Joel Seeley | Meeting Date: | 11/17/2020 |
| Re: | PR Subcommittee Meeting | Time: | 3:00pm |
| Location: | Remote Locations | Meeting No: | 4 |
| Distribution: | Attendees (MF) | | |

Attendees:

| PRESENT | NAME | AFFILIATION |
|---|---|---|
| ✓ | Sharon Iovanni | Chair PR Subcommittee, Community Member |
| ✓ | Marie Christie | Co-Chair School Building Committee |
| ✓ | Nicole Nial | School Committee Member |
| ✓ | Raymie Parker | Chair, Select Board |
| | Lisa Gallagher | Community Member, School Secretary, Past member of Middle School Building Committee |
| | David Bois | Co-Chair School Building Committee |
| ✓ | John Macero | Superintendent of Schools |
| | Bryan Lombardi | Principal |
| ✓ | Maureen Canova | Director Council on Aging |
| ✓ | Brooke Trivas | Perkins and Will |
| ✓ | Joel Seeley | SMMA |

| Item # | Action | Discussion |
|---|---|---|
| 4.1 | Record | M. Canova reviewed potential ways to provide opportunities for the Seniors to receive information on the project and provide feedback to the SSBC:<br>1. Informational Flyer to be included Council on Aging Newsletter mailing, approximately 1,600 recipients.<br>2. Informational Flyer to be included in Direct Email, approximately 800 contacts.<br>3. Stoneham TV programming<br>4. Surveys<br>5. Robocalls<br>The SSBC's October 2020 Informational Flyer was mailed 1,600 Seniors in the November Council on Aging Newsletter mailing. Feedback from the Seniors is the next Flyer should increase the font and diagrams size. |

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www.smma.com



TABLE OF CONTENTS
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PREFERRED SOLUTION 3.3.4
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APPENDICES

Project: Stoneham High School Feasibility Study
Meeting Date: 11/17/20
Meeting No.: 4
Page No.: 2

| Item # | Action | Discussion |
|---|---|---|
| 4.2 | M. Canova<br>J. Seeley<br>B. Trivas | **Senior Holiday Drive-Thru Lunch**<br>A holiday lunch will be distributed to the Seniors, via a drive-thru, on 12/2/20. The following documents are to be included in the Drive-Thru Handout Packet:<br>1. **Community-Wide Survey No. 1**- modified to the Seniors. *J. Seeley to coordinate with M. Canova on the modifications and send to the subcommittee for review*.<br>2. **Updated Informational Flyer** *B. Trivas to update the Informational Flyer and send to the Subcommittee for review. The flyer should have a link to the PSA video*. |
| 4.3 | J. Macero<br>S. Iovanni<br>M. Canova | **PSA Video**<br>The PSA Video, oriented to the Seniors and streamed on Stoneham TV, was reviewed.<br>1. J. Macero to coordinate with A. Brough Palmerino on logistics.<br>2. S. Iovanni and M. Canova to coordinate on a draft agenda for the video. |
| 4.4 | B. Trivas | **Community Forum No. 4 Flyer**<br>B. Trivas to develop the flyer for Community Forum No. 4 and send to the Subcommittee for review. |
| 4.5 | B. Trivas | **January Tax Bill Mailing**<br>The tax bill mailing in January was reviewed as a potential method of mailing a new Informational Flyer to 6,000 residents. The new Informational Flyer should reflect the December 16 voting taken by the SSBC on the Preferred Option, providing the rational and reasons the particular option was selected.<br>B. Trivas to draft the new Informational Flyer and send to the Subcommittee for review. |
| 4.6 | M. Canova | M. Canova to suggest a person to fill the current membership opening on the SSBC. |
| 4.7 | R. Parker | **Community-Wide Survey No. 1**<br>The Subcommittee reviewed the findings of Community-Wide Survey No. 1, attached.<br>The most impactful feedback comment was a request for the SSBC to create a Facebook page for information distribution.<br>R. Parker will confirm with D. Sheehan on any conditions or policies that the SSBC will need to follow relative to creating and maintaining a Facebook page. |
| 4.8 | J. Seeley | **Community-Wide Survey No. 2** |

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Project: Stoneham High School Feasibility Study
Meeting Date: 11/17/20
Meeting No.: 4
Page No.: 3

| Item # | Action | Discussion |
|---|---|---|
| | | J. Seeley to review the draft Community-Wide Survey No. 2 with the Subcommittee at the next Subcommittee meeting. |
| 4.9 | S. Iovanni | S. Iovanni to schedule the next PR Subcommittee meeting for 12/1/20 at 3:00pm. |

Attachments: Community Forum No. 1 Survey Results

The information herein reflects the understanding reached. Please contact the author if you have any questions or are not in agreement with these Project Minutes

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JGS/sat/P:\2020\20033\04-MEETINGS\4.3 Mtg_Notes\PR Subcommittee\04-17November2020\Prsubcommitteemeeting_17November2020.Docx



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## Stoneham High School Feasibility Study

### Stoneham School Building Committee
### Community Survey No. 1A

December 2, 2020

As the Stoneham School Building Committee (SSBC) prepares its recommendation for a Preferred Schematic Design to the Massachusetts School Building Authority (MSBA), it is important that we hear from you. Please complete the following short survey; the results will help guide the decision-making process as the SSBC continues its important work.

Please return this survey to the drop box at Stoneham Town Hall, the drop box in the vestibule at the Senior Center, or mail it to the Council on Aging at 136 Elm Street, Stoneham, MA 02180.

**Please return this survey by Wednesday, December 9, 2020 at 12:00 PM.**

1. **Please select all stakeholder groups that apply to you.**
   - ❑ I have children who have attended Stoneham Public Schools
   - ❑ I have grandchildren who are or have attended Stoneham Public Schools
   - ❑ I attended Stoneham Public Schools
   - ❑ Stoneham Registered Voter
   - ❑ Stoneham Homeowner
   - ❑ I am a community member who never had children attend Stoneham Public Schools

2. **With a new/improved community facility, I would like to see:**

   *Please check all that apply.*

   | | |
   |---|---|
   | ☐ | Ability to use tech center |
   | ☐ | Ability to use lifelong learning classes/programs |
   | ☐ | Ability to use fitness center and outdoor amenities (track, walking trail, pickle ball) |
   | ☐ | Ability to take part in intergenerational programming |
   | ☐ | Ability to use facility on the weekends |
   | ☐ | Ability for facility to be used as a sheltering place for emergencies |
   | ☐ | Other_____ |

3. **I would support the construction of a new high school complex as a long-term solution.** *Please circle one number.* **(1 = NO 5 = YES)**

   **NO** 1 2 3 4 5 **YES**

**(Survey continues on reverse side)**



## Stoneham High School Feasibility Study

### Stoneham School Building Committee
### Community Survey No. 1A

December 2, 2020

4. **I believe Stoneham's urgent need for improving the high school complex must be addressed now.** *Please circle one number.* **(1=NO 5= YES)**

   **NO** 1 2 3 4 5 **YES**

5. **How can the School Building Committee improve communication with you regarding this project and state grant?**
   *Please circle your most used form of communication.*

   | | | |
   |---|---|---|
   | Email | Sentinel | Newspaper |
   | Stoneham Community Television | Robo Call | Website |

6. **Is there another important consideration that is not listed above? If so, please explain.**

**Thank you for participating in Community Survey No. 1A**

*Please be assured that your opinions and contact information are protected and at no time will this information be sold to any third party. This information is strictly for the reference of the SSBC to incorporate your input into the project.*

Would you like to receive updates and information regarding the Stoneham High School project as the Feasibility Study progresses?

- ❑ Yes, my name is _____ and my email address is: _____
- ❑ No.

For the link to complete this survey electronically and share with your family, friends and neighbors: **https://forms.gle/bYiSELwizXiyMFhS9**



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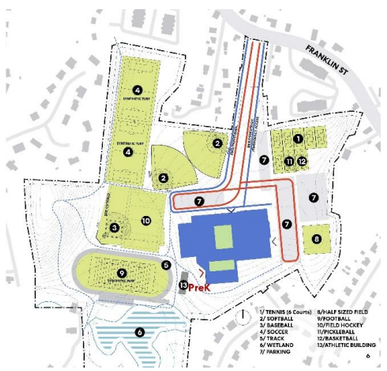
## Stoneham High School Feasibility Study

### Stoneham School Building Committee

December 2, 2020

- The Stoneham School Building Committee (SSBC) was formed in 2019.
- The Town is partnering with the Massachusetts School Building Authority (MSBA) who will provide a grant to assist in the cost of the high school project.
- The SSBC has studied 10 options for the high school, ranging from repairs to new construction, and has reduced that number down to 5.
- The SSBC has hosted several community forums and has made presentations to the Select Board, Finance and Advisory Board and School Committee describing these options.
- On December 16, 2020, the SSBC will select the option that best suits the needs of the Community.







***Some of the Options the SSBC is reviewing***

***For additional information, please visit the SSBC website: http://www.stoneham-ma.gov/hsbc***



# Perkins&Will

## Memo

**Date:** 11.5.2020
**To:** Stoneham
**From:** Brooke Trivas
**Re:** Program/ Meeting with:
David Pignone, AD
John Macaro, Superintendent
Bryan Lombardi, Principal
Marie Christe, Co-chair
David Warner, Landscape
Brooke Trivas, Perkins&Will

**Athletic Program: Interior/Exterior Program Outline**
NOTE: All subject to site conditions, other program needs (access, parking, Prek, play etc), building location/size and placement on site may impact final program.

**Interior Program**

| | | | |
|---|---|---|---|
| **HEALTH & PHYSICAL EDUCATION** | | | **28,100** |
| Gymnasium with Gymnastics (70' valut, beam, matt , uneven bars, track) | 16,000 | 1 | 16,000 |
| Gymnastics Storage | 300 | 1 | 300 |
| PE Alternatives- Fitness, Conditioning, Strength | 3,000 | 1 | 3,000 |
| Athletics Storeroom (indoor track, high jump, BB Scoring, chairs) | 500 | 1 | 500 |
| PE Locker Rooms - 1 Male / 1 Female w/ Toilets (50-60 stud.) | 1,100 | 2 | 2,200 |
| Phys. Ed. Storage | 400 | 1 | 400 |
| Athletic Director's Office, Secretary, Conference Area | 400 | 1 | 400 |
| Health Instructor's Office w/ Shower & Toilet | | | |
| Team Room (male 170 large lockers w/ toilets showers) | 1,150 | 1 | 1,150 |
| Team Room (female 180 regular lockers w/ toilets showers) | 1,150 | 1 | 1,150 |
| PE Office Male and Female (2 staff each) | 250 | 2 | 500 |
| Male Athletic Coaches (1-off/ 8 coaches) shower+toilet | 300 | 1 | 300 |
| Female Athletic Coaches (2 offices/ 3 coaches) toilet + Shower | 300 | 1 | 300 |
| Training Room w/ storage | 700 | 1 | 700 |
| Equiptment Room, laundry, store sports equipt. storage | 1200 | 1 | 1,200 |
| Team Meeting Rooms (60 students) | | | |
| Official's Room | | | |
| Ticketing | | | |

**Concession Program**

- 1 male locker room- 1,150 sf
- 1 women locker room- 1,150 sf
- 1 official- 10' x 10' = 100 sf
- 1 trainer- 10 x 10' = 100 sf
- Concession 15' x 20' = 300 sf
- Storage area- Football, high jump (DP provide list) 500- 800 sf
- Mens/ Women public toilets= tbd
- Ticketing separate from athletic building

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**Date:** 11.16.2020

**Exterior Program**

- Bleachers Home 750 seating (press box)
- Bleachers Away- 250-300 seating
- 6 tennis courts (1/ pickleball)
- 1 softball
- 1 baseball/ overlap with field hocky
- 1 football / (synthetic)
- 2 soccer/Lacrosse (synthetic)
- NEW – add ½ field grass area (160' x 160') if possible
- NOTE: if we can't have two softball than would like 1 softball + 1 grass area)
- Storage
    - Under bleacher 300 sf for football dummy pads, high jump pads, hurdles, etc.
    - Storage for softball, baseball, soccer, LAX (DP provide list)

**Athletic Fields - Sketches (attached) - Why I did I do what I did?**
**David Pignone 11.06.2020**

**Tennis Courts**
In all 3 design options 3A2, 4A3, and 4B I placed to the courts in the same place

- I feel like that field that abuts the apartment complex, and closest to Benjamin Terrace has always been too narrow and we have struggled with hosting games there with crowds standing all over the place. It has been mentioned that most of our fields are not regulation size and I felt that putting a field back there would not be ideal, but Tennis courts would work great.

**Turf Fields**
In all 3 design options I was looking to make sure all 3 turf fields were in close proximity to the new Athletic Building (bathrooms, concessions, etc...) I don't care how they fit on our campus, or where they necessarily go, but would love for this concept to be taken into consideration so the athletic building is NOT just for football games, but services all 3 turf fields and their events. Why am I more concerned about the turf fields than I am for baseball or softball? Because the number of kids, teams, and or events that will be played on those 3 fields will outnumber the use of any other fields we have. I am not against those fields being in close proximity as well, but first preference are the 3 turf fields.

**Baseball & Softball fields**
I have no preference in where you put these fields, although we strongly would like to suggest the bleachers, we get for both varsity baseball and varsity softball are the type that are placed behind home plate. Not sure if that will make a difference in where you place them. But that is going to be our wish. We do want to continue to make sure in all baseball field designs that we keep the field hockey field in the outfield. We would like to get a second softball field as we have now. I don't know what the future of softball enrollment is going to be and would hate for in 10 years to see it increase back to where it was 5 years ago and not have a second softball field to accommodate a JV team and more importantly the youth program. **If I had to choose between a second softball field and the extra grass field (mentioned below) I would choose the extra grass field. It would get way more use all year round**

**Grass field or extra field - this field does not need to be full - half or 3/4 works**
Having an extra field (at this point I think cost wise we would be pushing overboard to suggest it being turf) so Grass it is. With the number of programs, we have playing in the same season considering all the different levels we would need an option for overflow. For example, in the fall with boys' and girls' soccer 3 levels each - varsity, JV and freshman teams



Perkins&Will

**Date:** 11.16.2020
**Re:** [Insert subject]

that alone are 6 teams. We constantly practice with two teams on the same field using half a field each, but we could easily put freshman on the grass some days or if one team wanted to have a inter squad scrimmage and use the entire field, then they could spill over to the extra field without having to cancel practice or make kids come back in the evening and start stacking multiple teams in time slots on the same field. Where this grass field goes is not important to me. Be nice if it was close to the turfs but not a priority

**Athletic Building**
This building will have men's and women's bathrooms for spectators, concessions, 2 team rooms/ locker rooms, a room for officials and a room for the athletic trainer and of course some storage (as much as we can get) In all 3 option designs I just want the concept of this building to accommodate and be in close proximity to the 3 turf fields being proposed. As mentioned above in the turf field section, I don't care how you make them fit, but I am hopeful that we can find a way to make the athletic building and the 3 turf fields fit together somewhere on campus.
I would also suggest when building this building we take the proper steps in creating the possibility for future years to add a second floor. So, creating a set of stairs leading up, creating a gable roof or large dormers so the potential for making nothing out of something is an easy task someday down the road. This space in the future could increase storage if needed or become offices the options are endless.

**Stadium Field**
Not against moving this field or leaving it where it is. Whatever works best to accomplish my other suggestions mentioned above. One thing we heard yesterday was the desire to have bleachers on both sides. A home bleacher seating approx. 750 and a visiting bleacher seating approx. 250.
We mentioned when looking at track events both the discus and javelin can be set up to be thrown on the stadium field. We were going to look for space close by to add a separate shot-put pit.

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# Meeting Minutes

**Date:** 11.22.2020 **Authored by:** Brooke Trivas

### Meeting Details Stoneham High School: PSR Regulatory Review

| | | | |
|---|---|---|---|
| **Meeting Date:** | 11.17.2020 | **Project Name:** | Stoneham High School |
| **Meeting Time:** | 1:00 PM | **Project Number:** | 153010.00 |
| **Meeting Location:** | VIRTUAL | **Attendees:** | Chief Grafton, Fire<br>Chief McIntire, Police<br>Mike Rourke, Fire<br>Dennis Sheehan, Town Administrator<br>John Macero, Superintendent<br>Joel Seeley, OPM<br>Brooke Trivas, Perkins&Will<br>Xi Liu, Perkins&Will<br>Lizzy Dame, Perkins&Will<br>David Warner, Landscape<br>Emily Hunt, Landscape<br>David Conway, Civil<br>Kevin Alles, Mechanical<br>Nicholas Stefantsiv, Security |
| **Next Meeting Date:** | TBD | **Cc:** | Team, file |

### Discussion

| ITEM NO. | DESCRIPTION | RESPONSIBILITY | STATUS |
|---|---|---|---|
| 1.1 | PARKING: Concern in option 4A that there is not enough parking in this plan. Parking count provided by SBC. Needs to be reviewed. | Design Team | Under Review |
| 1.2 | STADIUM in Option 4A- concern that the stadium is too close to the site perimeter and lighting may impact the neighbors which may preclude using the stadium at night. | Design Team | Under Review |

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***Please note:*** *The foregoing constitutes our understanding of matters discussed and conclusions reached. Other participants are requested to review these items and advise the originator in writing of any errors or omissions.*



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**Meeting Minutes**
**Stoneham High School**
**Meeting Date:** 11.17.2020

| | | | |
|---|---|---|---|
| 1.3 | ACCESS FROM FRANKLIN: Pedestrian/ Emergency access separated from general vehicular traffic. | None | Record |
| 1.4 | HC ACCESS: for Baseball bleachers. Spectator seating would replicate quantity of seating currently in place. Is there a greater need for HC parking at those facilities? May need to provide a paved way for HC access which could double as emergency access. | Design Team | Under Review |
| 1.5 | SMALL FIELD: Option 4A if that area becomes parking could help emergency vehicles. | Design Team | Under Review |
| 1.6 | HC/ EMERGENCY ACCESS: Can HC access double as Emergency access. | Design Team | Under Review |
| 1.7 | ACCESS AROUND THE BUILDING: Existing HS has a 12' wide paved driveway which access east to west. Site assessment with FEMA. Looking at the 360 around the building to cue up the cars. Needing to distribute materials or vaccines. 360 around the building. Cars can cue at drop off area. Need emergency response to get to the fields. | sRecord | Record |
| 1.8 | PARKING ALL OPTIONS: Discussion around the quantity of parking in 4A. Some attendees expressed concern for more parking than existing. Stoneham to review. | Stoneham | Under Review |
| 1.9 | NEW CONSTURCTION 4A: Group noted that this Option appears congested. | Record | Record |
| 1.10 | OPTION 4A: Fields are behind the building and not in public view. Police needs to get behind the building for supervision. Would like a turnaround at the end of 17 at the terrace. | Design Team | Under Review |
| 1.11 | AMBULANCE: Pull up to trainer area is desirable. | Design Team | Under Review |
| 1.12 | OPITON 4A: use 17 to get around the building. | Design Team | Under Review |
| 1.13 | VISITOR BLEACHERS: How will emergency vehicles get to this area? Benjamin Terrace? | Design Team | Under Review |
| 1.14 | BENJAMIN TERRACE: Good idea for emergency access to SHS site. | Record | Record |
| 1.15 | OPTION 3A (renovation/addition): Vehicular Loop around the building is similar to existing. | Record | Record |
| 1.16 | FRONT OF THE SCHOOL DRIVEWAY: Be sensitive about pedestrians in areas at the front of the building. Provide barrier to pedestrians in front to the building. Bollards, planters etc.... to stop traffic. | Design Team | Record |
| 1.17 | CAMERAS: SHS will have interior and exterior cameras determined by the security committee. | Record | Record |
| 1.18 | PREK: Noted that the PREK will be on site. Security and safety for this population. | Record | Record |



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**Meeting Minutes**
**Stoneham High School**
**Meeting Date:** 11.17.2020

| | | | |
|---|---|---|---|
| 1.19 | STORIES: The new building is generally three stories. Section determined by building placement and grading. | Record | Record |
| 1.20 | FENCING AROUND FIELDS: Design to consider how to create fencing while keeping people off field- while keeping it welcoming. Start with fencing that is most needed and go from there. | Design Team | Under Review |
| 1.21 | OPTION 4A (new): Sits higher on the site. This Option working towards providing service to the east side of the site for emergency access, and kitchen. Moves the stadium more central to the site. Keeps a connection between building and stadium. | Record | Record |
| 1.22 | ACCESS AROUND THE SITE: Need to be able to get around in the event of an emergency but does not have to be paved and plowed. Noted that some areas will not have full access. | Record | Record |
| 1.23 | SAFER PLACE: What will be on the power requirements. Cooling in cafeteria and gym, walk in cooler and freezer on generator, toilets, general emergency lighting in the building, determine what is on the generator? IF the gym has AC than this increases the load. All electric building. Looking to have AC in the gymnasium. Town of Stoneham to provide memo on capacity, use, accessibility, etcetera. | Town of Stoneham | Provide Memo |

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***Please note:*** *The foregoing constitutes our understanding of matters discussed and conclusions reached. Other participants are requested to review these items and advise the originator in writing of any errors or omissions.*



Project Management | SMMA

# Project Minutes

| | | | |
|---|---|---|---|
| Project: | Stoneham High School Feasibility Study | Project No.: | 20033 |
| Prepared by: | Joel Seeley | Meeting Date: | 12/7/2020 |
| Re: | School Building Committee Meeting | Time: | 6:00pm |
| Location: | Remote Participation | Meeting No: | 15 |
| Distribution: | Attendees (MF) | | |

Attendees:

| PRESENT | NAME | AFFILIATION | VOTING MEMBER |
|---|---|---|---|
| Attended Remote | Marie Christie | Co-Chair, School Building Committee | **Voting Member** |
| Attended Remote | David Bois | Co-Chair, School Building Committee; Community Member with Architecture Experience | **Voting Member** |
| Attended Remote | Nicole Nial | School Committee Member | **Voting Member** |
| Attended Remote | Raymie Parker | Chair Select Board | **Voting Member** |
| | | Community Member with Building Commissioner Experience | **Voting Member** |
| Attended Remote | Douglas Gove | Community Member with Engineering Experience | **Voting Member** |
| Attended Remote | Stephen O'Neill | Community Member with Engineering Experience | **Voting Member** |
| Attended Remote | Josephine Thomson | Community Member | **Voting Member** |
| Attended Remote | Jeanne Craigie | Town Moderator | **Voting Member** |
| Attended Remote | Lisa Gallagher | Community Member, School Secretary, Past member of Middle School Building Committee | **Voting Member** |
| Attended Remote | Sharon Iovanni | Community Member | **Voting Member** |
| Attended Remote | Cory Mashburn | Community Member, Finance and Advisory Board | **Voting Member** |
| Attended Remote | Paul Ryder | Community Member with Construction Experience | **Voting Member** |
| Attended Remote | David Pignone | Athletic Director, Member knowledgeable in educational mission and function of facility | **Voting Member** |
| Attended Remote | Kevin Yianacopolus | Local Official responsible for Building Maintenance | **Voting Member** |
| Attended Remote | Dennis Sheehan | Town Administrator / MCPPO Certified | Non-Voting Member |
| Attended Remote | John Macero | Superintendent of Schools, Secretary of School Building Committee | Non-Voting Member |
| Attended Remote | Bryan Lombardi | Stoneham High School Principal | Non-Voting Member |
| Attended Remote | Brian McNeil | Facilities Director | Non-Voting Member |
| Attended Remote | Susan McPhee | Spark Energy Conservation | |
| Attended Remote | Vamshi Gooje | Thornton Tomasetti | |
| Attended Remote | Brooke Trivas | Perkins and Will | |
| Attended Remote | Patrick Cunningham | Perkins and Will | |
| Attended Remote | Leo Liu | Perkins and Will | |
| Attended Remote | David Warner | Warner Larson | |
| Attended Remote | Ed Dolan | BALA Consulting Engineers | |
| Attended Remote | Joel Seeley | SMMA | |
| | | | |

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Meeting Date: 12/7/20
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| Item # | Action | Discussion |
|---|---|---|
| 15.1 | Record | Call to Order, 6:00 PM, meeting opened by roll call. |
| 15.2 | Record | In accordance with the executive order issued by the Governor on March 10, 2020, this meeting will be held via video conference and a recording of such will be posted on the Town's website. |
| 15.3 | Record | A motion was made by S. Iovanni and seconded by N. Nial to approve the 11/30/20 School Building Committee meeting minutes. No discussion, motion passed unanimous by roll call vote. |
| 15.4 | Record | J. Seeley reviewed the Budget Status Report, dated 11/30/20, attached. |
| 15.5 | J. Seeley | J. Seeley reviewed Warrant No. 6, attached.<br>A motion was made by R. Parker and seconded by J. Craigie to approve Warrant No. 6. No discussion, motion passed unanimous by roll call vote.<br>J. Seeley to forward Warrant No. 6 to D. Bois for signature. |
| 15.6 | Committee | J. Seeley distributed and reviewed the Draft Schematic Design Phase Meetings and Agenda Schedule, attached.<br>Committee Discussion:<br>1. N. Nial indicated Annual Town Meeting is 5/3/21, the SSBC meeting will need to be moved to 5/4/21.<br>The Committee will review for the next Committee meeting. |
| 15.7 | J. Macero | J. Macero to review if there is a Pre-K Guideline that the proposed Pre-K program can be compared to. *(from prior meeting)* |
| 15.8 | J. Macero | J. Macero to review and provide direction on how close the middle school is to capacity and if it will need the space for the potential District Offices in the future? *(from prior meeting)* |
| 15.9 | B. Trivas | B. Trivas to determine the cost impact of relocating the Football/Track complex versus keeping the Football/Track complex in its current location. *(from prior meeting)* |
| 15.10 | B. Trivas | B. Trivas to calculate the amount of parking spaces needed to be dedicated for the PreK parents to park and walk their children into the building. *(from prior meeting)* |
| 15.11 | D. Warner | D. Warner to review the Zoning Bylaw for the minimum required amount of parking spaces. *(from prior meeting)* |
| 15.12 | J. Seeley | J. Seeley to break out the costs in a series of categories: Base High School Project followed by a listing of the Community Related Enhancements such as the synthetic |

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Project: Stoneham High School Feasibility Study
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| Item # | Action | Discussion |
|---|---|---|
| | | playfields, concession/locker room building, traffic signals, PreK Program, District Offices, Larger Auditorium, Larger Gymnasium, District Kitchen. *(from prior meeting)* |
| 15.13 | Committee | The Committee to review the draft Options Evaluation Form and email J. Seeley any modifications or additional factors to be used in evaluating each option. *(from prior meeting)* |
| 15.14 | PR Subcommittee D. Sheehan | The PR Subcommittee will review Town policies related to creating a Project Facebook page with D. Sheehan. *(from prior meeting)* |
| 15.15 | Record | D. Sheehan introduced S. McPhee, E. Dolan and V. Gooje to the Committee. D. Sheehan, P. Cunningham, E. Dolan, S. McPhee, V. Gooje and J. Seeley presented the Zero Net Energy Strategy, attached.<br>Committee Discussion:<br>1. R. Parker asked if the ZNE Capital Costs are included in the current cost estimates for each Option?<br>*P. Cunningham indicated yes, the ZNE Capital Costs are included in the current cost estimates for each Option.*<br>2. R. Parker asked what does the MSBA Minimum Project Baseline mean with respect to reimbursement?<br>*J. Seeley indicated the MSBA Minimum Project Baseline is a project that meets the minimum energy performance that the MSBA requires in order to receive reimbursement. It does meet the level required for the additional 2% reimbursement.*<br>3. J. Craigie asked how much of the parking lots do the PV car canopies cover?<br>*P. Cunningham indicated the canopies cover approximately three-quarters of the parking lots. The column supports are centered between the parking rows and do not reduce the amount of spaces.*<br>4. J. Craigie asked if the PV canopies can be damaged by vehicles?<br>*S. McPhee indicated the base of the column supports are concrete and are centered between the parking rows to be out of the way of moving vehicles.*<br>5. J. Craigie asked what is the life expectancy of the PV panels?<br>*S. McPhee indicated the PPA is for 20 years, the panels will last longer, between 30-35 years. After the 20-year PPA agreement expires, the Town will have the opportunity to purchase the panels for a nominal amount.*<br>6. D. Sheehan indicated the PPA would be brought to Town Meeting for approval. |

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| Item # | Action | Discussion |
|---|---|---|
| | | 7. R. Parker asked if Eversource provides incentive rebates for PV systems?<br>*D. Sheehan indicated the incentive rebates would be thru the MassSave program, which Eversource is a member of, based on the EUI.*<br>8. S. Iovanni asked if any of the Options have better energy performance than the others?<br>*P. Cunningham indicated all the Options can obtain the additional 2% MSBA reimbursement and all can achieve the 25 EUI, some with more refinement than others.*<br>9. D. Sheehan indicated the project, once completed, may see elevated use, which may impact the projected Life Cycle Savings. |
| 15.16 | P. Cunningham<br>D. Warner | P. Cunningham presented and reviewed Site Plans, Floor Plans, Building Sections and Massing Studies for New Construction Option 4B1 and 4B2, attached.<br>Committee Discussion:<br>1. P. Cunningham to review shifting the Pre-K entry closer to the parking lot. *(from prior meeting)*<br>2. D. Warner to provide construction and maintenance costs comparing synthetic and natural turf fields. *(from prior meeting)*<br>3. S. Iovanni asked if B. Lombardi could provide feedback on Options 4B1 and 4B2 from an educational perspective?<br>*B. Lombardi indicated preference for Option 4B1, which presents itself as equally representing academics, arts and athletics by having the auditorium in the wing. There is also potential for more dynamic corridors on the upper floors with the embedded gymnasium and clear access to the playing fields from the PE spaces can be provided for in Option 4B1.*<br>4. S. O'Neill indicated preference for Option 4B1, which provides greater opportunity for scale and massing at the front of the building.<br>5. D. Bois asked if public access can be controlled to the rest of building in Option 4B1, when the Gymnasium is open to the public off-hours?<br>*P. Cunningham explained how the building can be segregated thru doors and gates to control public access.*<br>6. D. Bois asked if there are sufficient means of egress from the Gymnasium in Option 4B1?<br>*P. Cunningham indicated he will review but believes the required amount can be accommodated.* |

1000 Massachusetts Avenue
Cambridge, MA 02138
617.547.5400

www.smma.com



Project: Stoneham High School Feasibility Study
Meeting Date: 12/7/20
Meeting No.: 15
Page No.: 5

| Item # | Action | Discussion |
|---|---|---|
| | | 7. D. Bois asked if D. Pignone could provide feedback on Options 4B1 and 4B2 from an athletics perspective?<br>*D. Pignone indicated Option 4B1 will work, given the public access control P. Cunningham described and with the locker rooms having direct access to the exterior.*<br>8. J. Macero indicated Option 4B1 represents the inclusive culture of Stoneham High School with access to academic spaces, arts and auditorium, beautiful playing fields and outdoor green spaces.<br>9. M. Christie indicated preference for Option 4B1, which provides opportunity for glass and light between the upper floor academic corridors and the Gymnasium.<br>10. J. Craigie indicated preference for Option 4B1, but is concerned if there will be dark and unlit pathways that the students will have to traverse going to the playing fields from the PE spaces.<br>*P. Cunningham indicated the pathways will be well lit.*<br>11. D. Pignone asked if the Gymnasium has a suspended jogging/walking track?<br>*B. Trivas indicated yes.*<br>12. D. Bois indicated preference for Option 4B1, having a plan that supports academics, providing opportunities for parking and playfield layout, and having least amount of construction impact.<br>A motion was made by J. Craigie and seconded by N. Nial to approve Option 4B1 for the 4B series. No discussion, motion passed unanimous by roll call vote. |
| 15.17 | Record | J. Seeley reviewed the Detailed Construction Cost Estimate, Project Cost, Construction Cost Comparison, Reimbursement and Cost to Stoneham Summaries for each Option, attached. |
| 15.18 | J. Seeley<br>B. Trivas<br>D. Sheehan | J. Seeley reviewed the outline for the presentations for the 12/9/20 Community Forum No. 4 and the 12/15/20 Tri-Board Meeting. J. Seeley and B. Trivas to develop the presentations.<br>Committee Discussion:<br>1. D. Bois asked if the Zero Net Energy Strategy will be included in the presentations?<br>*P. Cunningham indicated yes, but a more summarized version.*<br>2. R. Parker asked if a memo can be provided to the Tri-Board members defining the expectation for the meeting.<br>*D. Sheehan and J. Seeley to develop a memo to send to the Tri-Board.* |

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Project: Stoneham High School Feasibility Study
Meeting Date: 12/7/20
Meeting No.: 15
Page No.: 6

| Item # | Action | Discussion |
|---|---|---|
| | | 3. R. Parker asked if the Tri-Board members can receive a copy of the presentation prior the meeting?<br>*J. Seeley to forward a copy of the presentation prior to the meeting*.<br>4. J. Thomson asked if the perspective renderings will be included in the presentation?<br>*B. Trivas indicated yes*. |
| 15.19 | PR Subcommittee | **Subcommittee Updates**<br>**Public Relations Subcommittee**<br>1. S. Iovanni reviewed the Community Forum No. 4 Press Release and the draft Community-Wide Survey No. 2, attached. PR Subcommittee will provide the results of the survey at the 12/16/20 Committee meeting.<br>**Green Building Initiatives**<br>1. J. Seeley reviewed the 11/9/20 and 11/23/20 Green Building Initiatives Committee Meeting Minutes, attached.<br>**CM at Risk Prequalification Committee**<br>1. J. Seeley reviewed the 12/1/20 Notice to Proceed with the CM at Risk Delivery Method from the Office of the Inspector General, attached, and indicated eleven CM at Risk Qualification packages have been submitted. |
| 15.20 | Record | **Committee Questions** - none |
| 15.21 | J. Macero<br>B. Lombardi<br>J. Seeley | **Old or New Business**<br>1. J. Seeley reviewed emails from community members on the Community Garden, attached.<br>2. J. Craigie asked if photographs can be taken during the Billerica HS and Winthrop HS tours?<br>*J. Macero indicated yes, photographs will be taken and shared with the Committee*.<br>3. B. Lombardi will forward photographs from the Fall 2019 tour of Billerica HS to J. Seeley to forward to the Committee. |
| 15.22 | Record | **Public Comment** - none |
| 15.23 | Record | Next **SSBC Meeting: December 16, 2020 at 7:00 pm.** |
| 15.24 | Record | A Motion was made by S. Iovanni and seconded by R. Parker to adjourn the meeting. No discussion, motion passed unanimous by roll call vote. |

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Project: Stoneham High School Feasibility Study
Meeting Date: 12/7/20
Meeting No.: 15
Page No.: 7

Attachments: Agenda, Budget Status Report, Warrant No. 6, Draft Schematic Design Phase Meetings and Agenda Schedule, Detailed Construction Cost Estimate, Project Cost, Construction Cost Comparison, Reimbursement and Cost to Stoneham Summaries for each Option, Community Forum No. 4 Press Release, Draft Community-Wide Survey No. 2, 11/9/20 and 11/23/20 Green Building Initiatives Committee Meeting Minutes, 12/1/20 Notice to Proceed with the CM at Risk Delivery Method, Emails from community members on the Community Garden, Powerpoint

The information herein reflects the understanding reached. Please contact the author if you have any questions or are not in agreement with these Project Minutes

1000 Massachusetts Avenue
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JGS/sat/P:\2020\20033\04-MEETINGS\4.3 Mtg_Notes\School Building Committee\2020\15_2020_7December\Schoolbuildingcommitteemeeting_7December2020_FINAL.Docx



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Project Management | SMMA

# Agenda

| | | | |
|---|---|---|---|
| Project: | Stoneham High School Feasibility Study | Project No.: | 20033 |
| Re: | School Building Committee Meeting | Meeting Date: | 12/7/2020 |
| Prepared by: | Joel Seeley | Meeting Time: | **6:00 PM** |
| Location: | Remote Participation | | |
| Distribution: | Attendees (MF) | | |

1. Call to Order
2. Approval of Minutes
3. Approval of Invoices and Commitments
4. Schedule and Budget Update
5. ZNE Approach
   - Process
   - Systems
   - Solar Photovoltaic
   - Energy Modeling
   - First Costs and Operating Costs
6. Design Options Update
7. Review Design Options Cost Models
8. Preliminary Options Evaluation
9. Prepare for Community Forum No. 4 and Tri-Board Meeting
10. Subcommittee Updates
11. New or Old Business
12. Committee Questions
13. Public Comments
14. Next Meeting: December 16, 2020
15. Adjourn

**Join GoToMeeting:**
https://global.gotomeeting.com/join/517001509

**Dial-In:** +1 (224) 501-3412

**Access Code:** 517-001-509

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Cambridge, MA 02138
617.547.5400

www.smma.com



11/30/2020

**Stoneham High School Feasibility Study**
**Stoneham, Massachusetts**

**FEASIBILITY STUDY BUDGET STATUS REPORT**

| ProPay Code | Description | Total Project Budget | Authorized Changes | Revised Total Budget | Total Committed | % Comtd to Date | Budget Balance | Actual Spent to Date | % Spent to Date | Projected Expenditure/ Commitments | Balance to Spend |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **FEASIBILITY STUDY AGREEMENT** | | | | | | | | | | |
| 0001-0000 | **OPM Feasibility Study/Schematic Design** | $ 187,500.00 | $ (57,500.00) | $ 130,000.00 | $ 130,000.00 | 100% | $ - | $ 35,000.00 | 27% | $ 95,000.00 | $ 95,000.00 |
| 0002-0000 | **A/E Feasibility Study/Schematic Design** | $ 465,000.00 | $ (45,000.00) | $ 420,000.00 | $ 420,000.00 | 100% | $ - | $ 100,000.00 | 24% | $ 320,000.00 | $ 320,000.00 |
| 0003-0000 | **Environmental & Site** | $ 60,000.00 | $ 100,000.00 | $ 160,000.00 | $ 71,733.64 | 45% | $ 88,266.36 | $ 32,450.00 | 45% | $ 39,283.64 | $ 127,550.00 |
| 0004-0000 | **Other** | $ 37,500.00 | $ 2,500.00 | $ 40,000.00 | $ 8,312.36 | 21% | $ 31,687.64 | $ 614.08 | 7% | $ 7,698.28 | $ 39,385.92 |
| | **SUBTOTAL** | **$ 750,000.00** | | **$ 750,000.00** | **$ 630,046.00** | | **$ 119,954.00** | **$ 168,064.08** | **27%** | **$ 461,981.92** | **$ 581,935.92** |

** *Committed from Other*

| | | e | Amount | |
|---|---|---|---|---|
| Stoneham Independent | | $ | 230.81 | Advertisement in Stoneham Independent for Designer Procurement |
| Andrew T. Johnson / SMMA | | $ | 383.27 | Designer Proposal Production for Designer Procurement |
| MassSave ZNE Expert ESA | | $ | 7,500.00 | Cost Share for Thornton Tomasetti |
| Stoneham Independent | | $ | 198.28 | Advertisement in Stoneham Independent for CM-R Procurement - RFQ |
| | | **$** | **8,312.36** | |

Project Management | SMMA

# Warrant No. 6

| | | | |
|---|---|---|---|
| Project: | Stoneham High School, Stoneham, Massachusetts | Project No.: | 20033 |
| Prepared by: | Joel G. Seeley, AIA | Date: | 12/7/2020 |

School Building Committee for the Stoneham High School hereby authorizes to draw against funds for the obligations incurred for value received in services and for materials shown below:

| Vendor | Invoice No. | | Invoice Date | Invoice Amount | ProPay Code | Balance After Invoice |
|---|---|---|---|---|---|---|
| SMMA | 53997 | | 11/30/2020 | $ 7,000.00 | 0001-0000 | $ 88,000.00 |
| Perkins & Will | 0179554 | | 12/03/2020 | $ 25,000.00 | 0002-0000 | $ 295,000.00 |
| Perkins & Will | 0179554 | AM1 | 12/03/2020 | $ 16,417.50 | 0003-0000 | $ 2,970.00 |
| Perkins & Will | 0179554 | AM5 | 12/03/2020 | $ 4,166.14 | 0003-0000 | $ 0.00 |
| Stoneham Independent | Legal Ad 201107 | | 11/11/2020 | $ 198.28 | 0004-0000 | $ 39,385.92 |
| | | | **Total** | **$ 52,781.92** | | |

| | |
|---|---|
| _____ | _____ |
| Marie Christie | David Bois |
| _____ | _____ |
| Nicole Nial | Raymie Parker |
| _____ | _____ |
| | Douglas Gove |
| _____ | _____ |
| Stephen O'Neill | Josephine Thomson |
| _____ | _____ |
| Jeanne Craigie | Lisa Gallagher |
| _____ | _____ |
| Sharon Iovanni | Cory Mashburn |
| _____ | _____ |
| Paul Ryder | David Pignone |

Approved on _____

1000 Massachusetts Avenue
Cambridge, MA 02138
617.547.5400

www.smma.com

p:\2020\20033\00-info\0.8 warrants\warrant no. 6 - december 7, 2020\warrant no. 6.docx



Perkins&Will

# Invoice

December 3, 2020
Project No: 153010.000
Invoice No: 0179554

Dennis Sheehan
Town of Stoneham
Town Hall
35 Central St
Stoneham, MA 02180

Stoneham High School - FS-SD

**Professional Services: through November 27, 2020**

**Fee**

| Billing Phase | Fee | Percent Complete | Earned | Previous Fee Billing | Current Fee Billing |
|---|---|---|---|---|---|
| Feasibility Phase | 175,000.00 | 71.4286 | 125,000.00 | 100,000.00 | 25,000.00 |
| Schematic Design | 245,000.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Amendment #1 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Survey/Wetlands-Nitsch | 27,500.00 | 100.00 | 27,500.00 | 27,500.00 | 0.00 |
| Phase 1 ESA | 2,970.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Geotechnical Services-Lahlaf | 16,417.50 | 100.00 | 16,417.50 | 0.00 | 16,417.50 |
| Hazardous Materials-UEC | 4,950.00 | 100.00 | 4,950.00 | 4,950.00 | 0.00 |
| Amendment #2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Traffic Analysis-Nelson Nygaard | 18,150.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Amendment #3 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hydrant Flow Testing-AE | 1,760.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Amendment #4 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Traffic Analysis-Nelson Nygaard | -18,150.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Amendmant #5 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Traffic Analysis-Nelson Nygaard | 4,166.14 | 100.00 | 4,166.14 | 0.00 | 4,166.14 |
| Amendment #6 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Tarffic Analysis - Vanasse | 13,970.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total Fee | 491,733.64 | | 178,033.64 | 132,450.00 | 45,583.64 |
| | | **Total Fee** | | | **45,583.64** |

**REMIT PAYMENTS TO** Perkins&Will, Inc.
PO Box 71181
Chicago, IL 60694-1181

**WIRE/ACH TO** BMO Harris Bank
ABA# 071000288, Acct# 3769601
SWIFT HATRUS44

**TERMS** Net 30 Days

225 Franklin Street, Suite 1100, Boston, MA 02110 t 617.478.0300 perkinswill.com



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| | | | | |
|---|---|---|---|---|
| Project | 153010.000 | Stoneham High School - FS/SD | Invoice | 0179554 |

**Total this Invoice** **$45,583.64**

**Outstanding Invoices**

| Number | Date | Balance |
|---|---|---|
| 0178394 | 10/9/2020 | 107,450.00 |
| 0178789 | 11/2/2020 | 25,000.00 |
| **Total** | | **132,450.00** |

**Total Now Due** **$178,033.64**

**REMIT PAYMENTS TO** Perkins&Will, Inc.
PO Box 71181
Chicago, IL 60694-1181

**WIRE/ACH TO** BMO Harris Bank
ABA# 071000288, Acct# 3769601
SWIFT HATRUS44

**TERMS** Net 30 Days



LGCI
Lahlaf Geotechnical Consulting, Inc.

100 Chelmsford Road
Suite 2
Billerica, MA 01862
Phone: (978) 330-5912
Fax: (978) 330-5056
E-mail: LGCI@LGCinc.net
Bill To

Perkins + Will
Ms. Brook Trivas
225 Franklin Street
Suite 1100
Boston, MA 02110

# Invoice

| | |
|---|---|
| Invoice for Period Ending: | 8/11/2020 |
| Invoice No.: | 2022-01 |
| Date: | 8/11/2020 |

| Terms | Client No. | Project Name | Project Number | Location |
|---|---|---|---|---|
| Net 30 | 0940 | Prop. Stoneham High School | 2022 | Stoneham, MA |

| Description | | Qty | Rate | Amount |
|---|---|---|---|---|
| LGCI Proposal No. 20051-Rev.1<br>Desk Review - August 2020 | | | | |
| LGCI Proposal No. 20051-Rev.1 | $14,925.00 | | | |
| Amount Invoiced to date | $0.00 | | | |
| Current LGCI Invoice No. 2022-01 | $3,000.00 | | | |
| Balance remaining from Budget amount | $11,925.00 | | | |
| Tasks 1 to 3<br>Review Existing Information and Prepare Letter Report | | 1 | 3,000.00 | 3,000.00 |
| Make check payable to Lahlaf Geotechnical Consulting, Inc. | | | | |
| **Total due this invoice** | | | | $3,000.00 |
| | | | **Balance Due** | $3,000.00 |

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LGCI
Lahlaf Geotechnical Consulting, Inc.

100 Chelmsford Road
Suite 2
Billerica, MA 01862
Phone: (978) 330-5912
Fax: (978) 330-5056
E-mail: LGCI@LGCinc.net

# Invoice

| | |
|---|---|
| Invoice for Period Ending: | 10/1/2020 |
| Invoice No.: | 2022-02 |
| Date: | 10/1/2020 |

Bill To

Perkins + Will
Ms. Brooke Trivas
225 Franklin Street
Suite 1100
Boston, MA 02110

| Terms | Client No. | Project Name | Project Number | Location |
|---|---|---|---|---|
| Due on receipt | 0940 | Prop. Stoneham High School | 2022 | Stoneham, MA |

| Description | | Qty | Rate | Amount |
|---|---|---|---|---|
| LGCI Proposal No. 20051-Rev.1 | | | | |
| Preliminary Explorations - September 2020 | | | | |
| LGCI Proposal No. 20051-Rev.1 | $14,925.00 | | | |
| Amount Previously Invoiced | $3,000.00 | | | |
| Current LGCI Invoice No. 2022-01 | $11,925.00 | | | |
| Amount Invoiced to date | $14,925.00 | | | |
| Balance remaining from Budget amount | $0.00 | | | |
| Tasks 4a to 8 | | | | |
| Prepare Boring Location Plan for Review | | 1 | 160.00 | 160.00 |
| Mark Boring Locations in the Field | | 1 | 650.00 | 650.00 |
| Utility Clearance | | 1 | 175.00 | 175.00 |
| Coordinate with and Engage Subcontractor to Perform Borings | | 1 | 4,770.00 | 4,770.00 |
| Prevailing Wages for Subcontractor | | 1 | 1,700.00 | 1,700.00 |
| LGCI Engineer to Observe Borings | | 1 | 2,200.00 | 2,200.00 |
| Laboratory Testing | | 1 | 370.00 | 370.00 |
| Boring Logs and Preliminary Report | | 1 | 1,900.00 | 1,900.00 |
| Make check payable to Lahlaf Geotechnical Consulting, Inc. | | | | |
| **Total due this invoice** | | | | $11,925.00 |

**Balance Due** $11,925.00



NELSON NYGAARD

October 30, 2020
Project No: 920508.001
Invoice No: 78528

Perkins + Will - Boston
Perkins + Will
Attn: Dana Anderson
55 Court Street
Second Floor
Boston, MA 02108

Project 920508.001 STONEHAM High School Feasibility Study

**Professional Services from August 29, 2020 to October 2, 2020**

Phase 00.00 Environmental Testing: Traffic Consultant Services

**Fee**

| | | | | |
|---|---|---|---|---|
| Total Fee | 16,500.00 | | | |
| Percent Complete | 22.9545 | Total Earned | 3,787.50 | |
| | | Previous Fee Billing | 0.00 | |
| | | Current Fee Billing | 3,787.50 | |
| | | **Total Fee** | | **3,787.50** |
| | | | **Total this Phase** | **$3,787.50** |

| **Billing Limits** | **Current** | **Prior** | **Billed To Date** |
|---|---|---|---|
| Total Billings | 3,787.50 | 0.00 | 3,787.50 |
| Limit | | | 16,500.00 |
| Remaining | | | 12,712.50 |

**Total this Invoice** **$3,787.50**

**REMITTANCE ADVICE**

**BY REGULAR MAIL OR COURIER:**
**Pay to:** Nelson Nygaard Consulting Assoc., Inc.
PO BOX 71181
Chicago, IL 60694
**Tel:** 415-284-1544 **Tax ID:** 58-2592493

**ACH WIRE INSTRUCTIONS:**
**Beneficiary Bank:** BMO Harris Bank
**Routing Number:** 071000288 **Account Number:** 3543154
**Beneficiary:** Nelson Nygaard Consulting Assoc., Inc.
**Beneficiary Info:** Invoice & Project No. **Advice e-mail:** cash.receipts@perkinswill.com



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SMMA

Mr. Dennis Sheehan
Town Administrator
Town of Stoneham
35 Central St
Stoneham, MA 02180

November 30, 2020
Project No: 20033.00
Invoice No: 0053997

Project 20033.00 Stoneham High School OPM Services

**Professional Services from November 1, 2020 to November 27, 2020**

**Fee**

| Billing Phase | Fee | Percent Complete | Earned | Previous Fee Billing | Current Fee Billing |
|---|---|---|---|---|---|
| Feasibility Study | 56,000.00 | 75.00 | 42,000.00 | 35,000.00 | 7,000.00 |
| Schematic Design | 49,000.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total Fee | 105,000.00 | | 42,000.00 | 35,000.00 | 7,000.00 |
| | | **Total Fee** | | | **7,000.00** |
| | | | | **Total this Invoice** | **$7,000.00** |

**Outstanding Invoices**

| Number | Date | Balance |
|---|---|---|
| 0053146 | 6/30/2020 | 7,230.81 |
| 0053302 | 7/28/2020 | 7,000.00 |
| 0053473 | 9/3/2020 | 7,383.27 |
| 0053638 | 10/8/2020 | 7,000.00 |
| 0053816 | 11/2/2020 | 7,000.00 |
| **Total** | | **35,614.08** |

**Billings to Date**

| | Current | Prior | Total |
|---|---|---|---|
| Fee | 7,000.00 | 35,000.00 | 42,000.00 |
| Expense | 0.00 | 614.08 | 614.08 |
| **Totals** | **7,000.00** | **35,614.08** | **42,614.08** |

**Authorized By: Joel Seeley**

1000 Massachusetts Avenue
Cambridge, MA 02138

275 Promenade Street, Suite 275
Providence, RI 02908

617.547.5400
www.smma.com



# Stoneham Independent

**Woburn Daily Times, Inc., 1 Arrow Drive, Woburn MA 01801, 781-933-3700**

## INVOICE

Bill To Town of Stoneham
Attn: April Lanni, Procurement Officer
Address 1 35 Central Street
Address 2
City Stoneham State MA ZIP 02180

**PO#**

**Legal Ad#** **201107**

**Billing Key** Town of Stoneham RFQ: Construction Management at Risk Services for Stoneham High School project

**Run 1** **11/11/2020** **Run 2** **Run 3** **Run 4**

**# of Inches** **10.3** **# of Runs** **1**

**Cost** **198.28** **Notary Fee** **Total Cost** **$198.28**

**Payment Date** **Payment** **Balance Due** **$198.28**

**LEGAL NOTICE**

**TOWN OF STONEHAM**

Request for Qualifications for Construction Management at Risk Services for the Stoneham High School project. The Town of Stoneham requests that qualified and experienced firms submit a Statement of Qualifications (SOQ) and required information to the Town of Stoneham no later than 2:00 PM EST, December 2, 2020. The CM at Risk procurement is conducted pursuant to M.G.L. 149A, contained in Chapter 193 of the Acts of 2004. This Request for Qualifications ('RFQ') is the first phase of a two-phase procurement process as set forth in M.G.L. 149A. The Town of Stoneham is prequalifying firms interested in providing public CM at Risk services for the project through the RFQ process. The Town of Stoneham will evaluate submitted SOQs based upon the identified evaluation criteria as set forth in the RFQ and will select those respondents it deems qualified. Only those respondents deemed qualified will be invited to submit a proposal in response to a detailed Request for Proposals ('RFP'), which will be issued in the second phase of the procurement process. The project delivery method for construction will be public CM at Risk with a Guaranteed Maximum Price ('GMP') under M.G.L. 149A. Firms interested in being prequalified must demonstrate that they have had prior experience as a Construction Manager on projects of a similar size, complexity and type as this project as described in the RFQ. At the time a CM firm submits its Qualification Statement, the CM firm must have a DCAMM Certification in the Contractor Category, 'General Building Construction', with a single limit greater than the Estimated Total Construction cost of $140,000,000. It is anticipated that the Construction Manager will be under contract while the schematic design documents are being developed. The Request for Qualifications may be downloaded from http://procurementdocuments.smma.com or copies may be obtained by contacting the Town of Stoneham c/o Symmes Maini & McKee Associates, Inc., Attn: Joel Seeley, 1000 Massachusetts Avenue, Cambridge, Massachusetts 02138, 617-547-5400 or opm@smma.com on or after 2:00 PM EST on November 11, 2020.

201107 11/11/20





**STONEHAM HIGH SCHOOL**
**STONEHAM SCHOOL BUILDING COMMITTEE**

**MEETINGS SCHEDULE AND AGENDAS**
**November 16, 2020** ***Updated December 3, 2020***

| DATE | AGENDA |
|---|---|
| ***Schematic Design Phase (SD)*** | |
| | |
| | |
| January 12, 2021 | SCHOOL BUILDING COMMITTEE MEETING (TUESDAY) |
| | Review Schematic Design Phase Schedule and Deliverables |
| | |
| January 13, 2020 or<br>January 20, 2020 | *MSBA FAS MEETING* |
| | |
| January 25, 2021 | SCHOOL BUILDING COMMITTEE MEETING |
| | Review Site and Floor Plans |
| | |
| February 8, 2021 | SCHOOL BUILDING COMMITTEE MEETING |
| | Review Progress Site and Floor Plans |
| | Prepare for MSBA Board Meeting |
| | |
| *February 11, 2021* | *MSBA BOARD MEETING* |
| | |
| TBD | COMMUNITY FORUM NO. 5 |
| | |
| February 22, 2021 | SCHOOL BUILDING COMMITTEE MEETING |
| | Review MSBA Board Meeting |
| | CM Recommendation and Introduction |
| | Review Progress Site and Floor Plans |
| | Review Preliminary Exterior Imagery |
| | |
| March 8, 2021 | SCHOOL BUILDING COMMITTEE MEETING |
| | Review Sustainable Design Features |
| | Review Mechanical and Electrical Systems |
| | |
| March 22, 2021 | SCHOOL BUILDING COMMITTEE MEETING |
| | Review Progress Site and Floor Plans |
| | Review Updated Exterior Elevations |
| | Review Structural Systems |
| | |
| TBD | COMMUNITY FORUM NO. 6 |
| | |
| TBD | TRI-BOARD MEETING NO. 3 |
| | |
| April 5, 2021 | SCHOOL BUILDING COMMITTEE MEETING |
| | Review Preliminary Interior Materials |
| | Review Preliminary Exterior Materials |
| | |

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**STONEHAM HIGH SCHOOL**
**STONEHAM SCHOOL BUILDING COMMITTEE**

**MEETINGS SCHEDULE AND AGENDAS**
**November 16, 2020** ***Updated December 3, 2020***

| DATE | AGENDA |
|---|---|
| April 19, 2021 | SCHOOL BUILDING COMMITTEE MEETING |
| | Review Progress Site and Floor Plans |
| | Review Updated Mechanical and Electrical Systems |
| | Review Progress Technology Systems |
| | Review Progress FFE Layout |
| | |
| May 3, 2021 | SCHOOL BUILDING COMMITTEE MEETING |
| | Review Progress Site and Floor Plans |
| | Review Updated Exterior Elevations and Materials |
| | Review Updated Interior Materials |
| | |
| May 17, 2021 | SCHOOL BUILDING COMMITTEE MEETING |
| | Review Preliminary Cost Model |
| | Review Value Engineering Options |
| | |
| TBD | COMMUNITY FORUM NO. 7 |
| | |
| June 1, 2021 | SCHOOL BUILDING COMMITTEE MEETING (TUESDAY) |
| | Review Site Plan, Floor Plans and Elevations |
| | Review Final Mechanical and Electrical Systems |
| | Review Final Sustainable Design Features |
| | Review Updated Cost Model |
| | |
| TBD | TRI-BOARD MEETING NO. 3 |
| | |
| June 14, 2021 | SCHOOL BUILDING COMMITTEE MEETING |
| | Final Site Plan, Floor Plans and Elevations |
| | Final Project Cost |
| | Final Project Schedule |
| | Vote to submit Schematic Design Cost Estimate to MSBA |
| | |
| *June 23, 2021* | *SUBMIT SCHEMATIC DESIGN COST ESTIMATE TO MSBA* |
| | |
| June 28, 2021 | SCHOOL BUILDING COMMITTEE MEETING |
| | Vote to submit Schematic Design Package to MSBA |
| | |
| *July 7, 2021* | *SUBMIT SCHEMATIC DESIGN PACKAGE TO MSBA* |
| | |
| | ADDITIONAL MEETINGS TO BE SCHEDULED |

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# STONEHAM HIGH SCHOOL
# Building Committee Meeting

12.07.2020

## AGENDA

**Zero Net Energy Strategy**

**Design Option Update**
- Option 4B – New Construction
  - Option 4B1 - Embedded Gymnasium
  - Option 4B2 - Embedded Auditorium

**Design Options Recap**
- Option 2A – Renovation Only
- Option 3A – Renovation Addition
- Option 4A – New Construction

**Project Cost Update**

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→ Aerial View of Stoneham High School

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# Stoneham High School Zero Net Energy Strategy

**PDP 12/07/2020**



# Agenda

- **Introductions**
- **Zero Net Energy Modeling Process**
- **Recommended Building Systems Comparison**
- **Power Purchase Agreement (PPA) Process and Energy Rate Assumptions**
- **Stoneham Project Energy Modeling**
  Scheme Comparison
  System Comparison
- **First Cost Vs Operating Cost Overview**
- **Committee Discussion and Next Steps**





## Introductions

**Patrick Cunningham** AIA LEED, AP, CPHC
**Associate Principal**
Perkins & Will

**Erin Wortman**
**Director of Planning & Community Development**
Town of Stoneham

**Edward Dolan** PE, LEED AP
**Senior Vice President**
BALA Consulting Engineers

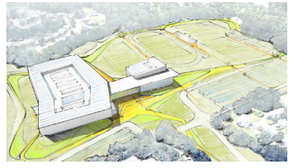
**Vamshi Gooje** PE, LEED AP
**Associate Principal, Energy Analyst**
Thornton Tomasetti

**Susan McPhee**
**Energy Conservation Coordinator**
Spark Energy Conservation

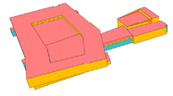
**Brian McNeil**
**Director of Facilities**
Town of Stoneham

## Zero Net Energy Modeling Process

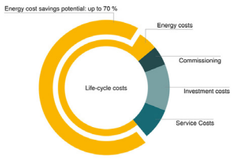
### Design Options



### Energy models



### Life Cycle Cost Models



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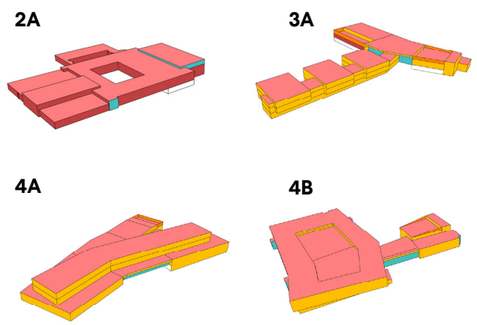
Zero Net Energy Modeling Process

**How do we estimate building energy use?**

- Building Geometry
- Roof and Wall Performance
- Building Mechanical System
- Energy Mix (all electric vs fossil fuels)
- Historical Climate Data

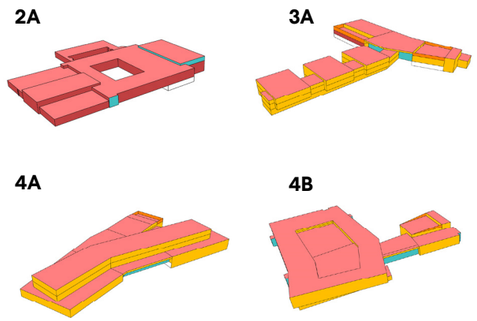





Zero Net Energy Modeling Process

**How do we estimate life cycle costs?**

- First Costs
- Replacement Costs
- Maintenance Costs
- Energy Costs






Life Cycle Cost Model

**ZNE Premiums**

- Bond Payments associated with geothermal minus: MassSave grant (EUI 25)
- Bond payments of rooftop solar (if no PPA)
- Bond payments associated with envelope upgrades

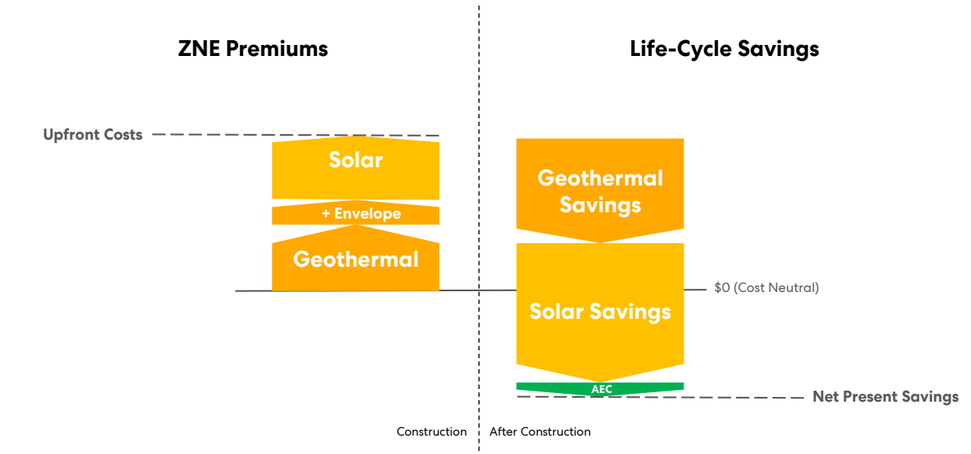
**Life-Cycle Savings**

- Utility Cost (energy, water and sewer) and maintenance associated with geothermal system (net savings vs premiums)
- The utility cost savings and Class I REC revenue generated by the rooftop solar (if no PPA)
- The Alternative Energy Credit (AEC) revenue generated by the geothermal system

Construction | After Construction



Life Cycle Cost Model



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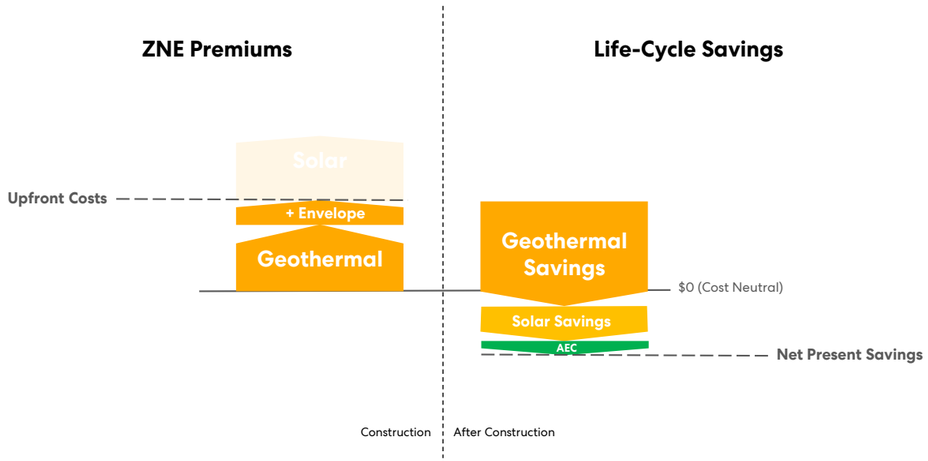
**Power Purchase Agreement (PPA)**
**Life Cycle Cost Model**

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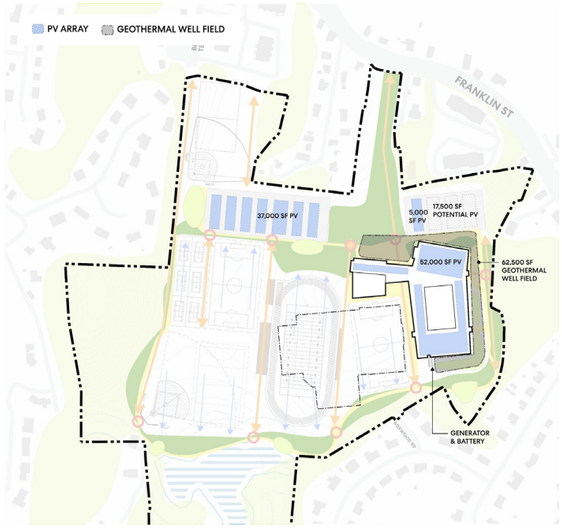
**Power Purchase Agreement (PPA) Process**

- **What is a PPA?**
  - A PPA is a financial agreement where a vendor arranges the design, permitting (including utility incentives), financing and installation of a solar energy system on an identified property at little to no cost.
  - PILOT (payment in lieu of taxes)
  - Approval Process
- **Why is it the right choice for Stoneham?**
  - A PPA is possible while in MSBA
  - Can be part a reimbursable expense
  - Can reimburse the project at the end of construction or lower the electricity rate
  - A/B projected that they would have spent an additional $120,000 on purchasing electricity without solar
  - Smart Program

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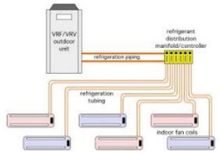
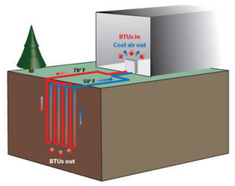
**Building Systems Comparison**



**Central Plant**
**(MSBA Minimum Requirement)**




**Variable Refrigerant Flow**




**Geo Exchange**

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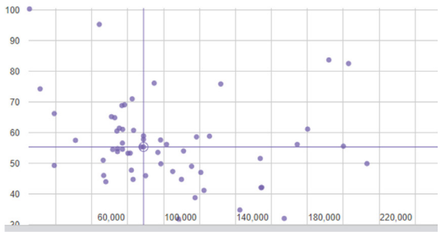
## Building Systems Comparison

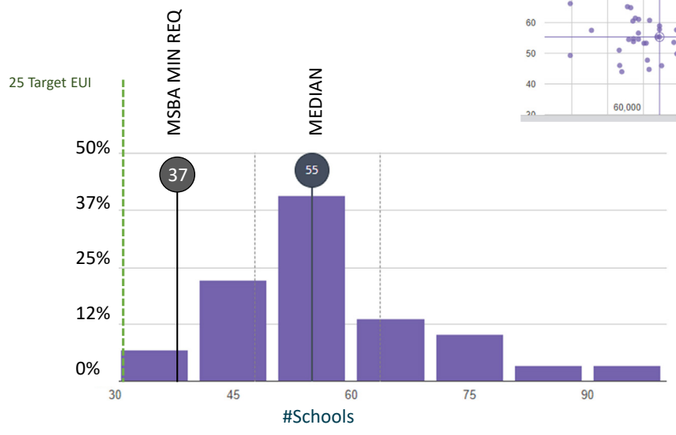
| System Type | MSBA Minimum Requirement | GeoExchange | Variable Refrigerant Flow (VRF) |
|---|---|---|---|
| Description | Baseline system for MSBA compliance. The system performance exceeds the energy code by 10% when combined with the high performance building envelope. | High performance geothermal heating/cooling system, rejects heat and draws heat from the earth as opposed to the atmosphere. | High performance heating/cooling system, rejects heat and draws heat from the atmosphere. |
| Main Components | • Central chiller and condensing boiler systems.<br>• Chilled Water/Hot Water Air handling Units.<br>• VAV Terminal Units. | • Central geothermal heat recovery chiller/heater systems.<br>• Chilled Water/Hot Water Air handling Units.<br>• Sensible Fan Powered Terminal Units. | • Rooftop air cooled heat recovery VRF condensing units.<br>• VRF Air handling Units.<br>• VRF Fan Coil Terminal Units. |
| Pros | • Moderate capital cost | • Highest efficiency, lowest operating cost. Best system for meeting target EUI.<br>• Less mechanical equipment on the roof. | • Lowest capital cost.<br>• Energy efficient, lower operating cost. |
| Cons | • Less energy efficient, higher operating cost.<br>• Mechanical equipment on the roof.<br>• Increased maintenance for cooling tower.<br>• Additional domestic water consumption for cooling tower make up. | • Highest Capital Cost | • Multiple mechanical pieces of equipment on the roof. |
| EUI | 37 | 25 | 29 |



## Benchmarking Data

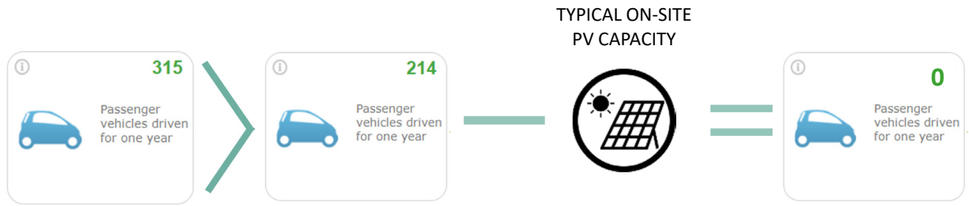



*https://bpd.lbl.gov/*



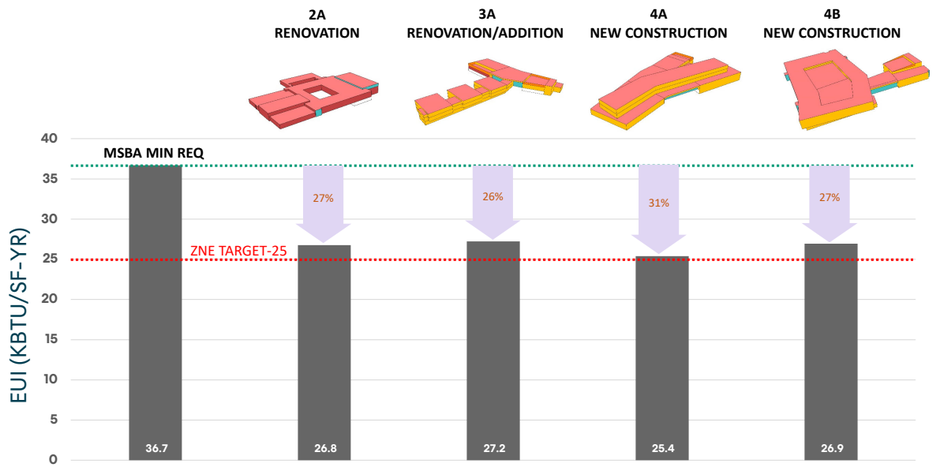



## Carbon Emissions






## Scheme Comparison



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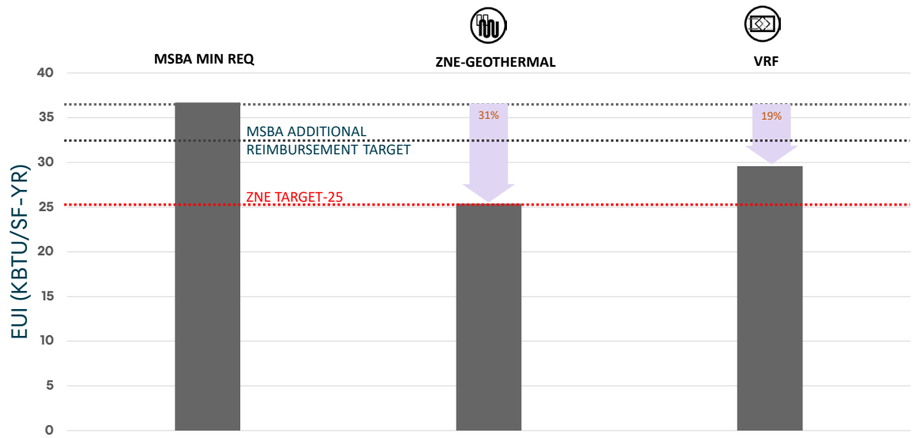
## HVAC System Comparison

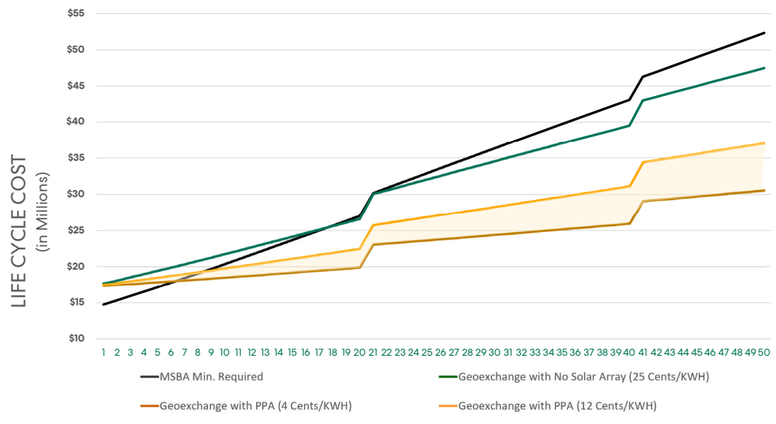
4A NEW CONSTRUCTION






## Lifecycle Cost Analysis

CUMULATIVE CASH FLOW: CAPITAL, OPERATIONAL, MAINTENANCE & REPLACEMENT COSTS



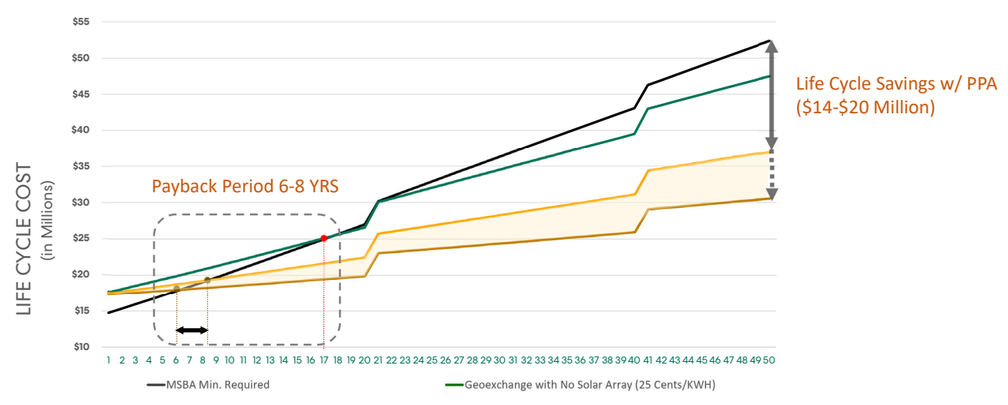

### ASSUMPTIONS:

- Blended Electric Rate - $.25/kwh (conservative estimate based on existing utility bill from the school)
- FEMP rates for discount and inflation
- Study period 50 years
- Replacement costs estimated at year 20 and 40 of operation
- Includes Mass save incentives and 2% Additional Reimbursement in the initial cost



## Lifecycle Cost Analysis

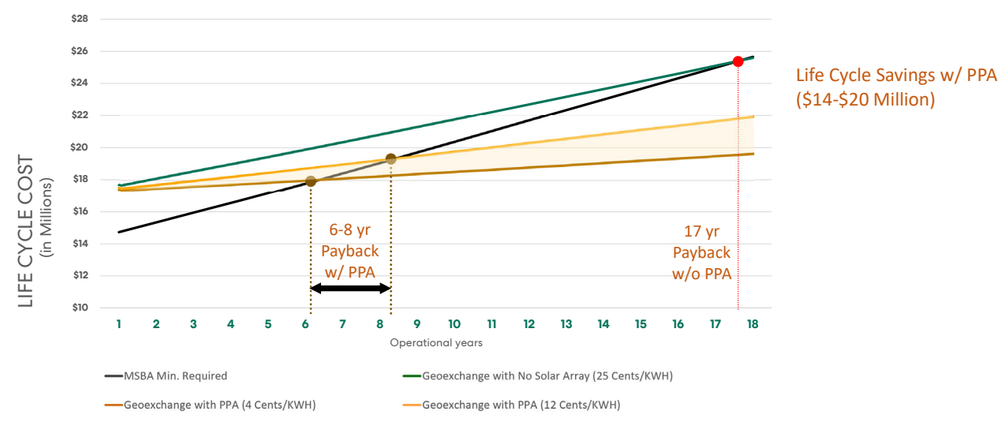
CUMULATIVE CASH FLOW: CAPITAL, OPERATIONAL, MAINTENANCE & REPLACEMENT COSTS






## Lifecycle Cost Analysis

CUMULATIVE CASH FLOW: CAPITAL, OPERATIONAL, MAINTENANCE & REPLACEMENT COSTS



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**Capital Cost and Annual Energy Operating Cost Overview**

| | |
|---|---|
| **ZNE PROJECT CAPITAL COSTS** | |
| Building Envelope Cost above Baseline | $1,156,784 |
| Geo Exch. HVAC System Cost above Baseline | $6,561,671 |
| Total | $7,718,455 |
| | |
| **ANNUAL ENERGY OPERATING COST SAVINGS** | |
| Annual Electrical Cost Savings | $158,645 |
| Annual Water Savings | $25,000 |
| 50 Year Cost Savings (includes premiums) | $14,000,000 to $20,000,000 |

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Perkins&Will

# Design Options Update

Building Committee Meeting





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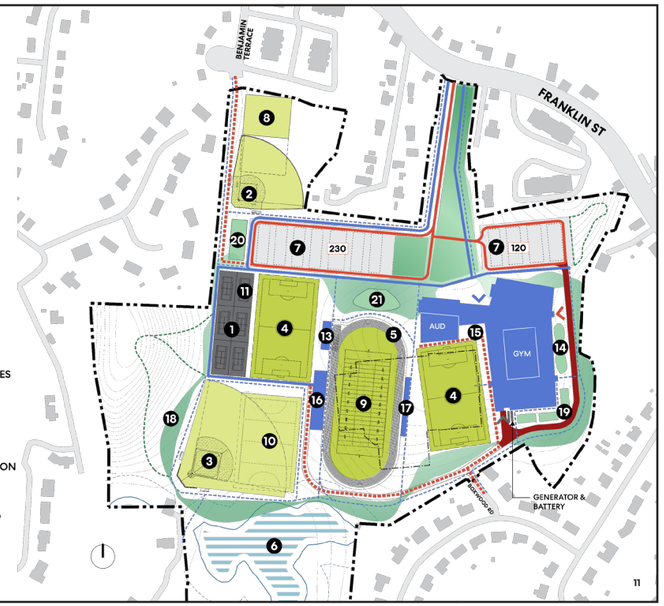
**Option 4B – Energy and Site Strategy**



## Option 4B1 – Embedded Gymnasium




**PROGRAM**

1 - TENNIS (5 Courts)
2 - SOFTBALL
3 - BASEBALL
4 - SOCCER
5 - TRACK
6 - WETLAND
7 - PARKING
8 - PRACTICE FIELD
9 - FOOTBALL
10 - FIELD HOCKEY
11 - PICKLEBALL
13 - ATHLETIC BUILDING
14 - PREK PLAY
15 - SPARTAN PLAZA
16 - HOME BLEACHERS
17 - VISITOR BLEACHERS
18 - LANDSCAPE LOOP
19 - OUTDOOR CLASSROOMS
20 - COMMUNITY GARDEN
21 - AMPHITHEATER

**CIRCULATION**

- VEHICULAR DRIVE
- LIMITED ACCESS: EMERGENCY, MAINTENANCE, BICYCLES
- SERVICE DRIVE
- BIKE LANE
- ACCESSIBLE PEDESTRIAN PATH
- HIKING TRAIL (NOT ADA ACCESSIBLE)
- NATURE WALK & HYDROLOGY LOOP

**KEY ENTRANCES**

- HS MAIN ENTRY
- PRE-K/DISTRICT OFFICES
- LOADING

**SITE PROGRAM**

- EDUCATION/RECREATION
- GRASS FIELD
- SYNTHETIC TURF FIELD

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## Option 4B2 – Embedded Auditorium




**PROGRAM**

1 - TENNIS (5 Courts)
2 - SOFTBALL
3 - BASEBALL
4 - SOCCER
5 - TRACK
6 - WETLAND
7 - PARKING
8 - PRACTICE FIELD W/ RETAINING WALL
9 - FOOTBALL
10 - FIELD HOCKEY
11 - PICKLEBALL
13 - ATHLETIC BUILDING
14 - PREK PLAY
15 - SPARTAN PLAZA
16 - HOME BLEACHERS
17 - VISITOR BLEACHERS
18 - LANDSCAPE LOOP
19 - OUTDOOR CLASSROOMS
20 - COMMUNITY GARDEN
21 - AMPHITHEATER
22 - CIVIC GREEN

**CIRCULATION**

- VEHICULAR DRIVE
- LIMITED ACCESS: EMERGENCY, MAINTENANCE, BICYCLES
- SERVICE DRIVE
- BIKE LANE
- ACCESSIBLE PEDESTRIAN PATH
- HIKING TRAIL (NOT ADA ACCESSIBLE)
- NATURE WALK & HYDROLOGY LOOP

**KEY ENTRANCES**

- HS MAIN ENTRY
- PRE-K/DISTRICT OFFICES
- LOADING

**SITE PROGRAM**

- EDUCATION/RECREATION
- GRASS FIELD
- SYNTHETIC TURF FIELD

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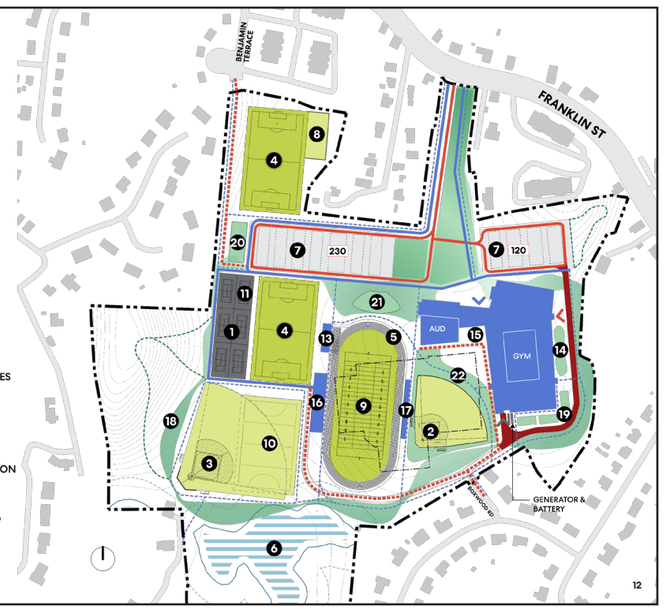
## Option 4B1 – Embedded Gymnasium




**PROGRAM**

1 - TENNIS (5 Courts)
2 - SOFTBALL
3 - BASEBALL
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5 - TRACK
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19 - OUTDOOR CLASSROOMS
20 - COMMUNITY GARDEN
21 - AMPHITHEATER
22 - CIVIC GREEN

**CIRCULATION**

- VEHICULAR DRIVE
- LIMITED ACCESS: EMERGENCY, MAINTENANCE, BICYCLES
- SERVICE DRIVE
- BIKE LANE
- ACCESSIBLE PEDESTRIAN PATH
- HIKING TRAIL (NOT ADA ACCESSIBLE)
- NATURE WALK & HYDROLOGY LOOP

**KEY ENTRANCES**

- HS MAIN ENTRY
- PRE-K/DISTRICT OFFICES
- LOADING

**SITE PROGRAM**

- EDUCATION/RECREATION
- GRASS FIELD
- SYNTHETIC TURF FIELD

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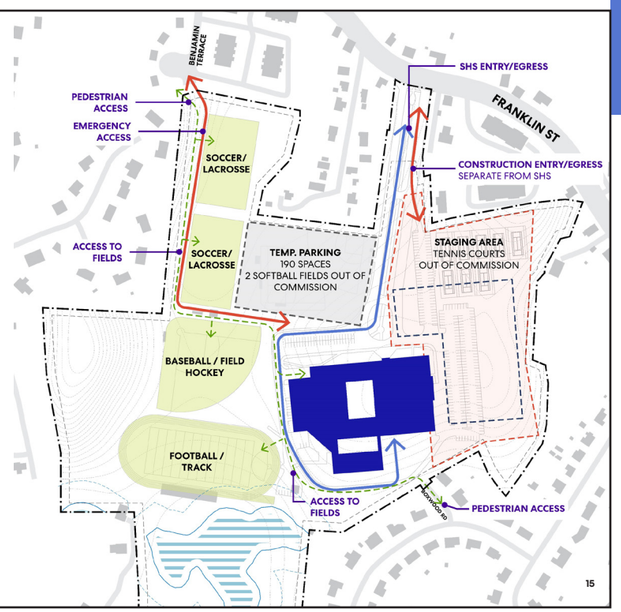
## Option 4B – Construction Phasing

Fields out of Commission:

- (8) Tennis Courts
- (2) Softball Fields

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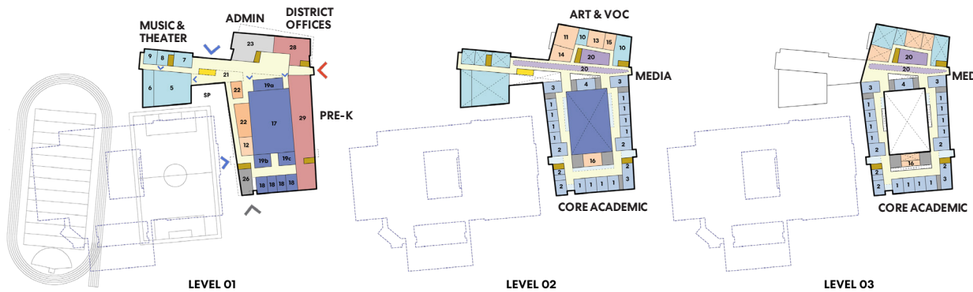
## Option 4B1 – Embedded Gymnasium




CORE ACADEMIC
1/ CLASSROOM
2/ SPED
3/ SCIENCE
4/ TEACHER PLANNING
BREAK OUT SPACE

ART & MUSIC
5/ AUDITORIUM
6/ STAGE
7/ BAND
8/ PRACTICE
9/ THEATER
10/ ART CLASSROOM

VOC & TECH
11/ PERFORMANCE
12/ CULINARY
13/ VIDEO PRODUCTION
14/ BIOMEDICAL
15/ ENGINEERING
16a/ MAKER SPACE
16b/ SCENE SHOP

HEALTH & PE
17/ GYMNASIUM
18/ LOCKERS
SB/STADIUM BLEACHERS
AF/ATHLETIC FIELDS

19/ ATHLETICS
a – ALT PE
b – ATHL. OFFICES
c – TRAINER
d – PE STORAGE
e – COACH SHOWERS
f – EQUIPMENT ROOM
g – GYMNASTICS STOR.
h – ATHLETICS STOR.

MEDIA CENTER
20a/ OPEN MEDIA
20b/ CLOSED MEDIA

DINING
21/ CAFETERIA
22/ KITCHEN
SP/ SPARTAN PLAZA

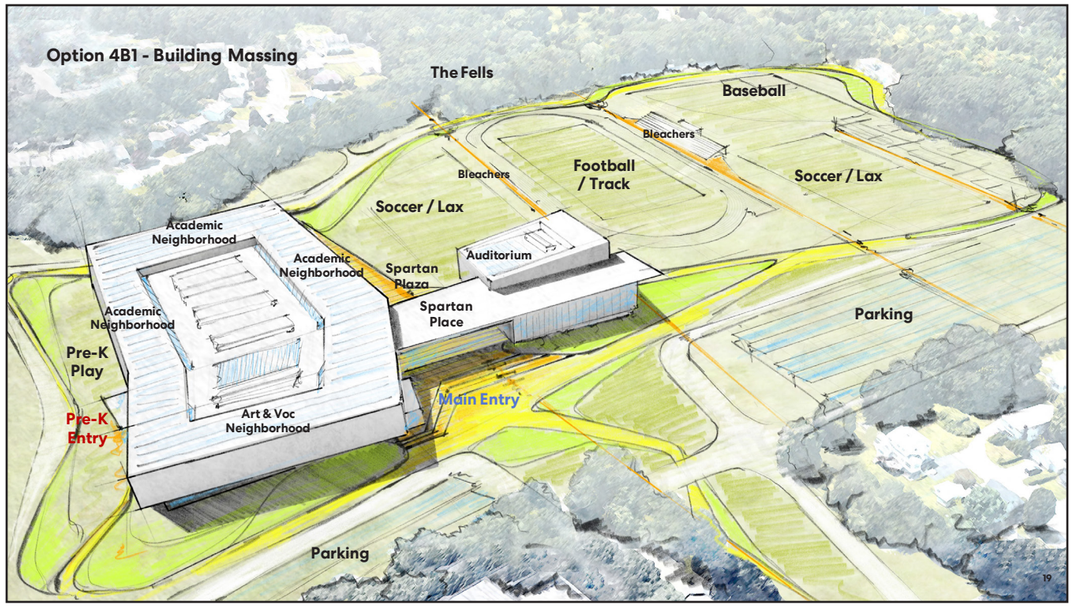
ADMIN
23/ ADMIN

SUPPORT
24/ CUSTODIAL
25/ MECHANICAL
26/ LOADING
27/ RESTROOMS

OTHER
28/ DISTRICT OFFICE
29/ PRE-K
CIRCULATION
OPEN STAIR
CLOSED EGRESS STAIR



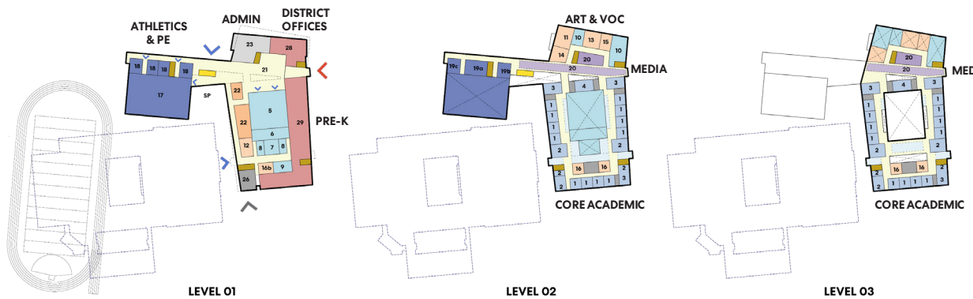
## Option 4B1 - Building Massing








## Option 4B2 – Embedded Auditorium




CORE ACADEMIC
1/ CLASSROOM
2/ SPED
3/ SCIENCE
4/ TEACHER PLANNING
BREAK OUT SPACE

ART & MUSIC
5/ AUDITORIUM
6/ STAGE
7/ BAND
8/ PRACTICE
9/ THEATER
10/ ART CLASSROOM

VOC & TECH
11/ PERFORMANCE
12/ CULINARY
13/ VIDEO PRODUCTION
14/ BIOMEDICAL
15/ ENGINEERING
16a/ MAKER SPACE
16b/ SCENE SHOP

HEALTH & PE
17/ GYMNASIUM
18/ LOCKERS
SB/STADIUM BLEACHERS
AF/ATHLETIC FIELDS

19/ ATHLETICS
a – ALT PE
b – ATHL. OFFICES
c – TRAINER
d – PE STORAGE
e – COACH SHOWERS
f – EQUIPMENT ROOM
g – GYMNASTICS STOR.
h – ATHLETICS STOR.

MEDIA CENTER
20a/ OPEN MEDIA
20b/ CLOSED MEDIA

DINING
21/ CAFETERIA
22/ KITCHEN
SP/ SPARTAN PLAZA

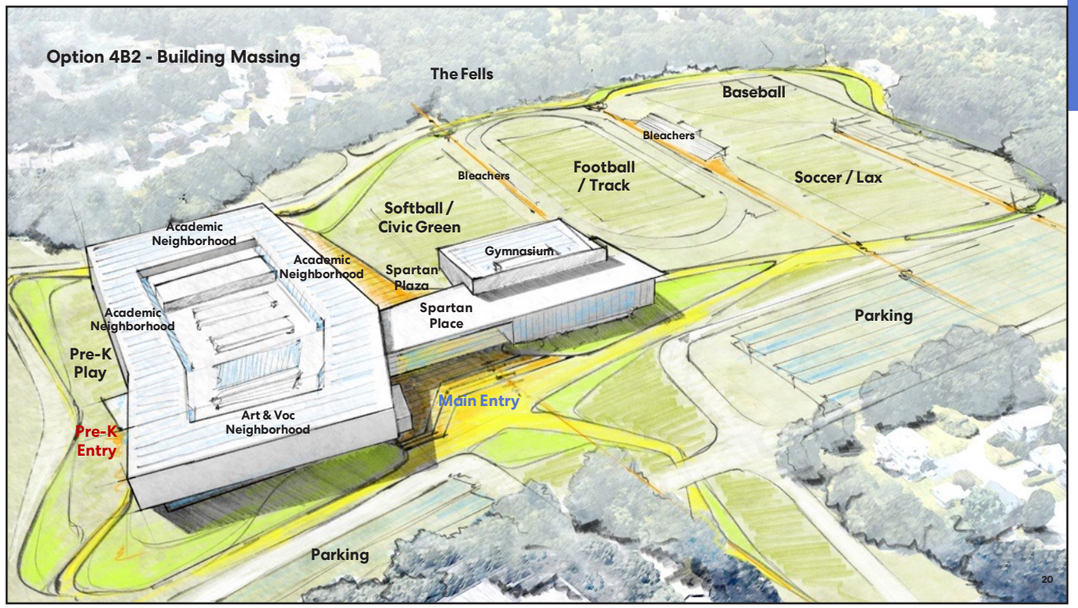
ADMIN
23/ ADMIN

SUPPORT
24/ CUSTODIAL
25/ MECHANICAL
26/ LOADING
27/ RESTROOMS

OTHER
28/ DISTRICT OFFICE
29/ PRE-K
CIRCULATION
OPEN STAIR
CLOSED EGRESS STAIR



## Option 4B2 - Building Massing



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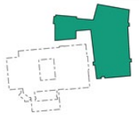
# Design Options Recap

Building Committee Meeting

## Design Options Summary

| CODE UPGRADE | RENOVATION | RENOVATION ADDITION | NEW CONSTRUCTION |
|---|---|---|---|
| *Option 1A* ☑ | *Option 2A* ☑ | *Option 3A* ☑ | *Option 4A* ☑ |
| • *NO Educational upgrades*<br>• *Code Upgrades*<br>• *System Upgrades*<br>• *Exterior Envelope Repairs*<br>• *Interior Repairs*<br>• *No Sitework* |  |  |  *Option 4B* ☑  |

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# Option 2A – Renovation Only

Building Committee Meeting

## Option 2A – Site Plan

**PROGRAM**

1 - TENNIS (5 Courts)
2 - SOFTBALL
3 - BASEBALL
4 - SOCCER
5 - TRACK
6 - WETLAND
7 - PARKING
8 - HALF SIZED FIELD
9 - FOOTBALL
10 - FIELD HOCKEY
11 - PICKLEBALL
12 - BASKETBALL
13 - ATHLETIC BUILDING
14 - PREK PLAY
15 - SPARTAN PLAZA
16 - HOME BLEACHERS
17 - PORTABLE VISITOR BLEACHERS

**CIRCULATION**

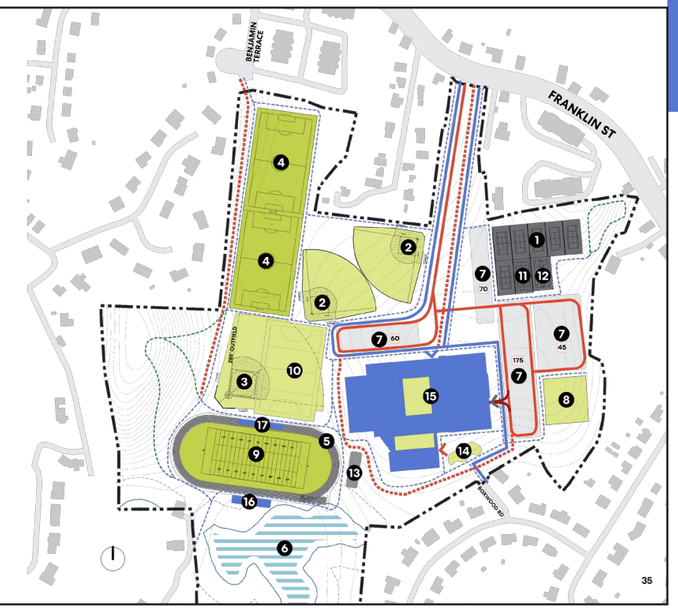
- VEHICULAR DRIVE
- LIMITED ACCESS: EMERGENCY, MAINTENANCE, BICYCLES
- SERVICE DRIVE
- BIKE LANE
- ACCESSIBLE PEDESTRIAN PATH
- HIKING TRAIL (NOT ADA ACCESSIBLE)

**KEY ENTRANCES**

- HS MAIN ENTRY
- PRE-K MAIN ENTRY
- LOADING

**FIELD MATERIAL**

- GRASS
- SYNTHETIC TURF

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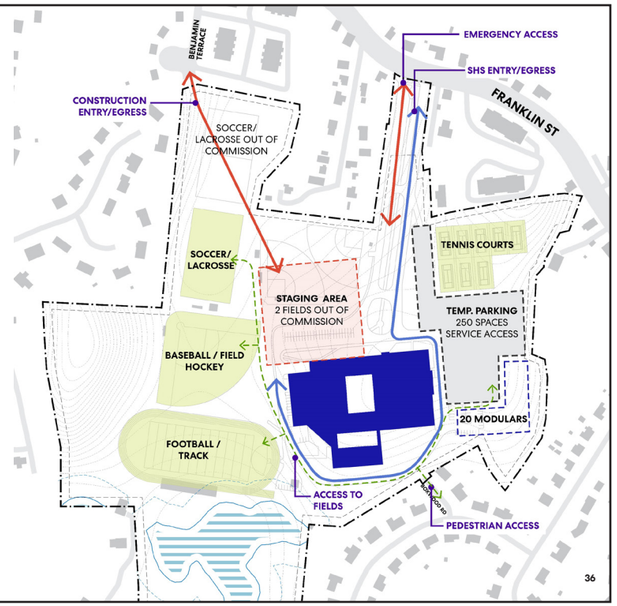
## Option 2A – Construction Phasing

Fields out of Commission:

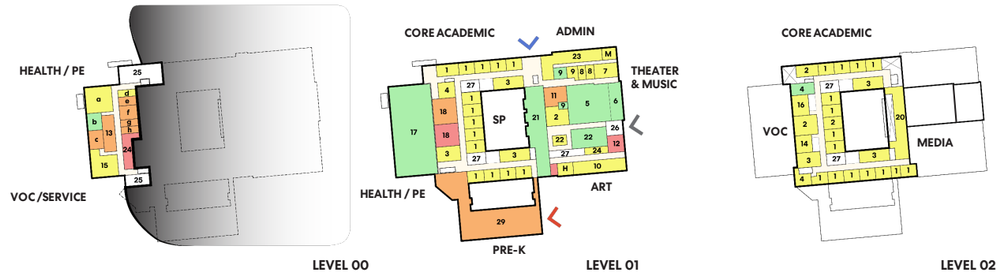
- (8) Tennis Courts
- (2) Softball Fields






## Option 2A – MSBA Space Summary Analysis

District Offices do Not Fit




- Greater than MSBA Guideline
- Meets MSBA Guideline
- Less than MSBA Guideline
- Proposed variation from MSBA Guideline



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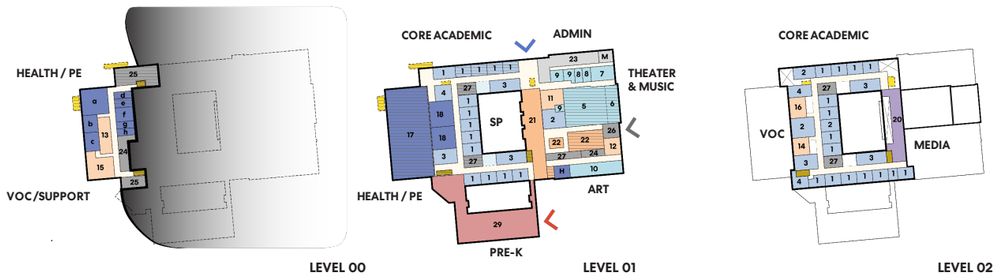
## Option 2A - Floor Plans

District Offices do Not Fit

0 50' 100' 200'




| | | | | | | |
|---|---|---|---|---|---|---|
| CORE ACADEMIC<br>1/ CLASSROOM<br>2/ SPED<br>3/ SCIENCE<br>4/ TEACHER PLANNING<br>BREAK OUT SPACE | ART & MUSIC<br>5/ AUDITORIUM<br>6/ STAGE<br>7/ BAND<br>8/ PRACTICE<br>9/ THEATER<br>10/ ART CLASSROOM | VOC & TECH<br>11/ PERFORMANCE<br>12/ CULINARY<br>13/ VIDEO PRODUCTION<br>14/ BIOMEDICAL<br>15/ ENGINEERING<br>16/ MAKER SPACE | HEALTH & PE<br>17/ GYMNASIUM<br>18/ LOCKERS<br>SB/STADIUM BLEACHERS<br>AF/ATHLETIC FIELDS<br>19/ ATHLETICS<br>a – ALT PE<br>b – ATHL. OFFICES<br>c – TRAINER<br>d – PE STORAGE<br>e – COACH SHOWERS<br>f – EQUIPMENT ROOM<br>g – GYMNASTICS STOR.<br>h – ATHLETICS STOR. | MEDIA CENTER<br>20a/ OPEN MEDIA<br>20b/ CLOSED MEDIA<br>DINING<br>21/ CAFETERIA<br>22/ KITCHEN<br>SP/ SPARTAN PLAZA | ADMIN<br>23/ ADMIN<br>SUPPORT<br>24/ CUSTODIAL<br>25/ MECHANICAL<br>26/ LOADING<br>27/ RESTROOMS | OTHER<br>28/ DISTRICT OFFICE<br>29/ PRE-K<br>CIRCULATION<br>OPEN STAIR<br>CLOSED EGRESS STAIR |



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# Option 3A – Renovation Addition

Building Committee Meeting

## Option 3A – Site Plan

**PROGRAM**

1 - TENNIS (5 Courts)
2 - SOFTBALL
3 - BASEBALL
4 - SOCCER
5 - TRACK
6 - WETLAND
7 - PARKING
8 - PRACTICE FIELD
9 - FOOTBALL
10 - FIELD HOCKEY
11 - PICKLEBALL
12 - BASKETBALL
13 - ATHLETIC BUILDING
14 - PREK PLAY
15 - SPARTAN PLAZA
16 - HOME BLEACHERS
17 - PORTABLE VISITOR BLEACHERS
19 - OUTDOOR CLASSROOMS
21 - AMPHITHEATER

**CIRCULATION**

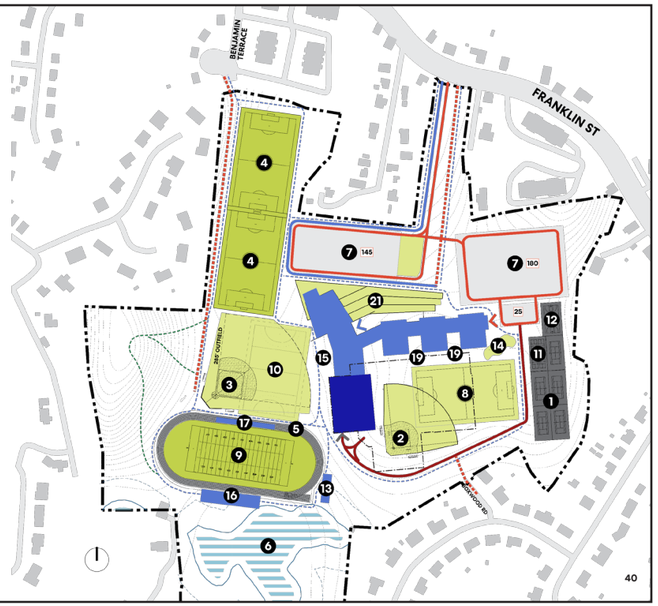
- VEHICULAR DRIVE
- LIMITED ACCESS: EMERGENCY, MAINTENANCE, BICYCLES
- SERVICE DRIVE
- BIKE LANE
- ACCESSIBLE PEDESTRIAN PATH
- HIKING TRAIL (NOT ADA ACCESSIBLE)

**KEY ENTRANCES**

- HS MAIN ENTRY
- PRE-K MAIN ENTRY
- LOADING

**FIELD MATERIAL**

- GRASS
- SYNTHETIC TURF

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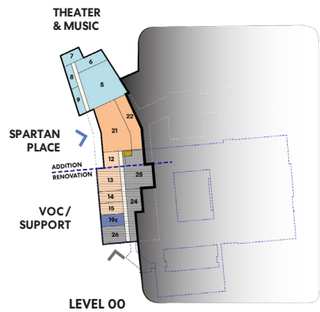
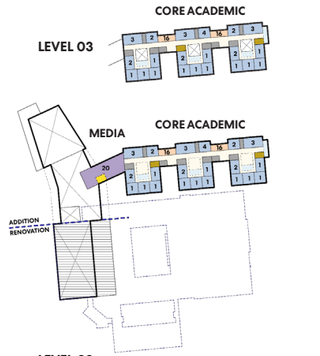
## Option 3A - Floor Plans










**CORE ACADEMIC**
1/ CLASSROOM
2/ SPED
3/ SCIENCE
4/ TEACHER PLANNING
BREAK OUT SPACE

**ART & MUSIC**
5/ AUDITORIUM
6/ STAGE
7/ BAND
8/ PRACTICE
9/ THEATER
10/ ART CLASSROOM

**VOC & TECH**
11/ PERFORMANCE
12/ CULINARY
13/ VIDEO PRODUCTION
14/ BIOMEDICAL
15/ ENGINEERING
16/ MAKER SPACE

**HEALTH & PE**
17/ GYMNASIUM
18/ LOCKERS
SB/STADIUM BLEACHERS
AF/ATHLETIC FIELDS
19/ ATHLETICS
a – ALT PE
b – ATHL. OFFICES
c – TRAINER
d – PE STORAGE
e – COACH SHOWERS
f – EQUIPMENT ROOM
g – GYMNASTICS STOR.
h – ATHLETICS STOR.

**MEDIA CENTER**
20a/ OPEN MEDIA
20b/ CLOSED MEDIA

**DINING**
21/ CAFETERIA
22/ KITCHEN
SP/ SPARTAN PLAZA

**ADMIN**
23/ ADMIN

**SUPPORT**
24/ CUSTODIAL
25/ MECHANICAL
26/ LOADING
27/ RESTROOMS

**OTHER**
28/ DISTRICT OFFICE
29/ PRE-K
CIRCULATION
OPEN STAIR
CLOSED EGRESS STAIR

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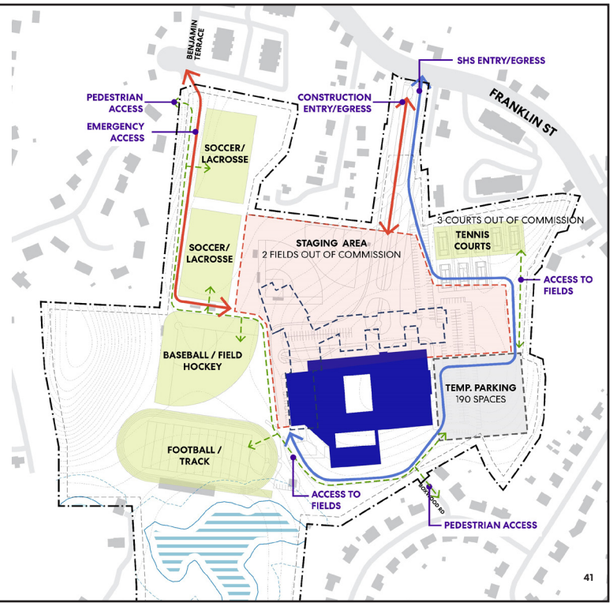
## Option 3A – Construction Phasing

Fields out of Commission:

- (3) Tennis Courts
- (2) Softball Fields

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# Option 4A – New Construction

Building Committee Meeting

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## Option 4A – Site Plan




**PROGRAM**

1 - TENNIS (5 Courts)
2 - SOFTBALL
3 - BASEBALL
4 - SOCCER
5 - TRACK
6 - WETLAND
7 - PARKING
8 - HALF SIZED FIELD
9 - FOOTBALL
10 - FIELD HOCKEY
11 - PICKLEBALL
12 - BASKETBALL
13 - ATHLETIC BUILDING
14 - PREK PLAY
15 - SPARTAN PLAZA
16 - HOME BLEACHERS
17 - VISITOR BLEACHERS
18 - LANDSCAPE PATH

**CIRCULATION**

- VEHICULAR DRIVE
- LIMITED ACCESS: EMERGENCY, MAINTENANCE, BICYCLES
- SERVICE DRIVE
- BIKE LANE
- ACCESSIBLE PEDESTRIAN PATH
- HIKING TRAIL (NOT ADA ACCESSIBLE)
- LANDSCAPE PEDESTRIAN PATH W/ EMERGENCY VEHICLE ACCESS ABILITY

**KEY ENTRANCES**

- HS MAIN ENTRY
- PRE-K MAIN ENTRY
- LOADING

**FIELD MATERIAL**

- GRASS
- SYNTHETIC TURF

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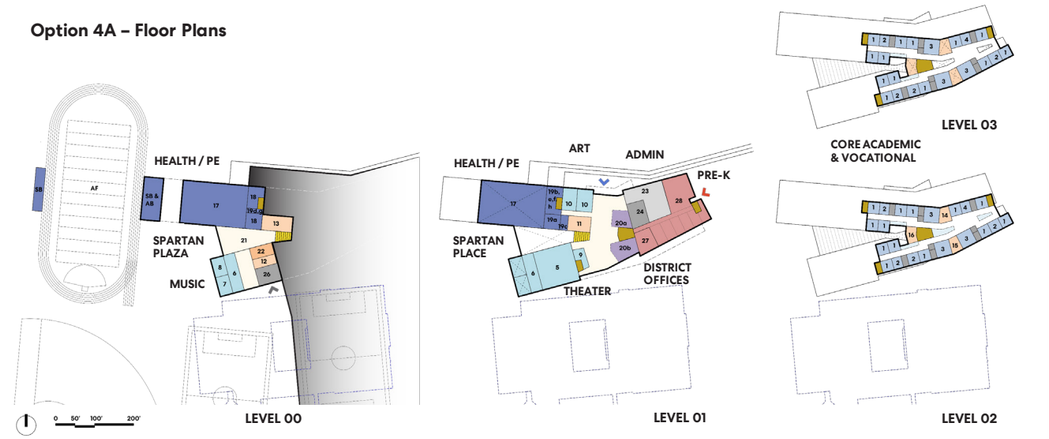
## Option 4A – Floor Plans




**CORE ACADEMIC**
1/ CLASSROOM
2/ SPED
3/ SCIENCE
4/ TEACHER PLANNING

**BREAK OUT SPACE**

**ART & MUSIC**
5/ AUDITORIUM
6/ STAGE
7/ BAND
8/ PRACTICE
9/ THEATER
10/ ART CLASSROOM

**VOC & TECH**
11/ PERFORMANCE
12/ CULINARY
13/ VIDEO PRODUCTION
14/ BIOMEDICAL
15/ ENGINEERING
16/ MAKER SPACE

**HEALTH & PE**
17/ GYMNASIUM
18/ PE & LOCKERS
SB/ STADIUM BLEACHERS
AF/ ATHLETIC FIELDS
AB/ ATHLETIC BLDG

19/ ATHLETICS
a – ALT PE
b – ATHL. OFFICES
c – TRAINER
d – PE STORAGE
e – COACH SHOWERS
f – EQUIPMENT ROOM
g – GYMNASTICS STOR.
h – ATHLETICS STOR.

**MEDIA CENTER**
20a/ OPEN MEDIA
20b/ CLOSED MEDIA

**DINING**
21/ CAFETERIA
22/ KITCHEN
SP/ SPARTAN PLAZA

**ADMIN**
23/ ADMIN

**SUPPORT**
24/ CUSTODIAL
25/ MECHANICAL
26/ LOADING
27/ RESTROOMS

**OTHER**
28/ DISTRICT OFFICE
29/ PRE-K

**CIRCULATION**

**OPEN STAIR**

**CLOSED EGRESS STAIR**

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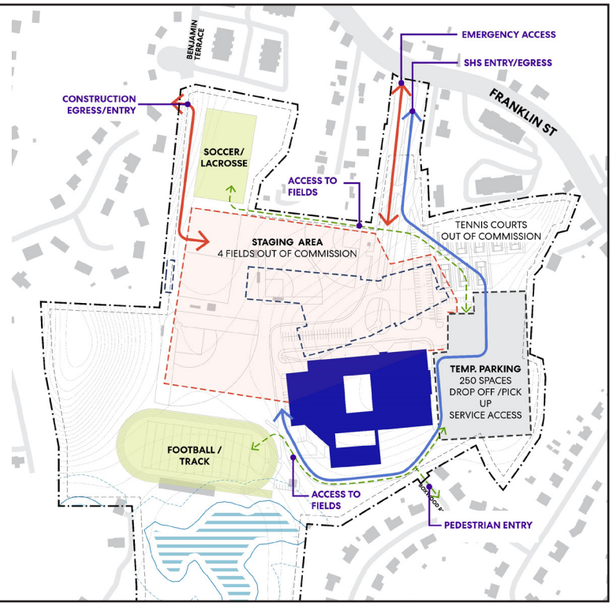
## Option 4A – Construction Phasing

Fields out of Commission:

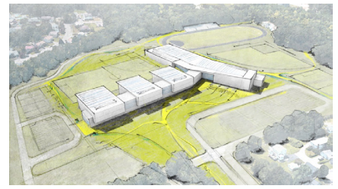
- (8) Tennis Courts
- (2) Softball Fields
- (1) Baseball Field
- (1) Soccer Field



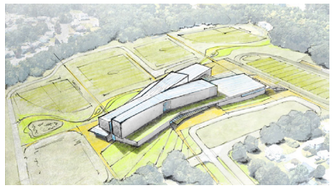

## Building Massing Sketches



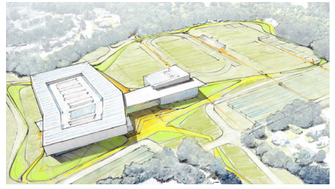
2A – Renovation Only



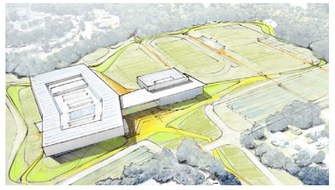
3A – Renovation Addition



4A – New Construction



4B1 – New Construction
Embedded Gymnasium



4B2 – New Construction
Embedded Auditorium

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# Project Cost Update

Building Committee Meeting

## Cost Estimate



| | Code Repair Only Option 1 | Renovation Only Option 2 | Renovation/ Addition Option 3A | New Construction Option 4A | New Construction Option 4B |
|---|---|---|---|---|---|
| **PDP PHASE** | | | | | |
| Approximate Total Project Cost | $115.0M | $173.4M | $175.2M | $174.8M | $172.9M |
| Approximate Cost to Stoneham | $61.0M | $111.5M | $120.7M | $123.7M | $122.0M |
| **PSR PHASE** | | | | | |
| Approximate Total Project Cost | $115.5M | $168.4M | $181.9M | $177.4M | $176.2M |
| Approximate Cost to Stoneham | $62.9M | $110.1M | $128.7M | $126.4M | $125.3M |

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## Tax Impact Schedule

Stoneham High School Feasibility Study
Average Homeowner Tax Impact
PSR Submission
12/3/20 *(updated 12/7/20)*

SMMA PROJECT MANAGEMENT

**DRAFT - FOR DISCUSSION PURPOSES ONLY**

| PDP Phase | Code Repair Only Option 1A | Renovation Only Option 2A | Renovation/ Addition Option 3A | New Construction Option 4A | New Construction Option 4B |
|---|---|---|---|---|---|
| ***Stoneham Share*** | $61,024,855 | $111,500,522 | $120,278,104 | $123,733,473 | $121,986,054 |
| Rate | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% |
| Term (years) | 20 | 20 | 20 | 20 | 20 |
| Yearly Payment-20 yr Average | $ 4,101,829 | $ 7,494,586 | $ 8,084,578 | $ 8,316,833 | $ 8,199,379 |
| Average Home Value | $ 577,700 | $ 577,700 | $ 577,700 | $ 577,700 | $ 577,700 |
| **Annual Tax Increase Average Home-20 yr Average** | **$ 475** | **$ 868** | **$ 937** | **$ 964** | **$ 950** |
| Annual Tax Increase per $1,000 Valuation | $ 0.82 | $ 1.50 | $ 1.62 | $ 1.67 | $ 1.65 |

| PSR Phase | Code Repair Only Option 1A | Renovation Only Option 2A | Renovation/ Addition Option 3A | New Construction Option 4A | New Construction Option 4B |
|---|---|---|---|---|---|
| ***Stoneham Share*** | $62,956,915 | $110,147,850 | $128,690,402 | $126,421,381 | $125,289,311 |
| Rate | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% |
| Term (years) | 20 | 20 | 20 | 20 | 20 |
| **Yearly Payment-20 yr Average** | **$ 4,231,694** | **$ 7,403,666** | **$ 8,650,016** | **$ 8,497,503** | **$ 8,421,410** |
| Average Home Value | $ 577,700 | $ 577,700 | $ 577,700 | $ 577,700 | $ 577,700 |
| **Annual Tax Increase Average Home-20 yr Average** | **$ 490** | **$ 858** | **$ 1,002** | **$ 985** | **$ 976** |
| **Annual Tax Increase per $1,000 Valuation** | **$ 0.85** | **$ 1.49** | **$ 1.74** | **$ 1.71** | **$ 1.69** |

Assumptions: Tax rate based on Fiscal 2023 assessed valuation and AVERAGE house value of $577,700.
Yearly impact will change based upon subsequent year tax rates and valuations.
Code Repair Only Option 1 does not include any site and playing field work or any educational improvement work in the building.
Costs subject to change as Feasibility Study progresses.

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# Discussion

Building Committee Meeting

## Rating the Options

| Options | Ed Program Compliance | Traffic: Queuing,Site Circulation, Parking | Parking proximity to stadium/fields | Stadium/fields/ lights neighborhood impact | Construction access impacts | Phasing Complexity | Existing field preservation | Optimized construction schedule | ZNE achievability | Civic presence | Reuse of Gymnasium | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Compliance Factors | | | | | | | | | | | |
| Option 1A – Code Upgrade | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | |
| Option 2A – Renovation Only | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | |
| Option 3A – Renovation Addition | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | |
| Option 4A – New Construction | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | |
| Option 4B – New Construction | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | |

Fulfills expectations/ minimal impact(3)

Neutral(2)

Fails expectations/ significant impact(1)

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**Stoneham High School Feasibility Study**
**Design Options Review**
**Progress PSR Comments and Responses**

*October 27, 2020*
*Update: November 9, 2020*

| No. | Date | SSBC Member | Comment | P&W Response |
|---|---|---|---|---|
| 1 | 10/28/2020 | Doug Gove | I thought the presentation the PW team made on the Renovation / Addition option was great. I realize it is early in the process, but has the team looked into the feasibility of maintaining the normal high school functions during construction and have these costs been incorporated into the cost estimate? I remained concerned about egress into and out of the existing building, parking, vehicular and student flow through the site. While I recognize that there will be some disruption to normal routine during construction, it is important that we provide a safe and functional learning environment for the kids attending school during this period. This comment applies to the new high school options as well --- I think we need to factor in student experience during construction when laying out these options. | Doug, these are excellent points that will be fully considered as we progress though the process. Being in the feasibility study we may not have all of the answers. We work collaboratively with the admin, regulatory, OPM and CM to determine the best routes, parking, flow and the details. While things will not function as they do now we will make the best decisions to provide a safe and functional learning experience for the students. |
| 2 | 10/28/2020 | Doug Gove | Building on my first comment, since traffic patterns onsite will be disrupted during construction, will there be enough queue length to avoid gridlock on Franklin Street. Would it be possible to have an early milestone in the project to implement traffic recommendations to ease the gridlock? | There are often early enabling packages for these projects. The phased construction phase may not be as effective as the final phase, however, the team (including the traffic consultant) will implement the best practices to eliminate as much congestion as possible. |
| 3 | 10/28/2020 | Doug Gove | There was a discussion on parking during the meeting and providing at least the same parking spots as the existing school. Has the PW team considered the parking available along both sides of Franklin Place and will this be available post project? Cars take advantage of this parking for big events at the high school. | It was determined that we would match the existing parking count. If that differs in any way we need to know to plan accordingly. If more parking is required than outside programs may be reduced. Traffic consultant will advise on parking along Franklin place. |
| 4 | 10/28/2020 | Doug Gove | There was discussion of having one of the new high school alternatives available for next meeting along with the renovation option. Can we prioritize differently so we have both new high school options and push off development of the renovation option until after our next meeting? | All options will be presented on 11.30.2020. |
| 5 | 10/28/2020 | David Bois | Comments on Option 3A2<br>Civic Presence / Siting:<br>If having the front door visible from Franklin St is important, this option does not achieve that goal. The front door is well to the west of the entry drive – which is centered on one of the neighborhood pods. | This is something the committee should discuss in the pros and cons discussions and included in the MATRIX. |





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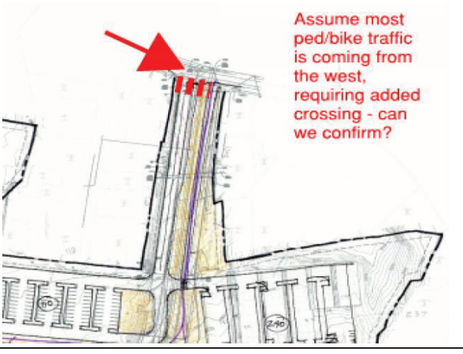
October 27, 2020
*Update: November 9, 2020*

**Stoneham High School Feasibility Study**
**Design Options Review**
**Progress PSR Comments and Responses**

| No. | Date | SSBC Member | Comment | P&W Response |
|---|---|---|---|---|
| 6 | 10/28/2020 | David Bois | The addition of the bike/ pedestrian path is a good design element – has this been evaluated with traffic to determine best location / operational efficiencies? Bike path is to the east of the vehicular drive – have we determined whether most pedestrians and bikes are coming from the east or are they more likely to arrive from the west (downtown direction) which would require an extra interaction between bikes, peds and cars?   | Traffic Consultant will review this in more detail as the options develop. |
| 7 | 10/28/2020 | David Bois | Pedestrian plaza at the front of the school is nice, but is north facing and separates the entry from the parking / drop-off. Is there program for this or would this space better serve the school and academic programs on the south side of the building? The addition of the field at the south is a good feature, two comments,<br>o has this been included in the current budgets or is this an add to those numbers?<br>o Since this is on the site of the existing school, it would seem as though this could be incorporated into any of the new build options as well | The design team can explore this as the options are developed. All of the site design will be included in the PSR pricing. |
| 8 | 10/28/2020 | David Bois | Front entry court dominated by parking – this may be unavoidable – assume we will landscape this area, include stormwater management (rain gardens, etc.) – has this been included in budget assumptions to date? Assume pervious paving is not anticipated due to maintenance concerns. | All site areas will be managed, designed and integrated into the overall site concept and educational program |

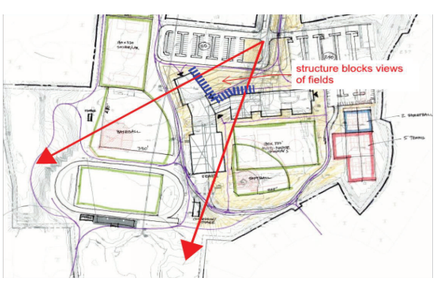






October 27, 2020
*Update: November 9, 2020*

**Stoneham High School Feasibility Study**
**Design Options Review**
**Progress PSR Comments and Responses**

| No. | Date | SSBC Member | Comment | P&W Response |
|---|---|---|---|---|
| 9 | 10/28/2020 | David Bois | The T shape building required by the renovation of the existing gym isolates the fields and blocks views of these from the entry and parking. Fields feel isolated and, with limited visibility, may be less inviting to the community. Note, tennis also more separated from public access.   | This is something the committee should discuss in the pros and cons discussions and included in the MATRIX. |

October 27, 2020
*Update: November 9, 2020*

**Stoneham High School Feasibility Study**
**Design Options Review**
**Progress PSR Comments and Responses**

| No. | Date | SSBC Member | Comment | P&W Response |
|---|---|---|---|---|
| 10 | 10/28/2020 | David Bois | Building Design<br>The desire to keep the existing gym in this option results in significant "sprawl" to this plan. PW has done a nice job creating a workable option, however, it is my opinion that there are significant flaws in this approach:<br><br>It appears that travel distances from the most remote classroom neighborhood to Spartan Place exceed 400' and are in excess of 500' to the gym and auditorium.<br>  <br> | Noted. |
| 11 | 10/28/2020 | David Bois | With the long travel distances, do we have a sense of how this impacts the need for additional elevators? | Currently 2 elevators are planned. Most students and staff will utilize the connecting stairs in the facility. Elevators are for HC use and those unable to use the stairs typically. The admin will determine who uses the elevators and in turn may impact how many are in the plan. |
| 12 | 10/28/2020 | David Bois | Spartan Place – is a dramatic feature of the design, however, with the need for the plan to stretch to connect to the gym, it is remote and not at the core of the design – alternate plans (not requiring connection to the existing gym) could locate this space more centrally connected to the neighborhoods. | Noted. |
| 13 | 10/28/2020 | David Bois | The "basement" classrooms locate program that was discussed as core academics to support our students into the future are remote and disconnected. | Noted. That is the con to this plan as we indicated on the presentation. There is 64,000sf of existing space to be renovated. Some program must go in that space. |





October 27, 2020
*Update: November 9, 2020*

**Stoneham High School Feasibility Study**
**Design Options Review**
**Progress PSR Comments and Responses**

| No. | Date | SSBC Member | Comment | P&W Response |
|---|---|---|---|---|
| 14 | 10/28/2020 | David Bois | Construction / Budget<br><br>The building is extremely close to the existing school – this is a result of reusing the existing gym – however there are significant concerns over the impacts of building this close to an active school. The project will impact at least two active school years, the quality of the learning environment, along with necessary exits / access and safety need to be considered a design element that guides our selection of the preferred option. In my opinion, this option will likely result in costs for logistics and temporary conditions that do not impact the quality of the new school long term. | As discussed and noted. |
| 15 | 10/28/2020 | David Bois | Renovation of the existing gym will result in a loss of use of that facility for some period of time – 6 months (or basically one school year) was mentioned, the committee has suggested that the least amount of impact on the fields (to allow for the continuation of normal sports seasons) should be a priority during construction – the gym should be considered in the same way. | As discussed and noted. |
| 16 | 10/28/2020 | David Bois | We still need to consider budget management as a core responsibility of this committee. We reviewed some breakouts of the very preliminary budget and ineligible costs – the plan /program shown raises some additional questions:<br><br>The Pre-K program is a significant portion of the project – as show by the plans – are there other alternatives or is this a community / educational mandate?<br><br>Core academics over MSBA are listed as nearly $6M – can we get more detail about what is included in this program?<br><br>The School Store is a $500K+ project element?<br><br>As discussed, we should review ZNE systems in relationship to life-cycle costs, not just initial costs.<br><br>Also, in relation to turf vs natural grass fields, can we look at ongoing operation costs: maintenance (mowing, repair etc.) , utility (water) as well as potential revenue opportunities for the turf fields?<br><br>Traffic signals are listed at nearly $5M – how many signals are included and how is this cost derived? Are there other funding sources for this as this is a community benefit and not related to any significant program change on site. | Committee should discuss program requirements and inclusions. See educational program for space and size details. Other questions are on going relative to life-cycle costs and operation costs of turf. Two traffic signals are being considered, however the traffic consultant in reviewing locations, pricing and need at this time. |
| 17 | 10/29/2020 | Sharon Iovanni | Have we taken into consideration how many spaces will be need for construction site workers? Can we identify a nearby offsite parking area from which construction site workers or students could be ferried to the high school site? | This should be reviewed with the CM. At some point there could be 75-100 workers, however, we will leave this discussion for the CM. Off site parking was raised by the design team, however, we were told that the construction workers needed to be on site. Committee to discuss. |

October 27, 2020
*Update: November 9, 2020*

**Stoneham High School Feasibility Study**
**Design Options Review**
**Progress PSR Comments and Responses**

| No. | Date | SSBC Member | Comment | P&W Response |
|---|---|---|---|---|
| 18 | 11/3/2020 | Jeanne Craigie | My major concern with what was presented was access to old building by students when that area appears directly in front of the old one. This is an accident waiting to happen . Now , will it be staged in sections which seems more costly , staged earth work , stage steel all of those are costly when not efficiently done all at once. | Committee to discuss and debate pros and cons. We have built other schools in this configuration successfully. |
| 19 | 11/3/2020 | Jeanne Craigie | Spartan Space is nice but it is not necessary to have that big a foot print when we are losing locker room space and athletic storage. Also the gentlemen who describe this plan kept using field house / gym as same thing?? We have no field house or did I miss it?? | The athletic program is planned as indicated on the educational program. Gym is the word to use moving forward. Committee was going to provide a list of names to describe the spaces comfortable by the SHBC. |
| 20 | 11/3/2020 | Jeanne Craigie | The only advantage to this one is a gymnasium larger than MSBA will not reimburse. | Comment noted. Should discuss with SHBC. |
| 21 | 11/3/2020 | Jeanne Craigie | The length of the building is truly a draw back to passing time and ability to travel in an efficient way for staff and students. | Comment noted. Should discuss with SHBC. |
| 22 | 11/3/2020 | Jeanne Craigie | I still don't buy the argument to relocate a baseball field for sun glare and ignore it on a football field ... ask him to go play on it! | Noted. |
| 23 | 11/8/2020 | Josephine Thomson | Does anyone have any idea of the lifespan of a turf field?<br>Best base for the artificial turf field?<br>Maintenance of the turf field? Such as watering - anything else?<br>What is the disposal process when the turf field has to be replaced? Where will it be disposed?<br>Is the artificial turf field hotter than the natural grass fields?<br>Safety concerns? Are there increased risks of injuries to the players? Respiratory concerns?<br>Any information on research into new species of natural grass (greater density)?<br>Feedback from other towns that have turf fields? | These questions are being addressed. These questions come up during the planning of all of our projects. |





Stoneham High School Feasibility Study
Average Homeowner Tax Impact
PSR Submission
12/3/20 *(updated 12/7/20)*

PROJECT MANAGEMENT SMMA

**DRAFT - FOR DISCUSSION PURPOSES ONLY**

| **PDP Phase** | **Code Repair Only Option 1A** | **Renovation Only Option 2A** | **Renovation/ Addition Option 3A** | **New Construction Option 4A** | **New Construction Option 4B** |
|---|---|---|---|---|---|
| ***Stoneham Share*** | **$61,024,855** | **$111,500,522** | **$120,278,104** | **$123,733,473** | **$121,986,054** |
| Rate | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% |
| Term (years) | 20 | 20 | 20 | 20 | 20 |
| Yearly Payment-20 yr Average | $ 4,101,829 | $ 7,494,586 | $ 8,084,578 | $ 8,316,833 | $ 8,199,379 |
| Average Home Value | $ 577,700 | $ 577,700 | $ 577,700 | $ 577,700 | $ 577,700 |
| **Annual Tax Increase Average Home-20 yr Average** | **$ 475** | **$ 868** | **$ 937** | **$ 964** | **$ 950** |
| Annual Tax Increase per $1,000 Valuation | $ 0.82 | $ 1.50 | $ 1.62 | $ 1.67 | $ 1.65 |



| **PSR Phase** | **Code Repair Only Option 1A** | **Renovation Only Option 2A** | **Renovation/ Addition Option 3A** | **New Construction Option 4A** | **New Construction Option 4B** |
|---|---|---|---|---|---|
| ***Stoneham Share*** | **$62,956,915** | **$110,147,850** | **$128,690,402** | **$126,421,381** | **$125,289,311** |
| Rate | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% |
| Term (years) | 20 | 20 | 20 | 20 | 20 |
| **Yearly Payment-20 yr Average** | **$ 4,231,694** | **$ 7,403,666** | **$ 8,650,016** | **$ 8,497,503** | **$ 8,421,410** |
| Average Home Value | $ 577,700 | $ 577,700 | $ 577,700 | $ 577,700 | $ 577,700 |
| **Annual Tax Increase Average Home-20 yr Average** | **$ 490** | **$ 858** | **$ 1,002** | **$ 985** | **$ 976** |
| **Annual Tax Increase per $1,000 Valuation** | **$ 0.85** | **$ 1.49** | **$ 1.74** | **$ 1.71** | **$ 1.69** |

Assumptions: Tax rate based on Fiscal 2023 assessed valuation and AVERAGE house value of $577,700.
Yearly impact will change based upon subsequent year tax rates and valuations.
Code Repair Only Option 1 does not include any site and playing field work or any educational improvement work in the building.
Costs subject to change as Feasibility Study progresses.

Stoneham High School Feasibility Study
Preliminary PSR Total Project Cost Estimate Comparison
12/3/2020

PROJECT MANAGEMENT SMMA

**DRAFT**

PM&C Estimate
Dated 12/3/20

| SF | Option | PDP Phase Project Costs | | Project Cost/SF | PSR Phase Project Costs | | Project Cost/SF |
|---|---|---|---|---|---|---|---|
| 208,113 | **Code Repairs Only Option 1A** | Construction Cost | $88,047,467 | | | $87,064,326 | |
| | | Building Cost | $78,183,395 | | | $77,258,529 | |
| | | Site Cost | $3,795,310 | | | $3,750,414 | |
| | | Concession/Locker Room Building | $0 | | | $0 | |
| | | Demo/HazMat Cost | $6,068,762 | | | $6,055,383 | |
| | | Temporary Classroom Modulars | $5,600,000 | | | $5,600,000 | |
| | | Fees,Testing, Utilities, and Expenses | $15,156,408 | | | $15,023,684 | |
| | | FFE/Technology | $0 | | | $0 | |
| | | Contingencies | $6,163,323 | | | $7,835,789 | |
| | | **total** | **$114,967,198** | **$552** | **total** | **$115,523,799** | **$555** |
| 208,113 | **Renovation Only Option 2A** | Construction Cost | $134,079,253 | | | $129,540,192 | |
| | | Building Cost | $101,123,150 | | | $97,665,445 | |
| | | Site Cost | $24,824,019 | | | $26,005,549 | |
| | | Concession/Locker Room Building | $2,250,000 | | | $0 | |
| | | Demo/HazMat Cost | $5,882,084 | | | $5,869,198 | |
| | | Temporary Classroom Modulars | $5,600,000 | | | $5,600,000 | |
| | | Fees,Testing, Utilities, and Expenses | $22,036,949 | | | $21,727,926 | |
| | | FFE/Technology | $2,502,000 | | | $2,502,000 | |
| | | Contingencies | $9,228,048 | | | $9,067,813 | |
| | | **total** | **$173,446,250** | **$833** | **total** | **$168,437,931** | **$809** |
| 207,827 | **Renovation/Addition Option 3A** | Construction Cost | $140,176,603 | | | $145,405,962 | |
| | | Building Cost | $102,795,319 | | | $109,855,783 | |
| | | Site Cost | $28,287,704 | | | $25,953,240 | |
| | | Concession/Locker Room Building | $2,250,000 | | | $2,880,106 | |
| | | Demo/HazMat Cost | $6,843,580 | | | $6,716,833 | |
| | | Fees,Testing, Utilities, and Expenses | $22,860,091 | | | $23,869,805 | |
| | | FFE/Technology | $2,502,000 | | | $2,502,000 | |
| | | Contingencies | $9,654,862 | | | $10,178,417 | |
| | | **total** | **$175,193,556** | **$858** | **total** | **$181,956,184** | **$876** |
| 207,827 | **New Construction Option 4A** | Construction Cost | $139,833,139 | | | $141,652,636 | |
| | | Building Cost | $102,795,502 | | | $103,847,292 | |
| | | Site Cost | $28,051,645 | | | $28,390,704 | |
| | | Concession/Locker Room Building | $2,250,000 | | | $2,838,789 | |
| | | Demo/HazMat Cost | $6,735,992 | | | $6,575,851 | |
| | | Fees,Testing, Utilities, and Expenses | $22,813,724 | | | $23,363,106 | |
| | | FFE/Technology | $2,502,000 | | | $2,502,000 | |
| | | Contingencies | $9,630,820 | | | $9,915,684 | |
| | | **total** | **$174,779,683** | **$856** | **total** | **$177,433,426** | **$854** |
| 207,827 | **New Construction Option 4B** | Construction Cost | $138,271,461 | | | $140,636,495 | |
| | | Building Cost | $101,572,664 | | | $103,056,537 | |
| | | Site Cost | $27,709,717 | | | $28,176,998 | |
| | | Concession/Locker Room Building | $2,250,000 | | | $2,835,267 | |
| | | Demo/HazMat Cost | $6,739,080 | | | $6,567,693 | |
| | | Fees,Testing, Utilities, and Expenses | $22,602,897 | | | $23,225,927 | |
| | | FFE/Technology | $2,502,000 | | | $2,502,000 | |
| | | Contingencies | $9,521,502 | | | $9,844,555 | |
| | | **total** | **$172,897,860** | **$847** | **total** | **$176,208,977** | **$848** |

Costs subject to change as Feasibility Study progresses



PROJECT MANAGEMENT SMMA

Stoneham High School Feasibility Study
Preliminary PSR Approximate Reimbursement Comparison
12/3/2020

**DRAFT**

PM&C Estimate
Dated 12/3/20

| | Code Repair Only Option 1A | Renovation/ Addition Option 3A | New Construction Option 4A | New Construction Option 4B |
|---|---|---|---|---|
| **Total Project Cost** | $115,523,799 | $181,956,184 | $177,433,426 | $176,208,977 |
| **Approximate MSBA Reimbursement** | $52,566,884 | $53,265,782 | $51,012,045 | $50,919,666 |
| **Approximate Cost to the Town** | **$62,956,915** | **$128,690,402** | **$126,421,381** | **$125,289,311** |
| **Summary of Approximate Ineligible Costs** | | | | |
| **Temporary Classroom Modulars** | $5,600,000 | $0 | $0 | $0 |
| **Site Costs above 8% Cap** | $0 | $20,585,314 | $21,030,236 | $20,875,561 |
| **Concession/Locker Room Building** | na | $2,050,000 | $2,050,000 | $2,050,000 |
| **Building Costs above $333/SF Cap** | $11,295,314 | $47,133,471 | $42,948,685 | $42,094,670 |
| **Building Costs Ineligible SF** | $5,150,628 | $10,084,905 | $10,084,905 | $10,084,905 |
| **OPM and Designer Fees on Ineligible SF** | $768,691 | $1,362,752 | $1,339,392 | $1,332,057 |
| **Asbestos Flooring Abatement** | $412,000 | $412,000 | $412,000 | $412,000 |
| **FFE/Technology over $2,400/student** | na | $834,000 | $834,000 | $834,000 |
| **Legal Fees, Moving Expenses, Contingencies** | $4,773,216 | $4,782,179 | $6,086,106 | $6,045,460 |
| | $27,999,849 | $87,244,621 | $84,785,324 | $83,728,653 |
| | $168,437,931 | $87,244,621 | $84,785,324 | $83,728,653 |
| | $58,290,081 | | | |
| | **$110,147,850** | | | |
| | $5,600,000 | | | |
| | $14,262,288 | | | |
| | na | | | |
| | $40,295,849 | | | |
| | $4,530,798 | | | |
| | $1,143,710 | | | |
| | $412,000 | | | |
| | $834,000 | | | |
| | $4,306,206 | | | |
| | $71,384,851 | | | |

Costs subject to change as Feasibility Study progresses
Code Repair Only Option 1 does not include any site and playing field work or any educational improvement work in the building

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Stoneham High School Feasibility Study
PSR Construction Cost Comparison
12/3/2020

PROJECT MANAGEMENT SMMA

**DRAFT**

PM&C Estimate
Dated 12/3/20

| | Code Repair Only Option 1A | Renovation Only Option 2A | Renovation/ Addition Option 3A | New Construction Option 4A | New Construction Option 4B |
|---|---|---|---|---|---|
| **Building Costs** | | | | | |
| Foundations | $573,250 | $573,250 | $4,875,810 | $5,631,605 | $3,234,067 |
| Superstructure | $1,289,522 | $1,905,068 | $6,368,864 | $8,810,031 | $8,661,362 |
| Exterior Closure | $3,250,002 | $9,328,752 | $12,786,440 | $10,834,295 | $12,501,463 |
| Roofing | $2,748,488 | $2,995,896 | $2,048,500 | $2,262,244 | $2,746,324 |
| Interior Construction | $3,826,957 | $8,405,443 | $6,342,867 | $8,001,167 | $8,001,167 |
| Staircases | $222,000 | $222,000 | $246,436 | $274,723 | $319,723 |
| Interior Finishes | $7,217,986 | $7,217,986 | $5,434,118 | $7,066,118 | $7,066,118 |
| Conveying Systems | $220,000 | $220,000 | $120,000 | $160,000 | $120,000 |
| Plumbing | $3,347,726 | $3,329,808 | $2,557,232 | $3,325,232 | $3,325,232 |
| HVAC | $11,446,215 | $14,567,910 | $11,187,890 | $14,547,890 | $14,547,890 |
| Fire Protection | $1,248,678 | $1,248,678 | $958,962 | $1,246,962 | $1,246,962 |
| Electrical | $8,589,892 | $8,718,417 | $6,998,765 | $8,723,426 | $8,723,426 |
| Equipment | $1,453,600 | $1,453,600 | $1,259,100 | $1,832,600 | $1,710,100 |
| Furnishings | $2,588,914 | $2,588,914 | $1,814,056 | $2,275,882 | $2,309,748 |
| Selective Renovations | $0 | $0 | $14,694,049 | $0 | $0 |
| Selective Demolition | $1,834,616 | $2,250,842 | $0 | $0 | $0 |
| Building Demolition | $0 | $0 | $1,280,904 | $1,248,678 | $1,248,678 |
| Hazardous Materials | $4,025,000 | $4,025,000 | $3,500,000 | $3,500,000 | $3,500,000 |
| Phasing | $1,495,735 | $1,950,797 | $500,000 | $0 | $0 |
| **Subtotal** | **$55,378,581** | **$71,002,361** | **$82,973,993** | **$79,740,853** | **$79,262,260** |
| **Sitework** | | | | | |
| General Sitework | $2,492,892 | $8,500,933 | $10,936,737 | $10,915,787 | $10,786,737 |
| Concession/Locker Room | $0 | $0 | $2,050,000 | $2,050,000 | $2,050,000 |
| Two Synthetic Soccer Fields | $0 | $1,686,000 | $1,686,000 | $1,686,000 | $1,686,000 |
| Synthetic Football Field, Track, Bleachers | $0 | $3,207,246 | $3,207,246 | $3,207,246 | $3,207,246 |
| Sports Lighting - three Fields | $0 | $1,440,000 | $1,440,000 | $1,440,000 | $1,440,000 |
| Two New Traffic Signals | $0 | $3,000,000 | $3,000,000 | $3,000,000 | $3,000,000 |
| Temporary Utilities | $0 | $0 | $253,000 | $253,000 | $253,000 |
| **Subtotal** | **$2,492,892** | **$17,834,179** | **$22,572,983** | **$22,552,033** | **$22,422,983** |
| **Mark-ups** | | | | | |
| Escalation | $3,761,646 | $5,774,375 | $6,582,706 | $7,302,062 | $7,074,544 |
| Design Contingency | $8,680,721 | $13,325,481 | $12,665,637 | $12,275,146 | $12,202,229 |
| General Conditions | $7,680,000 | $7,680,000 | $5,760,000 | $5,280,000 | $5,280,000 |
| General Requirements | $3,515,692 | $5,396,820 | $4,991,813 | $4,874,804 | $4,838,481 |
| Bonds | $703,138 | $1,079,364 | $1,247,953 | $1,218,701 | $1,209,620 |
| Insurance | $984,394 | $1,511,110 | $1,747,134 | $1,706,181 | $1,693,468 |
| Permit | $0 | $0 | $0 | $0 | $0 |
| Temporary Classrooms | $5,600,000 | $5,600,000 | $0 | $0 | $0 |
| CM Fee | $1,757,846 | $2,698,410 | $3,119,883 | $3,046,752 | $3,024,050 |
| CM Contingency | $2,109,415 | $3,238,092 | $3,743,860 | $3,656,103 | $3,628,860 |
| **Subtotal** | **$34,792,852** | **$46,303,652** | **$39,858,986** | **$39,359,749** | **$38,951,252** |
| **TOTAL** | **$92,664,325** | **$135,140,192** | **$145,405,962** | **$141,652,635** | **$140,636,495** |

Costs subject to change as Feasibility Study progresses



# PSR Estimate

# Stoneham High School
## Design Options

Stoneham, MA

**PM&C LLC**
20 Downer Ave, Suite 5
Hingham, MA 02043
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Prepared for:

**Perkins & Will**

December 3, 2020

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**Stoneham High School**
Design Options
Stoneham, MA

03-Dec-20

**PSR Estimate**

**MAIN CONSTRUCTION COST SUMMARY**

| | | | | Construction Start | Gross Floor Area | $/sf | Estimated Construction Cost |
|---|---|---|---|---|---|---|---|
| **RENOVATION HIGH SCHOOL CODE UPGRADES - OPTION 1A** | | | | | | | |
| | | | | Jan-23 | | | |
| RENOVATIONS TO EXISTING SCHOOL | | | | | 208,113 | $239.57 | $49,857,846 |
| REMOVE HAZARDOUS MATERIALS | | | | | | | $4,025,000 |
| PHASING COSTS | | | | | | | $1,495,735 |
| SYNTHETIC TWO SOCCER/LACROSS FIELDS | | | | | | | NR |
| SYNTHETIC FOOTBALL FIELD | | | | | | | NR |
| SPORTS LIGHTING - Three Fields | | | | | | | NR |
| STADIUM RENOVATION - New Track + Bleachers | | | | | | | ETR |
| NEW TRAFFIC SIGNAL WORK (Two Locations) | | | | | | | NR |
| TICKET BOOTH/PRESS BOX/MENS/STORAGE/WOMENS/CONCESSIONS | | | | | | | NR |
| SITEWORK - ALLOWANCE | | | | | | | $2,492,892 |
| SUB-TOTAL | | | | | 208,113 | $278.08 | $57,871,473 |
| ESCALATION TO MID-POINT - (assumed 3% PA) | 6.5% | | | | | | $3,761,646 |
| DESIGN AND PRICING CONTINGENCY | 15% | | | | | | $8,680,721 |
| SUB-TOTAL | | | | | 208,113 | $337.86 | $70,313,840 |
| GENERAL CONDITIONS | | 48 | MTHS | | | $160,000 | $7,680,000 |
| GENERAL REQUIREMENTS | 5.00% | | | | | | $3,515,692 |
| BONDS | 1.00% | | | | | | $703,138 |
| INSURANCE | 1.40% | | | | | | $984,394 |
| PERMIT | | | | | | | Waived |
| TEMPORARY CLASSROOMS | | 28 | ROOMS | | | $200,000 | $5,600,000 |
| CM FEE | 2.5% | | | | | | $1,757,846 |
| CM/GMP CONTINGENCY | 3% | | | | | | $2,109,415 |
| **TOTAL OF ALL CONSTRUCTION** | | | | | 208,113 | $445.26 | **$92,664,325** |
| PV PANELS | | | | | | ADD | **TBD** |



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**Stoneham High School**
Design Options
Stoneham, MA

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**PSR Estimate**

**MAIN CONSTRUCTION COST SUMMARY**

| | | | | Construction Start | Gross Floor Area | $/sf | Estimated Construction Cost |
|---|---|---|---|---|---|---|---|
| **FULL RENOVATION OPTION 2A** | | | | | | | |
| | | | | Jan-23 | | | |
| RENOVATIONS TO EXISTING SCHOOL | | | | | 208,113 | $312.46 | $65,026,564 |
| REMOVE HAZARDOUS MATERIALS | | | | | | | $4,025,000 |
| PHASING COSTS | | | | | | | $1,950,797 |
| SYNTHETIC TWO SOCCER/LACROSS FIELDS | | | | | | | Included with Site |
| SYNTHETIC FOOTBALL FIELD | | | | | | | Included with Site |
| SPORTS LIGHTING - Three Fields | | | | | | | $1,440,000 |
| STADIUM RENOVATION - New Track + Bleachers | | | | | | | Included with Site |
| NEW TRAFFIC SIGNAL WORK (Two Locations) | | | | | | | $3,000,000 |
| TICKET BOOTH/PRESS BOX/MENS/STORAGE/WOMENS/CONCESSIONS | | | | | | | NR |
| SITEWORK | | | | | | | $13,394,179 |
| SUB-TOTAL | | | | | 208,113 | $426.87 | $88,836,540 |
| ESCALATION TO MID-POINT - (assumed 3% PA) | 6.5% | | | | | | $5,774,375 |
| DESIGN AND PRICING CONTINGENCY | 15% | | | | | | $13,325,481 |
| SUB-TOTAL | | | | | 208,113 | $518.64 | $107,936,396 |
| GENERAL CONDITIONS | | 48 | MTHS | | | $160,000 | $7,680,000 |
| GENERAL REQUIREMENTS | 5.00% | | | | | | $5,396,820 |
| BONDS | 1.00% | | | | | | $1,079,364 |
| INSURANCE | 1.40% | | | | | | $1,511,110 |
| PERMIT | | | | | | | Waived |
| TEMPORARY CLASSROOMS | | 28 | ROOMS | | | $200,000 | $5,600,000 |
| CM FEE | 2.5% | | | | | | $2,698,410 |
| CM/GMP CONTINGENCY | 3% | | | | | | $3,238,092 |
| **TOTAL OF ALL CONSTRUCTION** | | | | | 208,113 | $649.36 | **$135,140,192** |
| PV PANELS | | | | | | ADD | **TBD** |
| HVAC OPTION VRF | | | | | | DEDUCT | **($4,302,019)** |
| HVAC OPTION CENTRAL PLANT with VAV | | | | | | DEDUCT | **($3,154,814)** |



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**Stoneham High School**
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Stoneham, MA

03-Dec-20

**PSR Estimate**

| | | Construction Start | Gross Floor Area | $/sf | Estimated Construction Cost |
|---|---|---|---|---|---|
| **RENOVATION + ADDITION OPTION 3A** | | Jan-23 | | | |
| RENOVATIONS TO EXISTING SCHOOL | | | 48,000 | $306.13 | $14,694,049 |
| ADDITIONS | | | 159,827 | $394.17 | $62,999,040 |
| DEMOLISH EXISTING SCHOOL - PARTIAL (phased) | | | 160,113 | $8.00 | $1,280,904 |
| REMOVE HAZARDOUS MATERIALS | | | | | $3,500,000 |
| PHASING COSTS | | | | | $500,000 |
| SYNTHETIC THREE SOCCER | | | | | Included with Site |
| SYNTHETIC FOOTBALL FIELD | | | | | Included with Site |
| SPORTS LIGHTING - Three Fields | | | | | $1,440,000 |
| STADIUM RENOVATION - New Track + Bleachers | | | | | Included with Site |
| NEW TRAFFIC SIGNAL WORK (Two Locations) | | | | | $3,000,000 |
| TEMPORARY UTILITIES | | | | | Included with Site |
| TICKET BOOTH/PRESS BOX/MENS/STORAGE/WOMENS/CONCESSIONS | | | 5,000 | $410.00 | $2,050,000 |
| SITEWORK | | | | | $16,082,983 |
| SUB-TOTAL | | | 207,827 | $507.86 | $105,546,976 |
| ESCALATION EARLY PACKAGE June 2022 - (assumed 3% PA) | 4.8% | | | | $539,744 |
| ESCALATION BUILDING Jan 2023 - (assumed 3% PA) | 6.5% | | | | $3,364,034 |
| ESCALATION SITE + RENO July 2024 - (assumed 3% PA) | 11.0% | | | | $2,678,928 |
| DESIGN AND PRICING CONTINGENCY | 12% | | | | $12,665,637 |
| SUB-TOTAL | | | 207,827 | $600.48 | $124,795,319 |
| GENERAL CONDITIONS | | 36 | MTHS | $160,000 | $5,760,000 |
| GENERAL REQUIREMENTS | 4.00% | | | | $4,991,813 |
| BONDS | 1.00% | | | | $1,247,953 |
| INSURANCE | 1.40% | | | | $1,747,134 |
| PERMIT | | | | | Waived |
| CM FEE | 2.5% | | | | $3,119,883 |
| CM/GMP CONTINGENCY | 3% | | | | $3,743,860 |
| **TOTAL OF ALL CONSTRUCTION** | | | 207,827 | $699.65 | **$145,405,962** |
| PV PANELS | | | | ADD | **TBD** |
| HVAC OPTION VRF | | | | DEDUCT | **($4,302,019)** |
| HVAC OPTION CENTRAL PLANT with VAV | | | | DEDUCT | **($3,154,814)** |



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**Stoneham High School**
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Stoneham, MA

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**PSR Estimate**

| | | Construction Start | Gross Floor Area | $/sf | Estimated Construction Cost |
|---|---|---|---|---|---|
| **NEW HIGH SCHOOL ONLY OPTION 4A** | | Jan-23 | | | |
| NEW SCHOOL | | | 207,827 | $360.84 | $74,992,175 |
| DEMOLISH EXISTING SCHOOL | | | 208,113 | $6.00 | $1,248,678 |
| REMOVE HAZARDOUS MATERIALS | | | | | $3,500,000 |
| PHASING COSTS | | | | | NR |
| SYNTHETIC TWO SOCCER/LACROSS FIELDS | | | | | Included with Site |
| SYNTHETIC STADIUM FIELD | | | | | Included with Site |
| SPORTS LIGHTING - Three Fields | | | | | $1,440,000 |
| STADIUM RENOVATION - New Track + Bleachers | | | | | Included with Site |
| NEW TRAFFIC SIGNAL WORK (Two Locations) | | | | | $3,000,000 |
| TEMPORARY UTILITIES | | | | | Included with Site |
| TICKET BOOTH/PRESS BOX/MENS/STORAGE/WOMENS/CONCESSIONS | | | 5,000 | $410.00 | $2,050,000 |
| SITEWORK | | | | | $16,062,033 |
| SUB-TOTAL | | | 207,827 | $492.20 | $102,292,886 |
| ESCALATION EARLY PACKAGE June 2022 - (assumed 3% PA) | 4.8% | | | | $693,199 |
| ESCALATION BUILDING Jan 2023 - (assumed 3% PA) | 6.5% | | | | $3,935,785 |
| ESCALATION SITE + RENO July 2024 - (assumed 3% PA) | 11.0% | | | | $2,673,078 |
| DESIGN AND PRICING CONTINGENCY | 12% | | | | $12,275,146 |
| SUB-TOTAL | | | 207,827 | $586.40 | $121,870,094 |
| GENERAL CONDITIONS | | 33 | MTHS | $160,000 | $5,280,000 |
| GENERAL REQUIREMENTS | 4.00% | | | | $4,874,804 |
| BONDS | 1.00% | | | | $1,218,701 |
| INSURANCE | 1.40% | | | | $1,706,181 |
| PERMIT | | | | | Waived |
| CM FEE | 2.5% | | | | $3,046,752 |
| CM/GMP CONTINGENCY | 3% | | | | $3,656,103 |
| **TOTAL OF ALL CONSTRUCTION** | | | 207,827 | $681.59 | **$141,652,635** |
| PV PANELS | | | | ADD | **TBD** |
| HVAC OPTION VRF | | | | DEDUCT | **($4,302,019)** |
| HVAC OPTION CENTRAL PLANT with VAV | | | | DEDUCT | **($3,154,814)** |



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**PSR Estimate**

| | | Construction Start | Gross Floor Area | $/sf | Estimated Construction Cost |
|---|---|---|---|---|---|
| **NEW HIGH SCHOOL ONLY OPTION 4B** | | Jan-23 | | | |
| NEW SCHOOL | | | 207,827 | $358.54 | $74,513,582 |
| DEMOLISH EXISTING SCHOOL | | | 208,113 | $6.00 | $1,248,678 |
| REMOVE HAZARDOUS MATERIALS | | | | | $3,500,000 |
| PHASING COSTS | | | | | NR |
| SYNTHETIC TWO SOCCER/LACROSS FIELDS | | | | | Included with Site |
| SYNTHETIC STADIUM FIELD | | | | | Included with Site |
| SPORTS LIGHTING - Three Fields | | | | | $1,440,000 |
| STADIUM RENOVATION - New Track + Bleachers | | | | | Included with Site |
| NEW TRAFFIC SIGNAL WORK (Two Locations) | | | | | $3,000,000 |
| TICKET BOOTH/PRESS BOX/MENS/STORAGE/WOMENS/CONCESSIONS | | | 5,000 | $410.00 | $2,050,000 |
| TEMPORARY UTILITIES | | | | | Included with Site |
| SITEWORK | | | | | $15,932,983 |
| SUB-TOTAL | | | 207,827 | $489.28 | $101,685,243 |
| ESCALATION EARLY PACKAGE June 2022 - (assumed 3% PA) | 4.8% | | | | $570,981 |
| ESCALATION BUILDING Jan 2023 - (assumed 3% PA) | 6.5% | | | | $4,070,180 |
| ESCALATION SITE + RENO July 2024 - (assumed 3% PA) | 11.0% | | | | $2,433,383 |
| DESIGN AND PRICING CONTINGENCY | 12% | | | | $12,202,229 |
| SUB-TOTAL | | | 207,827 | $582.03 | $120,962,016 |
| GENERAL CONDITIONS | | 33 | MTHS | $160,000 | $5,280,000 |
| GENERAL REQUIREMENTS | 4.00% | | | | $4,838,481 |
| BONDS | 1.00% | | | | $1,209,620 |
| INSURANCE | 1.40% | | | | $1,693,468 |
| PERMIT | | | | | Waived |
| CM FEE | 2.5% | | | | $3,024,050 |
| CM/GMP CONTINGENCY | 3% | | | | $3,628,860 |
| **TOTAL OF ALL CONSTRUCTION** | | | 207,827 | $676.70 | **$140,636,495** |
| PV PANELS | | | | ADD | **TBD** |
| HVAC OPTION VRF | | | | DEDUCT | **($4,302,019)** |
| HVAC OPTION CENTRAL PLANT with VAV | | | | DEDUCT | **($3,154,814)** |



PM&C

**Stoneham High School**
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Stoneham, MA

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**PSR Estimate**

**The costs presented in this report are ONLY for the comparison between the various options. These costs should not be represented as the final construction costs as the information they are based on is extremely preliminary and final construction costs may vary significantly from the PSR costs once the final design has been completed.**

This PSR cost estimate was produced from drawings, narratives and other documentation prepared by Perkins & Will dated December 02, 2020. Design and engineering changes occurring subsequent to the issue of these documents have not been incorporated in this estimate.

This estimate includes all direct construction costs, construction manager's overhead, fee and design contingency. Cost escalation assumes start dates indicated.

Bidding conditions are expected to be public bidding under Chapter 149a of the Massachusetts General Laws to pre-qualified construction managers, and pre-qualified sub-contractors, open specifications for materials and manufactures.

The estimate is based on prevailing wage rates for construction in this market and represents a reasonable opinion of cost. It is not a prediction of the successful bid from a contractor as bids will vary due to fluctuating market conditions, errors and omissions, proprietary specifications, lack or surplus of bidders, perception of risk, etc. Consequently the estimate is expected to fall within the range of bids from a number of competitive contractors or subcontractors, however we do not warrant that bids or negotiated prices will not vary from the final construction cost estimate.

**ITEMS NOT CONSIDERED IN THIS ESTIMATE**

Items not included in this estimate are:

- Land acquisition, feasibility, and financing costs
- All professional fees and insurance
- Site or existing conditions surveys investigations costs, including to determine subsoil conditions
- All Furnishings, Fixtures and Equipment
- Items identified in the design as Not In Contract (NIC)
- Items identified in the design as by others
- Owner supplied and/or installed items as indicated in the estimate
- Utility company back charges, including work required off-site
- Work to City streets and sidewalks, (except as noted in this estimate)
- Construction contingency (GMP Contingency is included)
- Contaminated soils removal



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**Stoneham High School**
**Design Options**
**Stoneham, MA**

03-Dec-20

**PSR Estimate**

GFA 208,113

## *CONSTRUCTION COST SUMMARY*

| | *BUILDING SYSTEM* | | *SUB-TOTAL* | *TOTAL* | *$/SF* | *%* |
|---|---|---|---|---|---|---|
| **HIGH SCHOOL CODE UPGRADES OPTION 1** | | | | | | |
| **A10** | **FOUNDATIONS** | | | | | |
| | A1010 | Standard Foundations | $95,000 | | | |
| | A1020 | Special Foundations | $0 | | | |
| | A1030 | Lowest Floor Construction | $478,250 | **$573,250** | $2.75 | 1.1% |
| **B10** | **SUPERSTRUCTURE** | | | | | |
| | B1010 | Upper Floor Construction | $470,247 | | | |
| | B1020 | Roof Construction | $819,275 | **$1,289,522** | $6.20 | 2.6% |
| **B20** | **EXTERIOR CLOSURE** | | | | | |
| | B2010 | Exterior Walls | $899,500 | | | |
| | B2020 | Windows/Curtainwall | $2,139,950 | | | |
| | B2030 | Exterior Doors | $210,552 | **$3,250,002** | $15.62 | 6.5% |
| **B30** | **ROOFING** | | | | | |
| | B3010 | Roof Coverings | $2,721,488 | | | |
| | B3020 | Roof Openings | $27,000 | **$2,748,488** | $13.21 | 5.5% |
| **C10** | **INTERIOR CONSTRUCTION** | | | | | |
| | C1010 | Partitions | $821,100 | | | |
| | C1020 | Interior Doors | $1,248,678 | | | |
| | C1030 | Specialties/Millwork | $1,757,179 | **$3,826,957** | $18.39 | 7.7% |
| **C20** | **STAIRCASES** | | | | | |
| | C2010 | Stair Construction | $180,000 | | | |
| | C2020 | Stair Finishes | $42,000 | **$222,000** | $1.07 | 0.4% |
| **C30** | **INTERIOR FINISHES** | | | | | |
| | C3010 | Wall Finishes | $2,915,469 | | | |
| | C3020 | Floor Finishes | $2,174,283 | | | |
| | C3030 | Ceiling Finishes | $2,128,234 | **$7,217,986** | $34.68 | 14.5% |
| **D10** | **CONVEYING SYSTEMS** | | | | | |
| | D1010 | Elevator | $220,000 | **$220,000** | $1.06 | 0.4% |
| **D20** | **PLUMBING** | | | | | |
| | D20 | Plumbing | $3,347,726 | **$3,347,726** | $16.09 | 6.7% |
| **D30** | **HVAC** | | | | | |
| | D30 | HVAC | $11,446,215 | **$11,446,215** | $55.00 | 23.0% |
| **D40** | **FIRE PROTECTION** | | | | | |
| | D40 | Fire Protection | $1,248,678 | **$1,248,678** | $6.00 | 2.5% |
| **D50** | **ELECTRICAL** | | | | | |
| | D5010 | Electrical Systems | $8,589,892 | **$8,589,892** | $41.28 | 17.2% |



PM&C

**Stoneham High School**
**Design Options**
**Stoneham, MA**

03-Dec-20

**PSR Estimate**

GFA 208,113

## *CONSTRUCTION COST SUMMARY*

| | *BUILDING SYSTEM* | | *SUB-TOTAL* | *TOTAL* | *$/SF* | *%* |
|---|---|---|---|---|---|---|
| **HIGH SCHOOL CODE UPGRADES OPTION 1** | | | | | | |
| **E10** | **EQUIPMENT** | | | | | |
| | E10 | Equipment | $1,453,600 | **$1,453,600** | $6.98 | 2.9% |
| **E20** | **FURNISHINGS** | | | | | |
| | E2010 | Fixed Furnishings | $2,588,914 | | | |
| | E2020 | Movable Furnishings | NIC | **$2,588,914** | $12.44 | 5.2% |
| **F10** | **SPECIAL CONSTRUCTION** | | | | | |
| | F10 | Special Construction | $0 | **$0** | $0.00 | 0.0% |
| **F20** | **SELECTIVE BUILDING DEMOLITION** | | | | | |
| | F2010 | Building Elements Demolition | $1,834,616 | | | |
| | F2020 | Hazardous Components Abatement | $0 | **$1,834,616** | $8.82 | 3.7% |
| | ***TOTAL DIRECT COST (Trade Costs)*** | | | ***$49,857,846*** | *$239.57* | *100.0%* |



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**Stoneham High School**
**Design Options**
Stoneham, MA

03-Dec-20

**PSR Estimate** **GFA** 208,113

| | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|
| | **HIGH SCHOOL CODE UPGRADES OPTION 1** | | | | | | |
| | ***GROSS FLOOR AREA CALCULATION*** | | | | | | |
| | LEVEL 2 | | | | 52,713 | | |
| | LEVEL 1 | | | | 127,252 | | |
| | LEVEL 0 | | | | 28,148 | | |
| | ***TOTAL GROSS FLOOR AREA (GFA)*** | | | | **208,113** ***sf*** | | |
| | ***A10 FOUNDATIONS*** | | | | | | |
| **A1010** | **STANDARD FOUNDATIONS** | | | | | | |
| | Repair cracks and resurface exposed concrete foundations | **1** | ls | 25,000 | 25,000 | | |
| | Repair at site retaining wall | **1** | ls | 30,000 | 30,000 | | |
| | Allowance for spalled concrete | **500** | sf | 80.00 | 40,000 | | |
| | SUBTOTAL | | | | | 95,000 | |
| **A1020** | **SPECIAL FOUNDATIONS** | | | | | | |
| | No work in this section | | | | | | |
| | SUBTOTAL | | | | | | |
| **A1030** | **LOWEST FLOOR CONSTRUCTION** | | | | | | |
| | Cutting and patching for MEP | **1** | ls | 25,000.00 | 25,000 | | |
| | New slab at bathroms and kitchen | **7,030** | sf | 25.00 | 175,750 | | |
| | Replace loading dock | **1** | ls | 30,000.00 | 30,000 | | |
| | Upgrade auditorium slopes for ADA compliance | **7,500** | sf | 25.00 | 187,500 | | |
| | Equipment pads | **1** | ls | 15,000.00 | 15,000 | | |
| | New elevator pit | **1** | ls | 45,000.00 | 45,000 | | |
| | SUBTOTAL | | | | | 478,250 | |
| | ***TOTAL - FOUNDATIONS*** | | | | | | **$573,250** |
| | ***B10 SUPERSTRUCTURE*** | | | | | | |
| **B1010** | **FLOOR CONSTRUCTION** | | | | | | |
| | Openings in structure for MEP systems | **208,113** | gsf | 0.50 | 104,057 | | |
| | Structural modifications to facilitate science classroom relocations | **1** | ls | 100,000.00 | 100,000 | | |
| | Infill existing stair openings | **1,760** | sf | 45.00 | 79,200 | | |
| | New stage floor structure | **1,914** | sf | 35.00 | 66,990 | | |
| | New code compliant ramp | **2** | loc | 35,000.00 | 70,000 | | |
| | Fire stopping floors | **1** | ls | 50,000.00 | 50,000 | | |
| | SUBTOTAL | | | | | 470,247 | |
| **B1020** | **ROOF CONSTRUCTION** | | | | | | |
| | Roof Structure - Steel: | | | | | | |
| | New reinforcing to low roofs for snow loading; 1 bay only against building | **11,653** | sf | 15.00 | 174,795 | | |
| | New structural steel at new stage and fly loft | **37.5** | tns | 6,500.00 | 243,750 | | |
| | New deck at rebuilt stage and fly loft | **1,914** | sf | 18.00 | 34,452 | | |
| | Allowance to reinforce roof diaphragms | **52,713** | sf | 6.00 | 316,278 | | |
| | Support framing for new MEP systems | **1** | ls | 50,000.00 | 50,000 | | |
| | SUBTOTAL | | | | | 819,275 | |
| | ***TOTAL - SUPERSTRUCTURE*** | | | | | | **$1,289,522** |



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**Stoneham High School**
**Design Options**
Stoneham, MA

03-Dec-20

**PSR Estimate** **GFA** 208,113

| | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|
| | **HIGH SCHOOL CODE UPGRADES OPTION 1** | | | | | | |
| | ***B20 EXTERIOR CLOSURE*** | | | | | | |
| **B2010** | **EXTERIOR WALLS** | *52,450* | *sf* | | | | |
| | Reclad and Insulate exterior walls to meet code | **52,450** | sf | 95.00 | NR | | |
| | Anchor the top of perimeter masonry partitions to the underside of the floor or structure above | **949** | loc | 500.00 | 474,500 | | |
| | Mechanical screen; includes backup structure | **5,000** | sf | 85.00 | 425,000 | | |
| | SUBTOTAL | | | | | 899,500 | |
| **B2020** | **WINDOWS/CURTAINWALL** | | | | | | |
| | Replace existing windows; double glazed | **13,112** | sf | 100.00 | 1,311,200 | | |
| | Replace existing curtainwall; double glazed | **6,375** | sf | 130.00 | 828,750 | | |
| | SUBTOTAL | | | | | 2,139,950 | |
| **B2030** | **EXTERIOR DOORS** | | | | | | |
| | Replace exterior glazed door, double | **15** | pr | 9,000.00 | 135,000 | | |
| | Replace exterior glazed door, single | **2** | ea | 4,000.00 | 8,000 | | |
| | Replace exterior single door | **10** | ea | 2,100.00 | 21,000 | | |
| | Replace garage doors | **4** | ea | 10,000.00 | 40,000 | | |
| | Backer rod & double sealant | **504** | lf | 10.00 | 5,040 | | |
| | Wood blocking at openings | **504** | lf | 3.00 | 1,512 | | |
| | SUBTOTAL | | | | | 210,552 | |
| | ***TOTAL - EXTERIOR CLOSURE*** | | | | | | **$3,250,002** |
| | ***B30 ROOFING*** | | | | | | |
| **B3010** | **ROOF COVERINGS** | | | | | | |
| | Replace existing roofing systems | **123,704** | sf | 22.00 | 2,721,488 | | |
| | SUBTOTAL | | | | | 2,721,488 | |
| **B3020** | **ROOF OPENINGS** | | | | | | |
| | New stage smoke hatches | **3** | ea | 8,000.00 | 24,000 | | |
| | Replace roof ladders/hatches etc. | **1** | ls | 3,000.00 | 3,000 | | |
| | SUBTOTAL | | | | | 27,000 | |
| | ***TOTAL - ROOFING*** | | | | | | **$2,748,488** |
| | ***C10 INTERIOR CONSTRUCTION*** | | | | | | |
| **C1010** | **PARTITIONS** | | | | | | |
| | Anchor the top of all masonry partitions to the underside of the floor or structure above | **1,970** | loc | 350.00 | 689,500 | | |
| | New walls for new layouts | **208,113** | sf | 22.00 | NR | | |
| | Replace auditorium operable wall | **68** | lf | 1,200.00 | 81,600 | | |
| | Repair/Fill cracks in CMU walls | **1** | ls | 50,000.00 | 50,000 | | |
| | SUBTOTAL | | | | | 821,100 | |
| **C1020** | **INTERIOR DOORS** | | | | | | |
| | Replace al interior doors, frames + hardware | **208,113** | sf | 6.00 | 1,248,678 | | |
| | SUBTOTAL | | | | | 1,248,678 | |
| **C1030** | **SPECIALTIES / MILLWORK** | | | | | | |
| | Toilet Partitions and accessories | **208,113** | gsf | 1.00 | 208,113 | | |
| | New stage proscenium | **1** | ls | 100,000 | 100,000 | | |



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**Stoneham High School**
**Design Options**
Stoneham, MA

03-Dec-20

**PSR Estimate** **GFA** 208,113

| | | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|---|
| | | **HIGH SCHOOL CODE UPGRADES OPTION 1** | | | | | | |
| 57 | | New markerboards/tackboards | **208,113** | gsf | 1.25 | 260,141 | | |
| 57 | | Upgrade athletic locker rooms specifically reconfigure showers to provide accessible shower stalls | **2** | ea | 30,000.00 | 60,000 | | |
| 58 | | Lockers, full height | **710** | ea | 350.00 | 248,500 | | |
| 58 | | New catwalk | **1** | ls | 100,000.00 | 100,000 | | |
| 59 | | | | | | | | |
| 59 | *055000* | *MISCELLANEOUS METALS* | | | | | | |
| 60 | | Miscellaneous metals throughout building | **208,113** | sf | 1.25 | 260,141 | | |
| 60 | | | | | | | | |
| 61 | *061000* | *ROUGH CARPENTRY* | | | | | | |
| 61 | | Rough blocking | **208,113** | sf | 0.50 | 104,057 | | |
| 62 | | | | | | | | |
| 62 | *070001* | *WATERPROOFING, DAMPPROOFING AND CAULKING* | | | | | | |
| 63 | | Miscellaneous sealants throughout building | **208,113** | sf | 1.50 | 312,170 | | |
| 63 | | | | | | | | |
| 64 | | | | | | | | |
| 64 | *101400* | *SIGNAGE* | | | | | | |
| 65 | | Code compliant signage | **208,113** | sf | 0.50 | 104,057 | | |
| 65 | | SUBTOTAL | | | | | 1,757,179 | |
| 66 | | ***TOTAL - INTERIOR CONSTRUCTION*** | | | | | | **$3,826,957** |
| 67 | | | | | | | | |
| 67 | | | | | | | | |
| 68 | | ***C20 STAIRCASES*** | | | | | | |
| 68 | | | | | | | | |
| 69 | **C2010** | **STAIR CONSTRUCTION** | | | | | | |
| 69 | | Upgrade existing stairs for code | **2** | flt | 10,000.00 | 20,000 | | |
| 70 | | New stairs | **4** | flt | 40,000.00 | 160,000 | | |
| 70 | | SUBTOTAL | | | | | 180,000 | |
| 71 | | | | | | | | |
| 71 | **C2020** | **STAIR FINISHES** | | | | | | |
| 72 | | New stair finishes; rubber treads/risers/landing and painting | **6** | flt | 7,000.00 | 42,000 | | |
| 72 | | SUBTOTAL | | | | | 42,000 | |
| 73 | | | | | | | | |
| 73 | | ***TOTAL - STAIRCASES*** | | | | | | **$222,000** |
| 74 | | | | | | | | |
| 74 | | | | | | | | |
| 75 | | ***C30 INTERIOR FINISHES*** | | | | | | |
| 75 | | | | | | | | |
| 76 | **C3010** | **WALL FINISHES** | | | | | | |
| 76 | | Painting | **208,113** | gsf | 3.00 | 624,339 | | |
| 77 | | Replace wood paneling at auditorium | **1** | ls | 150,000.00 | 150,000 | | |
| 77 | | Replace acoustic panels at gym | **1** | ls | 60,000.00 | 60,000 | | |
| 78 | | Other finishes | **208,113** | sf | 10.00 | 2,081,130 | | |
| 78 | | SUBTOTAL | | | | | 2,915,469 | |
| 79 | | | | | | | | |
| 79 | **C3020** | **FLOOR FINISHES** | | | | | | |
| 80 | | | | | | | | |
| 80 | | New linoleum flooring throughout including floor prep | **157,294** | sf | 8.00 | 1,258,352 | | |
| 81 | | New shock-absorbing wood gym floor | **16,000** | sf | 20.00 | 320,000 | | |
| 81 | | Bathroom renovations | **5,000** | sf | 100.00 | 500,000 | | |
| 82 | | New flooring at the stage | **1,914** | sf | 24.00 | 45,936 | | |
| 82 | | New carpet | **1,111** | sy | 45.00 | 49,995 | | |
| 83 | | SUBTOTAL | | | | | 2,174,283 | |
| 83 | | | | | | | | |
| 84 | **C3030** | **CEILING FINISHES** | | | | | | |



PM&C

**Stoneham High School**
**Design Options**
Stoneham, MA

03-Dec-20

**PSR Estimate** **GFA** 208,113

| | | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|---|
| | | **HIGH SCHOOL CODE UPGRADES OPTION 1** | | | | | | |
| 84 | | Replace ceiling at auditorium, provide new clouds | **1** | ls | 350,000 | 350,000 | | |
| 85 | | Replace existing ACT/Ceilings/Soffits | **157,294** | sf | 11.00 | 1,730,234 | | |
| 85 | | Paint gym exposed ceiling | **16,000** | sf | 3.00 | 48,000 | | |
| 86 | | SUBTOTAL | | | | | 2,128,234 | |
| 86 | | | | | | | | |
| 87 | | ***TOTAL - INTERIOR FINISHES*** | | | | | | **$7,217,986** |
| 87 | | | | | | | | |
| 88 | | | | | | | | |
| 88 | | ***D10 CONVEYING SYSTEMS*** | | | | | | |
| 89 | | | | | | | | |
| 89 | | Remove existing elevator | **1** | ls | 40,000.00 | 40,000 | | |
| 90 | | Remove existing elevator and install new elevator | **1** | ls | 135,000.00 | 135,000 | | |
| 90 | | New lift | **1** | ls | 45,000.00 | 45,000 | | |
| 91 | | SUBTOTAL | | | | | 220,000 | |
| 91 | | | | | | | | |
| 92 | | ***TOTAL - CONVEYING SYSTEMS*** | | | | | | **$220,000** |
| 92 | | | | | | | | |
| 93 | | | | | | | | |
| 93 | | ***D20 PLUMBING*** | | | | | | |
| 94 | **D20** | **PLUMBING, GENERALLY** | | | | | | |
| 95 | | Equipment | | | | | | |
| 95 | | Gas fired domestic HW heater; 400,000 BTUH | **2** | ea | 28,000.00 | 56,000 | | |
| 96 | | HW storage tank | **2** | ea | 5,000.00 | 10,000 | | |
| 96 | | Plumbing equipment | **208,113** | sf | 4.00 | 832,452 | | |
| 97 | | Plumbing Fixtures & Specialties | | | | | | |
| 97 | | Miscellaneous plumbing fixtures | **208,113** | sf | 1.00 | 208,113 | | |
| 98 | | Domestic Water Type L Copper Pipe | | | | | | |
| 98 | | Domestic water pipe with fittings & hangers | **208,113** | sf | 2.50 | 520,283 | | |
| 99 | | Domestic water pipe insulation | **208,113** | sf | 1.50 | 312,170 | | |
| 99 | | Sanitary Waste And Vent Pipe w/ Hangers | | | | | | |
| 100 | | Sanitary waste pipe with fittings & hangers | **208,113** | sf | 2.50 | 520,283 | | |
| 100 | | Kitchen waste pipe with fittings & hangers | **208,113** | sf | 0.30 | 62,434 | | |
| 101 | | Acid Waste And Vent Pipe w/ Hangers | | | | | | |
| 101 | | Acid waste & vent pipe with fittings & hangers | **208,113** | sf | 0.75 | 156,085 | | |
| 102 | | Storm Drainage, Hubless Cast Iron Pipe | | | | | | |
| 102 | | Storm water pipe with fittings & hangers | **208,113** | sf | 1.50 | 312,170 | | |
| 103 | | Pipe insulation on horizontal runs | **208,113** | sf | 0.20 | 41,623 | | |
| 103 | | Gas And Fuel Distribution Pipe | | | | | | |
| 104 | | Gas pipe with fittings & hangers | **208,113** | sf | 1.00 | 208,113 | | |
| 104 | | Miscellaneous | | | | | | |
| 105 | | Coordination & BIM | **1** | ls | 50,000.00 | 50,000 | | |
| 105 | | Coring, sleeves & firestopping | **1** | ls | 7,000.00 | 7,000 | | |
| 106 | | Commissioning support | **1** | ls | 20,000.00 | 20,000 | | |
| 106 | | Testing and sterilization | **1** | ls | 6,000.00 | 6,000 | | |
| 107 | | Fees & permits | **1** | ls | 25,000.00 | 25,000 | | |
| 107 | | SUBTOTAL | | | | | 3.347,726 | |
| 108 | | | | | | | | |
| 108 | | ***TOTAL - PLUMBING*** | | | | | | **$3.347.726** |
| 109 | | | | | | | | |
| 109 | | | | | | | | |
| 110 | | ***D30 HVAC*** | | | | | | |
| 110 | | | | | | | | |
| 111 | **D30** | **HVAC, GENERALLY** | | | | | | |
| 111 | | HVAC Equipment | | | | | | |
| 112 | | New HVAC system; VRF | **208,113** | gsf | 55.00 | 11,446,215 | | |



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**Stoneham High School** 03-Dec-20
**Design Options**
Stoneham, MA

**PSR Estimate** **GFA** 208,113

| | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|
| | **HIGH SCHOOL CODE UPGRADES OPTION 1** | | | | | | |
| | SUBTOTAL | | | | | 11,446,215 | |
| | ***TOTAL - HVAC*** | | | | | | **$11,446,215** |
| | ***D40 FIRE PROTECTION*** | | | | | | |
| | **D40 FIRE PROTECTION, GENERALLY** | | | | | | |
| | New sprinkler system | **208,113** | gsf | 6.00 | 1,248,678 | | |
| | SUBTOTAL | | | | | 1,248,678 | |
| | ***TOTAL - FIRE PROTECTION*** | | | | | | **$1,248,678** |
| | ***D50 ELECTRICAL*** | | | | | | |
| | **D5010 SERVICE & DISTRIBUTION** | | | | | | |
| | **Gear & Distribution** | | | | | | |
| | Normal power distribution switchgear & feeders | **208,113** | sf | 5.00 | 1,040,565 | | |
| | Emergency power | | | | | | |
| | Emergency power distribution switchgear & feeders | **208,113** | sf | 3.00 | 624,339 | | |
| | Equipment Wiring | | | | | | |
| | Equipment wiring | **208,113** | sf | 2.50 | 520,283 | | |
| | SUBTOTAL | | | | | 2,185,187 | |
| | **D5020 LIGHTING & POWER** | | | | | | |
| | Lighting & Branch Power | | | | - | | |
| | Lighting fixtures with installation labor | **208,113** | sf | 6.00 | 1,248,678 | | |
| | Lighting control system | | | | | | |
| | Lighting controls including interface with DDC | **208,113** | sf | 1.75 | 364,198 | | |
| | Branch devices | | | | | | |
| | Branch devices | **208,113** | sf | 0.50 | 104,057 | | |
| | Lighting and branch circuitry | | | | | | |
| | Lighting & branch circuitry | **208,113** | sf | 5.00 | 1,040,565 | | |
| 260000 | SUBTOTAL | | | | | 2,757,498 | |
| | **D5030 COMMUNICATION & SECURITY SYSTEMS** | | | | | | |
| | Fire Alarm | | | | | | |
| | Fire alarm system | **208,113** | sf | 3.50 | 728,396 | | |
| | Bi-Directional Svstem | | | | | | |
| | BDA system | **208,113** | sf | 0.50 | 104,057 | | |
| | Security System | | | | | | |
| | Security System | **208,113** | sf | 2.50 | 520,283 | | |
| | Telephone/Data/CATV | | | | | | |
| | Network switches, PBX, IP, VP, CCTV (By owner) | | | | By Owner | | |
| | Telecommunications rough in | **208,113** | sf | 1.50 | 312,170 | | |
| | Telecommunications devices and cabling | **208,113** | sf | 2.00 | 416,226 | | |
| | Public Address/Clock System | | | | | | |
| | PA/Master Clock system | **208,113** | sf | 1.25 | 260,141 | | |
| | Audio Visual (rough-in and power only) | | | | | | |
| | AV equipment | | | | By Owner | | |
| | Rough-In conduit and backboxes only | **208,113** | sf | 1.00 | 208,113 | | |
| | Auditorium | | | | | | |
| | Rigging system equipment & installation | | | | See equipment | | |
| | Power to rigging equipment | **1** | ls | 12,000.00 | 12,000 | | |
| | Stage dimming system with performance fixture package, allow | **1** | ls | 275,000.00 | 275,000 | | |
| | Installation, rough-in & 120V power to dimming equipment | **1** | ls | 70,000.00 | 70,000 | | |



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**Stoneham High School** 03-Dec-20
**Design Options**
Stoneham, MA

**PSR Estimate** **GFA** 208,113

| | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|
| | **HIGH SCHOOL CODE UPGRADES OPTION 1** | | | | | | |
| | Performance audio visual equipment, installation & LV cabling, allow | **1** | ls | 150,000.00 | 150,000 | | |
| | Performance audio visual rough-in and power | **1** | ls | 60,000.00 | 60,000 | | |
| | Gymnasium | | | | | | |
| | Sound system | **1** | ls | 50,000.00 | 50,000 | | |
| | Scoreboard/ shot clocks with feed and connection | **1** | ea | 15,000.00 | 15,000 | | |
| | Misc. gym equipment feed and connections | **1** | ls | 15,000.00 | 15,000 | | |
| | SUBTOTAL | | | | | 3,196,386 | |
| | **D5040 OTHER ELECTRICAL SYSTEMS** | | | | | | |
| | Miscellaneous | | | | | | |
| | Demolition & make safe | **1** | ls | 30,000.00 | 30,000 | | |
| | Temp power and lights | **208,113** | sf | 1.00 | 208,113 | | |
| | Seismic restraints | **1** | ls | 15,000.00 | 15,000 | | |
| | Lightning Protection System, UL Master label | **208,113** | sf | 0.45 | 93,651 | | |
| | Fees & Permits | **208,113** | sf | 0.50 | 104,057 | | |
| | SUBTOTAL | | | | | 450,821 | |
| | ***TOTAL - ELECTRICAL*** | | | | | | **$8,589,892** |
| | ***E10 EQUIPMENT*** | | | | | | |
| | **E10 EQUIPMENT, GENERALLY** | | | | | | |
| | Gym wall pads | **1** | ls | 20,000.00 | 20,000 | | |
| | Basketball backstops; swing up; electric operated | **12** | loc | 10,500.00 | 126,000 | | |
| | Gymnasium dividing net; electrically operated | **3** | ea | 30,000.00 | 90,000 | | |
| | Volleyball net and standards | **1** | ls | 5,000.00 | 5,000 | | |
| | Telescoping bleachers | **900** | seats | 240.00 | 216,000 | | |
| | Theatrical Equipment Stage curtains, rigging and controls | **1** | ls | 350,000.00 | 350,000 | | |
| | Theatrical AV allowance | **1** | ls | 200,000.00 | 200,000 | | |
| | Kitchen equipment | **2,030** | sf | 220.00 | 446,600 | | |
| | SUBTOTAL | | | | | 1,453,600 | |
| | ***TOTAL - EQUIPMENT*** | | | | | | **$1,453,600** |
| | ***E20 FURNISHINGS*** | | | | | | |
| | **E2010 FIXED FURNISHINGS** | | | | | | |
| | Window shades | **13,112** | sf | 7.00 | 91,784 | | |
| | Entrance mats | **1** | ls | 20,000.00 | 20,000 | | |
| | Replace auditorium seats | **1,100** | seat | 360.00 | 396,000 | | |
| *123553* | *CASEWORK* | | | | | | |
| | Sinks, counters and casework allowance | **208,113** | sf | 10.00 | 2,081,130 | | |
| | SUBTOTAL | | | | | 2,588,914 | |
| | **E2020 MOVABLE FURNISHINGS** | | | | | | |
| | All movable furnishings to be provided and installed by owner | | | | | | |
| | SUBTOTAL | | | | | NIC | |
| | ***TOTAL - FURNISHINGS*** | | | | | | **$2,588,914** |



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**Design Options**
Stoneham, MA

**PSR Estimate** **GFA** 208,113

| | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|
| | **HIGH SCHOOL CODE UPGRADES OPTION 1** | | | | | | |
| | ***F10 SPECIAL CONSTRUCTION*** | | | | | | |
| **F10** | **SPECIAL CONSTRUCTION** | | | | | | |
| | SUBTOTAL | | | | | - | |
| | ***TOTAL - SPECIAL CONSTRUCTION*** | | | | | | |
| | ***F20 SELECTIVE BUILDING DEMOLITION*** | | | | | | |
| **F2010** | **BUILDING ELEMENTS DEMOLITION** | | | | | | |
| | Remove exterior glazing | **13,112** | sf | 7.00 | 91,784 | | |
| | Remove exterior brick façade | **52,450** | sf | 10.00 | 524,500 | | |
| | Remove roofing | **123,704** | sf | 2.00 | In HazMat | | |
| | Demolish existing stage | **1,914** | sf | 15.00 | 28,710 | | |
| | Shoring | **1** | ls | 25,000.00 | 25,000 | | |
| | Remove existing stairs | **4** | flts | 5,000.00 | 20,000 | | |
| | Interior demolition | **208,113** | gsf | 4.00 | 832,452 | | |
| | Temporary enclosures/protection | **208,113** | sf | 1.50 | 312,170 | | |
| | SUBTOTAL | | | | | 1,834,616 | |
| **F2020** | **HAZARDOUS COMPONENTS ABATEMENT** | | | | | | |
| | See summary | | | | | | |
| | SUBTOTAL | | | | | | |
| | ***TOTAL - SELECTIVE BUILDING DEMOLITION*** | | | | | | **$1,834,616** |



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**Stoneham High School**
**Design Options**
**Stoneham, MA** 03-Dec-20

**PSR Estimate** GFA 208,113

## *CONSTRUCTION COST SUMMARY*

| | BUILDING SYSTEM | SUB-TOTAL | TOTAL | $/SF | % |
|---|---|---|---|---|---|
| | **FULL RENOVATION - OPTION 2A** | | | | |
| **A10** | **FOUNDATIONS** | | | | |
| A1010 | Standard Foundations | $95,000 | | | |
| A1020 | Special Foundations | $0 | | | |
| A1030 | Lowest Floor Construction | $478,250 | **$573,250** | $2.75 | 0.9% |
| **B10** | **SUPERSTRUCTURE** | | | | |
| B1010 | Upper Floor Construction | $1,220,247 | | | |
| B1020 | Roof Construction | $684,821 | **$1,905,068** | $9.15 | 2.9% |
| **B20** | **EXTERIOR CLOSURE** | | | | |
| B2010 | Exterior Walls | $6,459,200 | | | |
| B2020 | Windows/Curtainwall | $2,659,000 | | | |
| B2030 | Exterior Doors | $210,552 | **$9,328,752** | $44.83 | 14.3% |
| **B30** | **ROOFING** | | | | |
| B3010 | Roof Coverings | $2,968,896 | | | |
| B3020 | Roof Openings | $27,000 | **$2,995,896** | $14.40 | 4.6% |
| **C10** | **INTERIOR CONSTRUCTION** | | | | |
| C1010 | Partitions | $5,399,586 | | | |
| C1020 | Interior Doors | $1,248,678 | | | |
| C1030 | Specialties/Millwork | $1,757,179 | **$8,405,443** | $40.39 | 12.9% |
| **C20** | **STAIRCASES** | | | | |
| C2010 | Stair Construction | $180,000 | | | |
| C2020 | Stair Finishes | $42,000 | **$222,000** | $1.07 | 0.3% |
| **C30** | **INTERIOR FINISHES** | | | | |
| C3010 | Wall Finishes | $2,915,469 | | | |
| C3020 | Floor Finishes | $2,174,283 | | | |
| C3030 | Ceiling Finishes | $2,128,234 | **$7,217,986** | $34.68 | 11.1% |
| **D10** | **CONVEYING SYSTEMS** | | | | |
| D1010 | Elevator | $220,000 | **$220,000** | $1.06 | 0.3% |
| **D20** | **PLUMBING** | | | | |
| D20 | Plumbing | $3,329,808 | **$3,329,808** | $16.00 | 5.1% |
| **D30** | **HVAC** | | | | |
| D30 | HVAC | $14,567,910 | **$14,567,910** | $70.00 | 22.4% |
| **D40** | **FIRE PROTECTION** | | | | |
| D40 | Fire Protection | $1,248,678 | **$1,248,678** | $6.00 | 1.9% |
| **D50** | **ELECTRICAL** | | | | |
| D5010 | Electrical Systems | $8,718,417 | **$8,718,417** | $41.89 | 13.4% |



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**Stoneham High School**
**Design Options**
**Stoneham, MA**

03-Dec-20

**PSR Estimate**

GFA 208,113

## *CONSTRUCTION COST SUMMARY*

| | *BUILDING SYSTEM* | *SUB-TOTAL* | *TOTAL* | *$/SF* | *%* |
|---|---|---|---|---|---|
| **FULL RENOVATION - OPTION 2A** | | | | | |
| **E10** | **EQUIPMENT** | | | | |
| E10 | Equipment | $1,453,600 | **$1,453,600** | $6.98 | 2.2% |
| **E20** | **FURNISHINGS** | | | | |
| E2010 | Fixed Furnishings | $2,588,914 | | | |
| E2020 | Movable Furnishings | NIC | **$2,588,914** | $12.44 | 4.0% |
| **F10** | **SPECIAL CONSTRUCTION** | | | | |
| F10 | Special Construction | $0 | **$0** | $0.00 | 0.0% |
| **F20** | **SELECTIVE BUILDING DEMOLITION** | | | | |
| F2010 | Building Elements Demolition | $2,250,842 | | | |
| F2020 | Hazardous Components Abatement | $0 | **$2,250,842** | $10.82 | 3.5% |
| ***TOTAL DIRECT COST (Trade Costs)*** | | | ***$65,026,564*** | *$312.46* | *100.0%* |



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**Stoneham High School**
**Design Options**
Stoneham, MA

03-Dec-20

**PSR Estimate**

GFA 208,113

| | *DESCRIPTION* | *QTY* | *UNIT* | *UNIT COST* | *EST'D COST* | *SUB TOTAL* | *TOTAL COST* |
|---|---|---|---|---|---|---|---|
| | **FULL RENOVATION - OPTION 2A** | | | | | | |
| | ***GROSS FLOOR AREA CALCULATION*** | | | | | | |
| | **LEVEL 00** | | | | 30,304 | | |
| | **LEVEL 01** | | | | 123,704 | | |
| | **LEVEL 02** | | | | 54,105 | | |
| | ***TOTAL GROSS FLOOR AREA (GFA)*** | | | | **208,113** ***sf*** | | |
| | ***A10 FOUNDATIONS*** | | | | | | |
| **A1010** | **STANDARD FOUNDATIONS** | | | | | | |
| | Repair cracks and resurface exposed concrete foundations | **1** | ls | 25,000 | 25,000 | | |
| | Repair at site retaining wall | **1** | ls | 30,000 | 30,000 | | |
| | Allowance for spalled concrete | **500** | sf | 80.00 | 40,000 | | |
| | SUBTOTAL | | | | | 95,000 | |
| **A1020** | **SPECIAL FOUNDATIONS** | | | | | | |
| | No work in this section | | | | | | |
| | SUBTOTAL | | | | | | |
| **A1030** | **LOWEST FLOOR CONSTRUCTION** | | | | | | |
| | Cutting and patching for MEP | **1** | ls | 25,000.00 | 25,000 | | |
| | New slab at bathrooms and kitchen | **7,030** | sf | 25.00 | 175,750 | | |
| | Replace loading dock | **1** | ls | 30,000.00 | 30,000 | | |
| | Upgrade auditorium slopes for ADA compliance | **7,500** | sf | 25.00 | 187,500 | | |
| | Equipment pads | **1** | ls | 15,000.00 | 15,000 | | |
| | New elevator pit | **1** | ls | 45,000.00 | 45,000 | | |
| | SUBTOTAL | | | | | 478,250 | |
| | ***TOTAL - FOUNDATIONS*** | | | | | | **$573,250** |
| | ***B10 SUPERSTRUCTURE*** | | | | | | |
| **B1010** | **FLOOR CONSTRUCTION** | | | | | | |
| | Openings in structure for MEP systems | **208,113** | gsf | 0.50 | 104,057 | | |
| | Structural modifications to facilitate science classroom relocations | **1** | ls | 100,000.00 | 100,000 | | |
| | Infill existing stair openings | **1,760** | sf | 45.00 | 79,200 | | |
| | New stage floor structure | **1,914** | sf | 35.00 | 66,990 | | |
| | New code compliant ramp | **2** | loc | 35,000.00 | 70,000 | | |
| | New suspended track | **1** | ls | 750,000.00 | 750,000 | | |
| | Fire stopping floors | **1** | ls | 50,000.00 | 50,000 | | |
| | SUBTOTAL | | | | | 1,220,247 | |
| **B1020** | **ROOF CONSTRUCTION** | | | | | | |
| | Roof Structure - Steel: | | | | | | |
| | New reinforcing to low roofs for snow loading; 1 bay only against building | **11,653** | sf | 15.00 | 174,795 | | |
| | New structural steel at new stage and fly loft | **37.5** | tns | 6,500.00 | 243,750 | | |
| | New deck at rebuilt stage and fly loft | **1,914** | sf | 18.00 | 34,452 | | |
| | Allowance to reinforce roof diaphragms | **30,304** | sf | 6.00 | 181,824 | | |
| | Support framing for new MEP systems | **1** | ls | 50,000.00 | 50,000 | | |
| | SUBTOTAL | | | | | 684,821 | |
| | ***TOTAL - SUPERSTRUCTURE*** | | | | | | **$1,905,068** |



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**Stoneham High School** 03-Dec-20
**Design Options**
Stoneham, MA

**PSR Estimate** **GFA** 208,113

| | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|
| | **FULL RENOVATION - OPTION 2A** | | | | | | |
| | ***B20 EXTERIOR CLOSURE*** | | | | | | |
| | **B2010 EXTERIOR WALLS** | *52,450* | *sf* | | | | |
| | Reclad and Insulate exterior walls to meet code; EXT3 | **52,450** | sf | 106.00 | 5,559,700 | | |
| | Anchor the top of perimeter masonry partitions to the underside of the floor or structure above | **949** | loc | 500.00 | 474,500 | | |
| | Mechanical screen; includes backup structure | **5,000** | sf | 85.00 | 425,000 | | |
| | SUBTOTAL | | | | | 6,459,200 | |
| | **B2020 WINDOWS/CURTAINWALL** | | | | | | |
| | Replace existing windows; triple glazed; W1 | **13,112** | sf | 125.00 | 1,639,000 | | |
| | Replace existing curtainwall; triple glazed; W2 | **6,375** | sf | 160.00 | 1,020,000 | | |
| | SUBTOTAL | | | | | 2,659,000 | |
| | **B2030 EXTERIOR DOORS** | | | | | | |
| | Replace exterior glazed door, double | **15** | pr | 9,000.00 | 135,000 | | |
| | Replace exterior glazed door, single | **2** | ea | 4,000.00 | 8,000 | | |
| | Replace exterior single door | **10** | ea | 2,100.00 | 21,000 | | |
| | Replace garage doors | **4** | ea | 10,000.00 | 40,000 | | |
| | Backer rod & double sealant | **504** | lf | 10.00 | 5,040 | | |
| | Wood blocking at openings | **504** | lf | 3.00 | 1,512 | | |
| | SUBTOTAL | | | | | 210,552 | |
| | ***TOTAL - EXTERIOR CLOSURE*** | | | | | | **$9,328,752** |
| | ***B30 ROOFING*** | | | | | | |
| | **B3010 ROOF COVERINGS** | | | | | | |
| | Replace existing roofing systems with new TPO roof and 8" XPS insulation; R1 | **123,704** | sf | 24.00 | 2,968,896 | | |
| | SUBTOTAL | | | | | 2,968,896 | |
| | **B3020 ROOF OPENINGS** | | | | | | |
| | New stage smoke hatches | **3** | ea | 8,000.00 | 24,000 | | |
| | Replace roof ladders/hatches etc. | **1** | ls | 3,000.00 | 3,000 | | |
| | SUBTOTAL | | | | | 27,000 | |
| | ***TOTAL - ROOFING*** | | | | | | **$2,995,896** |
| | ***C10 INTERIOR CONSTRUCTION*** | | | | | | |
| | **C1010 PARTITIONS** | | | | | | |
| | Anchor the top of all masonry partitions to the underside of the floor or structure above | **1,970** | loc | 350.00 | 689,500 | | |
| | New walls for new layouts | **208,113** | sf | 22.00 | 4,578,486 | | |
| | Replace auditorium operable wall | **68** | lf | 1,200.00 | 81,600 | | |
| | Repair/Fill cracks in CMU walls | **1** | ls | 50,000.00 | 50,000 | | |
| | SUBTOTAL | | | | | 5.399.586 | |
| | **C1020 INTERIOR DOORS** | | | | | | |
| | Replace al interior doors, frames + hardware | **208,113** | sf | 6.00 | 1,248,678 | | |
| | SUBTOTAL | | | | | 1,248,678 | |
| | **C1030 SPECIALTIES / MILLWORK** | | | | | | |
| | Toilet Partitions and accessories | **208,113** | gsf | 1.00 | 208,113 | | |



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**Stoneham High School** 03-Dec-20
**Design Options**
Stoneham, MA

**PSR Estimate** **GFA** 208,113

| | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|
| | **FULL RENOVATION - OPTION 2A** | | | | | | |
| | New stage proscenium | **1** | ls | 100,000 | 100,000 | | |
| | New markerboards/tackboards | **208,113** | gsf | 1.25 | 260,141 | | |
| | Upgrade athletic locker rooms specifically reconfigure showers to provide accessible shower stalls | **2** | ea | 30,000.00 | 60,000 | | |
| | Lockers, full height | **710** | ea | 350.00 | 248,500 | | |
| | New catwalk | **1** | ls | 100,000.00 | 100,000 | | |
| *055000* | *MISCELLANEOUS METALS* | | | | | | |
| | Miscellaneous metals throughout building | **208,113** | sf | 1.25 | 260,141 | | |
| *061000* | *ROUGH CARPENTRY* | | | | | | |
| | Rough blocking | **208,113** | sf | 0.50 | 104,057 | | |
| *070001* | *WATERPROOFING, DAMPPROOFING AND CAULKING* | | | | | | |
| | Miscellaneous sealants throughout building | **208,113** | sf | 1.50 | 312,170 | | |
| *101400* | *SIGNAGE* | | | | | | |
| | Code compliant signage | **208,113** | sf | 0.50 | 104,057 | | |
| | SUBTOTAL | | | | | 1,757,179 | |
| | ***TOTAL - INTERIOR CONSTRUCTION*** | | | | | | **$8,405,443** |
| | ***C20 STAIRCASES*** | | | | | | |
| | **C2010 STAIR CONSTRUCTION** | | | | | | |
| | Upgrade existing stairs for code | **2** | flt | 10,000.00 | 20,000 | | |
| | New stairs | **4** | flt | 40,000.00 | 160,000 | | |
| | SUBTOTAL | | | | | 180,000 | |
| | **C2020 STAIR FINISHES** | | | | | | |
| | New stair finishes; rubber treads/risers/landing and painting | **6** | flt | 7,000.00 | 42,000 | | |
| | SUBTOTAL | | | | | 42,000 | |
| | ***TOTAL - STAIRCASES*** | | | | | | **$222,000** |
| | ***C30 INTERIOR FINISHES*** | | | | | | |
| | **C3010 WALL FINISHES** | | | | | | |
| | Painting | **208,113** | gsf | 3.00 | 624,339 | | |
| | Replace wood paneling at auditorium | **1** | ls | 150,000.00 | 150,000 | | |
| | Replace acoustic panels at gym | **1** | ls | 60,000.00 | 60,000 | | |
| | Other finishes | **208,113** | sf | 10.00 | 2,081,130 | | |
| | SUBTOTAL | | | | | 2,915,469 | |
| | **C3020 FLOOR FINISHES** | | | | | | |
| | New linoleum flooring throughout including floor prep | **157,294** | sf | 8.00 | 1,258,352 | | |
| | New shock-absorbing wood gym floor | **16,000** | sf | 20.00 | 320,000 | | |
| | Bathroom renovations | **5,000** | sf | 100.00 | 500,000 | | |
| | New flooring at the stage | **1,914** | sf | 24.00 | 45,936 | | |
| | New carpet | **1,111** | sy | 45.00 | 49,995 | | |
| | SUBTOTAL | | | | | 2,174,283 | |



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**Stoneham High School** 03-Dec-20
**Design Options**
Stoneham, MA

**PSR Estimate** **GFA** 208,113

| | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|
| | **FULL RENOVATION - OPTION 2A** | | | | | | |
| | **C3030 CEILING FINISHES** | | | | | | |
| | Replace ceiling at auditorium, provide new clouds | **1** | ls | 350,000 | 350,000 | | |
| | Replace existing ACT/Ceilings/Soffits | **157,294** | sf | 11.00 | 1,730,234 | | |
| | Paint gym exposed ceiling | **16,000** | sf | 3.00 | 48,000 | | |
| | SUBTOTAL | | | | | 2,128,234 | |
| | ***TOTAL - INTERIOR FINISHES*** | | | | | | **$7,217,986** |
| | ***D10 CONVEYING SYSTEMS*** | | | | | | |
| | Remove existing elevator | **1** | ls | 40,000.00 | 40,000 | | |
| | Remove existing elevator and install new elevator | **1** | ls | 135,000.00 | 135,000 | | |
| | New lift | **1** | ls | 45,000.00 | 45,000 | | |
| | SUBTOTAL | | | | | 220,000 | |
| | ***TOTAL - CONVEYING SYSTEMS*** | | | | | | **$220,000** |
| | ***D20 PLUMBING*** | | | | | | |
| | **D20 PLUMBING, GENERALLY** | | | | | | |
| | Complete system | **208,113** | sf | 16.00 | 3,329,808 | | |
| | SUBTOTAL | | | | | 3,329,808 | |
| | ***TOTAL - PLUMBING*** | | | | | | **$3,329,808** |
| | ***D30 HVAC*** | | | | | | |
| | **D30 HVAC, GENERALLY** | | | | | | |
| | Geothermal Heating/Cooling System | | | | | | |
| | (2) 225 ton heat recovery chiller-heaters with (200) 6" boreholes, active chilled beams, heat recovery units, and rooftop ahu's | **208,113** | sf | 70.00 | 14,567,910 | | |
| | SUBTOTAL | | | | | 14,567,910 | |
| | ***TOTAL - HVAC*** | | | | | | **$14,567,910** |
| | ***D40 FIRE PROTECTION*** | | | | | | |
| | **D40 FIRE PROTECTION, GENERALLY** | | | | | | |
| | New sprinkler system | 208,113 | gsf | 6.00 | 1,248,678 | | |
| | SUBTOTAL | | | | | 1,248,678 | |
| | ***TOTAL - FIRE PROTECTION*** | | | | | | **$1,248,678** |
| | ***D50 ELECTRICAL*** | | | | | | |
| | **D5010 SERVICE & DISTRIBUTION** | | | | | | |
| | **Gear & Distribution** | | | | | | |
| | 5000A 480/277V switchboard | **1** | ls | 140,000.00 | 140,000 | | |
| | Normal power distribution with associated panelboards, transformers and feeders | **208,113** | sf | 4.00 | 832,452 | | |
| | Emergency power | | | | | | |
| | Emergency generator and ATS"s with associated panelboards, transformers and feeders | **208,113** | sf | 2.50 | 520,283 | | |
| | PV | | | | | | |



PM&C

**Stoneham High School** 03-Dec-20
**Design Options**
Stoneham, MA

**PSR Estimate** **GFA** 208,113

| | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|
| | **FULL RENOVATION - OPTION 2A** | | | | | | |
| | PV provisions only, with empty conduit and pull boxes, per | **1** | ls | 5,000.00 | 5,000 | | |
| | Equipment Wiring | | | | | | |
| | Elevator and cab power feed and connection | **1** | ea | 5,000.00 | 5,000 | | |
| | Mechanical equipment wiring to HVAC heating and cooling | **208,113** | sf | 2.50 | 520,283 | | |
| | Misc. equipment wiring | **208,113** | sf | 0.50 | 104,057 | | |
| | Kitchen equipment wiring | **1** | ls | 25,000.00 | 25,000 | | |
| | Gym equipment feed and connections | **1** | ls | 15,000.00 | 15,000 | | |
| | SUBTOTAL | | | | | 2,167,075 | |
| | **D5020 LIGHTING & POWER** | | | | | | |
| | Lighting & Branch Power | | | | | - | |
| | Lighting fixtures with installation labor | **208,113** | sf | 6.00 | 1,248,678 | | |
| | Exterior building lighting | **1** | ls | 15,000.00 | 15,000 | | |
| | Lighting control system (Daylight Harvesting) | | | | | | |
| | Lighting controls with control panels, sensors and switches | **208,113** | sf | 1.25 | 260,141 | | |
| | Branch devices | | | | | | |
| | Duplex and GFI receptacles | **208,113** | sf | 0.50 | 104,057 | | |
| | Lighting and branch circuitry | | | | | | |
| | EMT and MC cable | **208,113** | sf | 4.50 | 936,509 | | |
| | SUBTOTAL | | | | | 2,564,385 | |
| | **D5030 COMMUNICATION & SECURITY SYSTEMS** | | | | | | |
| | Fire Alarm | | | | | | |
| | Control panel | **1** | ea | 15,000.00 | 15,000 | | |
| | Annunciator | **1** | ea | 1,500.00 | 1,500 | | |
| | Beacon | **1** | ea | 2,250.00 | 2,250 | | |
| | Knox box | **1** | ea | 350.00 | 350 | | |
| | Radio master box | **1** | ea | 9,500.00 | 9,500 | | |
| | Devices and cabling | **208,113** | sf | 2.00 | 416,226 | | |
| | Mass. Notification | **208,113** | sf | 1.00 | 208,113 | | |
| | Testing programming | **1** | ls | 5,000.00 | 5,000 | | |
| | Bi-Directional System | | | | | | |
| | BDA system | **1** | ls | 100,000.00 | 100,000 | | |
| | Telephone/Data/CATV | | | | | | |
| | Network switches, PBX, IP, VP, CATV (By owner) | | | | By Owner | | |
| | Telecommunications rough in | **208,113** | sf | 1.00 | 208,113 | | |
| | Telecommunications devices and cabling | **208,113** | sf | 2.00 | 416,226 | | |
| | Grounding | **1** | ls | 1,500.00 | 1,500 | | |
| | Public Address/Clock System | | | | | | |
| | PA/Master Clock system | **208,113** | sf | 1.00 | 208,113 | | |
| | Classroom Speech Amplification | **208,113** | sf | 0.50 | 104,057 | | |
| | Audio Visual (rough-in and power only) | | | | | | |
| | AV equipment | | | | By Owner | | |
| | Rough-In conduit and backboxes only | **208,113** | sf | 0.50 | 104,057 | | |
| | Auditorium | | | | | | |
| | Rigging system equipment & installation | | | | See equipment | | |
| | Power to rigging equipment | **1** | ls | 12,000.00 | 12,000 | | |
| | Stage dimming system with performance fixture package, allow | **1** | ls | 275,000.00 | 275,000 | | |
| | Installation, rough-in & 120V power to dimming equipment | **1** | ls | 70,000.00 | 70,000 | | |
| | Performance audio visual equipment, installation & LV cabling, | **1** | ls | 150,000.00 | 150,000 | | |
| | Performance audio visual rough-in and power | **1** | ls | 60,000.00 | 60,000 | | |
| | Cafeteria | | | | | | |
| | Sound system | **1** | ls | 15,000.00 | 15,000 | | |
| | Media Center | | | | | | |
| | Sound system | **1** | ls | 15,000.00 | 15,000 | | |
| | Gymnasium | | | | | | |



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**Design Options**
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**PSR Estimate** **GFA** 208,113

| | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|
| | **FULL RENOVATION - OPTION 2A** | | | | | | |
| | Sound system | **1** | ls | 30,000.00 | 30,000 | | |
| | Scoreboard/ shot clocks with feed and connection | **1** | ea | 15,000.00 | 15,000 | | |
| | Security System | | | | | | |
| | Head end | **1** | ls | 50,000.00 | 50,000 | | |
| | Card access system | **208,113** | sf | 1.00 | 208,113 | | |
| | Intrusion system | **208,113** | sf | 1.00 | 208,113 | | |
| | CCTV surveillance system | **208,113** | sf | 2.00 | 416,226 | | |
| | SUBTOTAL | | | | | 3,324,457 | |
| **D5040** | **OTHER ELECTRICAL SYSTEMS** | | | | | | |
| | Miscellaneous | | | | | | |
| | Lightning Protection System, UL Master label | **1** | ls | 95,000.00 | 95,000 | | |
| | Temp power and lights | **1** | ls | 150,000.00 | 150,000 | | |
| | Hoisting and rigging | **1** | ls | 10,000.00 | 10,000 | | |
| | Seismic restraints | **1** | ls | 7,500.00 | 7,500 | | |
| | Coordination, BIM & shop drawings | **1** | ls | 240,000.00 | 240,000 | | |
| | Fees & Permits | **1** | ls | 160,000.00 | 160,000 | | |
| | SUBTOTAL | | | | | 662,500 | |
| | ***TOTAL - ELECTRICAL*** | | | | | | **$8,718,417** |
| ***E10*** | ***EQUIPMENT*** | | | | | | |
| **E10** | **EQUIPMENT, GENERALLY** | | | | | | |
| | Gym wall pads | **1** | ls | 20,000.00 | 20,000 | | |
| | Basketball backstops; swing up; electric operated | **12** | loc | 10,500.00 | 126,000 | | |
| | Gymnasium dividing net; electrically operated | **3** | ea | 30,000.00 | 90,000 | | |
| | Volleyball net and standards | **1** | ls | 5,000.00 | 5,000 | | |
| | Telescoping bleachers | **900** | seats | 240.00 | 216,000 | | |
| | Theatrical Equipment Stage curtains, rigging and controls | **1** | ls | 350,000.00 | 350,000 | | |
| | Theatrical AV allowance | **1** | ls | 200,000.00 | 200,000 | | |
| | Kitchen equipment | **2,030** | sf | 220.00 | 446,600 | | |
| | SUBTOTAL | | | | | 1,453,600 | |
| | ***TOTAL - EQUIPMENT*** | | | | | | **$1,453,600** |
| ***E20*** | ***FURNISHINGS*** | | | | | | |
| **E2010** | **FIXED FURNISHINGS** | | | | | | |
| | Window shades | **13,112** | sf | 7.00 | 91,784 | | |
| | Entrance mats | **1** | ls | 20,000.00 | 20,000 | | |
| | Replace auditorium seats | **1,100** | seat | 360.00 | 396,000 | | |
| *123553* | *CASEWORK* | | | | | | |
| | Sinks, counters and casework allowance | **208,113** | sf | 10.00 | 2,081,130 | | |
| | SUBTOTAL | | | | | 2,588,914 | |
| **E2020** | **MOVABLE FURNISHINGS** | | | | | | |
| | All movable furnishings to be provided and installed by owner | | | | | | |
| | SUBTOTAL | | | | | NIC | |
| | ***TOTAL - FURNISHINGS*** | | | | | | **$2,588,914** |



PM&C

**Stoneham High School** 03-Dec-20
**Design Options**
Stoneham, MA

**PSR Estimate** **GFA** 208,113

| | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|
| | **FULL RENOVATION - OPTION 2A** | | | | | | |
| ***F10*** | ***SPECIAL CONSTRUCTION*** | | | | | | |
| **F10** | **SPECIAL CONSTRUCTION** | | | | | | |
| | SUBTOTAL | | | | | - | |
| | ***TOTAL - SPECIAL CONSTRUCTION*** | | | | | | |
| ***F20*** | ***SELECTIVE BUILDING DEMOLITION*** | | | | | | |
| **F2010** | **BUILDING ELEMENTS DEMOLITION** | | | | | | |
| | Remove exterior glazing | **13,112** | sf | 7.00 | 91,784 | | |
| | Remove exterior brick façade | **52,450** | sf | 10.00 | 524,500 | | |
| | Remove roofing | **123,704** | sf | 2.00 | In HazMat | | |
| | Demolish existing stage | **1,914** | sf | 15.00 | 28,710 | | |
| | Shoring | **1** | ls | 25,000.00 | 25,000 | | |
| | Remove existing stairs | **4** | flts | 5,000.00 | 20,000 | | |
| | Interior demolition | **208,113** | gsf | 6.00 | 1,248,678 | | |
| | Temporary enclosures/protection | **208,113** | sf | 1.50 | 312,170 | | |
| | SUBTOTAL | | | | | 2,250,842 | |
| **F2020** | **HAZARDOUS COMPONENTS ABATEMENT** | | | | | | |
| | See summary | | | | | | |
| | SUBTOTAL | | | | | | |
| | ***TOTAL - SELECTIVE BUILDING DEMOLITION*** | | | | | | **$2,250,842** |



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**Stoneham High School**
Design Options
Stoneham, MA

03-Dec-20

**PSR Estimate**

| CSI CODE | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|
| | **SITEWORK RENOVATE HIGH SCHOOL OPTION 2A** | | | | | | |
| | ***G SITEWORK*** | *1,900,000* | *sf* | | - | | |
| | **G10 SITE PREPARATION & DEMOLITION** | | | | | | |
| | Site construction fence/barricades | **7,900** | lf | 18.00 | 142,200 | | |
| | Site construction fence gates | **1** | ea | 10,000.00 | 10,000 | | |
| | Stabilized construction entrance | **1** | ls | 15,000.00 | 15,000 | | |
| | Pavement/curbing removal, crush and re-use for sub-base | **250,800** | sf | 1.00 | 250,800 | | |
| | Walkways | **1** | ls | 20,000.00 | 20,000 | | |
| | Miscellaneous demolition | **1** | ls | 100,000.00 | 100,000 | | |
| | SUBTOTAL | | | | | 538,000 | |
| | Temporary parking | 250 | spc | | | | |
| | gravel base; 12" thick | **4,074** | cy | 40.00 | 162,960 | | |
| | Binder course | **12,222** | sy | 20.00 | 244,440 | | |
| | Construction fence | **1,900** | lf | 18.00 | 34,200 | | |
| | Line markings/painting/signs | **250** | spc | 100.00 | 25,000 | | |
| | Demolish temp parking | **110,000** | sf | 1.00 | 110,000 | | |
| | Blasting for temporary parking | **1** | ls | 150,000.00 | 150,000 | | |
| | SUBTOTAL | | | | | 726,600 | |
| | Site Earthwork | | | | | | |
| | Strip Topsoil and remove; 6" thick | 3,148 | cy | 16.00 | 50,368 | | |
| | Fine grading | 200,000 | sf | 0.20 | 40,000 | | |
| | Silt fence/erosion control, wash bays, stock piles | **7,900** | lf | 12.00 | 94,800 | | |
| | Silt fence maintenance and monitoring | **1** | ls | 40,000.00 | 40,000 | | |
| | Hazardous Waste Remediation | | | | | | |
| | Remove existing underground fuel storage tanks; 500 Gal | **1** | ls | 50,000.00 | 50,000 | | |
| | Dispose/treat contaminated soils | **1** | ls | 20,000.00 | 20,000 | | |
| | SUBTOTAL | | | | | 295,168 | |
| | **G20 SITE IMPROVEMENTS** | | | | | | |
| | Asphalt Paving; parking lot and roadway; mill and pave only | *250,800* | sf | | | | |
| | gravel base; 12" thick | **9,289** | cy | 35.00 | ETR | | |
| | asphalt; mill and pave | **27,867** | sy | 20.00 | 557,340 | | |
| | VGC | **7,231** | lf | 34.00 | ETR | | |
| | Single solid lines, 4" thick | **1** | ls | 10,000.00 | 10,000 | | |
| | Crosswalk Hatching | **4** | loc | 900.00 | 3,600 | | |
| | Other road markings | **1** | ls | 7,500.00 | 7,500 | | |
| | HC curb cuts | **8** | loc | 350.00 | 2,800 | | |
| | Signage | **1** | ls | 20,000.00 | 20,000 | | |
| | Pedestrian Paving | | | | | | |
| | Concrete paving | | | | | | |
| | gravel base; 8" thick | **372** | cy | 35.00 | 13,020 | | |
| | 4" concrete paving | **15,000** | sf | 10.00 | 150,000 | | |
| | SUBTOTAL | | | | | 764,260 | |
| | Site Athletics | | | | | | |
| | **STADIUM - Running Track/Turf Football Field/Bleachers** | | | | | | |
| | Synthetic turf anchor curb integral with trench drain | **1,310** | lf | 80.00 | 104,800 | | |
| | Resilient surface at track | **75,525** | sf | 8.00 | 604,200 | | |
| | Gravel base - assumed 12" thick | **3,707** | cy | 45.00 | 166,815 | | |
| | Geotextile reinforced impermeable liner 20 mill | **100,100** | sf | 1.00 | 100,100 | | |
| | Synthetic turf field - Hybrid infill synthetic field with premolded resilient drainage pad | **100,100** | sf | 12.00 | 1,201,200 | | |
| | Football goals | **2** | ea | 3,500.00 | 7,000 | | |
| | Scoreboard | **1** | ea | 60,000.00 | 60,000 | | |
| | Line markings - allowance | **2** | ls | 2,000.00 | 4,000 | | |
| | 1250 seat bleacher | **1** | loc | 450,000.00 | 450,000 | | |
| | Rip-Rap under bleachers | **1** | ls | 25,000.00 | 25,000 | | |
| | Field logo's | **1** | loc | 6,000.00 | 6,000 | | |



PM&C

**Stoneham High School**
Design Options
Stoneham, MA

03-Dec-20

**PSR Estimate**

| CSI CODE | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|
| | **SITEWORK RENOVATE HIGH SCHOOL OPTION 2A** | | | | | | |
| | Discus pad & enclosure | **1** | ea | 15,000.00 | 15,000 | | |
| | Shot put pad & enclosure | **1** | ea | 15,000.00 | 15,000 | | |
| | Long jump/triple jump | **2** | ea | 10,000.00 | 20,000 | | |
| | Pole vault and accessories | **1** | ea | 10,000.00 | 10,000 | | |
| | High jump pads | **1** | ea | 6,000.00 | 6,000 | | |
| | Javelin with track surfacing runway | **1** | ea | 10,000.00 | 10,000 | | |
| | Hurdles and starting blocks | **1** | ls | 8,000.00 | 8,000 | | |
| | Track crossing pad | **1** | ls | 10,000.00 | 10,000 | | |
| | Trash/recycling receptacles | **12** | ea | 800.00 | 9,600 | | |
| | Team benches- 7'-5" long | **12** | ea | 1,500.00 | 18,000 | | |
| | Portable ball control netting, 120' long | **4** | ea | 2,500.00 | 10,000 | | |
| | Pit covers | **2** | ea | 3,500.00 | 7,000 | | |
| | Subsurface infiltration/drainage/field drains etc. | **175,625** | sf | 1.25 | 219,531 | | |
| | Stadium sound system (AV) | **1** | ls | 120,000.00 | 120,000 | | |
| | SUBTOTAL | | | | | 3,207,246 | |
| | Baseball/Field Hockey | **1** | ea | 360,000.00 | 360,000 | | |
| | Half size field | **1** | ls | 150,000.00 | 150,000 | | |
| | Synthetic grass soccer fields; Two Fields | **140,500** | sf | 12.00 | 1,686,000 | | |
| | Softball field | **2** | ea | 250,000.00 | 500,000 | | |
| | Tennis courts - Six Courts (including pickle courts); 1 basketball court | *50,600* | *sf* | | | | |
| | gravel base; 8" thick | **1,256** | cy | 40.00 | 50,240 | | |
| | Asphalt paving | **5,622** | sy | 30.00 | 168,660 | | |
| | Color coating | **50,600** | sf | 2.00 | 101,200 | | |
| | Fence with wind break | **1,177** | lf | 80.00 | 94,160 | | |
| | Tennis court nets | **5** | set | 1,500.00 | 7,500 | | |
| | Basketball hoops | **1** | set | 5,000.00 | 5,000 | | |
| | SUBTOTAL | | | | | 3,122,760 | |
| | Site Improvements | | | | | | |
| | Flag pole 50' high | **1** | ea | 6,500.00 | 6,500 | | |
| | Concrete retaining walls | | | | Assumed not required | | |
| | Repair to stairs | **1** | ls | 50,000.00 | 50,000 | | |
| | Pre-K playground and equipment | **1** | ls | 150,000.00 | 150,000 | | |
| | Other site improvements; walls, fences etc. | **1** | ls | 250,000.00 | 250,000 | | |
| | SUBTOTAL | | | | | 456,500 | |
| | Landscaping | | | | | | |
| | Topsoil - Import new topsoil; minimum 6" | **3,148** | cy | 65.00 | 204,620 | | |
| | Lawn - loam & seed | **170,000** | sf | 0.25 | 42,500 | | |
| | Allowance for courtyard upgrades | **2** | loc | 75,000.00 | 150,000 | | |
| | Planting allowance | **1** | ls | 200,000.00 | 200,000 | | |
| | SUBTOTAL | | | | | 597,120 | |
| | **G30 CIVIL MECHANICAL UTILITIES** | | | | | | |
| | Utilities - Enabling | | | | | | |
| | Allowance for temporary utilities etc. | **1** | ls | 50,000.00 | 50,000 | | |
| | Water supply; Pricing includes E&B and bedding | | | | | | |
| | New DI piping; 8" | **557** | lf | 100.00 | ETR | | |
| | New DI piping; 8" Fire loop | **2,500** | lf | 120.00 | 300,000 | | |
| | Connect to existing | **1** | loc | 100,000.00 | 100,000 | | |
| | FD connection | **1** | ea | 2,000.00 | 2,000 | | |
| | Gate valves | **8** | ea | 750.00 | 6,000 | | |
| | Fire hydrant | **3** | ea | 5,000.00 | 15,000 | | |
| | SUBTOTAL | | | | | 473,000 | |



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**Stoneham High School**
Design Options
Stoneham, MA

03-Dec-20

**PSR Estimate**

| | CSI CODE | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|---|
| | | **SITEWORK RENOVATE HIGH SCHOOL OPTION 2A** | | | | | | |
| 109 | | Sanitary; Pricing includes E&B and bedding | | | | | | |
| 110 | | Manholes | **2** | ea | 4,500.00 | 9,000 | | |
| 111 | | Grease trap | **1** | ea | 15,000.00 | 15,000 | | |
| 112 | | 8" PVC | **1,000** | lf | 70.00 | 70,000 | | |
| 113 | | Connect to existing drain | **1** | ea | 3,000.00 | 3,000 | | |
| 114 | | SUBTOTAL | | | | | 97,000 | |
| 115 | | | | | | | | |
| 116 | | Storm water; Pricing includes E&B and bedding | | | | | | |
| 117 | | Allowance for new drainage systems; piping only | **250,800** | sf | 3.00 | 752,400 | | |
| 118 | | Infiltration systems; cultec chambers | **137,500** | cf | 8.00 | 1,100,000 | | |
| 119 | | Rock excavation | **1** | ls | 250,000.00 | 250,000 | | |
| 120 | | Catch basins | **12** | ea | 3,800.00 | 45,600 | | |
| 121 | | Manholes | **10** | ea | 4,500.00 | 45,000 | | |
| 122 | | WQ structures | **3** | ea | 16,000.00 | 48,000 | | |
| 123 | | Area drains | **4** | ea | 1,500.00 | 6,000 | | |
| 124 | | Gas service | | | | | | |
| 125 | | E&B trench for new gas pipe - install by plumbing | **557** | lf | 25.00 | 13,925 | | |
| 126 | | SUBTOTAL | | | | | 2,260,925 | |
| 127 | | | | | | | | |
| 128 | **G40** | **ELECTRICAL UTILITIES** | | | | | | |
| 129 | | | | | | | | |
| 130 | | Power | | | | | | |
| 131 | | Utility co. backcharges, allow | **1** | ls | 30,000.00 | Utility co. | | |
| 132 | | Connections at existing manhole | | | | Utility co. | | |
| 133 | | Manhole | **1** | ls | 8,500.00 | 8,500 | | |
| 134 | | Connections in manhole | **1** | ls | 3,500.00 | 3,500 | | |
| 135 | | Primary ductbank 2-5" ductbank, empty, allow | **1000** | lf | 120.00 | 120,000 | | |
| 136 | | Transformer by utility company | | | | By Utility Co. | | |
| 137 | | Transformer pad | **1** | ea | 2,500.00 | 2,500 | | |
| 138 | | Secondary service | **60** | lf | 1,100.00 | 66,000 | | |
| 139 | | Communications | | | | | | |
| 140 | | Connection at riser pole, allow | **1** | ea | 1,500.00 | 1,500 | | |
| 141 | | Telecom ductbank 4-4", allow | **1000** | lf | 152.00 | 152,000 | | |
| 142 | | Site Lighting | | | | | | |
| 143 | | Site Parking lighting (allow) | **250,800** | sf | 2.00 | 501,600 | | |
| 144 | | SUBTOTAL | | | | | 855,600 | |
| 145 | | | | | | | | |
| 146 | | **TOTAL - SITE DEVELOPMENT** | | | | | | ***$13,394,179*** |



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**Stoneham High School**
**Design Options**
**Stoneham, MA**

03-Dec-20

**PSR Estimate** GFA 48,000

## *CONSTRUCTION COST SUMMARY*

| | BUILDING SYSTEM | | SUB-TOTAL | TOTAL | $/SF | % |
|---|---|---|---|---|---|---|
| **HIGH SCHOOL RENOVATION - OPTION 3A** | | | | | | |
| **A10** | **FOUNDATIONS** | | | | | |
| | A1010 | Standard Foundations | $42,500 | | | |
| | A1020 | Special Foundations | $0 | | | |
| | A1030 | Lowest Floor Construction | $63,750 | **$106,250** | $2.21 | 0.7% |
| **B10** | **SUPERSTRUCTURE** | | | | | |
| | B1010 | Upper Floor Construction | $1,067,000 | | | |
| | B1020 | Roof Construction | $144,000 | **$1,211,000** | $25.23 | 8.2% |
| **B20** | **EXTERIOR CLOSURE** | | | | | |
| | B2010 | Exterior Walls | $1,717,220 | | | |
| | B2020 | Windows/Curtainwall | $456,875 | | | |
| | B2030 | Exterior Doors | $49,284 | **$2,223,379** | $46.32 | 15.1% |
| **B30** | **ROOFING** | | | | | |
| | B3010 | Roof Coverings | $636,000 | | | |
| | B3020 | Roof Openings | $5,000 | **$641,000** | $13.35 | 4.4% |
| **C10** | **INTERIOR CONSTRUCTION** | | | | | |
| | C1010 | Partitions | $720,000 | | | |
| | C1020 | Interior Doors | $288,000 | | | |
| | C1030 | Specialties/Millwork | $348,000 | **$1,356,000** | $28.25 | 9.2% |
| **C20** | **STAIRCASES** | | | | | |
| | C2010 | Stair Construction | $10,000 | | | |
| | C2020 | Stair Finishes | $7,000 | **$17,000** | $0.35 | 0.1% |
| **C30** | **INTERIOR FINISHES** | | | | | |
| | C3010 | Wall Finishes | $684,000 | | | |
| | C3020 | Floor Finishes | $607,400 | | | |
| | C3030 | Ceiling Finishes | $251,350 | **$1,542,750** | $32.14 | 10.5% |
| **D10** | **CONVEYING SYSTEMS** | | | | | |
| | D1010 | Elevator | $40,000 | **$40,000** | $0.83 | 0.3% |
| **D20** | **PLUMBING** | | | | | |
| | D20 | Plumbing | $768,000 | **$768,000** | $16.00 | 5.2% |
| **D30** | **HVAC** | | | | | |
| | D30 | HVAC | $3,360,000 | **$3,360,000** | $70.00 | 22.9% |
| **D40** | **FIRE PROTECTION** | | | | | |
| | D40 | Fire Protection | $288,000 | **$288,000** | $6.00 | 2.0% |
| **D50** | **ELECTRICAL** | | | | | |
| | D5010 | Electrical Systems | $1,691,500 | **$1,691,500** | $35.24 | 11.5% |
| **E10** | **EQUIPMENT** | | | | | |
| | E10 | Equipment | $451,000 | **$451,000** | $9.40 | 3.1% |

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**Stoneham High School**
**Design Options**
**Stoneham, MA**

03-Dec-20

**PSR Estimate**

GFA 48,000

## *CONSTRUCTION COST SUMMARY*

| | *BUILDING SYSTEM* | *SUB-TOTAL* | *TOTAL* | *$/SF* | *%* |
|---|---|---|---|---|---|
| **HIGH SCHOOL RENOVATION - OPTION 3A** | | | | | |
| **E20** | **FURNISHINGS** | | | | |
| E2010 | Fixed Furnishings | $510,585 | | | |
| E2020 | Movable Furnishings | NIC | **$510,585** | $10.64 | 3.5% |
| **F10** | **SPECIAL CONSTRUCTION** | | | | |
| F10 | Special Construction | $0 | **$0** | $0.00 | 0.0% |
| **F20** | **SELECTIVE BUILDING DEMOLITION** | | | | |
| F2010 | Building Elements Demolition | $487,585 | | | |
| F2020 | Hazardous Components Abatement | $0 | **$487,585** | $10.16 | 3.3% |
| ***TOTAL DIRECT COST (Trade Costs)*** | | | ***$14,694,049*** | *$306.13* | *100.0%* |



PM&C

**Stoneham High School**
**Design Options**
Stoneham, MA

03-Dec-20

**PSR Estimate**

GFA 48,000

| | *DESCRIPTION* | *QTY* | *UNIT* | *UNIT COST* | *EST'D COST* | *SUB TOTAL* | *TOTAL COST* |
|---|---|---|---|---|---|---|---|
| | **HIGH SCHOOL RENOVATION - OPTION 3A** | | | | | | |
| | ***GROSS FLOOR AREA CALCULATION*** | | | | | | |
| | **Level 00** | | | | 21,500 | | |
| | **Level 01** | | | | 26,500 | | |
| | ***TOTAL GROSS FLOOR AREA (GFA)*** | | | | **48,000** ***sf*** | | |
| | ***A10 FOUNDATIONS*** | | | | | | |
| **A1010** | **STANDARD FOUNDATIONS** | | | | | | |
| | Repair cracks and resurface exposed concrete foundations | **1** | ls | 10,000 | 10,000 | | |
| | Allowance for spalled concrete | **500** | sf | 65.00 | 32,500 | | |
| | SUBTOTAL | | | | | 42,500 | |
| **A1020** | **SPECIAL FOUNDATIONS** | | | | | | |
| | No work in this section | | | | | | |
| | SUBTOTAL | | | | | | |
| **A1030** | **LOWEST FLOOR CONSTRUCTION** | | | | | | |
| | Cutting and patching for MEP | **1** | ls | 10,000.00 | 10,000 | | |
| | New slab at bathrooms | **550** | sf | 25.00 | 13,750 | | |
| | Replace loading dock | **1** | ls | 30,000.00 | 30,000 | | |
| | Equipment pads | **1** | ls | 10,000.00 | 10,000 | | |
| | SUBTOTAL | | | | | 63,750 | |
| | ***TOTAL - FOUNDATIONS*** | | | | | | **$106,250** |
| | ***B10 SUPERSTRUCTURE*** | | | | | | |
| **B1010** | **FLOOR CONSTRUCTION** | | | | | | |
| | Openings in structure for MEP systems | **48,000** | gsf | 0.50 | 24,000 | | |
| | Sesimic and lateral bracing allowance | **48,000** | gsf | 6.00 | 288,000 | | |
| | New suspended track | **1** | ls | 750,000.00 | 750,000 | | |
| | Fire stopping floors | **1** | ls | 5,000.00 | 5,000 | | |
| | SUBTOTAL | | | | | 1,067,000 | |
| **B1020** | **ROOF CONSTRUCTION** | | | | | | |
| | Roof Structure - Steel: | | | | | | |
| | Allowance to reinforce roof diaphragms | **21,500** | sf | 6.00 | 129,000 | | |
| | Support framing for new MEP systems | **1** | ls | 15,000.00 | 15,000 | | |
| | SUBTOTAL | | | | | 144,000 | |
| | ***TOTAL - SUPERSTRUCTURE*** | | | | | | **$1,211,000** |
| | ***B20 EXTERIOR CLOSURE*** | | | | | | |
| **B2010** | **EXTERIOR WALLS** | *14,620* | *sf* | | | | |
| | Reclad and Insulate exterior walls to meet code; EXT3 | **14,620** | sf | 106.00 | 1,549,720 | | |
| | Anchor the top of perimeter masonry partitions to the underside of the floor or structure above | **335** | loc | 500.00 | 167,500 | | |
| | SUBTOTAL | | | | | 1,717,220 | |
| **B2020** | **WINDOWS/CURTAINWALL** | | | | | | |
| | Replace existing windows; triple glazed; W1 | **3,655** | sf | 125.00 | 456,875 | | |
| | SUBTOTAL | | | | | 456,875 | |
| **B2030** | **EXTERIOR DOORS** | | | | | | |
| | Replace exterior single door | **4** | ea | 2,100.00 | 8,400 | | |
| | Replace garage doors | **4** | ea | 10,000.00 | 40,000 | | |



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PM&C

**Stoneham High School** 03-Dec-20
**Design Options**
Stoneham, MA

**PSR Estimate** **GFA** 48,000

| | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|
| | **HIGH SCHOOL RENOVATION - OPTION 3A** | | | | | | |
| | Backer rod & double sealant | **68** | lf | 10.00 | 680 | | |
| | Wood blocking at openings | **68** | lf | 3.00 | 204 | | |
| | SUBTOTAL | | | | | 49,284 | |
| | ***TOTAL - EXTERIOR CLOSURE*** | | | | | | **$2,223,379** |
| | ***B30 ROOFING*** | | | | | | |
| | **B3010 ROOF COVERINGS** | | | | | | |
| | Replace existing roofing systems with new TPO roof and 8" XPS insulation; R1 | **26,500** | sf | 24.00 | 636,000 | | |
| | SUBTOTAL | | | | | 636,000 | |
| | **B3020 ROOF OPENINGS** | | | | | | |
| | Replace roof ladders/hatches etc. | **1** | ls | 5,000.00 | 5,000 | | |
| | SUBTOTAL | | | | | 5,000 | |
| | ***TOTAL - ROOFING*** | | | | | | **$641,000** |
| | ***C10 INTERIOR CONSTRUCTION*** | | | | | | |
| | **C1010 PARTITIONS** | | | | | | |
| | Partition allowance | **48,000** | sf | 15.00 | 720,000 | | |
| | SUBTOTAL | | | | | 720,000 | |
| | **C1020 INTERIOR DOORS** | | | | | | |
| | Replace al interior doors, frames + hardware | **48,000** | sf | 6.00 | 288,000 | | |
| | SUBTOTAL | | | | | 288,000 | |
| | **C1030 SPECIALTIES / MILLWORK** | | | | | | |
| | Toilet Partitions and accessories | **48,000** | gsf | 1.00 | 48,000 | | |
| | New markerboards/tackboards | **48,000** | gsf | 1.25 | 60,000 | | |
| | Upgrade athletic locker rooms specifically reconfigure showers to provide accessible shower stalls | **2** | ea | 30,000.00 | 60,000 | | |
| | *055000 MISCELLANEOUS METALS* | | | | | | |
| | Miscellaneous metals throughout building | **48,000** | sf | 1.25 | 60,000 | | |
| | *061000 ROUGH CARPENTRY* | | | | | | |
| | Rough blocking | **48,000** | sf | 0.50 | 24,000 | | |
| | *070001 WATERPROOFING, DAMPPROOFING AND CAULKING* | | | | | | |
| | Miscellaneous sealants throughout building | **48,000** | sf | 1.50 | 72,000 | | |
| | *101400 SIGNAGE* | | | | | | |
| | Code compliant signage | **48,000** | sf | 0.50 | 24,000 | | |
| | SUBTOTAL | | | | | 348,000 | |
| | ***TOTAL - INTERIOR CONSTRUCTION*** | | | | | | **$1,356,000** |
| | ***C20 STAIRCASES*** | | | | | | |
| | **C2010 STAIR CONSTRUCTION** | | | | | | |
| | Upgrade existing stairs for code | **1** | flt | 10,000.00 | 10,000 | | |
| | SUBTOTAL | | | | | 10,000 | |
| | **C2020 STAIR FINISHES** | | | | | | |
| | New stair finishes; rubber treads/risers/landing and painting | **1** | flt | 7,000.00 | 7,000 | | |



PM&C

**Stoneham High School** 03-Dec-20
**Design Options**
Stoneham, MA

**PSR Estimate** **GFA** 48,000

| | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|
| | **HIGH SCHOOL RENOVATION - OPTION 3A** | | | | | | |
| | SUBTOTAL | | | | | 7,000 | |
| | ***TOTAL - STAIRCASES*** | | | | | | **$17,000** |
| | ***C30 INTERIOR FINISHES*** | | | | | | |
| | **C3010 WALL FINISHES** | | | | | | |
| | Painting | **48,000** | gsf | 3.00 | 144,000 | | |
| | Replace acoustic panels at gym | **1** | ls | 60,000.00 | 60,000 | | |
| | Other finishes | **48,000** | sf | 10.00 | 480,000 | | |
| | SUBTOTAL | | | | | 684,000 | |
| | **C3020 FLOOR FINISHES** | | | | | | |
| | New linoleum flooring throughout including floor prep | **29,050** | sf | 8.00 | 232,400 | | |
| | New shock-absorbing wood gym floor | **16,000** | sf | 20.00 | 320,000 | | |
| | Bathroom renovations | **550** | sf | 100.00 | 55,000 | | |
| | SUBTOTAL | | | | | 607,400 | |
| | **C3030 CEILING FINISHES** | | | | | | |
| | Replace existing ACT | **29,050** | sf | 7.00 | 203,350 | | |
| | Paint gym exposed ceiling | **16,000** | sf | 3.00 | 48,000 | | |
| | SUBTOTAL | | | | | 251,350 | |
| | ***TOTAL - INTERIOR FINISHES*** | | | | | | **$1,542,750** |
| | ***D10 CONVEYING SYSTEMS*** | | | | | | |
| | Remove existing elevator | **1** | ls | 40,000.00 | 40,000 | | |
| | SUBTOTAL | | | | | 40,000 | |
| | ***TOTAL - CONVEYING SYSTEMS*** | | | | | | **$40,000** |
| | ***D20 PLUMBING*** | | | | | | |
| | **D20 PLUMBING, GENERALLY** | | | | | | |
| | Plumbing allowance | **48,000** | gsf | 16.00 | 768,000 | | |
| | SUBTOTAL | | | | | 768,000 | |
| | ***TOTAL - PLUMBING*** | | | | | | **$768,000** |
| | ***D30 HVAC*** | | | | | | |
| | **D30 HVAC, GENERALLY** | | | | | | |
| | Geothermal Heating/Cooling System | | | | | | |
| | (2) 225 ton heat recovery chiller-heaters with (200) 6" boreholes, active chilled beams, heat recovery units, and rooftop ahu's | **48,000** | sf | 70.00 | 3,360,000 | | |
| | SUBTOTAL | | | | | 3,360,000 | |
| | ***TOTAL - HVAC*** | | | | | | **$3,360,000** |
| | ***D40 FIRE PROTECTION*** | | | | | | |
| | **D40 FIRE PROTECTION, GENERALLY** | | | | | | |
| | New sprinkler system | **48,000** | gsf | 6.00 | 288,000 | | |
| | SUBTOTAL | | | | | 288,000 | |
| | ***TOTAL - FIRE PROTECTION*** | | | | | | **$288,000** |



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PM&C

**Stoneham High School** 03-Dec-20
**Design Options**
Stoneham, MA

**PSR Estimate** **GFA** 48,000

| | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|
| | **HIGH SCHOOL RENOVATION - OPTION 3A** | | | | | | |
| | | | | | | | |
| | ***D50 ELECTRICAL*** | | | | | | |
| | | | | | | | |
| | **D5010 SERVICE & DISTRIBUTION** | | | | | | |
| | **Gear & Distribution** | | | | | | |
| | 5000A 480/277V switchboard | **1** | ls | 140,000.00 | w/addition | | |
| | Normal power distribution with associated panelboards, transformers and feeders | **48,000** | sf | 4.00 | 192,000 | | |
| | Emergency power | | | | | | |
| | Emergency generator and ATS"s with associated panelboards, transformers and feeders | **48,000** | sf | 2.50 | 120,000 | | |
| | Equipment Wiring | | | | | | |
| | Elevator and cab power feed and connection | **1** | ea | 5,000.00 | 5,000 | | |
| | Mechanical equipment wiring to HVAC heating and cooling equipment | **48,000** | sf | 2.50 | 120,000 | | |
| | Misc. equipment wiring | **48,000** | sf | 0.50 | 24,000 | | |
| | Gym equipment feed and connections | **1** | ls | 15,000.00 | 15,000 | | |
| | SUBTOTAL | | | | | 476,000 | |
| | | | | | | | |
| | **D5020 LIGHTING & POWER** | | | | | | |
| | Lighting & Branch Power | | | | - | | |
| | Lighting fixtures with installation labor | **48,000** | sf | 6.00 | 288,000 | | |
| | Lighting control system (Daylight Harvesting) | | | | | | |
| | Lighting controls with control panels, sensors and switches | **48,000** | sf | 1.25 | 60,000 | | |
| | Branch devices | | | | | | |
| | Duplex and GFI receptacles | **48,000** | sf | 0.50 | 24,000 | | |
| | Lighting and branch circuitry | | | | | | |
| | EMT and MC cable | **48,000** | sf | 4.50 | 216,000 | | |
| 260000 | SUBTOTAL | | | | | 588,000 | |
| | | | | | | | |
| | **D5030 COMMUNICATION & SECURITY SYSTEMS** | | | | | | |
| | Fire Alarm | | | | | | |
| | Control panel | **1** | ea | 15,000.00 | w/addition | | |
| | Annunciator | **1** | ea | 1,500.00 | w/addition | | |
| | Beacon | **1** | ea | 2,250.00 | w/addition | | |
| | Knox box | **1** | ea | 350.00 | w/addition | | |
| | Radio master box | **1** | ea | 9,500.00 | w/addition | | |
| | Devices and cabling | **48,000** | sf | 2.00 | 96,000 | | |
| | Mass. Notification | **48,000** | sf | 1.00 | 48,000 | | |
| | Testing programming | **1** | ls | 5,000.00 | 5,000 | | |
| | Bi-Directional System | | | | | | |
| | BDA system | **1** | ls | 100,000.00 | w/addition | | |
| | Telephone/Data/CATV | | | | | | |
| | Network switches, PBX, IP, VP, CATV (By owner) | | | | By Owner | | |
| | Telecommunications rough in | **48,000** | sf | 1.00 | 48,000 | | |
| | Telecommunications devices and cabling | **48,000** | sf | 2.00 | 96,000 | | |
| | Grounding | **1** | ls | 1,500.00 | 1,500 | | |
| | Public Address/Clock System | | | | | | |
| | PA/Master Clock system | **48,000** | sf | 1.00 | 48,000 | | |
| | Classroom Speech Amplification | **48,000** | sf | 0.50 | 24,000 | | |
| | Audio Visual (rough-in and power only) | | | | | | |
| | AV equipment | | | | By Owner | | |
| | Rough-In conduit and backboxes only | **48,000** | sf | 0.50 | 24,000 | | |
| | Gymnasium | | | | | | |
| | Sound system | **1** | ls | 30,000.00 | 30,000 | | |
| | Scoreboard/ shot clocks with feed and connection | **1** | ea | 15,000.00 | 15,000 | | |
| | Security System | | | | | | |
| | Head end | **1** | ls | 50,000.00 | w/addition | | |
| | Card access system | **48,000** | sf | 1.00 | 48,000 | | |
| | Intrusion system | **48,000** | sf | 1.00 | 48,000 | | |
| | CCTV surveillance system | **48,000** | sf | 2.00 | 96,000 | | |



PM&C

**Stoneham High School** 03-Dec-20
**Design Options**
Stoneham, MA

**PSR Estimate** **GFA** 48,000

| | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|
| | **HIGH SCHOOL RENOVATION - OPTION 3A** | | | | | | |
| | SUBTOTAL | | | | | 627,500 | |
| | | | | | | | |
| | **D5040 OTHER ELECTRICAL SYSTEMS** | | | | | | |
| | Miscellaneous | | | | | | |
| | Lightning Protection System, UL Master label | **1** | ls | 95,000.00 | w/addition | | |
| | Temp power and lights | **1** | ls | 150,000.00 | w/addition | | |
| | Hoisting and rigging | **1** | ls | 10,000.00 | w/addition | | |
| | Seismic restraints | **1** | ls | 7,500.00 | w/addition | | |
| | Coordination, BIM & shop drawings | **1** | ls | 240,000.00 | w/addition | | |
| | Fees & Permits | **1** | ls | 160,000.00 | w/addition | | |
| | SUBTOTAL | | | | | - | |
| | | | | | | | |
| | ***TOTAL - ELECTRICAL*** | | | | | | **$1,691,500** |
| | | | | | | | |
| | ***E10 EQUIPMENT*** | | | | | | |
| | | | | | | | |
| | **E10 EQUIPMENT, GENERALLY** | | | | | | |
| | Gym wall pads | **1** | ls | 20,000.00 | 20,000 | | |
| | Basketball backstops; swing up; electric operated | **12** | loc | 10,000.00 | 120,000 | | |
| | Gymnasium dividing net; electrically operated | **3** | ea | 30,000.00 | 90,000 | | |
| | Volleyball net and standards | **1** | ls | 5,000.00 | 5,000 | | |
| | Telescoping bleachers | **900** | seats | 240.00 | 216,000 | | |
| | SUBTOTAL | | | | | 451,000 | |
| | | | | | | | |
| | ***TOTAL - EQUIPMENT*** | | | | | | **$451,000** |
| | | | | | | | |
| | ***E20 FURNISHINGS*** | | | | | | |
| | | | | | | | |
| | **E2010 FIXED FURNISHINGS** | | | | | | |
| | Window shades | **3,655** | sf | 7.00 | 25,585 | | |
| | Entrance mats | **1** | ls | 5,000.00 | 5,000 | | |
| | | | | | | | |
| *123553* | *CASEWORK* | | | | | | |
| | Sinks, counters and casework allowance | **48,000** | sf | 10.00 | 480,000 | | |
| | SUBTOTAL | | | | | 510,585 | |
| | | | | | | | |
| | **E2020 MOVABLE FURNISHINGS** | | | | | | |
| | All movable furnishings to be provided and installed by owner | | | | | | |
| | SUBTOTAL | | | | | NIC | |
| | | | | | | | |
| | ***TOTAL - FURNISHINGS*** | | | | | | **$510,585** |
| | | | | | | | |
| | ***F10 SPECIAL CONSTRUCTION*** | | | | | | |
| | | | | | | | |
| | **F10 SPECIAL CONSTRUCTION** | | | | | | |
| | SUBTOTAL | | | | | - | |
| | | | | | | | |
| | ***TOTAL - SPECIAL CONSTRUCTION*** | | | | | | |
| | | | | | | | |
| | ***F20 SELECTIVE BUILDING DEMOLITION*** | | | | | | |
| | | | | | | | |
| | **F2010 BUILDING ELEMENTS DEMOLITION** | | | | | | |
| | Remove exterior glazing | **3,655** | sf | 7.00 | 25,585 | | |
| | Remove roofing | **26,500** | sf | 2.00 | In HazMat | | |
| | Interior demolition | **48,000** | gsf | 6.00 | 288,000 | | |
| | Temporary exterior | **750** | sf | 40.00 | 30,000 | | |



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PM&C

**Stoneham High School** 03-Dec-20
**Design Options**
Stoneham, MA

**PSR Estimate** GFA 48,000

| | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|
| | **HIGH SCHOOL RENOVATION - OPTION 3A** | | | | | | |
| | Temporary enclosures/protection | **48,000** | sf | 3.00 | 144,000 | | |
| | SUBTOTAL | | | | | 487,585 | |
| | | | | | | | |
| | **F2020 HAZARDOUS COMPONENTS ABATEMENT** | | | | | | |
| | See summary | | | | | | |
| | SUBTOTAL | | | | | | |
| | | | | | | | |
| | ***TOTAL - SELECTIVE BUILDING DEMOLITION*** | | | | | | **$487,585** |



PM&C

**Stoneham High School** 03-Dec-20
**Design Options**
Stoneham, MA

**PSR Estimate** GFA 159,827

## *CONSTRUCTION COST SUMMARY*

| | BUILDING SYSTEM | SUB-TOTAL | TOTAL | $/SF | % |
|---|---|---|---|---|---|
| **OPTION 3A NEW ADDITION** | | | | | |
| **A10** | **FOUNDATIONS** | | | | |
| A1010 | Standard Foundations | $592,000 | | | |
| A1020 | Special Foundations | $2,960,000 | | | |
| A1030 | Lowest Floor Construction | $1,087,935 | **$4,639,935** | $29.03 | 7.4% |
| **A20** | **BASEMENT CONSTRUCTION** | | | | |
| A2010 | Basement Excavation | $0 | | | |
| A2020 | Basement Walls | $235,875 | **$235,875** | $1.48 | 0.4% |
| **B10** | **SUPERSTRUCTURE** | | | | |
| B1010 | Upper Floor Construction | $3,659,564 | | | |
| B1020 | Roof Construction | $2,709,300 | **$6,368,864** | $39.85 | 10.1% |
| **B20** | **EXTERIOR CLOSURE** | | | | |
| B2010 | Exterior Walls | $8,327,636 | | | |
| B2020 | Windows | $4,357,164 | | | |
| B2030 | Exterior Doors | $101,640 | **$12,786,440** | $80.00 | 20.3% |
| **B30** | **ROOFING** | | | | |
| B3010 | Roof Coverings | $2,016,000 | | | |
| B3020 | Roof Openings | $32,500 | **$2,048,500** | $12.82 | 3.3% |
| **C10** | **INTERIOR CONSTRUCTION** | | | | |
| C1010 | Partitions | $3,835,848 | | | |
| C1020 | Interior Doors | $958,962 | | | |
| C1030 | Specialties/Millwork | $1,548,057 | **$6,342,867** | $39.69 | 10.1% |
| **C20** | **STAIRCASES** | | | | |
| C2010 | Stair Construction | $215,000 | | | |
| C2020 | Stair Finishes | $31,436 | **$246,436** | $1.54 | 0.4% |
| **C30** | **INTERIOR FINISHES** | | | | |
| C3010 | Wall Finishes | $2,237,578 | | | |
| C3020 | Floor Finishes | $1,438,443 | | | |
| C3030 | Ceiling Finishes | $1,758,097 | **$5,434,118** | $34.00 | 8.6% |
| **D10** | **CONVEYING SYSTEMS** | | | | |
| D1010 | Elevator | $120,000 | **$120,000** | $0.75 | 0.2% |
| **D20** | **PLUMBING** | | | | |
| D20 | Plumbing | $2,557,232 | **$2,557,232** | $16.00 | 4.1% |
| **D30** | **HVAC** | | | | |
| D30 | HVAC | $11,187,890 | **$11,187,890** | $70.00 | 17.8% |



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**Stoneham High School**
**Design Options**
Stoneham, MA

03-Dec-20

**PSR Estimate** GFA 159,827

## *CONSTRUCTION COST SUMMARY*

| *BUILDING SYSTEM* | | *SUB-TOTAL* | *TOTAL* | *$/SF* | *%* |
|---|---|---|---|---|---|
| **OPTION 3A NEW ADDITION** | | | | | |
| **D40 FIRE PROTECTION** | | | | | |
| D40 | Fire Protection | $958,962 | **$958,962** | $6.00 | 1.5% |
| **D50 ELECTRICAL** | | | | | |
| D5010 | Complete System | $6,998,765 | **$6,998,765** | $43.79 | 11.1% |
| **E10 EQUIPMENT** | | | | | |
| E10 | Equipment | $1,259,100 | **$1,259,100** | $7.88 | 2.0% |
| **E20 FURNISHINGS** | | | | | |
| E2010 | Fixed Furnishings | $1,814,056 | | | |
| E2020 | Movable Furnishings | NIC | **$1,814,056** | $11.35 | 2.9% |
| **F10 SPECIAL CONSTRUCTION** | | | | | |
| F10 | Special Construction | $0 | **$0** | $0.00 | 0.0% |
| **F20 HAZMAT REMOVALS** | | | | | |
| F2010 | Building Elements Demolition | $0 | | | |
| F2020 | Hazardous Components Abatement | $0 | **$0** | $0.00 | 0.0% |
| ***TOTAL DIRECT COST (Trade Costs)*** | | | ***$62,999,040*** | *$394.17* | *100.0%* |



PM&C

**Stoneham High School**
**Design Options**
Stoneham, MA

03-Dec-20

**PSR Estimate** GFA 159,827

| | *CSI CODE* | *DESCRIPTION* | *QTY* | *UNIT* | *UNIT COST* | *EST'D COST* | *SUB TOTAL* | *TOTAL COST* |
|---|---|---|---|---|---|---|---|---|
| | **OPTION 3A NEW ADDITION** | | | | | | | |
| 1 | | ***GROSS FLOOR AREA CALCULATION*** | | | | | | |
| 2 | | | | | | | | |
| 3 | | Level 00 | | | 33,708 | | | |
| 4 | | Level 01 | | | 51,555 | | | |
| 5 | | Level 02 | | | 40,658 | | | |
| 6 | | Level 03 | | | 33,906 | | | |
| 7 | | | | | | | | |
| 8 | | ***TOTAL GROSS FLOOR AREA (GFA)*** | | | | **159,827** | ***sf*** | |
| 9 | | | | | | | | |
| 10 | | | | | | | | |
| 11 | | ***A10 FOUNDATIONS*** | *SOG* | | 74,000 | | | |
| 12 | | | | | | | | |
| 13 | **A1010** | **STANDARD FOUNDATIONS** | | | | | | |
| 14 | | Allowance for standard foundations; 50% of building footprint | **37,000** | sf | 16.00 | 592,000 | | |
| 15 | | SUBTOTAL | | | | | 592,000 | |
| 16 | | | | | | | | |
| 17 | **A1020** | **SPECIAL FOUNDATIONS** | | | | | | |
| 18 | | Allowance for shallow pier foundations; 50% of building footprint | **37,000** | sf | 80.00 | 2,960,000 | | |
| 19 | | SUBTOTAL | | | | | 2,960,000 | |
| 20 | | | | | | | | |
| 21 | **A1030** | **LOWEST FLOOR CONSTRUCTION** | | | | | | |
| 22 | | New Slab on grade, 5" thick | | | | | | |
| 23 | | Gravel fill, 12" | **2,741** | cy | 40.00 | 109,640 | | |
| 24 | | Rigid insulation | **74,000** | sf | 2.25 | 166,500 | | |
| 25 | | Vapor barrier | **74,000** | sf | 1.00 | 74,000 | | |
| 26 | | Compact existing sub-grade | **74,000** | sf | 0.50 | 37,000 | | |
| 27 | | Mesh reinforcing 15% lap | **85,100** | sf | 1.15 | 97,865 | | |
| 28 | | Concrete - 5" thick; 4,000 psi | **1,209** | cy | 125.00 | 151,125 | | |
| 29 | | Placing concrete | **1,209** | cy | 45.00 | 54,405 | | |
| 30 | | Finishing and curing concrete | **74,000** | sf | 2.50 | 185,000 | | |
| 31 | | Control joints - saw cut | **74,000** | sf | 0.10 | 7,400 | | |
| 32 | | Miscellaneous | | | | | | |
| 33 | | Premium for rock excavation to 50% of foundations | **1** | ls | 100,000.00 | 100,000 | | |
| 34 | | Premium for sloped floor at auditorium | **1** | ls | 50,000.00 | 50,000 | | |
| 35 | | New Elevator pit | **1** | ea | 40,000.00 | 40,000 | | |
| 36 | | Equipment pads | **1** | ls | 15,000.00 | 15,000 | | |
| 37 | | SUBTOTAL | | | | | 1,087,935 | |
| 38 | | | | | | | | |
| 39 | | ***TOTAL - FOUNDATIONS*** | | | | | | **$4,639,935** |
| 40 | | | | | | | | |
| 41 | | | | | | | | |
| 42 | | ***A20 BASEMENT CONSTRUCTION*** | | | | | | |
| 43 | | | | | | | | |
| 44 | **A2010** | **BASEMENT EXCAVATION** | | | | | | |
| 45 | | SUBTOTAL | | | | | - | |
| 46 | | | | | | | | |
| 47 | **A2020** | **BASEMENT WALLS** | | | | | | |
| 48 | | Allowance for retaining walls | **185** | lf | 1,275.00 | 235,875 | | |
| 49 | | SUBTOTAL | | | | | 235,875 | |
| 50 | | | | | | | | |
| 51 | | ***TOTAL - BASEMENT CONSTRUCTION*** | | | | | | **$235,875** |
| 52 | | | | | | | | |
| 53 | | | | | | | | |
| 54 | | ***B10 SUPERSTRUCTURE*** | | | | | | |
| 55 | | | 14.50 | lbs/sf | | - | | |
| 56 | **B1010** | **FLOOR CONSTRUCTION** | 1,159 | tns | | - | | |
| 57 | | Floor Structure - Steel: | | | | | | |
| 58 | | Steel beams and columns to new addition; 14.5#/SF | **622** | tns | 3,800.00 | 2,363,600 | | |
| 59 | | Premium for HSS | **156** | tns | 300.00 | 46,800 | | |
| 60 | | Shear studs | **17,165** | ea | 2.50 | 42,913 | | |
| 61 | | Floor Structure | | | | | | |
| 62 | | 2" 18 Ga. Metal galvanized floor Deck | **85,827** | sf | 4.00 | 343,308 | | |



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PM&C

**Stoneham High School**
**Design Options**
Stoneham, MA

03-Dec-20

**PSR Estimate**

GFA 159,827

| CSI CODE | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|
| **OPTION 3A NEW ADDITION** | | | | | | | |
| | WWF reinforcement | **98,701** | sf | 0.80 | 78,961 | | |
| | Concrete Fill to metal deck; 6" Normal Weight | **2,003** | cy | 135.00 | 270,405 | | |
| | Place and finish concrete | **85,827** | sf | 2.50 | 214,568 | | |
| | Rebar to decks | **25,748** | lbs | 1.20 | 30,898 | | |
| | Misc. angles | **85,827** | sf | 0.50 | Incl | | |
| | Miscellaneous | | | | | | |
| | Fire proofing to columns and beams | **85,827** | sf | 2.25 | 193,111 | | |
| | Intumescent paint | **1** | ls | 50,000.00 | 50,000 | | |
| | Fire stopping floors | **1** | ls | 25,000.00 | 25,000 | | |
| | SUBTOTAL | | | | | 3,659,564 | |
| **B1020** | **ROOF CONSTRUCTION** | | | | | | |
| | Roof Structure - Steel: | | | | | | |
| | Steel beams and columns to new addition; 14.5#/SF | **537** | tns | 3,800.00 | 2,040,600 | | |
| | Premium for HSS | **134** | tns | 300.00 | 40,200 | | |
| | Exposed steel | **1** | ls | 50,000.00 | 50,000 | | |
| | Roof Structure | | | | | | |
| | Acoustic deck allowance | **5,000** | sf | 9.00 | 45,000 | | |
| | 3" 20 Ga. galvanized Metal Roof Deck | **69,000** | sf | 3.50 | 241,500 | | |
| | Miscellaneous | | | | | | |
| | Concrete under RTU's | **8,500** | sf | 10.00 | 85,000 | | |
| | Fire proofing to columns, beams and deck | **69,000** | sf | 3.00 | 207,000 | | |
| | SUBTOTAL | | | | | 2,709,300 | |
| | ***TOTAL - SUPERSTRUCTURE*** | | | | | | **$6,368,864** |
| | ***B20 EXTERIOR CLOSURE*** | | | | | | |
| **B2010** | **EXTERIOR WALLS** | | | | | | |
| | **Exterior Wall Area; EXT 1** | *65,785* | sf | | | | |
| *055000* | *MISC. METALS* | | | | | | |
| | Stainless steel sign at main entrance | **1** | ls | 10,000.00 | 10,000 | | |
| *070001* | *WATERPROOFING, DAMPPROOFING AND CAULKING* | | | | | | |
| | Air barrier; fluid applied | **65,785** | sf | 6.00 | 394,710 | | |
| | Air barrier/flashing at windows | **15,822** | lf | 6.25 | 98,888 | | |
| | Miscellaneous sealants to closure | **65,785** | sf | 1.00 | 65,785 | | |
| *072100* | *THERMAL INSULATION* | | | | | | |
| | Insulation; 6" XPS | **65,785** | sf | 5.50 | 361,818 | | |
| | Insulation; 4" spray | **65,785** | sf | 4.25 | 279,586 | | |
| *076400* | *CLADDING* | | | | | | |
| | Metal panel; rainscreen system | **65,785** | sf | 70.00 | 4,604,950 | | |
| | Mechanical screen; includes backup structure | **5,693** | sf | 85.00 | 483,905 | | |
| | Soffits; including all backup; S1 | **8,233** | sf | 100.50 | 827,417 | | |
| *092900* | *GYPSUM BOARD ASSEMBLIES* | | | | | | |
| | 6" metal stud backup | **65,785** | sf | 12.00 | 789,420 | | |
| | Gypsum Sheathing | **65,785** | sf | 2.75 | 180,909 | | |
| | Drywall lining to interior face of stud backup | **65,785** | sf | 3.50 | 230,248 | | |
| | SUBTOTAL | | | | | 8,327,636 | |
| **B2020** | **WINDOWS** | | | | | | |
| | **Exterior Wall Area** | *26,898* | sf | | | | |
| *061000* | *ROUGH CARPENTRY* | | | | | | |



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**PSR Estimate**

GFA 159,827

| CSI CODE | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|
| **OPTION 3A NEW ADDITION** | | | | | | | |
| | Wood blocking at openings | **15,822** | lf | 12.00 | 189,864 | | |
| *070001* | *WATERPROOFING, DAMPPROOFING AND CAULKING* | | | | | | |
| | Backer rod & double sealant | **15,822** | lf | 10.00 | 158,220 | | |
| *080001* | *METAL WINDOWS* | | | | | | |
| | Windows, triple glazed; fiberglass; W1 | **16,446** | sf | 125.00 | 2,055,750 | | |
| | Curtainwall, triple glazed; BOD Kawneer 1600 sys 2 1" IGU; W2 | **10,452** | sf | 165.00 | 1,724,580 | | |
| | Sunshades; 3" aluminum trellis | **1,500** | lf | 140.00 | 210,000 | | |
| *089000* | *LOUVERS* | | | | | | |
| | Louvers | **250** | sf | 75.00 | 18,750 | | |
| | SUBTOTAL | | | | | 4,357,164 | |
| **B2030** | **EXTERIOR DOORS** | | | | | | |
| | Glazed entrance doors including frame and hardware; double door | **10** | pr | 9,000.00 | 90,000 | | |
| | HM doors, frames and hardware- Double | **4** | pr | 2,000.00 | 8,000 | | |
| | Backer rod & double sealant | **280** | lf | 10.00 | 2,800 | | |
| | Wood blocking at openings | **280** | lf | 3.00 | 840 | | |
| | SUBTOTAL | | | | | 101,640 | |
| | ***TOTAL - EXTERIOR CLOSURE*** | | | | | | **$12,786,440** |
| | ***B30 ROOFING*** | | | | | | |
| **B3010** | **ROOF COVERINGS** | | | | | | |
| | New roofing complete; TPO 8" Insulation; R1 | **74,000** | sf | 24.00 | 1,776,000 | | |
| | Allowance for green roof; includes planted areas, paving, fencing etc. | **4,000** | sf | 60.00 | 240,000 | | |
| | SUBTOTAL | | | | | 2,016,000 | |
| **B3020** | **ROOF OPENINGS** | | | | | | |
| | Skylights, allow | **1** | ls | 30,000.00 | 30,000 | | |
| | Roof hatch | **1** | loc | 2,500.00 | 2,500 | | |
| | SUBTOTAL | | | | | 32,500 | |
| | ***TOTAL - ROOFING*** | | | | | | **$2,048,500** |
| | ***C10 INTERIOR CONSTRUCTION*** | | | | | | |
| **C1010** | **PARTITIONS** | | | | | | |
| | Miscellaneous partitions/glazed partitions/borrowed lights/blocking etc. | **159,827** | gsf | 24.00 | 3,835,848 | | |
| | SUBTOTAL | | | | | 3,835,848 | |
| **C1020** | **INTERIOR DOORS** | | | | | | |
| | Interior doors, frames and hardware | **159,827** | gsf | 6.00 | 958,962 | | |
| | SUBTOTAL | | | | | 958,962 | |
| **C1030** | **SPECIALTIES / MILLWORK** | | | | | | |
| | Toilet Partitions and accessories | **159,827** | gsf | 1.00 | 159,827 | | |
| | Backer panels in electrical closets | **1** | ls | 1,000.00 | 1,000 | | |
| | Marker boards/tackboards in classrooms, offices, conference rooms, library and MP rooms | **159,827** | sf | 1.25 | 199,784 | | |
| | Room Signs | **159,827** | gsf | 0.50 | 79,914 | | |
| | Fire extinguisher cabinets | **53** | ea | 350.00 | 18,550 | | |
| | Lockers, full height | **710** | ea | 350.00 | 248,500 | | |
| | New catwalk | **1** | ls | 100,000.00 | 100,000 | | |
| | Janitors Work Shop Accessories | **1** | ls | 1,500.00 | 1,500 | | |
| | Janitors Closet Accessories | **3** | rms | 300.00 | 900 | | |
| | *Media* | | | | | | |
| | Reception desks | **2** | loc | 25,000 | 50,000 | | |
| | Railings to open to below areas | **362** | lf | 300.00 | 108,600 | | |
| | Library shelving at perimeters 7' Tall | | | | F,F & E | | |



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GFA 159,827

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|---|---|---|---|---|---|---|---|
| **OPTION 3A NEW ADDITION** | | | | | | | |
| | Library shelving at perimeters 3' Tall | | | | F,F & E | | |
| | Stage proscenium | **1** | ls | 100,000 | 100,000 | | |
| | Display cases | **159,827** | gsf | 0.25 | 39,957 | | |
| | Miscellaneous metals throughout building | **159,827** | sf | 1.25 | 199,784 | | |
| | Miscellaneous sealants throughout building | **159,827** | sf | 1.50 | 239,741 | | |
| | SUBTOTAL | | | | | 1,548,057 | |
| | ***TOTAL - INTERIOR CONSTRUCTION*** | | | | | | **$6,342,867** |
| ***C20*** | ***STAIRCASES*** | | | | | | |
| **C2010** | **STAIR CONSTRUCTION** | | | | | | |
| | Metal pan stair; egress stair | **3** | flt | 35,000.00 | 105,000 | | |
| | Main staircase | **2** | flt | 50,000.00 | 100,000 | | |
| | Concrete fill to stairs | **5** | flt | 2,000.00 | 10,000 | | |
| | SUBTOTAL | | | | | 215,000 | |
| **C2020** | **STAIR FINISHES** | | | | | | |
| | High performance coating to stairs including all railings etc. | **5** | flt | 3,000.00 | 15,000 | | |
| | Rubber tile at stairs - landings | **500** | sf | 10.00 | 5,000 | | |
| | Rubber tile at stairs - treads & risers | **600** | lft | 19.06 | 11,436 | | |
| | SUBTOTAL | | | | | 31,436 | |
| | ***TOTAL - STAIRCASES*** | | | | | | **$246,436** |
| ***C30*** | ***INTERIOR FINISHES*** | | | | | | |
| **C3010** | **WALL FINISHES** | | | | | | |
| | Wall finishes | **159,827** | sf | 14.00 | 2,237,578 | | |
| | SUBTOTAL | | | | | 2,237,578 | |
| **C3020** | **FLOOR FINISHES** | | | | | | |
| | Floor finishes | **159,827** | sf | 9.00 | 1,438,443 | | |
| | SUBTOTAL | | | | | 1,438,443 | |
| **C3030** | **CEILING FINISHES** | | | | | | |
| | Ceiling finishes | **159,827** | sf | 11.00 | 1,758,097 | | |
| | SUBTOTAL | | | | | 1,758,097 | |
| | ***TOTAL - INTERIOR FINISHES*** | | | | | | **$5,434,118** |
| ***D10*** | ***CONVEYING SYSTEMS*** | | | | | | |
| **D1010** | **ELEVATOR** | | | | | | |
| | New elevator; 3 stop; oversize; 5,000 lbs | **1** | ea | 120,000.00 | 120,000 | | |
| | SUBTOTAL | | | | | 120,000 | |
| | ***TOTAL - CONVEYING SYSTEMS*** | | | | | | **$120,000** |
| ***D20*** | ***PLUMBING*** | | | | | | |
| **D20** | **PLUMBING, GENERALLY** | | | | | | |
| | Plumbing; complete system | **159,827** | sf | 16.00 | 2,557,232 | | |
| | SUBTOTAL | | | | | 2,557,232 | |
| | ***TOTAL - PLUMBING*** | | | | | | **$2,557,232** |
| ***D30*** | ***HVAC*** | | | | | | |
| **D30** | **HVAC, GENERALLY** | | | | | | |
| | Geothermal Heating/Cooling System | | | | | | |
| | (2) 225 ton heat recovery chiller-heaters with (200) 6" boreholes, active chilled beams, heat recovery units, and rooftop ahu's | **159,827** | sf | 70.00 | 11,187,890 | | |
| | SUBTOTAL | | | | | 11,187,890 | |



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|---|---|---|---|---|---|---|---|
| **OPTION 3A NEW ADDITION** | | | | | | | |
| | ***TOTAL - HVAC*** | | | | | | **$11,187,890** |
| ***D40*** | ***FIRE PROTECTION*** | | | | | | |
| **D40** | **FIRE PROTECTION, GENERALLY** | | | | | | |
| | Fire protection system | **159,827** | gsf | 6.00 | 958,962 | | |
| | SUBTOTAL | | | | | 958,962 | |
| | ***TOTAL - FIRE PROTECTION*** | | | | | | **$958,962** |
| ***D50*** | ***ELECTRICAL*** | | | | | | |
| **D5010** | **SERVICE & DISTRIBUTION** | | | | | | |
| | **Gear & Distribution** | | | | | | |
| | 5000A 480/277V switchboard | **1** | ls | 140,000.00 | 140,000 | | |
| | Normal power distribution with associated panelboards, transformers and feeders | **159,827** | sf | 4.00 | 639,308 | | |
| | Emergency power | | | | | | |
| | Emergency generator and ATS"s with associated panelboards, transformers and feeders | **159,827** | sf | 2.50 | 399,568 | | |
| | Equipment Wiring | | | | | | |
| | Elevator and cab power feed and connection | **1** | ea | 5,000.00 | 5,000 | | |
| | Mechanical equipment wiring to HVAC heating and cooling equipment | **159,827** | sf | 2.50 | 399,568 | | |
| | Misc. equipment wiring | **159,827** | sf | 0.50 | 79,914 | | |
| | Gym equipment feed and connections | **1** | ls | 15,000.00 | 15,000 | | |
| | SUBTOTAL | | | | | 1,678,358 | |
| **D5020** | **LIGHTING & POWER** | | | | | | |
| | Lighting & Branch Power | | | | - | | |
| | Lighting fixtures with installation labor | **159,827** | sf | 6.00 | 958,962 | | |
| | Lighting control system (Daylight Harvesting) | | | | | | |
| | Lighting controls with control panels, sensors and switches | **159,827** | sf | 1.25 | 199,784 | | |
| | Branch devices | | | | | | |
| | Duplex and GFI receptacles | **159,827** | sf | 0.50 | 79,914 | | |
| | Lighting and branch circuitry | | | | | | |
| | EMT and MC cable | **159,827** | sf | 4.50 | 719,222 | | |
| | SUBTOTAL | | | | | 1,957,882 | |
| **D5030** | **COMMUNICATION & SECURITY SYSTEMS** | | | | | | |
| | Fire Alarm | | | | | | |
| | Control panel | **1** | ea | 15,000.00 | 15,000 | | |
| | Annunciator | **1** | ea | 1,500.00 | 1,500 | | |
| | Beacon | **1** | ea | 2,250.00 | 2,250 | | |
| | Knox box | **1** | ea | 350.00 | 350 | | |
| | Radio master box | **1** | ea | 9,500.00 | 9,500 | | |
| | Devices and cabling | **159,827** | sf | 2.00 | 319,654 | | |
| | Mass. Notification | **159,827** | sf | 1.00 | 159,827 | | |
| | Testing programming | **1** | ls | 5,000.00 | 5,000 | | |
| | Bi-Directional System | | | | | | |
| | BDA system | **1** | ls | 100,000.00 | 100,000 | | |
| | Telephone/Data/CATV | | | | | | |
| | Network switches, PBX, IP, VP, CATV (By owner) | | | | By Owner | | |
| | Telecommunications rough in | **159,827** | sf | 1.00 | 159,827 | | |
| | Telecommunications devices and cabling | **159,827** | sf | 2.00 | 319,654 | | |
| | Grounding | **1** | ls | 1,500.00 | 1,500 | | |
| | Public Address/Clock System | | | | | | |
| | PA/Master Clock system | **159,827** | sf | 1.00 | 159,827 | | |
| | Classroom Speech Amplification | **159,827** | sf | 0.50 | 79,914 | | |
| | Audio Visual (rough-in and power only) | | | | | | |
| | AV equipment | | | | By Owner | | |
| | Rough-In conduit and backboxes only | **159,827** | sf | 0.50 | 79,914 | | |



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|---|---|---|---|---|---|---|---|
| | **OPTION 3A NEW ADDITION** | | | | | | |
| | Auditorium | | | | | | |
| | Rigging system equipment & installation | | | | See equipment | | |
| | Power to rigging equipment | **1** | ls | 12,000.00 | 12,000 | | |
| | Stage dimming system with performance fixture package, allow | **1** | ls | 275,000.00 | 275,000 | | |
| | Installation, rough-in & 120V power to dimming equipment | **1** | ls | 70,000.00 | 70,000 | | |
| | Performance audio visual equipment, installation & LV cabling, allow | **1** | ls | 150,000.00 | 150,000 | | |
| | Performance audio visual rough-in and power | **1** | ls | 60,000.00 | 60,000 | | |
| | Cafeteria | | | | | | |
| | Sound system | **1** | ls | 15,000.00 | 15,000 | | |
| | Media Center | | | | | | |
| | Sound system | **1** | ls | 15,000.00 | 15,000 | | |
| | Security System | | | | | | |
| | Head end | **1** | ls | 50,000.00 | 50,000 | | |
| | Card access system | **159,827** | sf | 1.00 | 159,827 | | |
| | Intrusion system | **159,827** | sf | 1.00 | 159,827 | | |
| | CCTV surveillance system | **159,827** | sf | 2.00 | 319,654 | | |
| | SUBTOTAL | | | | | 2,700,025 | |
| **D5040** | **OTHER ELECTRICAL SYSTEMS** | | | | | | |
| | Miscellaneous | | | | | | |
| | Lightning Protection System, UL Master label | **1** | ls | 95,000.00 | 95,000 | | |
| | Temp power and lights | **1** | ls | 150,000.00 | 150,000 | | |
| | Hoisting and rigging | **1** | ls | 10,000.00 | 10,000 | | |
| | Seismic restraints | **1** | ls | 7,500.00 | 7,500 | | |
| | Coordination, BIM & shop drawings | **1** | ls | 240,000.00 | 240,000 | | |
| | Fees & Permits | **1** | ls | 160,000.00 | 160,000 | | |
| | SUBTOTAL | | | | | 662,500 | |
| | ***TOTAL - ELECTRICAL*** | | | | | | **$6,998,765** |
| ***E10*** | ***EQUIPMENT*** | | | | | | |
| **E10** | **EQUIPMENT, GENERALLY** | | | | | | |
| | Theatrical Equipment Stage curtains, rigging and controls | **1** | ls | 350,000.00 | 350,000 | | |
| | Theatrical AV allowance | **1** | ls | 200,000.00 | 200,000 | | |
| | Kitchen equipment | **2,030** | sf | 220.00 | 446,600 | | |
| | Auditorium seats | **750** | seat | 350.00 | 262,500 | | |
| | SUBTOTAL | | | | | 1,259,100 | |
| | ***TOTAL - EQUIPMENT*** | | | | | | **$1,259,100** |
| ***E20*** | ***FURNISHINGS*** | | | | | | |
| **E2010** | **FIXED FURNISHINGS** | | | | | | |
| | Entry mats & frames - recessed with carpet/rubber strips | **500** | sf | 55.00 | 27,500 | | |
| | Window blinds | **26,898** | sf | 7.00 | 188,286 | | |
| *123553* | *CASEWORK* | | | | | | |
| | Sinks, counters and casework; allowance | **159,827** | sf | 10.00 | 1,598,270 | | |
| | SUBTOTAL | | | | | 1,814,056 | |
| **E2020** | **MOVABLE FURNISHINGS** | | | | | | |
| | All movable furnishings to be provided and installed by owner | | | | | | |
| | SUBTOTAL | | | | | NIC | |
| | ***TOTAL - FURNISHINGS*** | | | | | | **$1,814,056** |
| ***F10*** | ***SPECIAL CONSTRUCTION*** | | | | | | |
| **F10** | **SPECIAL CONSTRUCTION** | | | | | | |
| | No items in this section | | | | | | |



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|---|---|---|---|---|---|---|---|
| | **OPTION 3A NEW ADDITION** | | | | | | |
| | SUBTOTAL | | | | | | |
| | ***TOTAL - SPECIAL CONSTRUCTION*** | | | | | | |
| ***F20*** | ***SELECTIVE BUILDING DEMOLITION*** | | | | | | |
| **F2010** | **BUILDING ELEMENTS DEMOLITION** | | | | | | |
| | No items in this section | | | | | | |
| | SUBTOTAL | | | | | | |
| **F2020** | **HAZARDOUS COMPONENTS ABATEMENT** | | | | | | |
| | See main summary for HazMat allowance | | | | | See Summary | |
| | SUBTOTAL | | | | | | |
| | ***TOTAL - SELECTIVE BUILDING DEMOLITION*** | | | | | | |



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|---|---|---|---|---|---|---|---|
| | **SITEWORK OPTION 3A** | | | | | | |
| | ***G SITEWORK*** | *1,900,000* | *sf* | | - | | |
| | **G10 SITE PREPARATION & DEMOLITION** | | | | | | |
| | Site construction fence/barricades | **7,900** | lf | 18.00 | 142,200 | | |
| | Site construction fence gates | **1** | ea | 10,000.00 | 10,000 | | |
| | Stabilized construction entrance | **1** | ls | 15,000.00 | 15,000 | | |
| | Pavement/curbing removal, crush and re-use for sub-base | **250,800** | sf | 1.00 | 250,800 | | |
| | Demolish tennis courts | **56,200** | sf | 1.50 | 84,300 | | |
| | Demolish track/football field | **175,625** | sf | 1.00 | 175,625 | | |
| | Walkways | **1** | ls | 20,000.00 | 20,000 | | |
| | Miscellaneous demolition | **1** | ls | 100,000.00 | 100,000 | | |
| | SUBTOTAL | | | | | 797,925 | |
| | Temporary parking | **190** | spc | | | | |
| | gravel base; 12" thick | **2,981** | cy | 40.00 | 119,240 | | |
| | Binder course | **8,944** | sy | 20.00 | 178,880 | | |
| | Construction fence | **1,135** | lf | 18.00 | 20,430 | | |
| | Line markings/painting/signs | **190** | spc | 100.00 | 19,000 | | |
| | Demolish temp parking | **110,000** | sf | 1.00 | 110,000 | | |
| | Blasting for temporary parking | **1** | ls | 150,000.00 | 150,000 | | |
| | SUBTOTAL | | | | | 597,550 | |
| | Site Earthwork | | | | | | |
| | Strip Topsoil and remove; 6" thick | **3,148** | cy | 16.00 | 50,368 | | |
| | Fine grading | **659,695** | sf | 0.20 | 131,939 | | |
| | Cut and Fill; assumed AV 1ft; balanced site | **24,433** | cy | 10.00 | 244,330 | | |
| | Silt fence/erosion control, wash bays, stock piles | **7,900** | lf | 12.00 | 94,800 | | |
| | Silt fence maintenance and monitoring | **1** | ls | 40,000.00 | 40,000 | | |
| | Hazardous Waste Remediation | | | | | | |
| | Remove existing underground fuel storage tanks; 500 Gal | **1** | ls | 50,000.00 | 50,000 | | |
| | Dispose/treat contaminated soils | **1** | ls | 20,000.00 | 20,000 | | |
| | SUBTOTAL | | | | | 631,437 | |
| | **G20 SITE IMPROVEMENTS** | | | | | | |
| | Asphalt Paving; parking lot and roadway | *250,800* | | | | | |
| | gravel base; 12" thick | **9,289** | cy | 40.00 | 371,560 | | |
| | asphalt; 4" thick | **27,867** | sy | 25.00 | 696,675 | | |
| | VGC | **10,032** | lf | 40.00 | 401,280 | | |
| | Single solid lines, 4" thick | **1** | ls | 10,000.00 | 10,000 | | |
| | Crosswalk Hatching | **4** | loc | 900.00 | 3,600 | | |
| | Other road markings | **1** | ls | 7,500.00 | 7,500 | | |
| | HC curb cuts | **8** | loc | 350.00 | 2,800 | | |
| | Signage | **1** | ls | 20,000.00 | 20,000 | | |
| | Pedestrian Paving | | | | | | |
| | Concrete paving | | | | | | |
| | gravel base; 8" thick | **372** | cy | 35.00 | 13,020 | | |
| | 4" concrete paving | **15,000** | sf | 9.00 | 135,000 | | |
| | Drop Off Plaza | *16,720* | *sf* | | | | |
| | Precast pavers; 50% | **8,360** | sf | 40.00 | 334,400 | | |
| | Poured in place rubber safety surface; 25% | **4,180** | sf | 26.00 | 108,680 | | |
| | Planted areas; 25% | **4,180** | sf | 10.00 | 41,800 | | |
| | Ground Level Garden; Pre-K Playground | *10,450* | sf | | - | | |
| | Rubber surface over concrete | **7,838** | sf | 18.00 | 141,084 | | |
| | Raised planters; green space | **2,613** | sf | 10.00 | 26,130 | | |
| | Shade structure | **1** | loc | 30,000.00 | 30,000 | | |
| | Music elements | **1** | loc | 35,000.00 | 35,000 | | |
| | Play equipment | **1** | loc | 50,000.00 | 50,000 | | |
| | SUBTOTAL | | | | | 2,428,529 | |

Site Athletics

**STADIUM - Running Track/Turf Football Field/Bleachers**



PM&C

**Stoneham High School**
Design Options
Stoneham, MA

03-Dec-20

**PSR Estimate**

| CSI CODE | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|
| | **SITEWORK OPTION 3A** | | | | | | |
| | Synthetic turf anchor curb integral with trench drain | **1,310** | lf | 80.00 | 104,800 | | |
| | Resilient surface at track | **75,525** | sf | 8.00 | 604,200 | | |
| | Gravel base - assumed 12" thick | **3,707** | cy | 45.00 | 166,815 | | |
| | Geotextile reinforced impermeable liner 20 mill | **100,100** | sf | 1.00 | 100,100 | | |
| | Synthetic turf field - Hybrid infill synthetic field with premolded resilient drainage pad | **100,100** | sf | 12.00 | 1,201,200 | | |
| | Football goals | **2** | ea | 3,500.00 | 7,000 | | |
| | Scoreboard | **1** | ea | 60,000.00 | 60,000 | | |
| | Line markings - allowance | **2** | ls | 2,000.00 | 4,000 | | |
| | 1250 seat bleacher | **1** | loc | 450,000.00 | 450,000 | | |
| | Rip-Rap under bleachers | **1** | ls | 25,000.00 | 25,000 | | |
| | Field logo's | **1** | loc | 6,000.00 | 6,000 | | |
| | Discus pad & enclosure | **1** | ea | 15,000.00 | 15,000 | | |
| | Shot put pad & enclosure | **1** | ea | 15,000.00 | 15,000 | | |
| | Long jump/triple jump | **2** | ea | 10,000.00 | 20,000 | | |
| | Pole vault and accessories | **1** | ea | 10,000.00 | 10,000 | | |
| | High jump pads | **1** | ea | 6,000.00 | 6,000 | | |
| | Javelin with track surfacing runway | **1** | ea | 10,000.00 | 10,000 | | |
| | Hurdles and starting blocks | **1** | ls | 8,000.00 | 8,000 | | |
| | Track crossing pad | **1** | ls | 10,000.00 | 10,000 | | |
| | Trash/recycling receptacles | **12** | ea | 800.00 | 9,600 | | |
| | Team benches- 7'-5" long | **12** | ea | 1,500.00 | 18,000 | | |
| | Portable ball control netting, 120' long | **4** | ea | 2,500.00 | 10,000 | | |
| | Pit covers | **2** | ea | 3,500.00 | 7,000 | | |
| | Subsurface infiltration/drainage/field drains etc. | **175,625** | sf | 1.25 | 219,531 | | |
| | Stadium sound system (AV) | **1** | ls | 120,000.00 | 120,000 | | |
| | SUBTOTAL | | | | | 3,207,246 | |
| | Baseball/Field Hockey | **1** | ea | 360,000.00 | 360,000 | | |
| | Synthetic grass soccer fields; Two Fields | **140,500** | sf | 12.00 | 1,686,000 | | |
| | Full size field; grass | **1** | ea | 300,000.00 | 300,000 | | |
| | Softball field | **1** | ea | 250,000.00 | 250,000 | | |
| | Tennis courts - Six Courts (including pickle courts); 1 basketball court | *50,600* | *sf* | | | | |
| | gravel base; 8" thick | **1,256** | cy | 40.00 | 50,240 | | |
| | Asphalt paving | **5,622** | sy | 30.00 | 168,660 | | |
| | Color coating | **50,600** | sf | 2.00 | 101,200 | | |
| | Fence with wind break | **1,177** | lf | 80.00 | 94,160 | | |
| | Tennis court nets | **5** | set | 1,500.00 | 7,500 | | |
| | Basketball hoops | **1** | set | 5,000.00 | 5,000 | | |
| | SUBTOTAL | | | | | 3,022,760 | |
| | Site Improvements | | | | | | |
| | Flag pole 50' high | **1** | ea | 6,500.00 | 6,500 | | |
| | Concrete retaining walls | **1** | ls | 500,000.00 | 500,000 | | |
| | Other site improvements; walls, fences etc. | **1** | ls | 200,000.00 | 200,000 | | |
| | Outdoor dining | **1** | ls | 50,000.00 | 50,000 | | |
| | SUBTOTAL | | | | | 756,500 | |
| | Landscaping | | | | | | |
| | Topsoil - reuse existing | **3,148** | cy | 25.00 | 78,700 | | |
| | Topsoil - Import new topsoil; minimum 6" | **581** | cy | 65.00 | 37,765 | | |
| | Seeding | **964,805** | sf | 0.15 | 144,721 | | |
| | Green space | **31,350** | sf | 10.00 | 313,500 | | |
| | SUBTOTAL | | | | | 574,686 | |
| | **G30 CIVIL MECHANICAL UTILITIES** | | | | | | |
| | Water supply; Pricing includes E&B and bedding | | | | | | |
| | Temporary water line | **650** | lf | 120.00 | 78,000 | | |
| | New DI piping; 8" | **450** | lf | 100.00 | 45,000 | | |
| | New DI piping; 8" Fire loop | **2,800** | lf | 100.00 | 280,000 | | |



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PM&C

**Stoneham High School**
Design Options
Stoneham, MA

03-Dec-20

**PSR Estimate**

| CSI CODE | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|
| | **SITEWORK OPTION 3A** | | | | | | |
| | Connect to existing | **1** | loc | 5,000.00 | 5,000 | | |
| | FD connection | **1** | ea | 2,000.00 | 2,000 | | |
| | Gate valves | **8** | ea | 750.00 | 6,000 | | |
| | Fire hydrant | **3** | ea | 5,000.00 | 15,000 | | |
| | SUBTOTAL | | | | | 431,000 | |
| | Sanitary; Pricing includes E&B and bedding | | | | | | |
| | Temporary sewer line | **1** | ls | 50,000.00 | 50,000 | | |
| | Manholes | **4** | ea | 4,000.00 | 16,000 | | |
| | Grease trap | **1** | ea | 15,000.00 | 15,000 | | |
| | 8" PVC | **1,000** | lf | 60.00 | 60,000 | | |
| | Connect to existing drain | **1** | ea | 3,000.00 | 3,000 | | |
| | SUBTOTAL | | | | | 144,000 | |
| | Storm water; Pricing includes E&B and bedding | | | | | | |
| | Temporary storm (relocate existing 15" line + new manholes) | **1** | ls | 125,000.00 | 125,000 | | |
| | Allowance for new drainage systems; piping only | **250,800** | sf | 3.00 | 752,400 | | |
| | Infiltration systems; cultec chambers | **137,500** | cf | 8.00 | 1,100,000 | | |
| | Rock excavation | **1** | ls | 250,000.00 | 250,000 | | |
| | Catch basins | **12** | ea | 3,800.00 | 45,600 | | |
| | Manholes | **10** | ea | 4,500.00 | 45,000 | | |
| | WQ structures | **3** | ea | 16,000.00 | 48,000 | | |
| | Area drains | **4** | ea | 1,500.00 | 6,000 | | |
| | Work to culvert | **1** | ls | 250,000.00 | 250,000 | | |
| | Gas service | | | | | | |
| | E&B trench for new gas pipe - install by plumbing | **450** | lf | 25.00 | 11,250 | | |
| | SUBTOTAL | | | | | 2,633,250 | |
| **G40** | **ELECTRICAL UTILITIES** | | | | | | |
| | Power | | | | | | |
| | Utility co. backcharges, allow | **1** | ls | 30,000.00 | Utility co. | | |
| | Connections at existing manhole | | | | Utility co. | | |
| | Manhole | **1** | ls | 8,500.00 | 8,500 | | |
| | Connections in manhole | **1** | ls | 3,500.00 | 3,500 | | |
| | Primary ductbank 2-5" ductbank, empty, allow | **1000** | lf | 120.00 | 120,000 | | |
| | Transformer by utility company | | | | By Utility Co. | | |
| | Transformer pad; temporary for relocated transformer | **1** | ea | 5,000.00 | 5,000 | | |
| | Secondary service | **60** | lf | 1,100.00 | 66,000 | | |
| | Communications | | | | | | |
| | Connection at riser pole, allow | **1** | ea | 1,500.00 | 1,500 | | |
| | Telecom ductbank 4-4", allow | **1000** | lf | 152.00 | 152,000 | | |
| | Site Lighting | | | | | | |
| | Site Parking lighting (allow) | **250,800** | sf | 2.00 | 501,600 | | |
| | SUBTOTAL | | | | | 858,100 | |
| | **TOTAL - SITE DEVELOPMENT** | | | | | | ***$16,082,983*** |



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**Stoneham High School**
**Design Options**
Stoneham, MA

03-Dec-20

**PSR Estimate** GFA 207,827

## *CONSTRUCTION COST SUMMARY*

| | BUILDING SYSTEM | SUB-TOTAL | TOTAL | $/SF | % |
|---|---|---|---|---|---|
| **OPTION 4A NEW BUILDING** | | | | | |
| **A10** | **FOUNDATIONS** | | | | |
| A1010 | Standard Foundations | $663,248 | | | |
| A1020 | Special Foundations | $3,316,240 | | | |
| A1030 | Lowest Floor Construction | $1,244,117 | **$5,223,605** | $25.13 | 7.0% |
| **A20** | **BASEMENT CONSTRUCTION** | | | | |
| A2010 | Basement Excavation | $0 | | | |
| A2020 | Basement Walls | $408,000 | **$408,000** | $1.96 | 0.5% |
| **B10** | **SUPERSTRUCTURE** | | | | |
| B1010 | Upper Floor Construction | $5,794,842 | | | |
| B1020 | Roof Construction | $3,015,189 | **$8,810,031** | $42.39 | 11.7% |
| **B20** | **EXTERIOR CLOSURE** | | | | |
| B2010 | Exterior Walls | $7,093,817 | | | |
| B2020 | Windows | $3,638,838 | | | |
| B2030 | Exterior Doors | $101,640 | **$10,834,295** | $52.13 | 14.4% |
| **B30** | **ROOFING** | | | | |
| B3010 | Roof Coverings | $2,229,744 | | | |
| B3020 | Roof Openings | $32,500 | **$2,262,244** | $10.89 | 3.0% |
| **C10** | **INTERIOR CONSTRUCTION** | | | | |
| C1010 | Partitions | $4,987,848 | | | |
| C1020 | Interior Doors | $1,246,962 | | | |
| C1030 | Specialties/Millwork | $1,766,357 | **$8,001,167** | $38.50 | 10.7% |
| **C20** | **STAIRCASES** | | | | |
| C2010 | Stair Construction | $237,000 | | | |
| C2020 | Stair Finishes | $37,723 | **$274,723** | $1.32 | 0.4% |
| **C30** | **INTERIOR FINISHES** | | | | |
| C3010 | Wall Finishes | $2,909,578 | | | |
| C3020 | Floor Finishes | $1,870,443 | | | |
| C3030 | Ceiling Finishes | $2,286,097 | **$7,066,118** | $34.00 | 9.4% |
| **D10** | **CONVEYING SYSTEMS** | | | | |
| D1010 | Elevator | $160,000 | **$160,000** | $0.77 | 0.2% |
| **D20** | **PLUMBING** | | | | |
| D20 | Plumbing | $3,325,232 | **$3,325,232** | $16.00 | 4.4% |
| **D30** | **HVAC** | | | | |
| D30 | HVAC | $14,547,890 | **$14,547,890** | $70.00 | 19.4% |



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**Stoneham High School**
**Design Options**
Stoneham, MA

03-Dec-20

**PSR Estimate** GFA 207,827

## CONSTRUCTION COST SUMMARY

| | BUILDING SYSTEM | | SUB-TOTAL | TOTAL | $/SF | % |
|---|---|---|---|---|---|---|
| **OPTION 4A NEW BUILDING** | | | | | | |
| **D40** | **FIRE PROTECTION** | | | | | |
| | D40 | Fire Protection | $1,246,962 | **$1,246,962** | $6.00 | 1.7% |
| **D50** | **ELECTRICAL** | | | | | |
| | D5010 | Complete System | $8,723,426 | **$8,723,426** | $41.97 | 11.6% |
| **E10** | **EQUIPMENT** | | | | | |
| | E10 | Equipment | $1,832,600 | **$1,832,600** | $8.82 | 2.4% |
| **E20** | **FURNISHINGS** | | | | | |
| | E2010 | Fixed Furnishings | $2,275,882 | | | |
| | E2020 | Movable Furnishings | NIC | **$2,275,882** | $10.95 | 3.0% |
| **F10** | **SPECIAL CONSTRUCTION** | | | | | |
| | F10 | Special Construction | $0 | **$0** | $0.00 | 0.0% |
| **F20** | **HAZMAT REMOVALS** | | | | | |
| | F2010 | Building Elements Demolition | $0 | | | |
| | F2020 | Hazardous Components Abatement | $0 | **$0** | $0.00 | 0.0% |
| ***TOTAL DIRECT COST (Trade Costs)*** | | | | ***$74,992,175*** | *$360.84* | *100.0%* |



PM&C

**Stoneham High School**
**Design Options**
Stoneham, MA

03-Dec-20

**PSR Estimate** GFA 207,827

| CSI CODE | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|
| **OPTION 4A NEW BUILDING** | | | | | | | |
| | ***GROSS FLOOR AREA CALCULATION*** | | | | | | |
| | Level 00 | | | 54,707 | | | |
| | Level 01 | | | 82,906 | | | |
| | Level 02 | | | 36,207 | | | |
| | Level 03 | | | 34,007 | | | |
| | ***TOTAL GROSS FLOOR AREA (GFA)*** | | | | **207,827** | ***sf*** | |
| | ***A10 FOUNDATIONS*** | | | | | | |
| **A1010** | **STANDARD FOUNDATIONS** | | | | | | |
| | Allowance for standard foundations; 50% of building footprint | **41,453** | sf | 16.00 | 663,248 | | |
| | SUBTOTAL | | | | | 663,248 | |
| **A1020** | **SPECIAL FOUNDATIONS** | | | | | | |
| | Allowance for shallow pier foundations; 50% of building footprint | **41,453** | sf | 80.00 | 3,316,240 | | |
| | SUBTOTAL | | | | | $3,316,240 | |
| **A1030** | **LOWEST FLOOR CONSTRUCTION** | | | | | | |
| | New Slab on grade, 5" thick | | | | | | |
| | Gravel fill, 12" | **3,071** | cy | 40.00 | 122,840 | | |
| | Rigid insulation | **82,906** | sf | 2.25 | 186,539 | | |
| | Vapor barrier | **82,906** | sf | 1.00 | 82,906 | | |
| | Compact existing sub-grade | **82,906** | sf | 0.50 | 41,453 | | |
| | Mesh reinforcing 15% lap | **95,342** | sf | 1.15 | 109,643 | | |
| | Concrete - 5" thick; 4,000 psi | **1,354** | cy | 125.00 | 169,250 | | |
| | Placing concrete | **1,354** | cy | 45.00 | 60,930 | | |
| | Finishing and curing concrete | **82,906** | sf | 2.50 | 207,265 | | |
| | Control joints - saw cut | **82,906** | sf | 0.10 | 8,291 | | |
| | Miscellaneous | | | | | | |
| | Premium for rock excavation to 50% of foundations | **1** | ls | 150,000.00 | 150,000 | | |
| | Premium for sloped floor at auditorium | **1** | ls | 50,000.00 | 50,000 | | |
| | New Elevator pit | **1** | ea | 40,000.00 | 40,000 | | |
| | Equipment pads | **1** | ls | 15,000.00 | 15,000 | | |
| | SUBTOTAL | | | | | 1,244,117 | |
| | ***TOTAL - FOUNDATIONS*** | | | | | | **$5,223,605** |
| | ***A20 BASEMENT CONSTRUCTION*** | | | | | | |
| **A2010** | **BASEMENT EXCAVATION** | | | | | | |
| | SUBTOTAL | | | | | - | |
| **A2020** | **BASEMENT WALLS** | | | | | | |
| | Allowance for retaining walls | **320** | lf | 1,275.00 | 408,000 | | |
| | SUBTOTAL | | | | | 408,000 | |
| | ***TOTAL - BASEMENT CONSTRUCTION*** | | | | | | **$408,000** |
| | ***B10 SUPERSTRUCTURE*** | | | | | | |
| | | 14.50 | lbs/sf | | - | | |
| **B1010** | **FLOOR CONSTRUCTION** | 1,507 | tns | | - | | |
| | Floor Structure - Steel: | | | | | | |
| | Steel beams and columns to new addition; 14.5#/SF | **906** | tns | 3,800.00 | 3,442,800 | | |
| | Premium for HSS | **227** | tns | 300.00 | 68,100 | | |
| | Shear studs | **24,984** | ea | 2.50 | 62,460 | | |
| | Floor Structure | | | | | | |
| | 2" 18 Ga. Metal galvanized floor Deck | **124,921** | sf | 4.00 | 499,684 | | |



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**Design Options**
Stoneham, MA

03-Dec-20

**PSR Estimate**

GFA 207,827

| CSI CODE | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|
| | **OPTION 4A NEW BUILDING** | | | | | | |
| | WWF reinforcement | **143,659** | sf | 0.80 | 114,927 | | |
| | Concrete Fill to metal deck; 6" Normal Weight | **2,915** | cy | 135.00 | 393,525 | | |
| | Place and finish concrete | **124,921** | sf | 2.50 | 312,303 | | |
| | Rebar to decks | **37,476** | lbs | 1.20 | 44,971 | | |
| | Misc. angles | **124,921** | sf | 0.50 | Incl | | |
| | Miscellaneous | | | | | | |
| | Allowance for running track | **1** | ls | 500,000.00 | 500,000 | | |
| | Fire proofing to columns and beams | **124,921** | sf | 2.25 | 281,072 | | |
| | Intumescent paint | **1** | ls | 50,000.00 | 50,000 | | |
| | Fire stopping floors | **1** | ls | 25,000.00 | 25,000 | | |
| | SUBTOTAL | | | | | 5,794,842 | |
| **B1020** | **ROOF CONSTRUCTION** | | | | | | |
| | Roof Structure - Steel: | | | | | | |
| | Steel beams and columns to new addition; 14.5#/SF | **601** | tns | 3,800.00 | 2,283,800 | | |
| | Premium for HSS | **150** | tns | 300.00 | 45,000 | | |
| | Exposed steel | **1** | ls | 50,000.00 | 50,000 | | |
| | Roof Structure | | | | | | |
| | Acoustic deck allowance | **5,000** | sf | 9.00 | 45,000 | | |
| | 3" 20 Ga. galvanized Metal Roof Deck | **77,906** | sf | 3.50 | 272,671 | | |
| | Miscellaneous | | | | | | |
| | Concrete under RTU's | **8,500** | sf | 10.00 | 85,000 | | |
| | Fire proofing to columns, beams and deck | **77,906** | sf | 3.00 | 233,718 | | |
| | SUBTOTAL | | | | | 3,015,189 | |
| | ***TOTAL - SUPERSTRUCTURE*** | | | | | | **$8,810,031** |
| ***B20*** | ***EXTERIOR CLOSURE*** | | | | | | |
| **B2010** | **EXTERIOR WALLS** | | | | | | |
| | **Exterior Wall Area; EXT 1** | *61,602* | sf | | | | |
| *055000* | *MISC. METALS* | | | | | | |
| | Stainless steel sign at main entrance | **1** | ls | 10,000.00 | 10,000 | | |
| *070001* | *WATERPROOFING, DAMPPROOFING AND CAULKING* | | | | | | |
| | Air barrier | **61,602** | sf | 7.00 | 431,214 | | |
| | Air barrier/flashing at windows | **13,309** | lf | 6.25 | 83,181 | | |
| | Miscellaneous sealants to closure | **61,602** | sf | 1.00 | 61,602 | | |
| *072100* | *THERMAL INSULATION* | | | | | | |
| | Insulation; 6" XPS | **61,602** | sf | 5.50 | 338,811 | | |
| | Insulation; 4" spray | **61,602** | sf | 4.25 | 261,809 | | |
| *076400* | *CLADDING* | | | | | | |
| | Metal panel; rainscreen system | **61,602** | sf | 70.00 | 4,312,140 | | |
| | Mechanical screen; includes backup structure | **1,700** | sf | 85.00 | 144,500 | | |
| | Soffits; including all backup; S1 | **3,215** | sf | 101.50 | 326,323 | | |
| *092900* | *GYPSUM BOARD ASSEMBLIES* | | | | | | |
| | 6" metal stud backup | **61,602** | sf | 12.00 | 739,224 | | |
| | Gypsum Sheathing | **61,602** | sf | 2.75 | 169,406 | | |
| | Drywall lining to interior face of stud backup | **61,602** | sf | 3.50 | 215,607 | | |
| | SUBTOTAL | | | | | 7,093,817 | |
| **B2020** | **WINDOWS** | | | | | | |
| | **Exterior Wall Area** | *22,626* | sf | | | | |



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|---|---|---|---|---|---|---|---|
| | **OPTION 4A NEW BUILDING** | | | | | | |
| *061000* | *ROUGH CARPENTRY* | | | | | | |
| | Wood blocking at openings | **13,309** | lf | 12.00 | 159,708 | | |
| *070001* | *WATERPROOFING, DAMPPROOFING AND CAULKING* | | | | | | |
| | Backer rod & double sealant | **13,309** | lf | 10.00 | 133,090 | | |
| *080001* | *METAL WINDOWS* | | | | | | |
| | Windows, triple glazed; fiberglass; W1 | **15,400** | sf | 125.00 | 1,925,000 | | |
| | Curtainwall, triple glazed; BOD Kawneer 1600 sys 2 1" IGU; W2 | **7,226** | sf | 165.00 | 1,192,290 | | |
| | Sunshades; 3" aluminum trellis | **1,500** | lf | 140.00 | 210,000 | | |
| *089000* | *LOUVERS* | | | | | | |
| | Louvers | **250** | sf | 75.00 | 18,750 | | |
| | SUBTOTAL | | | | | 3,638,838 | |
| **B2030** | **EXTERIOR DOORS** | | | | | | |
| | Glazed entrance doors including frame and hardware; double door | **10** | pr | 9,000.00 | 90,000 | | |
| | HM doors, frames and hardware- Double | **4** | pr | 2,000.00 | 8,000 | | |
| | Backer rod & double sealant | **280** | lf | 10.00 | 2,800 | | |
| | Wood blocking at openings | **280** | lf | 3.00 | 840 | | |
| | SUBTOTAL | | | | | 101,640 | |
| | ***TOTAL - EXTERIOR CLOSURE*** | | | | | | **$10,834,295** |
| ***B30*** | ***ROOFING*** | | | | | | |
| **B3010** | **ROOF COVERINGS** | | | | | | |
| | New roofing complete; TPO 8" Insulation; R1 | **82,906** | sf | 24.00 | 1,989,744 | | |
| | Roof garden/outdoor sensory garden; 50% decking/50% planters; includes furnishings and planting | **4,000** | sf | 60.00 | 240,000 | | |
| | SUBTOTAL | | | | | 2,229,744 | |
| **B3020** | **ROOF OPENINGS** | | | | | | |
| | Skylights, allow | **1** | ls | 30,000.00 | 30,000 | | |
| | Roof hatch | **1** | loc | 2,500.00 | 2,500 | | |
| | SUBTOTAL | | | | | 32,500 | |
| | ***TOTAL - ROOFING*** | | | | | | **$2,262,244** |
| ***C10*** | ***INTERIOR CONSTRUCTION*** | | | | | | |
| **C1010** | **PARTITIONS** | | | | | | |
| | Miscellaneous partitions/glazed partitions/borrowed lights/blocking etc. | **207,827** | gsf | 24.00 | 4,987,848 | | |
| | SUBTOTAL | | | | | 4,987,848 | |
| **C1020** | **INTERIOR DOORS** | | | | | | |
| | Interior doors, frames and hardware | **207,827** | gsf | 6.00 | 1,246,962 | | |
| | SUBTOTAL | | | | | 1,246,962 | |
| **C1030** | **SPECIALTIES / MILLWORK** | | | | | | |
| | Toilet Partitions and accessories | **207,827** | gsf | 1.00 | 207,827 | | |
| | Backer panels in electrical closets | **1** | ls | 1,000.00 | 1,000 | | |
| | Marker boards/tackboards in classrooms, offices, conference rooms, library and MP rooms | **207,827** | sf | 1.25 | 259,784 | | |
| | Room Signs | **207,827** | gsf | 0.50 | 103,914 | | |
| | Fire extinguisher cabinets | **69** | ea | 350.00 | 24,150 | | |
| | Lockers, full height | **710** | ea | 350.00 | 248,500 | | |
| | New catwalk | **1** | ls | 100,000.00 | 100,000 | | |
| | Janitors Work Shop Accessories | **1** | ls | 1,500.00 | 1,500 | | |
| | Janitors Closet Accessories | **3** | rms | 300.00 | 900 | | |
| | *Media* | | | | | | |
| | Reception desks | **2** | loc | 25,000 | 50,000 | | |



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PM&C

**Stoneham High School**
**Design Options**
Stoneham, MA

03-Dec-20

**PSR Estimate**

GFA 207,827

| CSI CODE | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|
| | **OPTION 4A NEW BUILDING** | | | | | | |
| | Railings to open to below areas | **151** | lf | 300 | 45,300 | | |
| | Library shelving at perimeters 7' Tall | | | | F,F & E | | |
| | Library shelving at perimeters 3' Tall | | | | F,F & E | | |
| | Stage proscenium | **1** | ls | 100,000 | 100,000 | | |
| | Display cases | **207,827** | sf | 0.25 | 51,957 | | |
| | Miscellaneous metals throughout building | **207,827** | sf | 1.25 | 259,784 | | |
| | Miscellaneous sealants throughout building | **207,827** | sf | 1.50 | 311,741 | | |
| | SUBTOTAL | | | | | 1,766,357 | |
| | ***TOTAL - INTERIOR CONSTRUCTION*** | | | | | | **$8,001,167** |
| | ***C20 STAIRCASES*** | | | | | | |
| **C2010** | **STAIR CONSTRUCTION** | | | | | | |
| | Metal pan stair; egress stair | **5** | flt | 35,000.00 | 175,000 | | |
| | Main staircase | **1** | flt | 50,000.00 | 50,000 | | |
| | Concrete fill to stairs | **6** | flt | 2,000.00 | 12,000 | | |
| | SUBTOTAL | | | | | 237,000 | |
| **C2020** | **STAIR FINISHES** | | | | | | |
| | High performance coating to stairs including all railings etc. | **6** | flt | 3,000.00 | 18,000 | | |
| | Rubber tile at stairs - landings | **600** | sf | 10.00 | 6,000 | | |
| | Rubber tile at stairs - treads & risers | **720** | lft | 19.06 | 13,723 | | |
| | SUBTOTAL | | | | | 37,723 | |
| | ***TOTAL - STAIRCASES*** | | | | | | **$274,723** |
| | ***C30 INTERIOR FINISHES*** | | | | | | |
| **C3010** | **WALL FINISHES** | | | | | | |
| | Wall finishes | **207,827** | sf | 14.00 | 2,909,578 | | |
| | SUBTOTAL | | | | | 2,909,578 | |
| **C3020** | **FLOOR FINISHES** | | | | | | |
| | Floor finishes | **207,827** | sf | 9.00 | 1,870,443 | | |
| | SUBTOTAL | | | | | 1,870,443 | |
| **C3030** | **CEILING FINISHES** | | | | | | |
| | Ceiling finishes | **207,827** | sf | 11.00 | 2,286,097 | | |
| | SUBTOTAL | | | | | 2,286,097 | |
| | ***TOTAL - INTERIOR FINISHES*** | | | | | | **$7,066,118** |
| | ***D10 CONVEYING SYSTEMS*** | | | | | | |
| **D1010** | **ELEVATOR** | | | | | | |
| | New elevator; 4 stop; oversize; 5,000 lbs | **1** | ea | 160,000.00 | 160,000 | | |
| | SUBTOTAL | | | | | 160,000 | |
| | ***TOTAL - CONVEYING SYSTEMS*** | | | | | | **$160,000** |
| | ***D20 PLUMBING*** | | | | | | |
| **D20** | **PLUMBING, GENERALLY** | | | | | | |
| | Plumbing; complete system | **207,827** | sf | 16.00 | 3,325,232 | | |
| | SUBTOTAL | | | | | 3,325,232 | |
| | ***TOTAL - PLUMBING*** | | | | | | **$3,325,232** |
| | ***D30 HVAC*** | | | | | | |
| **D30** | **HVAC, GENERALLY** | | | | | | |
| | Geothermal Heating/Cooling System | | | | | | |
| | (2) 225 ton heat recovery chiller-heaters with (200) 6" boreholes, active chilled beams, heat recovery units, and rooftop ahu's | **207,827** | sf | 70.00 | 14,547,890 | | |
| | SUBTOTAL | | | | | 14,547,890 | |
| | ***TOTAL - HVAC*** | | | | | | **$14,547,890** |
| | ***D40 FIRE PROTECTION*** | | | | | | |
| **D40** | **FIRE PROTECTION, GENERALLY** | | | | | | |
| | Fire protection system | **207,827** | gsf | 6.00 | 1,246,962 | | |
| | SUBTOTAL | | | | | 1,246,962 | |
| | ***TOTAL - FIRE PROTECTION*** | | | | | | **$1,246,962** |
| | ***D50 ELECTRICAL*** | | | | | | |
| **D5010** | **SERVICE & DISTRIBUTION** | | | | | | |
| | **Gear & Distribution** | | | | | | |
| | 5000A 480/277V switchboard | **1** | ls | 140,000.00 | 140,000 | | |
| | Normal power distribution with associated panelboards, transformers and feeders | **207,827** | sf | 4.00 | 831,308 | | |
| | Emergency power | | | | | | |
| | Emergency generator and ATS"s with associated panelboards, transformers and feeders | **207,827** | sf | 2.50 | 519,568 | | |
| | PV | | | | | | |
| | PV provisions only, with empty conduit and pull boxes, per narrative | **1** | ls | 5,000.00 | 5,000 | | |
| | Equipment Wiring | | | | | | |
| | Elevator and cab power feed and connection | **1** | ea | 5,000.00 | 5,000 | | |
| | Mechanical equipment wiring to HVAC heating and cooling equipment | **207,827** | sf | 2.50 | 519,568 | | |
| | Misc. equipment wiring | **209,000** | sf | 0.50 | 104,500 | | |
| | Kitchen equipment wiring | **1** | ls | 25,000.00 | 25,000 | | |
| | Gym equipment feed and connections | **1** | ls | 15,000.00 | 15,000 | | |
| | SUBTOTAL | | | | | 2,164,944 | |
| **D5020** | **LIGHTING & POWER** | | | | | | |
| | Lighting & Branch Power | | | | - | | |
| | Lighting fixtures with installation labor | **207,827** | sf | 6.00 | 1,246,962 | | |
| | Exterior building lighting | **1** | ls | 15,000.00 | 15,000 | | |
| | Lighting control system (Daylight Harvesting) | | | | | | |
| | Lighting controls with control panels, sensors and switches | **207,827** | sf | 1.25 | 259,784 | | |
| | Branch devices | | | | | | |
| | Duplex and GFI receptacles | **207,827** | sf | 0.50 | 103,914 | | |
| | Lighting and branch circuitry | | | | | | |
| | EMT and MC cable | **207,827** | sf | 4.50 | 935,222 | | |
| | SUBTOTAL | | | | | 2,560,882 | |
| **D5030** | **COMMUNICATION & SECURITY SYSTEMS** | | | | | | |
| | Fire Alarm | | | | | | |
| | Control panel | **1** | ea | 15,000.00 | 15,000 | | |
| | Annunciator | **1** | ea | 1,500.00 | 1,500 | | |
| | Beacon | **1** | ea | 2,250.00 | 2,250 | | |
| | Knox box | **1** | ea | 350.00 | 350 | | |
| | Radio master box | **1** | ea | 9,500.00 | 9,500 | | |
| | Devices and cabling | **209,000** | sf | 2.00 | 418,000 | | |
| | Mass. Notification | **209,000** | sf | 1.00 | 209,000 | | |
| | Testing programming | **1** | ls | 5,000.00 | 5,000 | | |
| | Bi-Directional System | | | | | | |
| | BDA system | **1** | ls | 100,000.00 | 100,000 | | |
| | Telephone/Data/CATV | | | | | | |
| | Network switches, PBX, IP, VP, CATV (By owner) | | | | By Owner | | |
| | Telecommunications rough in | **209,000** | sf | 1.00 | 209,000 | | |
| | Telecommunications devices and cabling | **209,000** | sf | 2.00 | 418,000 | | |
| | Grounding | **1** | ls | 1,500.00 | 1,500 | | |
| | Public Address/Clock System | | | | | | |

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**Stoneham High School**
**Design Options**
Stoneham, MA

03-Dec-20

**PSR Estimate**

GFA 207,827

| CSI CODE | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|
| | **OPTION 4A NEW BUILDING** | | | | | | |
| | PA/Master Clock system | **209,000** | sf | 1.00 | 209,000 | | |
| | Classroom Speech Amplification | **209,000** | sf | 0.50 | 104,500 | | |
| | Audio Visual (rough-in and power only) | | | | | | |
| | AV equipment | | | | By Owner | | |
| | Rough-In conduit and backboxes only | **209,000** | sf | 0.50 | 104,500 | | |
| | Auditorium | | | | | | |
| | Rigging system equipment & installation | | | | See equipment | | |
| | Power to rigging equipment | **1** | ls | 12,000.00 | 12,000 | | |
| | Stage dimming system with performance fixture package, allow | **1** | ls | 275,000.00 | 275,000 | | |
| | Installation, rough-in & 120V power to dimming equipment | **1** | ls | 70,000.00 | 70,000 | | |
| | Performance audio visual equipment, installation & LV cabling, allow | **1** | ls | 150,000.00 | 150,000 | | |
| | Performance audio visual rough-in and power | **1** | ls | 60,000.00 | 60,000 | | |
| | Cafeteria | | | | | | |
| | Sound system | **1** | ls | 15,000.00 | 15,000 | | |
| | Media Center | | | | | | |
| | Sound system | **1** | ls | 15,000.00 | 15,000 | | |
| | Gymnasium | | | | | | |
| | Sound system | **1** | ls | 30,000.00 | 30,000 | | |
| | Scoreboard/ shot clocks with feed and connection | **1** | ea | 15,000.00 | 15,000 | | |
| | Security System | | | | | | |
| | Head end | **1** | ls | 50,000.00 | 50,000 | | |
| | Card access system | **209,000** | sf | 1.00 | 209,000 | | |
| | Intrusion system | **209,000** | sf | 1.00 | 209,000 | | |
| | CCTV surveillance system | **209,000** | sf | 2.00 | 418,000 | | |
| | SUBTOTAL | | | | | 3,335,100 | |
| **D5040** | **OTHER ELECTRICAL SYSTEMS** | | | | | | |
| | Miscellaneous | | | | | | |
| | Lightning Protection System, UL Master label | **1** | ls | 95,000.00 | 95,000 | | |
| | Temp power and lights | **1** | ls | 150,000.00 | 150,000 | | |
| | Hoisting and rigging | **1** | ls | 10,000.00 | 10,000 | | |
| | Seismic restraints | **1** | ls | 7,500.00 | 7,500 | | |
| | Coordination, BIM & shop drawings | **1** | ls | 240,000.00 | 240,000 | | |
| | Fees & Permits | **1** | ls | 160,000.00 | 160,000 | | |
| | SUBTOTAL | | | | | 662,500 | |
| | ***TOTAL - ELECTRICAL*** | | | | | | **$8,723,426** |
| ***E10*** | ***EQUIPMENT*** | | | | | | |
| **E10** | **EQUIPMENT, GENERALLY** | | | | | | |
| | Gym wall pads | **1** | ls | 20,000.00 | 20,000 | | |
| | Basketball backstops; swing up; electric operated | **12** | loc | 10,000.00 | 120,000 | | |
| | Gymnasium dividing net; electrically operated | **3** | ea | 30,000.00 | 90,000 | | |
| | Volleyball net and standards | **1** | ls | 5,000.00 | 5,000 | | |
| | Telescoping bleachers | **900** | seats | 240.00 | 216,000 | | |
| | Theatrical Equipment Stage curtains, rigging and controls | **1** | ls | 350,000.00 | 350,000 | | |
| | Theatrical AV allowance | **1** | ls | 200,000.00 | 200,000 | | |
| | Kitchen equipment | **2,030** | sf | 220.00 | 446,600 | | |
| | Auditorium seats | **1,100** | seat | 350.00 | 385,000 | | |
| | SUBTOTAL | | | | | 1,832,600 | |
| | ***TOTAL - EQUIPMENT*** | | | | | | **$1,832,600** |
| ***E20*** | ***FURNISHINGS*** | | | | | | |
| **E2010** | **FIXED FURNISHINGS** | | | | | | |
| | Entry mats & frames - recessed with carpet/rubber strips | **500** | sf | 55.00 | 27,500 | | |
| | Window blinds | **22,626** | sf | 7.00 | 158,382 | | |



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|---|---|---|---|---|---|---|---|
| | **OPTION 4A NEW BUILDING** | | | | | | |
| *123553* | *CASEWORK* | | | | | | |
| | Sinks, counters and casework; allowance | **209,000** | sf | 10.00 | 2,090,000 | | |
| | SUBTOTAL | | | | | 2,275,882 | |
| **E2020** | **MOVABLE FURNISHINGS** | | | | | | |
| | All movable furnishings to be provided and installed by owner | | | | | | |
| | SUBTOTAL | | | | | NIC | |
| | ***TOTAL - FURNISHINGS*** | | | | | | **$2,275,882** |
| ***F10*** | ***SPECIAL CONSTRUCTION*** | | | | | | |
| **F10** | **SPECIAL CONSTRUCTION** | | | | | | |
| | No items in this section | | | | | | |
| | SUBTOTAL | | | | | | |
| | ***TOTAL - SPECIAL CONSTRUCTION*** | | | | | | |
| ***F20*** | ***SELECTIVE BUILDING DEMOLITION*** | | | | | | |
| **F2010** | **BUILDING ELEMENTS DEMOLITION** | | | | | | |
| | No items in this section | | | | | | |
| | SUBTOTAL | | | | | | |
| **F2020** | **HAZARDOUS COMPONENTS ABATEMENT** | | | | | | |
| | See main summary for HazMat allowance | | | | | See Summary | |
| | SUBTOTAL | | | | | | |
| | ***TOTAL - SELECTIVE BUILDING DEMOLITION*** | | | | | | |



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Stoneham, MA

03-Dec-20

**PSR Estimate**

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|---|---|---|---|---|---|---|---|
| | **SITEWORK OPTION 4A** | | | | | | |
| | ***G SITEWORK*** | *1,900,000* | *sf* | | - | | |
| | **G10 SITE PREPARATION & DEMOLITION** | | | | | | |
| | Site construction fence/barricades | **7,900** | lf | 18.00 | 142,200 | | |
| | Site construction fence gates | **1** | ea | 10,000.00 | 10,000 | | |
| | Stabilized construction entrance | **1** | ls | 15,000.00 | 15,000 | | |
| | Pavement/curbing removal, crush and re-use for sub-base | **250,800** | sf | 1.00 | 250,800 | | |
| | Demolish tennis courts | **56,200** | sf | 1.50 | 84,300 | | |
| | Demolish track/football field | **175,625** | sf | 1.00 | 175,625 | | |
| | Walkways | **1** | ls | 20,000.00 | 20,000 | | |
| | Miscellaneous demolition | **1** | ls | 100,000.00 | 100,000 | | |
| | SUBTOTAL | | | | | 797,925 | |
| | Temporary parking | 250 | spc | | | | |
| | gravel base; 12" thick | **4,074** | cy | 40.00 | 162,960 | | |
| | Binder course | **12,222** | sy | 20.00 | 244,440 | | |
| | Construction fence | **1,900** | lf | 18.00 | 34,200 | | |
| | Line markings/painting/signs | **250** | spc | 100.00 | 25,000 | | |
| | Demolish temp parking | **110,000** | sf | 1.00 | 110,000 | | |
| | Blasting for temporary parking | **1** | ls | 150,000.00 | 150,000 | | |
| | SUBTOTAL | | | | | 726,600 | |
| | Site Earthwork | | | | | | |
| | Strip Topsoil and remove; 6" thick | **3,148** | cy | 16.00 | 50,368 | | |
| | Fine grading | **659,695** | sf | 0.20 | 131,939 | | |
| | Silt fence/erosion control, wash bays, stock piles | **7,900** | lf | 12.00 | 94,800 | | |
| | Silt fence maintenance and monitoring | **1** | ls | 40,000.00 | 40,000 | | |
| | Hazardous Waste Remediation | | | | | | |
| | Remove existing underground fuel storage tanks; 500 Gal | **1** | ls | 50,000.00 | 50,000 | | |
| | Dispose/treat contaminated soils | **1** | ls | 20,000.00 | 20,000 | | |
| | SUBTOTAL | | | | | 631,437 | |
| | **G20 SITE IMPROVEMENTS** | | | | | | |
| | Asphalt Paving; parking lot and roadway | *250,800* | | | | | |
| | gravel base; 12" thick | **9,289** | cy | 40.00 | 371,560 | | |
| | asphalt; 4" thick | **27,867** | sy | 25.00 | 696,675 | | |
| | VGC | **10,032** | lf | 40.00 | 401,280 | | |
| | Single solid lines, 4" thick | **1** | ls | 10,000.00 | 10,000 | | |
| | Crosswalk Hatching | **4** | loc | 900.00 | 3,600 | | |
| | Other road markings | **1** | ls | 7,500.00 | 7,500 | | |
| | HC curb cuts | **8** | loc | 350.00 | 2,800 | | |
| | Signage | **1** | ls | 20,000.00 | 20,000 | | |
| | Pedestrian Paving | | | | | | |
| | Concrete paving | | | | | | |
| | gravel base; 8" thick | **372** | cy | 35.00 | 13,020 | | |
| | 4" concrete paving | **15,000** | sf | 9.00 | 135,000 | | |
| | Drop Off Plaza | *16,720* | *sf* | | | | |
| | Precast pavers; 50% | **8,360** | sf | 40.00 | 334,400 | | |
| | Poured in place rubber safety surface; 25% | **4,180** | sf | 26.00 | 108,680 | | |
| | Planted areas; 25% | **4,180** | sf | 10.00 | 41,800 | | |
| | Ground Level Garden: Pre-K Playground | *10,450* | sf | | - | | |
| | Rubber surface over concrete | **7,838** | sf | 18.00 | 141,084 | | |
| | Raised planters; green space | **2,613** | sf | 10.00 | 26,130 | | |
| | Shade structure | **1** | loc | 30,000.00 | 30,000 | | |
| | Music elements | **1** | loc | 35,000.00 | 35,000 | | |
| | Play equipment | **1** | loc | 50,000.00 | 50,000 | | |
| | SUBTOTAL | | | | | 2,428,529 | |

## Site Athletics

**STADIUM - Running Track/Turf Football Field/Bleachers**



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Stoneham, MA

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| CSI CODE | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|
| | **SITEWORK OPTION 4A** | | | | | | |
| | Synthetic turf anchor curb integral with trench drain | **1,310** | lf | 80.00 | 104,800 | | |
| | Resilient surface at track | **75,525** | sf | 8.00 | 604,200 | | |
| | Gravel base - assumed 12" thick | **3,707** | cy | 45.00 | 166,815 | | |
| | Geotextile reinforced impermeable liner 20 mill | **100,100** | sf | 1.00 | 100,100 | | |
| | Synthetic turf field - Hybrid infill synthetic field with premolded resilient drainage pad | **100,100** | sf | 12.00 | 1,201,200 | | |
| | Football goals | **2** | ea | 3,500.00 | 7,000 | | |
| | Scoreboard | **1** | ea | 60,000.00 | 60,000 | | |
| | Line markings - allowance | **2** | ls | 2,000.00 | 4,000 | | |
| | 1250 seat bleacher | **1** | loc | 450,000.00 | 450,000 | | |
| | Rip-Rap under bleachers | **1** | ls | 25,000.00 | 25,000 | | |
| | Field logo's | **1** | loc | 6,000.00 | 6,000 | | |
| | Discus pad & enclosure | **1** | ea | 15,000.00 | 15,000 | | |
| | Shot put pad & enclosure | **1** | ea | 15,000.00 | 15,000 | | |
| | Long jump/triple jump | **2** | ea | 10,000.00 | 20,000 | | |
| | Pole vault and accessories | **1** | ea | 10,000.00 | 10,000 | | |
| | High jump pads | **1** | ea | 6,000.00 | 6,000 | | |
| | Javelin with track surfacing runway | **1** | ea | 10,000.00 | 10,000 | | |
| | Hurdles and starting blocks | **1** | ls | 8,000.00 | 8,000 | | |
| | Track crossing pad | **1** | ls | 10,000.00 | 10,000 | | |
| | Trash/recycling receptacles | **12** | ea | 800.00 | 9,600 | | |
| | Team benches- 7'-5" long | **12** | ea | 1,500.00 | 18,000 | | |
| | Portable ball control netting, 120' long | **4** | ea | 2,500.00 | 10,000 | | |
| | Pit covers | **2** | ea | 3,500.00 | 7,000 | | |
| | Subsurface infiltration/drainage/field drains etc. | **175,625** | sf | 1.25 | 219,531 | | |
| | Stadium sound system (AV) | **1** | ls | 120,000.00 | 120,000 | | |
| | SUBTOTAL | | | | | 3,207,246 | |
| | Baseball/Field Hockey | **1** | ea | 360,000.00 | 360,000 | | |
| | Synthetic grass soccer fields; Two Fields | **140,500** | sf | 12.00 | 1,686,000 | | |
| | Half size field; grass | **1** | ea | 150,000.00 | 150,000 | | |
| | Softball field | **1** | ea | 250,000.00 | 250,000 | | |
| | Tennis courts - Six Courts (including pickle courts); 1 basketball court | *50,600* | *sf* | | | | |
| | gravel base; 8" thick | **1,256** | cy | 40.00 | 50,240 | | |
| | Asphalt paving | **5,622** | sy | 30.00 | 168,660 | | |
| | Color coating | **50,600** | sf | 2.00 | 101,200 | | |
| | Fence with wind break | **1,177** | lf | 80.00 | 94,160 | | |
| | Tennis court nets | **5** | set | 1,500.00 | 7,500 | | |
| | Basketball hoops | **1** | set | 5,000.00 | 5,000 | | |
| | SUBTOTAL | | | | | 2,872,760 | |
| | Site Improvements | | | | | | |
| | Flag pole 50' high | **1** | ea | 6,500.00 | 6,500 | | |
| | Concrete retaining walls | **1** | ls | 500,000.00 | 500,000 | | |
| | Other site improvements; walls, fences etc. | **1** | ls | 200,000.00 | 200,000 | | |
| | Outdoor dining | **1** | ls | 50,000.00 | 50,000 | | |
| | SUBTOTAL | | | | | 756,500 | |
| | Landscaping | | | | | | |
| | Topsoil - reuse existing | **3,148** | cy | 25.00 | 78,700 | | |
| | Topsoil - Import new topsoil; minimum 6" | **581** | cy | 65.00 | 37,765 | | |
| | Seeding | **964,805** | sf | 0.15 | 144,721 | | |
| | Green space | **31,350** | sf | 10.00 | 313,500 | | |
| | SUBTOTAL | | | | | 574,686 | |
| | **G30 CIVIL MECHANICAL UTILITIES** | | | | | | |
| | Water supply; Pricing includes E&B and bedding | | | | | | |
| | Temporary water line | **650** | lf | 120.00 | 78,000 | | |
| | New DI piping; 8" | **450** | lf | 100.00 | 45,000 | | |
| | New DI piping; 8" Fire loop | **2,800** | lf | 100.00 | 280,000 | | |



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PM&C

**Stoneham High School**
Design Options
Stoneham, MA

03-Dec-20

**PSR Estimate**

| | CSI CODE | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|---|
| | | **SITEWORK OPTION 4A** | | | | | | |
| 125 | | Connect to existing | **1** | loc | 5,000.00 | 5,000 | | |
| 126 | | FD connection | **1** | ea | 2,000.00 | 2,000 | | |
| 127 | | Gate valves | **8** | ea | 750.00 | 6,000 | | |
| 128 | | Fire hydrant | **3** | ea | 5,000.00 | 15,000 | | |
| 129 | | SUBTOTAL | | | | | 431,000 | |
| 129 | | Sanitary; Pricing includes E&B and bedding | | | | | | |
| 130 | | Temporary sewer line | **1** | ls | 50,000.00 | 50,000 | | |
| 131 | | Manholes | **4** | ea | 4,000.00 | 16,000 | | |
| 132 | | Grease trap | **1** | ea | 15,000.00 | 15,000 | | |
| 133 | | 8" PVC | **1,000** | lf | 60.00 | 60,000 | | |
| 134 | | Connect to existing drain | **1** | ea | 3,000.00 | 3,000 | | |
| 135 | | SUBTOTAL | | | | | 144,000 | |
| 135 | | Storm water; Pricing includes E&B and bedding | | | | | | |
| 136 | | Temporary storm (relocate existing 15" line + new manholes) | **1** | ls | 125,000.00 | 125,000 | | |
| 137 | | Allowance for new drainage systems; piping only | **250,800** | sf | 3.00 | 752,400 | | |
| 138 | | Infiltration systems; cultec chambers | **137,500** | cf | 8.00 | 1,100,000 | | |
| 139 | | Rock excavation | **1** | ls | 250,000.00 | 250,000 | | |
| 140 | | Catch basins | **12** | ea | 3,800.00 | 45,600 | | |
| 141 | | Manholes | **10** | ea | 4,500.00 | 45,000 | | |
| 142 | | WQ structures | **3** | ea | 16,000.00 | 48,000 | | |
| 143 | | Area drains | **4** | ea | 1,500.00 | 6,000 | | |
| 144 | | Work to culvert | **1** | ls | 250,000.00 | 250,000 | | |
| 145 | | Gas service | | | | | | |
| 146 | | E&B trench for new gas pipe - install by plumbing | **450** | lf | 25.00 | 11,250 | | |
| 147 | | SUBTOTAL | | | | | 2,633,250 | |
| 148 | | | | | | | | |
| 149 | **G40** | **ELECTRICAL UTILITIES** | | | | | | |
| 150 | | | | | | | | |
| 151 | | Power | | | | | | |
| 152 | | Utility co. backcharges, allow | **1** | ls | 30,000.00 | Utility co. | | |
| 153 | | Connections at existing manhole | | | | Utility co. | | |
| 154 | | Manhole | **1** | ls | 8,500.00 | 8,500 | | |
| 155 | | Connections in manhole | **1** | ls | 3,500.00 | 3,500 | | |
| 156 | | Primary ductbank 2-5" ductbank, empty, allow | **1000** | lf | 120.00 | 120,000 | | |
| 157 | | Transformer by utility company | | | | By Utility Co. | | |
| 158 | | Transformer pad; temporary for relocated transformer | **1** | ea | 5,000.00 | 5,000 | | |
| 159 | | Secondary service | **60** | lf | 1,100.00 | 66,000 | | |
| 160 | | Communications | | | | | | |
| 161 | | Connection at riser pole, allow | **1** | ea | 1,500.00 | 1,500 | | |
| 162 | | Telecom ductbank 4-4", allow | **1000** | lf | 152.00 | 152,000 | | |
| 163 | | Site Lighting | | | | | | |
| 164 | | Site Parking lighting (allow) | **250,800** | sf | 2.00 | 501,600 | | |
| 165 | | SUBTOTAL | | | | | 858,100 | |
| 166 | | | | | | | | |
| 167 | | **TOTAL - SITE DEVELOPMENT** | | | | | | ***$16,062,033*** |



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**Stoneham High School**
**Design Options**
Stoneham, MA

03-Dec-20

**PSR Estimate**

GFA 207,827

## *CONSTRUCTION COST SUMMARY*

| | BUILDING SYSTEM | | SUB-TOTAL | TOTAL | $/SF | % |
|---|---|---|---|---|---|---|
| **OPTION 4B NEW BUILDING** | | | | | | |
| **A10** | **FOUNDATIONS** | | | | | |
| | A1010 | Standard Foundations | $1,649,216 | | | |
| | A1020 | Special Foundations | $0 | | | |
| | A1030 | Lowest Floor Construction | $1,584,851 | **$3,234,067** | $15.56 | 4.3% |
| **A20** | **BASEMENT CONSTRUCTION** | | | | | |
| | A2010 | Basement Excavation | $0 | | | |
| | A2020 | Basement Walls | $0 | **$0** | $0.00 | 0.0% |
| **B10** | **SUPERSTRUCTURE** | | | | | |
| | B1010 | Upper Floor Construction | $4,949,168 | | | |
| | B1020 | Roof Construction | $3,712,194 | **$8,661,362** | $41.68 | 11.6% |
| **B20** | **EXTERIOR CLOSURE** | | | | | |
| | B2010 | Exterior Walls | $7,952,263 | | | |
| | B2020 | Windows | $4,447,560 | | | |
| | B2030 | Exterior Doors | $101,640 | **$12,501,463** | $60.15 | 16.8% |
| **B30** | **ROOFING** | | | | | |
| | B3010 | Roof Coverings | $2,713,824 | | | |
| | B3020 | Roof Openings | $32,500 | **$2,746,324** | $13.21 | 3.7% |
| **C10** | **INTERIOR CONSTRUCTION** | | | | | |
| | C1010 | Partitions | $4,987,848 | | | |
| | C1020 | Interior Doors | $1,246,962 | | | |
| | C1030 | Specialties/Millwork | $1,766,357 | **$8,001,167** | $38.50 | 10.7% |
| **C20** | **STAIRCASES** | | | | | |
| | C2010 | Stair Construction | $282,000 | | | |
| | C2020 | Stair Finishes | $37,723 | **$319,723** | $1.54 | 0.4% |
| **C30** | **INTERIOR FINISHES** | | | | | |
| | C3010 | Wall Finishes | $2,909,578 | | | |
| | C3020 | Floor Finishes | $1,870,443 | | | |
| | C3030 | Ceiling Finishes | $2,286,097 | **$7,066,118** | $34.00 | 9.5% |
| **D10** | **CONVEYING SYSTEMS** | | | | | |
| | D1010 | Elevator | $120,000 | **$120,000** | $0.58 | 0.2% |
| **D20** | **PLUMBING** | | | | | |
| | D20 | Plumbing | $3,325,232 | **$3,325,232** | $16.00 | 4.5% |
| **D30** | **HVAC** | | | | | |
| | D30 | HVAC | $14,547,890 | **$14,547,890** | $70.00 | 19.5% |



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PM&C

**Stoneham High School**
**Design Options**
Stoneham, MA

03-Dec-20

**PSR Estimate** GFA 207,827

## *CONSTRUCTION COST SUMMARY*

| | *BUILDING SYSTEM* | | *SUB-TOTAL* | *TOTAL* | *$/SF* | *%* |
|---|---|---|---|---|---|---|
| **OPTION 4B NEW BUILDING** | | | | | | |
| **D40** | **FIRE PROTECTION** | | | | | |
| | D40 | Fire Protection | $1,246,962 | **$1,246,962** | $6.00 | 1.7% |
| **D50** | **ELECTRICAL** | | | | | |
| | D5010 | Complete System | $8,723,426 | **$8,723,426** | $41.97 | 11.7% |
| **E10** | **EQUIPMENT** | | | | | |
| | E10 | Equipment | $1,710,100 | **$1,710,100** | $8.23 | 2.3% |
| **E20** | **FURNISHINGS** | | | | | |
| | E2010 | Fixed Furnishings | $2,309,748 | | | |
| | E2020 | Movable Furnishings | NIC | **$2,309,748** | $11.11 | 3.1% |
| **F10** | **SPECIAL CONSTRUCTION** | | | | | |
| | F10 | Special Construction | $0 | **$0** | $0.00 | 0.0% |
| **F20** | **HAZMAT REMOVALS** | | | | | |
| | F2010 | Building Elements Demolition | $0 | | | |
| | F2020 | Hazardous Components Abatement | $0 | **$0** | $0.00 | 0.0% |
| ***TOTAL DIRECT COST (Trade Costs)*** | | | | ***$74,513,582*** | *$358.54* | *100.0%* |



PM&C

**Stoneham High School**
**Design Options**
Stoneham, MA

03-Dec-20

**PSR Estimate** GFA 207,827

| | *CSI CODE* | *DESCRIPTION* | *QTY* | *UNIT* | *UNIT COST* | *EST'D COST* | *SUB TOTAL* | *TOTAL COST* |
|---|---|---|---|---|---|---|---|---|
| | **OPTION 4B NEW BUILDING** | | | | | | | |
| 1 | | ***GROSS FLOOR AREA CALCULATION*** | | | | | | |
| 2 | | | | | | | | |
| 3 | | Level 01 | | | 103,076 | | | |
| 4 | | Level 02 | | | 62,426 | | | |
| 5 | | Level 03 | | | 42,325 | | | |
| 6 | | | | | | | | |
| 7 | | ***TOTAL GROSS FLOOR AREA (GFA)*** | | | | **207,827** | ***sf*** | |
| 8 | | | | | | | | |
| 9 | | | | | | | | |
| 10 | | ***A10 FOUNDATIONS*** | | | | | | |
| 11 | | | | | | | | |
| 12 | **A1010** | **STANDARD FOUNDATIONS** | | | | | | |
| 13 | | Allowance for standard foundations | **103,076** | sf | 16.00 | 1,649,216 | | |
| 14 | | SUBTOTAL | | | | | 1,649,216 | |
| 15 | | | | | | | | |
| 16 | **A1020** | **SPECIAL FOUNDATIONS** | | | | | | |
| 17 | | **No work assumed** | | | | | | |
| 18 | | SUBTOTAL | | | | | | |
| 19 | | | | | | | | |
| 20 | **A1030** | **LOWEST FLOOR CONSTRUCTION** | | | | | | |
| 21 | | New Slab on grade, 5" thick | | | | | | |
| 22 | | Gravel fill, 12" | **3,818** | cy | 40.00 | 152,720 | | |
| 23 | | Rigid insulation | **103,076** | sf | 2.25 | 231,921 | | |
| 24 | | Vapor barrier | **103,076** | sf | 1.00 | 103,076 | | |
| 25 | | Compact existing sub-grade | **103,076** | sf | 0.50 | 51,538 | | |
| 26 | | Mesh reinforcing 15% lap | **118,537** | sf | 1.15 | 136,318 | | |
| 27 | | Concrete - 5" thick; 4,000 psi | **1,684** | cy | 125.00 | 210,500 | | |
| 28 | | Placing concrete | **1,684** | cy | 45.00 | 75,780 | | |
| 29 | | Finishing and curing concrete | **103,076** | sf | 2.50 | 257,690 | | |
| 30 | | Control joints - saw cut | **103,076** | sf | 0.10 | 10,308 | | |
| 31 | | Miscellaneous | | | | | | |
| 32 | | Premium for rock excavation to 100% of foundations | **1** | ls | 250,000.00 | 250,000 | | |
| 33 | | Premium for sloped floor at auditorium | **1** | ls | 50,000.00 | 50,000 | | |
| 34 | | New Elevator pit | **1** | ea | 40,000.00 | 40,000 | | |
| 35 | | Equipment pads | **1** | ls | 15,000.00 | 15,000 | | |
| 36 | | SUBTOTAL | | | | | 1,584,851 | |
| 37 | | | | | | | | |
| 38 | | ***TOTAL - FOUNDATIONS*** | | | | | | **$3,234,067** |
| 39 | | | | | | | | |
| 40 | | | | | | | | |
| 41 | | ***A20 BASEMENT CONSTRUCTION*** | | | | | | |
| 42 | | | | | | | | |
| 43 | **A2010** | **BASEMENT EXCAVATION** | | | | | | |
| 44 | | SUBTOTAL | | | | | - | |
| 45 | | | | | | | | |
| 46 | **A2020** | **BASEMENT WALLS** | | | | | | |
| 47 | | SUBTOTAL | | | | | - | |
| 48 | | | | | | | | |
| 49 | | ***TOTAL - BASEMENT CONSTRUCTION*** | | | | | | |
| 50 | | | | | | | | |
| 51 | | | | | | | | |
| 52 | | ***B10 SUPERSTRUCTURE*** | | | | | | |
| 53 | | | 14.49 | lbs/sf | | - | | |
| 54 | **B1010** | **FLOOR CONSTRUCTION** | 1,506 | tns | | - | | |
| 55 | | Floor Structure - Steel: | | | | | | |
| 56 | | Steel beams and columns to new addition; 14.5#/SF | **759** | tns | 3,800.00 | 2,884,200 | | |
| 57 | | Premium for HSS | **190** | tns | 300.00 | 57,000 | | |
| 58 | | Shear studs | **20,950** | ea | 2.50 | 52,375 | | |
| 59 | | Floor Structure | | | | | | |
| 60 | | 2" 18 Ga. Metal galvanized floor Deck | **104,751** | sf | 4.00 | 419,004 | | |
| 61 | | WWF reinforcement | **120,464** | sf | 0.80 | 96,371 | | |



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**Stoneham High School**
**Design Options**
Stoneham, MA

03-Dec-20

**PSR Estimate**

GFA 207,827

| CSI CODE | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|
| | **OPTION 4B NEW BUILDING** | | | | | | |
| | Concrete Fill to metal deck; 6" Normal Weight | **2,444** | cy | 135.00 | 329,940 | | |
| | Place and finish concrete | **104,751** | sf | 2.50 | 261,878 | | |
| | Rebar to decks | **31,425** | lbs | 1.20 | 37,710 | | |
| | Misc. angles | **104,751** | sf | 0.50 | Incl | | |
| | Miscellaneous | | | | | | |
| | Allowance for running track | **1** | ls | 500,000.00 | 500,000 | | |
| | Fire proofing to columns and beams | **104,751** | sf | 2.25 | 235,690 | | |
| | Intumescent paint | **1** | ls | 50,000.00 | 50,000 | | |
| | Fire stopping floors | **1** | ls | 25,000.00 | 25,000 | | |
| | SUBTOTAL | | | | | 4,949,168 | |
| **B1020** | **ROOF CONSTRUCTION** | | | | | | |
| | Roof Structure - Steel: | | | | | | |
| | Steel beams and columns to new addition; 14.5#/SF | **747** | tns | 3,800.00 | 2,838,600 | | |
| | Premium for HSS | **187** | tns | 300.00 | 56,100 | | |
| | Exposed steel | **1** | ls | 50,000.00 | 50,000 | | |
| | Roof Structure | | | | | | |
| | Acoustic deck allowance | **5,000** | sf | 9.00 | 45,000 | | |
| | 3" 20 Ga. galvanized Metal Roof Deck | **98,076** | sf | 3.50 | 343,266 | | |
| | Miscellaneous | | | | | | |
| | Concrete under RTU's | **8,500** | sf | 10.00 | 85,000 | | |
| | Fire proofing to columns, beams and deck | **98,076** | sf | 3.00 | 294,228 | | |
| | SUBTOTAL | | | | | 3,712,194 | |
| | ***TOTAL - SUPERSTRUCTURE*** | | | | | | **$8,661,362** |
| ***B20*** | ***EXTERIOR CLOSURE*** | | | | | | |
| **B2010** | **EXTERIOR WALLS** | | | | | | |
| | **Exterior Wall Area; EXT 1** | *66,817* | sf | | | | |
| *055000* | *MISC. METALS* | | | | | | |
| | Stainless steel sign at main entrance | **1** | ls | 10,000.00 | 10,000 | | |
| *070001* | *WATERPROOFING, DAMPPROOFING AND CAULKING* | | | | | | |
| | Air barrier | **66,817** | sf | 7.00 | 467,719 | | |
| | Air barrier/flashing at windows | **16,155** | lf | 6.25 | 100,969 | | |
| | Miscellaneous sealants to closure | **66,817** | sf | 1.00 | 66,817 | | |
| *072100* | *THERMAL INSULATION* | | | | | | |
| | Insulation; 6" XPS | **66,817** | sf | 5.50 | 367,494 | | |
| | Insulation; 4" spray | **66,817** | sf | 4.25 | 283,972 | | |
| *076400* | *CLADDING* | | | | | | |
| | Metal panel; rainscreen system | **66,817** | sf | 70.00 | 4,677,190 | | |
| | Mechanical screen; includes backup structure | **1,004** | sf | 85.00 | 85,340 | | |
| | Soffits; including all backup; S1 | **6,634** | sf | 101.50 | 673,351 | | |
| *092900* | *GYPSUM BOARD ASSEMBLIES* | | | | | | |
| | 6" metal stud backup | **66,817** | sf | 12.00 | 801,804 | | |
| | Gypsum Sheathing | **66,817** | sf | 2.75 | 183,747 | | |
| | Drywall lining to interior face of stud backup | **66,817** | sf | 3.50 | 233,860 | | |
| | SUBTOTAL | | | | | 7,952,263 | |
| **B2020** | **WINDOWS** | | | | | | |
| | **Exterior Wall Area** | *27,464* | sf | | | | |
| *061000* | *ROUGH CARPENTRY* | | | | | | |



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GFA 207,827

| CSI CODE | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|
| | **OPTION 4B NEW BUILDING** | | | | | | |
| | Wood blocking at openings | **16,155** | lf | 12.00 | 193,860 | | |
| *070001* | *WATERPROOFING, DAMPPROOFING AND CAULKING* | | | | | | |
| | Backer rod & double sealant | **16,155** | lf | 10.00 | 161,550 | | |
| *080001* | *METAL WINDOWS* | | | | | | |
| | Windows, triple glazed; fiberglass; W1 | **16,704** | sf | 125.00 | 2,088,000 | | |
| | Curtainwall, triple glazed; BOD Kawneer 1600 sys 2 1" IGU; W2 | **10,760** | sf | 165.00 | 1,775,400 | | |
| | Sunshades; 3" aluminum trellis | **1,500** | lf | 140.00 | 210,000 | | |
| *089000* | *LOUVERS* | | | | | | |
| | Louvers | **250** | sf | 75.00 | 18,750 | | |
| | SUBTOTAL | | | | | 4,447,560 | |
| **B2030** | **EXTERIOR DOORS** | | | | | | |
| | Glazed entrance doors including frame and hardware; double door | **10** | pr | 9,000.00 | 90,000 | | |
| | HM doors, frames and hardware- Double | **4** | pr | 2,000.00 | 8,000 | | |
| | Backer rod & double sealant | **280** | lf | 10.00 | 2,800 | | |
| | Wood blocking at openings | **280** | lf | 3.00 | 840 | | |
| | SUBTOTAL | | | | | 101,640 | |
| | ***TOTAL - EXTERIOR CLOSURE*** | | | | | | **$12,501,463** |
| ***B30*** | ***ROOFING*** | | | | | | |
| **B3010** | **ROOF COVERINGS** | | | | | | |
| | New roofing complete; TPO 8" Insulation; R1 | **103,076** | sf | 24.00 | 2,473,824 | | |
| | Roof garden/outdoor sensory garden; 50% decking/50% planters; includes furnishings and planting | **4,000** | sf | 60.00 | 240,000 | | |
| | SUBTOTAL | | | | | 2,713,824 | |
| **B3020** | **ROOF OPENINGS** | | | | | | |
| | Skylights, allow | 1 | ls | 30,000.00 | 30,000 | | |
| | Roof hatch | 1 | loc | 2,500.00 | 2,500 | | |
| | SUBTOTAL | | | | | 32,500 | |
| | ***TOTAL - ROOFING*** | | | | | | **$2,746,324** |
| ***C10*** | ***INTERIOR CONSTRUCTION*** | | | | | | |
| **C1010** | **PARTITIONS** | | | | | | |
| | Miscellaneous partitions/glazed partitions/borrowed lights/blocking etc. | **207,827** | gsf | 24.00 | 4,987,848 | | |
| | SUBTOTAL | | | | | 4,987,848 | |
| **C1020** | **INTERIOR DOORS** | | | | | | |
| | Interior doors, frames and hardware | **207,827** | gsf | 6.00 | 1,246,962 | | |
| | SUBTOTAL | | | | | 1,246,962 | |
| **C1030** | **SPECIALTIES / MILLWORK** | | | | | | |
| | Toilet Partitions and accessories | **207,827** | gsf | 1.00 | 207,827 | | |
| | Backer panels in electrical closets | **1** | ls | 1,000.00 | 1,000 | | |
| | Marker boards/tackboards in classrooms, offices, conference rooms, library and MP rooms | **207,827** | sf | 1.25 | 259,784 | | |
| | Room Signs | **207,827** | gsf | 0.50 | 103,914 | | |
| | Fire extinguisher cabinets | **69** | ea | 350.00 | 24,150 | | |
| | Lockers, full height | **710** | ea | 350.00 | 248,500 | | |
| | New catwalk | **1** | ls | 100,000.00 | 100,000 | | |
| | Janitors Work Shop Accessories | **1** | ls | 1,500.00 | 1,500 | | |
| | Janitors Closet Accessories | **3** | rms | 300.00 | 900 | | |
| | *Media* | | | | | | |
| | Reception desks | **2** | loc | 25,000 | 50,000 | | |
| | Railings to open to below areas | **151** | lf | 300 | 45,300 | | |



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PM&C

**Stoneham High School**
**Design Options**
Stoneham, MA

03-Dec-20

**PSR Estimate**

GFA 207,827

| CSI CODE | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|
| | **OPTION 4B NEW BUILDING** | | | | | | |
| | Library shelving at perimeters 7' Tall | | | | F,F & E | | |
| | Library shelving at perimeters 3' Tall | | | | F,F & E | | |
| | Stage proscenium | **1** | ls | 100,000 | 100,000 | | |
| | Display cases | **207,827** | sf | 0.25 | 51,957 | | |
| | Miscellaneous metals throughout building | **207,827** | sf | 1.25 | 259,784 | | |
| | Miscellaneous sealants throughout building | **207,827** | sf | 1.50 | 311,741 | | |
| | SUBTOTAL | | | | | 1,766,357 | |
| | ***TOTAL - INTERIOR CONSTRUCTION*** | | | | | | **$8,001,167** |
| | ***C20 STAIRCASES*** | | | | | | |
| **C2010** | **STAIR CONSTRUCTION** | | | | | | |
| | Metal pan stair; egress stair | **2** | flt | 35,000.00 | 70,000 | | |
| | Main staircase | **4** | flt | 50,000.00 | 200,000 | | |
| | Concrete fill to stairs | **6** | flt | 2,000.00 | 12,000 | | |
| | SUBTOTAL | | | | | 282,000 | |
| **C2020** | **STAIR FINISHES** | | | | | | |
| | High performance coating to stairs including all railings etc. | **6** | flt | 3,000.00 | 18,000 | | |
| | Rubber tile at stairs - landings | **600** | sf | 10.00 | 6,000 | | |
| | Rubber tile at stairs - treads & risers | **720** | lft | 19.06 | 13,723 | | |
| | SUBTOTAL | | | | | 37,723 | |
| | ***TOTAL - STAIRCASES*** | | | | | | **$319,723** |
| | ***C30 INTERIOR FINISHES*** | | | | | | |
| **C3010** | **WALL FINISHES** | | | | | | |
| | Wall finishes | **207,827** | sf | 14.00 | 2,909,578 | | |
| | SUBTOTAL | | | | | 2,909,578 | |
| **C3020** | **FLOOR FINISHES** | | | | | | |
| | Floor finishes | **207,827** | sf | 9.00 | 1,870,443 | | |
| | SUBTOTAL | | | | | 1,870,443 | |
| **C3030** | **CEILING FINISHES** | | | | | | |
| | Ceiling finishes | **207,827** | sf | 11.00 | 2,286,097 | | |
| | SUBTOTAL | | | | | 2,286,097 | |
| | ***TOTAL - INTERIOR FINISHES*** | | | | | | **$7,066,118** |
| | ***D10 CONVEYING SYSTEMS*** | | | | | | |
| **D1010** | **ELEVATOR** | | | | | | |
| | New elevator; 3 stop; oversize; 5,000 lbs | **1** | ea | 120,000.00 | 120,000 | | |
| | SUBTOTAL | | | | | 120,000 | |
| | ***TOTAL - CONVEYING SYSTEMS*** | | | | | | **$120,000** |
| | ***D20 PLUMBING*** | | | | | | |
| **D20** | **PLUMBING, GENERALLY** | | | | | | |
| | Plumbing; complete system | **207,827** | sf | 16.00 | 3,325,232 | | |
| | SUBTOTAL | | | | | 3,325,232 | |
| | ***TOTAL - PLUMBING*** | | | | | | **$3,325,232** |
| | ***D30 HVAC*** | | | | | | |
| **D30** | **HVAC, GENERALLY** | | | | | | |
| | Geothermal Heating/Cooling System | | | | | | |
| | (2) 225 ton heat recovery chiller-heaters with (200) 6" boreholes, active chilled beams, heat recovery units, and rooftop ahu's | **207,827** | sf | 70.00 | 14,547,890 | | |
| | SUBTOTAL | | | | | 14,547,890 | |



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|---|---|---|---|---|---|---|---|
| | **OPTION 4B NEW BUILDING** | | | | | | |
| | ***TOTAL - HVAC*** | | | | | | **$14,547,890** |
| | ***D40 FIRE PROTECTION*** | | | | | | |
| **D40** | **FIRE PROTECTION, GENERALLY** | | | | | | |
| | Fire protection system | **207,827** | gsf | 6.00 | 1,246,962 | | |
| | SUBTOTAL | | | | | 1,246,962 | |
| | ***TOTAL - FIRE PROTECTION*** | | | | | | **$1,246,962** |
| | ***D50 ELECTRICAL*** | | | | | | |
| **D5010** | **SERVICE & DISTRIBUTION** | | | | | | |
| | **Gear & Distribution** | | | | | | |
| | 5000A 480/277V switchboard | **1** | ls | 140,000.00 | 140,000 | | |
| | Normal power distribution with associated panelboards, transformers and feeders | **207,827** | sf | 4.00 | 831,308 | | |
| | Emergency power | | | | | | |
| | Emergency generator and ATS"s with associated panelboards, transformers and feeders | **207,827** | sf | 2.50 | 519,568 | | |
| | PV | | | | | | |
| | PV provisions only, with empty conduit and pull boxes, per narrative | **1** | ls | 5,000.00 | 5,000 | | |
| | Equipment Wiring | | | | | | |
| | Elevator and cab power feed and connection | **1** | ea | 5,000.00 | 5,000 | | |
| | Mechanical equipment wiring to HVAC heating and cooling equipment | **207,827** | sf | 2.50 | 519,568 | | |
| | Misc. equipment wiring | **209,000** | sf | 0.50 | 104,500 | | |
| | Kitchen equipment wiring | **1** | ls | 25,000.00 | 25,000 | | |
| | Gym equipment feed and connections | **1** | ls | 15,000.00 | 15,000 | | |
| | SUBTOTAL | | | | | 2,164,944 | |
| **D5020** | **LIGHTING & POWER** | | | | | | |
| | Lighting & Branch Power | | | | - | | |
| | Lighting fixtures with installation labor | **207,827** | sf | 6.00 | 1,246,962 | | |
| | Exterior building lighting | **1** | ls | 15,000.00 | 15,000 | | |
| | Lighting control system (Daylight Harvesting) | | | | | | |
| | Lighting controls with control panels, sensors and switches | **207,827** | sf | 1.25 | 259,784 | | |
| | Branch devices | | | | | | |
| | Duplex and GFI receptacles | **207,827** | sf | 0.50 | 103,914 | | |
| | Lighting and branch circuitry | | | | | | |
| | EMT and MC cable | **207,827** | sf | 4.50 | 935,222 | | |
| | SUBTOTAL | | | | | 2,560,882 | |
| **D5030** | **COMMUNICATION & SECURITY SYSTEMS** | | | | | | |
| | Fire Alarm | | | | | | |
| | Control panel | **1** | ea | 15,000.00 | 15,000 | | |
| | Annunciator | **1** | ea | 1,500.00 | 1,500 | | |
| | Beacon | **1** | ea | 2,250.00 | 2,250 | | |
| | Knox box | **1** | ea | 350.00 | 350 | | |
| | Radio master box | **1** | ea | 9,500.00 | 9,500 | | |
| | Devices and cabling | **209,000** | sf | 2.00 | 418,000 | | |
| | Mass. Notification | **209,000** | sf | 1.00 | 209,000 | | |
| | Testing programming | **1** | ls | 5,000.00 | 5,000 | | |
| | Bi-Directional System | | | | | | |
| | BDA system | **1** | ls | 100,000.00 | 100,000 | | |
| | Telephone/Data/CATV | | | | | | |
| | Network switches, PBX, IP, VP, CATV (By owner) | | | | By Owner | | |
| | Telecommunications rough in | **209,000** | sf | 1.00 | 209,000 | | |
| | Telecommunications devices and cabling | **209,000** | sf | 2.00 | 418,000 | | |
| | Grounding | **1** | ls | 1,500.00 | 1,500 | | |
| | Public Address/Clock System | | | | | | |
| | PA/Master Clock system | **209,000** | sf | 1.00 | 209,000 | | |



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03-Dec-20

**PSR Estimate**

GFA 207,827

| CSI CODE | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|
| | **OPTION 4B NEW BUILDING** | | | | | | |
| | Classroom Speech Amplification | **209,000** | sf | 0.50 | 104,500 | | |
| | Audio Visual (rough-in and power only) | | | | | | |
| | AV equipment | | | | By Owner | | |
| | Rough-In conduit and backboxes only | **209,000** | sf | 0.50 | 104,500 | | |
| | Auditorium | | | | | | |
| | Rigging system equipment & installation | | | | See equipment | | |
| | Power to rigging equipment | **1** | ls | 12,000.00 | 12,000 | | |
| | Stage dimming system with performance fixture package, allow | **1** | ls | 275,000.00 | 275,000 | | |
| | Installation, rough-in & 120V power to dimming equipment | **1** | ls | 70,000.00 | 70,000 | | |
| | Performance audio visual equipment, installation & LV cabling, allow | **1** | ls | 150,000.00 | 150,000 | | |
| | Performance audio visual rough-in and power | **1** | ls | 60,000.00 | 60,000 | | |
| | Cafeteria | | | | | | |
| | Sound system | **1** | ls | 15,000.00 | 15,000 | | |
| | Media Center | | | | | | |
| | Sound system | **1** | ls | 15,000.00 | 15,000 | | |
| | Gymnasium | | | | | | |
| | Sound system | **1** | ls | 30,000.00 | 30,000 | | |
| | Scoreboard/ shot clocks with feed and connection | **1** | ea | 15,000.00 | 15,000 | | |
| | Security System | | | | | | |
| | Head end | **1** | ls | 50,000.00 | 50,000 | | |
| | Card access system | **209,000** | sf | 1.00 | 209,000 | | |
| | Intrusion system | **209,000** | sf | 1.00 | 209,000 | | |
| | CCTV surveillance system | **209,000** | sf | 2.00 | 418,000 | | |
| | SUBTOTAL | | | | | 3.335,100 | |
| **D5040** | **OTHER ELECTRICAL SYSTEMS** | | | | | | |
| | Miscellaneous | | | | | | |
| | Lightning Protection System, UL Master label | **1** | ls | 95,000.00 | 95,000 | | |
| | Temp power and lights | **1** | ls | 150,000.00 | 150,000 | | |
| | Hoisting and rigging | **1** | ls | 10,000.00 | 10,000 | | |
| | Seismic restraints | **1** | ls | 7,500.00 | 7,500 | | |
| | Coordination, BIM & shop drawings | **1** | ls | 240,000.00 | 240,000 | | |
| | Fees & Permits | **1** | ls | 160,000.00 | 160,000 | | |
| | SUBTOTAL | | | | | 662,500 | |
| | ***TOTAL - ELECTRICAL*** | | | | | | **$8,723,426** |
| ***E10*** | ***EQUIPMENT*** | | | | | | |
| **E10** | **EQUIPMENT, GENERALLY** | | | | | | |
| | Gym wall pads | **1** | ls | 20,000.00 | 20,000 | | |
| | Basketball backstops; swing up; electric operated | **12** | loc | 10,000.00 | 120,000 | | |
| | Gymnasium dividing net; electrically operated | **3** | ea | 30,000.00 | 90,000 | | |
| | Volleyball net and standards | **1** | ls | 5,000.00 | 5,000 | | |
| | Telescoping bleachers | **900** | seats | 240.00 | 216,000 | | |
| | Theatrical Equipment Stage curtains, rigging and controls | **1** | ls | 350,000.00 | 350,000 | | |
| | Theatrical AV allowance | **1** | ls | 200,000.00 | 200,000 | | |
| | Kitchen equipment | **2,030** | sf | 220.00 | 446,600 | | |
| | Auditorium seats | **750** | seat | 350.00 | 262,500 | | |
| | SUBTOTAL | | | | | 1,710,100 | |
| | ***TOTAL - EQUIPMENT*** | | | | | | **$1,710,100** |
| ***E20*** | ***FURNISHINGS*** | | | | | | |
| **E2010** | **FIXED FURNISHINGS** | | | | | | |
| | Entry mats & frames - recessed with carpet/rubber strips | **500** | sf | 55.00 | 27,500 | | |
| | Window blinds | **27,464** | sf | 7.00 | 192,248 | | |
| *123553* | *CASEWORK* | | | | | | |



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|---|---|---|---|---|---|---|---|
| | **OPTION 4B NEW BUILDING** | | | | | | |
| | Sinks, counters and casework; allowance | **209,000** | sf | 10.00 | 2,090,000 | | |
| | SUBTOTAL | | | | | 2,309,748 | |
| **E2020** | **MOVABLE FURNISHINGS** | | | | | | |
| | All movable furnishings to be provided and installed by owner | | | | | | |
| | SUBTOTAL | | | | | NIC | |
| | ***TOTAL - FURNISHINGS*** | | | | | | **$2,309,748** |
| ***F10*** | ***SPECIAL CONSTRUCTION*** | | | | | | |
| **F10** | **SPECIAL CONSTRUCTION** | | | | | | |
| | No items in this section | | | | | | |
| | SUBTOTAL | | | | | | |
| | ***TOTAL - SPECIAL CONSTRUCTION*** | | | | | | |
| ***F20*** | ***SELECTIVE BUILDING DEMOLITION*** | | | | | | |
| **F2010** | **BUILDING ELEMENTS DEMOLITION** | | | | | | |
| | No items in this section | | | | | | |
| | SUBTOTAL | | | | | | |
| **F2020** | **HAZARDOUS COMPONENTS ABATEMENT** | | | | | | |
| | See main summary for HazMat allowance | | | | | See Summary | |
| | SUBTOTAL | | | | | | |
| | ***TOTAL - SELECTIVE BUILDING DEMOLITION*** | | | | | | |



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Stoneham, MA

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|---|---|---|---|---|---|---|---|
| | **SITEWORK OPTION 4B** | | | | | | |
| | ***G SITEWORK*** | *1,900,000* | *sf* | | - | | |
| | **G10 SITE PREPARATION & DEMOLITION** | | | | | | |
| | Site construction fence/barricades | **7,900** | lf | 18.00 | 142,200 | | |
| | Site construction fence gates | **1** | ea | 10,000.00 | 10,000 | | |
| | Stabilized construction entrance | **1** | ls | 15,000.00 | 15,000 | | |
| | Pavement/curbing removal, crush and re-use for sub-base | **250,800** | sf | 1.00 | 250,800 | | |
| | Demolish tennis courts | **56,200** | sf | 1.50 | 84,300 | | |
| | Demolish track/football field | **175,625** | sf | 1.00 | 175,625 | | |
| | Walkways | **1** | ls | 20,000.00 | 20,000 | | |
| | Miscellaneous demolition | **1** | ls | 100,000.00 | 100,000 | | |
| | SUBTOTAL | | | | | 797,925 | |
| | Temporary parking | 190 | spc | | | | |
| | gravel base; 12" thick | **2,981** | cy | 40.00 | 119,240 | | |
| | Binder course | **8,944** | sy | 20.00 | 178,880 | | |
| | Construction fence | **1,135** | lf | 18.00 | 20,430 | | |
| | Line markings/painting/signs | **190** | spc | 100.00 | 19,000 | | |
| | Demolish temp parking | **110,000** | sf | 1.00 | 110,000 | | |
| | Blasting for temporary parking | **1** | ls | 150,000.00 | 150,000 | | |
| | SUBTOTAL | | | | | 597,550 | |
| | Site Earthwork | | | | | | |
| | Strip Topsoil and remove; 6" thick | **3,148** | cy | 16.00 | 50,368 | | |
| | Fine grading | **659,695** | sf | 0.20 | 131,939 | | |
| | Silt fence/erosion control, wash bays, stock piles | **7,900** | lf | 12.00 | 94,800 | | |
| | Silt fence maintenance and monitoring | **1** | ls | 40,000.00 | 40,000 | | |
| | Hazardous Waste Remediation | | | | | | |
| | Remove existing underground fuel storage tanks; 500 Gal | **1** | ls | 50,000.00 | 50,000 | | |
| | Dispose/treat contaminated soils | **1** | ls | 20,000.00 | 20,000 | | |
| | SUBTOTAL | | | | | 631,437 | |
| | **G20 SITE IMPROVEMENTS** | | | | | | |
| | Asphalt Paving; parking lot and roadway | *250,800* | | | | | |
| | gravel base; 12" thick | **9,289** | cy | 40.00 | 371,560 | | |
| | asphalt; 4" thick | **27,867** | sy | 25.00 | 696,675 | | |
| | VGC | **10,032** | lf | 40.00 | 401,280 | | |
| | Single solid lines, 4" thick | **1** | ls | 10,000.00 | 10,000 | | |
| | Crosswalk Hatching | **4** | loc | 900.00 | 3,600 | | |
| | Other road markings | **1** | ls | 7,500.00 | 7,500 | | |
| | HC curb cuts | **8** | loc | 350.00 | 2,800 | | |
| | Signage | **1** | ls | 20,000.00 | 20,000 | | |
| | Pedestrian Paving | | | | | | |
| | Concrete paving | | | | | | |
| | gravel base; 8" thick | **372** | cy | 35.00 | 13,020 | | |
| | 4" concrete paving | **15,000** | sf | 9.00 | 135,000 | | |
| | Drop Off Plaza | *16,720* | *sf* | | | | |
| | Precast pavers; 50% | **8,360** | sf | 40.00 | 334,400 | | |
| | Poured in place rubber safety surface; 25% | **4,180** | sf | 26.00 | 108,680 | | |
| | Planted areas; 25% | **4,180** | sf | 10.00 | 41,800 | | |
| | Ground Level Garden; Pre-K Playground | *10,450* | sf | | - | | |
| | Rubber surface over concrete | **7,838** | sf | 18.00 | 141,084 | | |
| | Raised planters; green space | **2,613** | sf | 10.00 | 26,130 | | |
| | Shade structure | **1** | loc | 30,000.00 | 30,000 | | |
| | Music elements | **1** | loc | 35,000.00 | 35,000 | | |
| | Play equipment | **1** | loc | 50,000.00 | 50,000 | | |
| | SUBTOTAL | | | | | 2,428,529 | |

## Site Athletics

**STADIUM - Running Track/Turf Football Field/Bleachers**



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|---|---|---|---|---|---|---|---|
| | **SITEWORK OPTION 4B** | | | | | | |
| | Synthetic turf anchor curb integral with trench drain | **1,310** | lf | 80.00 | 104,800 | | |
| | Resilient surface at track | **75,525** | sf | 8.00 | 604,200 | | |
| | Gravel base - assumed 12" thick | **3,707** | cy | 45.00 | 166,815 | | |
| | Geotextile reinforced impermeable liner 20 mill | **100,100** | sf | 1.00 | 100,100 | | |
| | Synthetic turf field - Hybrid infill synthetic field with premolded resilient drainage pad | **100,100** | sf | 12.00 | 1,201,200 | | |
| | Football goals | **2** | ea | 3,500.00 | 7,000 | | |
| | Scoreboard | **1** | ea | 60,000.00 | 60,000 | | |
| | Line markings - allowance | **2** | ls | 2,000.00 | 4,000 | | |
| | 1250 seat bleacher | **1** | loc | 450,000.00 | 450,000 | | |
| | Rip-Rap under bleachers | **1** | ls | 25,000.00 | 25,000 | | |
| | Field logo's | **1** | loc | 6,000.00 | 6,000 | | |
| | Discus pad & enclosure | **1** | ea | 15,000.00 | 15,000 | | |
| | Shot put pad & enclosure | **1** | ea | 15,000.00 | 15,000 | | |
| | Long jump/triple jump | **2** | ea | 10,000.00 | 20,000 | | |
| | Pole vault and accessories | **1** | ea | 10,000.00 | 10,000 | | |
| | High jump pads | **1** | ea | 6,000.00 | 6,000 | | |
| | Javelin with track surfacing runway | **1** | ea | 10,000.00 | 10,000 | | |
| | Hurdles and starting blocks | **1** | ls | 8,000.00 | 8,000 | | |
| | Track crossing pad | **1** | ls | 10,000.00 | 10,000 | | |
| | Trash/recycling receptacles | **12** | ea | 800.00 | 9,600 | | |
| | Team benches- 7'-5" long | **12** | ea | 1,500.00 | 18,000 | | |
| | Portable ball control netting, 120' long | **4** | ea | 2,500.00 | 10,000 | | |
| | Pit covers | **2** | ea | 3,500.00 | 7,000 | | |
| | Subsurface infiltration/drainage/field drains etc. | **175,625** | sf | 1.25 | 219,531 | | |
| | Stadium sound system (AV) | **1** | ls | 120,000.00 | 120,000 | | |
| | SUBTOTAL | | | | | 3,207,246 | |
| | Baseball/Field Hockey | **1** | ea | 360,000.00 | 360,000 | | |
| | Half size field | **1** | ea | 150,000.00 | 150,000 | | |
| | Synthetic grass soccer fields; Two Fields | **140,500** | sf | 12.00 | 1,686,000 | | |
| | Softball field | **1** | ea | 250,000.00 | 250,000 | | |
| | Tennis courts - Six Courts (including pickle courts); 1 basketball court | *50,600* | *sf* | | | | |
| | gravel base; 8" thick | **1,256** | cy | 40.00 | 50,240 | | |
| | Asphalt paving | **5,622** | sy | 30.00 | 168,660 | | |
| | Color coating | **50,600** | sf | 2.00 | 101,200 | | |
| | Fence with wind break | **1,177** | lf | 80.00 | 94,160 | | |
| | Tennis court nets | **5** | set | 1,500.00 | 7,500 | | |
| | Basketball hoops | **1** | set | 5,000.00 | 5,000 | | |
| | SUBTOTAL | | | | | 2,872,760 | |
| | Site Improvements | | | | | | |
| | Flag pole 50' high | **1** | ea | 6,500.00 | 6,500 | | |
| | Concrete retaining walls | **1** | ls | 500,000.00 | 500,000 | | |
| | Other site improvements; walls, fences etc. | **1** | ls | 200,000.00 | 200,000 | | |
| | Outdoor dining | **1** | ls | 50,000.00 | 50,000 | | |
| | SUBTOTAL | | | | | 756,500 | |
| | Landscaping | | | | | | |
| | Topsoil - reuse existing | **3,148** | cy | 25.00 | 78,700 | | |
| | Topsoil - Import new topsoil; minimum 6" | **581** | cy | 65.00 | 37,765 | | |
| | Seeding | **964,805** | sf | 0.15 | 144,721 | | |
| | Green space | **31,350** | sf | 10.00 | 313,500 | | |
| | SUBTOTAL | | | | | 574,686 | |
| | **G30 CIVIL MECHANICAL UTILITIES** | | | | | | |
| | Water supply; Pricing includes E&B and bedding | | | | | | |
| | Temporary water line | **650** | lf | 120.00 | 78,000 | | |
| | New DI piping; 8" | **450** | lf | 100.00 | 45,000 | | |
| | New DI piping; 8" Fire loop | **2,800** | lf | 100.00 | 280,000 | | |



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PM&C

**Stoneham High School**
Design Options
Stoneham, MA

03-Dec-20

**PSR Estimate**

| CSI CODE | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|
| | **SITEWORK OPTION 4B** | | | | | | |
| | Connect to existing | **1** | loc | 5,000.00 | 5,000 | | |
| | FD connection | **1** | ea | 2,000.00 | 2,000 | | |
| | Gate valves | **8** | ea | 750.00 | 6,000 | | |
| | Fire hydrant | **3** | ea | 5,000.00 | 15,000 | | |
| | SUBTOTAL | | | | | 431,000 | |
| | <u>Sanitary; Pricing includes E&B and bedding</u> | | | | | | |
| | Temporary sewer line | **1** | ls | 50,000.00 | 50,000 | | |
| | Manholes | **4** | ea | 4,000.00 | 16,000 | | |
| | Grease trap | **1** | ea | 15,000.00 | 15,000 | | |
| | 8" PVC | **1,000** | lf | 60.00 | 60,000 | | |
| | Connect to existing drain | **1** | ea | 3,000.00 | 3,000 | | |
| | SUBTOTAL | | | | | 144,000 | |
| | <u>Storm water; Pricing includes E&B and bedding</u> | | | | | | |
| | Temporary storm (relocate existing 15" line + new manholes) | **1** | ls | 125,000.00 | 125,000 | | |
| | Allowance for new drainage systems; piping only | **250,800** | sf | 3.00 | 752,400 | | |
| | Infiltration systems; cultec chambers | **137,500** | cf | 8.00 | 1,100,000 | | |
| | Rock excavation | **1** | ls | 250,000.00 | 250,000 | | |
| | Catch basins | **12** | ea | 3,800.00 | 45,600 | | |
| | Manholes | **10** | ea | 4,500.00 | 45,000 | | |
| | WQ structures | **3** | ea | 16,000.00 | 48,000 | | |
| | Area drains | **4** | ea | 1,500.00 | 6,000 | | |
| | Work to culvert | **1** | ls | 250,000.00 | 250,000 | | |
| | <u>Gas service</u> | | | | | | |
| | E&B trench for new gas pipe - install by plumbing | **450** | lf | 25.00 | 11,250 | | |
| | SUBTOTAL | | | | | 2,633,250 | |
| **G40** | **ELECTRICAL UTILITIES** | | | | | | |
| | <u>Power</u> | | | | | | |
| | Utility co. backcharges, allow | **1** | ls | 30,000.00 | Utility co. | | |
| | Connections at existing manhole | | | | Utility co. | | |
| | Manhole | **1** | ls | 8,500.00 | 8,500 | | |
| | Connections in manhole | **1** | ls | 3,500.00 | 3,500 | | |
| | Primary ductbank 2-5" ductbank, empty, allow | **1000** | lf | 120.00 | 120,000 | | |
| | Transformer by utility company | | | | By Utility Co. | | |
| | Transformer pad; temporary for relocated transformer | **1** | ea | 5,000.00 | 5,000 | | |
| | Secondary service | **60** | lf | 1,100.00 | 66,000 | | |
| | <u>Communications</u> | | | | | | |
| | Connection at riser pole, allow | **1** | ea | 1,500.00 | 1,500 | | |
| | Telecom ductbank 4-4", allow | **1000** | lf | 152.00 | 152,000 | | |
| | <u>Site Lighting</u> | | | | | | |
| | Site Parking lighting (allow) | **250,800** | sf | 2.00 | 501,600 | | |
| | SUBTOTAL | | | | | 858,100 | |
| | **TOTAL - SITE DEVELOPMENT** | | | | | | ***$15,932,983*** |



PM&C

**Stoneham High School**
**Design Options**
**Stoneham, MA**

03-Dec-20

**PSR Estimate**

| CSI CODE | DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|---|---|---|---|---|---|---|
| | **SPORTS LIGHTING** | | | | | | |
| **G40** | **ELECTRICAL UTILITIES** | | | | | | |
| | <u>Sports Field Lighting and Sound System</u> | | | | | | |
| | Football field lighting, bases and circuitry | **1** | ls | 540,000.00 | 540,000 | | |
| | Soccer Field Lighting | **2** | loc | 400,000.00 | 800,000 | | |
| | Remote lighting control system | **1** | ls | 100,000.00 | 100,000 | | |
| | **TOTAL - SPORTS LIGHTING** | | | | | | ***1,440,000*** |

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FOR IMMEDIATE RELEASE
Contact: Sharon Iovanni
siovanni01@gmail.com
781-248-9754

**WHAT COULD STONEHAM HIGH SCHOOL LOOK LIKE IN 2024?**

**Attend the SHS Feasibility Study Community Forum #4 December 9th and Help the SSBC Decide!**

Stoneham, MA – The Stoneham School Building Committee (SSBC) will host the fourth in a series of Community Forums led by Perkins&Will to update the community on the Stoneham High School project and learn what options are most likely to be considered in the next phase submission.

The Forum is planned for Wednesday, December 9, 2020 at 6:30 p.m. and will include exciting details of the five options currently being considered by the SSBC and the potential costs for each option.

This will be the only Forum before the Committee makes its decision on which option is best for the future high school complex to recommend to the MSBA in its December 21, 2020 Preferred Schematic Report.

“We were delighted with the information we received in the first survey, with over 200 replies and lots of good suggestions and considerations,” says SSBC Co-Chair Marie Christie. “But we know that there are many more residents who have a stake in Stoneham’s future, and it is important to us that all residents have the chance to share their opinions and ideas.”

Forum participants will be encouraged to share what they like about the options, what they wish was included, what they see as the advantages or disadvantages in the options presented and which options they believe best meets Stoneham’s educational and community needs today and for the future.

The Forum will be held virtually using the GoToMeeting app and can be accessed on a laptop, mobile device or by phone.

Join the Forum online by using this link -



https://global.gotomeeting.com/join/284992117 or call in to 1-872-240-3311 and using Access Code: 284-992-117

The Forum can viewed on Stoneham TV OnDemand at https://www.stonehamtv.org/ondemand

For more detailed information about the SSBC including meeting minutes, presentations and upcoming meetings, visit http://stoneham-ma.gov/hsbc



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# Stoneham High School Feasibility Study Stoneham School Building Committee Community Survey No. 2

As the Stoneham School Building Committee (SSBC) prepares its recommendation for a Preferred Schematic Design to the Massachusetts School Building Authority (MSBA), it is important that we hear from you.

Please complete the following short survey; the results will help guide the decision-making process as the SSBC continues its important work.

* Required

Email address *

Your email

DRAFT



# Stoneham High School Feasibility Study Stoneham School Building Committee Community Survey No. 2

* Required

## The SSBC has narrowed the options to five final designs.

As the Stoneham School Building Committee (SSBC) prepares for its vote to select the Preferred Design Option on December 16, 2020, for submission to the Massachusetts School Building Authority (MSBA), it is important that we hear from you.

Please rank the design options from your highest priority (5) to your lowest priority (1).

The 5 design options are as follows and described below:

* Option 1A - Code Repairs Only;
* Option 2A - Renovation Only;
* Option 3A - Renovation and Addition;
* Option 4A - New Construction; and
* Option 4B - New Construction

For additional information on the options, please visit our website: http://www.stoneham-ma.gov/hsbc

## Option 1A - Code Repairs Only

- **Upgrades the existing building to current building codes only**
- **Includes District Office**
- **No renovations for educational improvement**
- **No Zero Net Energy Design**
- **No upgrades to playfields, roadways or parking**
- **No traffic improvements on Franklin Street**
- **48 months estimated project duration (phased student occupancy)**
- **Temporary classroom trailer cost**
- **Initial estimated cost to the taxpayers of Stoneham of $61.0M**



DRAFT



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## Option 2A - Renovation Only

- Upgrades the existing building to current building codes
- Does not include District Offices
- Renovates existing building for educational improvements
- Includes relocated PreK program
- Includes Zero Net Energy Design
- Upgrades playfields, roadways and parking
- Improves traffic on Franklin Street
- 48 months estimated project duration (phased student occupancy)
- Temporary classroom trailer cost
- Initial estimated cost to the taxpayers of Stoneham of $111.5M




## Option 3A - Renovation and Addition

- Renovates gymnasium and lower level spaces
- Includes District Offices
- Demolishes remaining portion of existing building
- New addition housing all other school functions including auditorium, cafeteria, classrooms, and administrative offices
- Includes relocated PreK program
- Includes Zero Net Energy Design
- Upgrades playfields, roadways and parking
- Improves traffic on Franklin Street
- 40 months estimated project duration
- Initial estimated cost to the taxpayers of Stoneham of $120.3M




DRAFT

## Option 4A - New Construction

- New building located to the north of the existing building
- Includes District Offices
- Includes relocated PreK program
- Includes Zero Net Energy Design
- Upgrades playfields, roadways and parking
- Improves traffic on Franklin Street
- 33 months estimated project duration
- Initial estimated cost to the taxpayers of Stoneham of $123.7M
- Includes District Offices




## Option 4B - New Construction

- New building located to the north and east of the existing building
- Includes relocated PreK program
- Includes Zero Net Energy Design
- Upgrades playfields, roadways and parking
- Improves traffic on Franklin Street
- 33 months estimated project duration
- Initial estimated cost to the taxpayers of Stoneham of $122.0M
- Includes District Offices




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1. Which of the design alternatives shown above provides the Stoneham Community the best long-term plan for educating its high school students? *

Please rank the following options with 5 being the best long-term solution and 1 being the least.

| | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|
| Option 1A - Code Repairs Only | ○ | ○ | ○ | ○ | ○ |
| Option 2A – Renovation Only | ○ | ○ | ○ | ○ | ○ |
| Option 3A - Renovation Addition | ○ | ○ | ○ | ○ | ○ |
| Option 4A - New Construction | ○ | ○ | ○ | ○ | ○ |
| Option 4B - New Construction | ○ | ○ | ○ | ○ | ○ |

2. Please provide any additional feedback you have on any of these specific options

Your answer

DRAFT



3. Please select all stakeholder groups that apply to you. *

- [ ] Student/Former Student
- [ ] Parent
- [ ] Stoneham Resident
- [ ] Stoneham Registered Voter
- [ ] Stoneham Homeowner
- [ ] Stoneham Business Owner
- [ ] Stoneham Elected Official
- [ ] Stoneham Public Schools Employee
- [ ] Other: _____

4. Please check all the following ways in which you have learned about the status of the project. *

- [ ] Attended a Community Forum or School Building Committee Meeting
- [ ] Watched a Community Forum or School Building Committee Meeting on StonehamTV
- [ ] Visited and reviewed infromation on the School Building Committee's website
- [ ] Read article(s) in local newspaper
- [ ] Viewed information shared on Facebook or other social media channels
- [ ] Discussed information with others in town
- [ ] Have seen notices around town regarding forums
- [ ] Have not seen/heard much about the project
- [ ] Other: _____

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GLENN A. CUNHA
INSPECTOR GENERAL

The Commonwealth of Massachusetts
Office of the Inspector General

JOHN W. McCORMACK
STATE OFFICE BUILDING
ONE ASHBURTON PLACE
ROOM 1311
BOSTON, MA 02108
TEL: (617) 727-9140
FAX: (617) 723-2334

December 1, 2020

Dennis Sheehan, Town Administrator
Town of Stoneham
Stoneham Town Hall
35 Central Street
Stoneham, MA 02180

**Re: Application to Use the Construction Management At-Risk Alternative Delivery Method for the Stoneham High School Project**

Dear Mr. Sheehan:

On October 20, 2020, pursuant to M.G.L. c. 149A and 945 CMR 2.00, the town of Stoneham ("Stoneham") submitted an application to use the construction management at-risk ("CM at-risk") alternative delivery method for the Stoneham High School project.

Based on all the information provided, Stoneham has met the statutory requirements for using the CM at-risk delivery method. Accordingly, the Office of the Inspector General ("Office") is issuing this notice to proceed to use the CM at-risk delivery method as specified in M.G.L. c. 149A, §§ 1-13, and to use the plan and procedures submitted.

This approval is conditioned on Stoneham using a CM at-risk firm that the Division of Capital Asset Management and Maintenance ("DCAMM") has certified, as well as DCAMM-certified trade contractors. Therefore, Stoneham must require each CM at-risk firm to supply both a certificate of eligibility and an update statement during both the prequalification phase and the technical proposal phase of the selection process. In addition, Stoneham must require each trade contractor to supply a certificate of eligibility and an update statement during the prequalification phase and again at the bidding phase of the selection process. Stoneham must reject as invalid all contractors' statements of qualifications, proposals and bids that do not provide such certificates of eligibility or update statements.

If, during the course of the project, Stoneham changes its owner's project manager or designer, please submit information about the new project manager or designer to the Office. Also, if Stoneham decides not to proceed with the CM at-risk delivery method, please notify the Office.





Please feel free to contact me or Kerri-Anne Hollingshead, Policy Analyst, if you have any questions or concerns.

Sincerely,

Glenn A. Cunha
Inspector General

cc: Joel G. Seeley, Symmes, Maini & McKee Associates, Inc.
Sarah Traniello, Symmes, Maini & McKee Associates, Inc.



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Project Management | SMMA

# Project Minutes

| | | | |
|---|---|---|---|
| Project: | Stoneham High School Feasibility Study | Project No.: | 20033 |
| Prepared by: | Joel Seeley | Meeting Date: | 11/23/2020 |
| Re: | Green Building Initiatives Meeting | Time: | 10:00am |
| Location: | Remote Locations | Meeting No: | 6 |
| Distribution: | Attendees (MF) | | |

Attendees:

| PRESENT | NAME | AFFILIATION |
|---|---|---|
| | Marie Christie | Co-Chair, School Building Committee |
| | David Bois | Co-Chair, School Building Committee |
| ✓ | Raymie Parker | Chair, Select Board |
| ✓ | Dennis Sheehan | Town Administrator |
| ✓ | John Macero | Superintendent of Schools |
| ✓ | Brian McNeil | Facilities Director |
| ✓ | Erin Wortman | Director, Planning and Community Development |
| ✓ | Susan McPhee | Energy Conservation Coordinator |
| ✓ | David Mauer | School Committee |
| | Kimberly Cullinane | Eversource - Electricity |
| | Mark Rooney | Eversource - Electricity |
| | Denise Rouleau | National Grid - Gas |
| ✓ | Vamshi Gooje | Thornton Tomasetti |
| | Xiaoshu Du | Thornton Tomasetti |
| | Brooke Trivas | Perkins and Will |
| ✓ | Patrick Cunningham | Perkins and Will |
| | Kevin Caddle | BALA |
| ✓ | Edward Dolan | BALA |
| ✓ | Joel Seeley | SMMA |
| | | |

| Item # | Action | Discussion |
|---|---|---|
| 6.1 | E. Wortman<br>S. McPhee<br>D. Sheehan<br>V. Gooje | **Photovoltaic (PV) System**<br>1. E. Wortman reviewed notes from the conversation with JD Head, Director of School Operations at Acton-Boxborough and Paul Lyons of Zapotec, attached. E. Wortman will share the PV RFP once received form JD.<br>2. E. Wortman and S. McPhee will take the lead in retaining the PV Vender, either thru RFP (preferred) or PowerOptions. |

1000 Massachusetts Avenue
Cambridge, MA 02138
617.547.5400

www.smma.com



Project: Stoneham High School Feasibility Study
Meeting Date: 11/23/20
Meeting No.: 6
Page No.: 2

| Item # | Action | Discussion |
|---|---|---|
| | | 3. D. Sheehan will confirm with Town Counsel on the whether the School Committee or Select Board will sign the Letter of Support with the PV Vender for the SMART Program.<br>4. E. Dolan requested a copy of the Basis of Design relative to degree day decisions used on the A-B school. *V. Gooje will provide*.<br>5. P. Cunningham will review the orientation of parking lots to the maximize solar canopy's orientation. Approximately 90,000 SF of PV Array will be needed, assumed to be divided 50/50 between building roof and car canopies.<br>6. E. Wortman will ask JD the following question:<br>a. How did A-B estimate the Alternative Energy Credits for the Geothermal System?<br>7. S. McPhee indicated Arlington is planning their new High School for ZNE and their PV is approximately 1 MW at 11-12 cents/kWh. |
| 6.2 | P. Cunningham<br>E. Wortman<br>V. Gooje | **12/7/20 SSBC Presentation**<br>1. P. Cunningham will forward Option 4B, including rhino model, to V. Gooje on Tuesday.<br>2. E. Wortman will forward V. Gooje past electric and gas bills to confirm current rates.<br>3. V. Gooje will provide energy model and cost assessments for Options 2A, 3A and 4A and a qualitative assessment on Option 4B.<br>4. P. Cunningham will develop the agenda for the ZNE presentation to the SSBC. V. Gooje, E. Wortman, B. McNeil, P. Cunningham, E. Dolan and J. Seeley to present.<br>5. P. Cunningham will provide V. Gooje the construction cost information for each design option.<br>J. Seeley indicated that the presentation materials will need to be provided on Friday 12/4/20 to be included in the SSBC Friday packet. |
| 6.3 | V.Gooje | **Energy and Cost Modeling Baseline**<br>1. V. Gooje reviewed the energy modeling baseline memo, attached.<br>2. V. Gooje to provide feedback to P. Cunningham on the exterior wall assemblies. |

1000 Massachusetts Avenue
Cambridge, MA 02138
617.547.5400

www.smma.com



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Project: Stoneham High School Feasibility Study
Meeting Date: 11/23/20
Meeting No.: 6
Page No.: 3

| Item # | Action | Discussion |
|---|---|---|
| | | 3. S. McPhee asked if V. Gooje can provide the approximate heating, cooling and overall electric load?<br>*V. Gooje will provide by Wednesday*. |
| 6.4 | P. Cunningham | **Geo-Thermal System**<br>1. P. Cunningham reviewing scope of services to be performed during the Schematic Design Phase versus in the Design Development Phase to develop a fee proposal within the available budget. |
| 6.5 | D. Sheehan | **Domestic Water Main Heat Exchanger System**<br>1. D. Sheehan will confirm with the Water Department if there are any restrictions or regulations on altering the water temperature.<br>2. V. Gooje suggested Domestic Water Main Heat Exchanger System may be used in conjunction with the geo-thermal system, a hybrid approach, to reduce the amount of required geo-thermal wells. |
| 6.6 | B. McNeil | P. Cunningham provided Facility Department contact information from all-electric schools to B. McNeil. B. McNeil to contact them for feedback. |
| 6.7 | P. Cunningham | P. Cunningham indicated there will potentially be gas use in the kitchen and science rooms and he will provide direction as the project design progresses. *(from prior meeting)* |
| 6.8 | J. Seeley | J. Seeley to develop a ZNE decision timeline for the SSBC to use in deciding the final extent of ZNE in the Schematic Design Phase. *(from prior meeting)* |
| 6.9 | P. Cunningham | P. Cunningham is developing a draft LEED Scorecard for review at the next meeting. *(from prior meeting)* |

The information herein reflects the understanding reached. Please contact the author if you have any questions or are not in agreement with these Project Minutes

1000 Massachusetts Avenue
Cambridge, MA 02138
617.547.5400

www.smma.com





To: Erin Wortman
From: Susan McPhee
Date: November 22, 2020
Re: Notes from Conversations re Stoneham High Project

### 1. *JD Head, Director School Operations, Acton-Boxboro 11/16*

- **Process** observations, notes for the committee
  - Process happens fast
    - Decisions are made on a timetable
    - Process will feel very fast to committee members, particularly if you miss a meeting or two
  - Feasibility study drives the whole design process
  - Visioning process is key interaction for stakeholders
    - OPM and architect will run visioning
    - For Acton it was 80 people over three days
    - Get as many people as possible to participate in the visioning
      - Use social media
      - Engage the "nay sayers" or people who might be negative
      - Involve key people like Fin Com members, students, seniors
- **Solar PPA**
  - Without solar in the project, JD calculated he would spend an additional **$120,000 annually** on purchasing electricity
    - Can we use $120,000 as a place holder calculation?
  - Remind project team and town that electricity use will increase in the new school building. Adjust expectations.
  - ***JD ran RFP for solar Power Purchase Agreement (PPA) at this stage in the project***
    - Need preliminary roof drawings at 25% design, plus canopy size
    - Used assumption of 100% electric, no fossil fuel use.
    - Strongly advised monetizing batteries on site, rather than using them for emergency use.
      - Get a good generator instead
      - Check if SHS is town designated emergency shelter
  - ***Used solar consultant to construct and run RFP***
  - Drummed up a lot of interest
  - Three bids in the end
  - Bids included cost of installation (conduit and set up)
    - Conduit and set up will be part of the project
    - MSBA allows "solar ready" as a reimbursable expense
    - Construction Manager will track all solar related install expenses
    - True up accounts with Solar provider at project end
      - Reimburse the project at end of construction
      - OR lower the PPA electricity rate appropriately
- **HVAC and Net Zero**
  - Geo-Thermal solution



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- Got the most push back because it is expensive
- Monitor engineers – designing for the coldest day of the coldest winter lead to inefficient system, very expensive.
    - Acton: called for 120 wells, needed 85
    - Installed back up electric system. Inefficient and cheap to install, expensive to run, but likely only needed rarely.
    - Created their own hybrid system.

- **Key to successful building over time**
    - Preventative maintenance is key
    - Staff that can support the sophisticated equipment
        - Town should plan in budget for a Building Manager for new SHS
        - "You wouldn't buy a Maserati and through the keys to a high school grad to do the maintenance."

2. ***Paul Lyons, Solar Consultant, Zapotec Energy 11/12/20***

Currently working on two elementary schools in Watertown, going for net zero with combination rooftop and canopy solar arrays. Worked on Cambridge MLK Elementary School, achieved net zero. Worked on King Open in East Cambridge, net zero with 1.5 MW rooftop array. Recommended by Melrose Energy Manager.

- SHS has a promising site for solar
- Once decisions are made, new vs renovation, location on site, do a solar study
    i. Employ "Over-all electricity use projection" from architect's energy model
        1. Use first draft energy model
        2. Get square footage and use kWh/sq. ft/ year to Est how many kWh annually
    ii. Does scope include solar analysis?
    iii. Is there a section in the feasibility study for onsite solar projection?
    iv. As part of SD include feasibility for interconnection
    v. If using PPA, then describe solar in the construction drawings
        1. Include the switch gear
        2. Include Conduit runs in and out of building
        3. Saves 20% of the install cost by including it in the building design (Acton got this refunded to the project or lower rate)
- **Canopy Parking – Solar Ready design ******crucial***
    i. Lay out parking so canopies are easy (inexpensive) to build
        1. Run east west with a long axis
        2. Array south facing
        3. Cars face north/south
- **Battery Storage – questions to consider**
    i. Where will it be on the site?
    ii. Will it be a separate service?
        1. closer to utility tie in
        2. study economic advantages for the town





**Thornton Tomasetti** Memorandum

| | | | |
|---|---|---|---|
| TO | Joel Seeley | FROM | Vamshi Gooje |
| CC | Stoneham Team | DATE | November 10, 2020 |
| RE | MSBA Requirements | PROJECT NO | MA SCHOOLS |

Compliance with the MSBA Sustainable Building Design Policy will be based on the energy code in effect when the Schematic Design Submittal is received by the MSBA. For all projects submitting SD package after Nov. 7, 2020, the requirements for different tiers are summarized below:

1. **MSBA Minimum requirements**
    - Achieve a minimum of LEED Certified or NE-CHPS Verified.

AND

    - Exceed the level of energy efficiency required in the current Massachusetts base energy code (IECC 2018 or ASHARE 90.1-2016, including any MA amendments) by 10%. The new code is schedule to go in effect on November 7, 2020. For projects pursuing LEED certification, the compliance can also be demonstrated by achieving 12 points in the LEED v4 Optimize Energy Performance credit. This is considered equivalent to 10% better than IECC 2018 or ASHRAE 90.1-2016. For projects,

2. **MSBA Additional Reimbursement**
    - For 2% additional reimbursement, in addition to the requirements described above, projects must exceed the level of energy efficiency required in the current Massachusetts base energy code (IECC 2018 or ASHARE 90.1-2016, including any MA amendment) by 20%. The compliance can be demonstrated by achieving 14 points in LEEDv4 Optimize Energy Performance. This is considered equivalent to 20% better than IECC 2018 or ASHRAE 90.1-2016. For projects,

386 Fore Street, Suite 401 | Portland ME 04101-7408 | T 207.245.6060 | F 207.245.6061 | www.ThorntonTomasetti.com



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Thornton Tomasetti

# Memorandum

Re: MSBA Requirements
Page 2

*Notes:*

1. *Compliance with the local energy code is determined at the submission of the permit set. This may vary from the MSBA baseline for grant money (which is determined at the submission of SD).*

2. *MSBA uses the submitted LEED-S / NE-CHPS scorecard as a basis for establishing conformance with their requirements. Designers should confirm that any submitted LEED-S / NE-CHPS scorecards are based on the correct energy code, noting which version of LEED-S / NE-CHPS is used, with descriptions of any beta credits or alternate compliance paths used.*



Project Management | SMMA

# Project Minutes

| | | | |
|---|---|---|---|
| Project: | Stoneham High School Feasibility Study | Project No.: | 20033 |
| Prepared by: | Joel Seeley | Meeting Date: | 11/9/2020 |
| Re: | Green Building Initiatives Meeting | Time: | 10:00am |
| Location: | Remote Locations | Meeting No: | 5 |
| Distribution: | Attendees (MF) | | |

Attendees:

| PRESENT | NAME | AFFILIATION |
|---|---|---|
| ✓ | Marie Christie | Co-Chair, School Building Committee |
| | David Bois | Co-Chair, School Building Committee |
| ✓ | Raymie Parker | Chair, Select Board |
| ✓ | Dennis Sheehan | Town Administrator |
| | John Macero | Superintendent of Schools |
| ✓ | Brian McNeil | Facilities Director |
| ✓ | Erin Wortman | Director, Planning and Community Development |
| ✓ | Susan McPhee | Energy Conservation Coordinator |
| ✓ | Kimberly Cullinane | Eversource - Electricity |
| | Mark Rooney | Eversource - Electricity |
| | Denise Rouleau | National Grid - Gas |
| ✓ | Vamshi Gooje | Thornton Tomasetti |
| ✓ | Xiaoshu Du | Thornton Tomasetti |
| ✓ | Brooke Trivas | Perkins and Will |
| ✓ | Patrick Cunningham | Perkins and Will |
| | Kevin Caddle | BALA |
| | Edward Dolan | BALA |
| ✓ | Joel Seeley | SMMA |
| | | |

| Item # | Action | Discussion |
|---|---|---|
| 5.1 | E. Wortman<br>S. McPhee<br>P. Cunningham<br>V. Gooje | **Photovoltaic (PV) System**<br>1. E. Wortman contacted JD Head at Acton-Boxborough for more information on their PV RFP and will review further with him next week. Questions to ask are:<br>a. What methodology did A-B use in estimating the payback for the PV?<br>b. How did A-B estimate the Alternative Energy Credits for the Geothermal System? |

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|---|---|---|
| | | 2. S. McPhee will ask PowerOptions what a preliminary PV cent/kWh should be used for preliminary planning.<br>3. S. McPhee asked if there is a preliminary size of the PV Array and what percentage would be roof mounted versus carport canopy mounted?<br>*P. Cunningham and V. Gooje will review and provide preliminary findings*.<br>4. D. Sheehan asked if the PowerOptions rate is locked in?<br>*E. Wortman indicated yes, annually, but can be multi-year.* |
| 5.2 | V.Gooje | **Energy and Cost Modeling Baseline**<br>1. V. Gooje reviewed the energy modeling baseline to be used, based on MSBA baseline requirements per ASHRAE 90.1. The baseline will be an all-electric building. V. Gooje will issue a clarifying memo for review.<br>2. K. Cullinane recommends reviewing the Lexington presentation for their approach to cost balancing, ie energy cost savings compared to capital cost investment.<br>3. J. Seeley provided V. Gooje with the PDP Phase construction and total project costs related to ZNE.<br>4. E. Wortman provided the current electric rate, which is 10.793 cents/kWh.<br>5. V. Gooje to confirm if the $6 million in energy cost savings over 20 years shown in the Acton-Boxborough presentation was based on a gas or all-electric baseline building. |
| 5.3 | P. Cunningham | **Geo-Thermal System**<br>1. P. Cunningham to provide a fee proposal for performing a geothermal test well in the Schematic Design Phase. |
| 5.4 | D. Sheehan | **Domestic Water Main Heat Exchanger System**<br>1. V. Gooje indicated based on a preliminary calculation, a Domestic Water Main Heat Exchanger System may be a viable alternative to the Geo-Thermal System, however the Town will need to confirm if there are any restrictions or regulations on altering the water temperature.<br>*D. Sheehan will confirm with the Water Department*.<br>2. D. Sheehan asked if this type of system has been used before?<br>*S. McPhee indicated Woburn is currently studying for a school project*. |
| 5.5 | P. Cunningham<br>V. Gooje | **12/7/20 SSBC Presentation** |

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| Item # | Action | Discussion |
|---|---|---|
| | | 1. P. Cunningham will forward Option 2 and Option 4A, including rhino model, to V. Gooje later this week and strive to send Option 4B earlier than the 11/23/20 SSBC meeting date.<br>2. V. Gooje has commenced working on the preliminary energy models, operational cost models and LCCA.<br>3. P. Cunningham to provide V. Gooje the construction cost information for each design option prior to the 12/7/20 SSBC meeting.<br>4. J. Seeley indicated that the presentation materials will need to be provided on Friday 12/4/20 to be included in the SSBC Friday packet. |
| 5.6 | P. Cunningham | P. Cunningham indicated there will potentially be gas use in the kitchen and science rooms and he will provide direction as the project design progresses. *(from prior meeting)* |
| 5.7 | J. Seeley | J. Seeley to develop a ZNE decision timeline for the SSBC to use in deciding the final extent of ZNE in the Schematic Design Phase. *(from prior meeting)* |
| 5.8 | P. Cunningham | P. Cunningham will provide Facility Department contact information from all-electric schools to B. McNeil. |
| 5.9 | P. Cunningham | P. Cunningham is developing a draft LEED Scorecard for review at the next meeting. |

The information herein reflects the understanding reached. Please contact the author if you have any questions or are not in agreement with these Project Minutes

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**Subject:** Fw: community garden project

**From:** Sharon Iovanni <sharon.iovanni@rcn.com>
**Sent:** Tuesday, December 1, 2020 7:44 PM
**To:** Seeley, Joel <jseeley@smma.com>; Marie Christie <mariechristie@comcast.net>; David Bois <bois@arrowstreet.com>
**Subject:** FW: community garden project

This is the other one I mentioned earlier,

**From:** Louise Ann Zuk [mailto:Lzuk626@msn.com]
**Sent:** Tuesday, December 1, 2020 6:42 AM
**To:** mmw; Siovanni01@gmail.com
**Subject:** Re: community garden project

I have a few thoughts on the community garden. It is a wonderful idea to have people tend to the garden and grow fresh vegetables. In the beginning lots of people want to be involved. What happens when people become less interested during the growing season? Will there be water available for the garden use? Will the students prepare the soil or those that are going to plant? I hope this moves forward to help people enjoy gardening if they don't have space of their own. Also it is a great way to meet new people.

If there is anything I can do to help please call me at 617-872-5101
Best of luck,
Louise Zuk

On Dec 1, 2020, at 2:16 AM, mmw <mmw@copper.net> wrote:

Apologies this is so long; would appreciate your thoughts ranging from..." what....are you out of your mind to great idea here are my thoughts"

I just posted on Stoneham Gardening page.

Community Garden Project
Stoneham is considering a new High School or the renovation of the existing ca. 1968 one. As part of the process the committee is seeking input from citizens. I suggested space be allocated for a community garden both for students and the public at large. Great way to feed the hungry, educate the students, engage retirees, get families " back to the earth", etc.

In response, Sharon Iovanni on behalf of the committee is asking:
"Some folks on the committee questioned who would be responsible for the garden, who would use the garden, could it be used as a teaching tool given that most of the growing season was during "summer vacation", how would it be managed….

If you have any reach outs to the Garden Club or other gardners whom you know would be interested in this





concept, can you provide me with some suggested responses to this question….or better yet, get them to participate in the next Community Forum #4 on December 9. "





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**Subject:** Fw: Community Garden Project

**From:** Sharon Iovanni <sharon.iovanni@rcn.com>
**Sent:** Tuesday, December 1, 2020 7:43 PM
**To:** Seeley, Joel <jseeley@smma.com>; Marie Christie <mariechristie@comcast.net>; David Bois <bois@arrowstreet.com>
**Subject:** FW: Community Garden Project

Hi Joel,
I'm not sure how I should handle these –

I received this email today after I reached out to Marcia Wengen re the Community Garden. Feel free to share in the next package if you think it is appropriate. Or, Marie or David, other suggestions for what we might do with these. I have another one that I will be forwarding after this.

Thanks
Shar

**From:** Kathleen Celata [mailto:Kathysjewel6@outlook.com]
**Sent:** Tuesday, December 1, 2020 5:47 PM
**To:** siovanni01@gmail.com
**Subject:** Community Garden Project

Hello Sharon Iovanni

I read your post on Facebook I think it would be a great idea to have a Community Garden up at the High School. I think if the High School has a plot in the community garden then students are responsible for the care of their plot. These plots tend to go pretty fast and some have waiting lists. I think that our community could benefit by one. The plots could have a nominal fee to use for a year and for those who cant afford the nominal fee could volunteer some free time to helping the garden out where it is needed. I would suggest reaching out to the Congregational Church to see if they would be interested in a plot where they could grow veggies and herbs for the Food Pantry and the Boys and Girls Club might also be interested in teaching the children about growing their own food. The local garden groups might also be interested and with tons of experience might be willing to show others their first hand knowledge of growing veggies and fruit.

Just a few ideas, I am interested in helping if it comes down to being something that might work.

Kathleen Celata

1



**Subject:** Fw: Another comm garden email

**From:** Sharon Iovanni <sharon.iovanni@rcn.com>
**Sent:** Tuesday, December 1, 2020 7:46 PM
**To:** Seeley, Joel <jseeley@smma.com>; Marie Christie <mariechristie@comcast.net>; David Bois <bois@arrowstreet.com>
**Subject:** Another comm garden email

**From:** mmw [mailto:mmw@copper.net]
**Sent:** Tuesday, December 1, 2020 2:42 AM
**To:** Sharon Iovanni
**Subject:** How to Build a Community Garden in 10 Steps - BeautifulRVA

https://beautifulrva.org/10-steps-community-garden/

Thanks for the heads up. I posted this community garden project on/to:

Stoneham Gardening FB page
2 members of Stoneham Garden Club
1 member of Senior Center gardening group
1 Stoneham Farmers Market wizard

There is a wealth of imformation about community garden projects on the web. The attachment is a quick read with any number of really good ideas, that you may want to share with your members.

More to follow.

Marcia

Sent from my T-Mobile 4G LTE Device

1



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# How to Build a Community Garden in 10 Steps

## 10 STEPS FOR MAKING YOUR OWN URBAN GARDEN IN RICHMOND

"None of this is new, people have been planting community gardens for years," said Chavis, community engagement coordinator for Lewis Ginter Botanical Garden. "But now it's being framed differently: for public health and environmental benefits."

Families are prone to eat what they grow, and fresh vegetables support good health. Exercise and time spent outdoors are vital for wellbeing, too. When youngsters join in, gardening teaches stewardship while supporting SOLs related to science, technology and math. An urban garden nurtures renewal through natural beauty. It also supports environmental sustainability as it improves air quality, ambient noise, stormwater mitigation and heat reduction through shade.

"Greenspaces also help with social cohesiveness," Chavis said. "They integrate people into a social fabric that creates unity and community pride."

Chavis outlined ten steps for developing a garden in an urban setting. Most pertain to establishing planting beds on school grounds and in rural communities, too. Now is a good time to start, wherever the parcel of land, since approvals and planning take time.

**1. Find a location.** Scout for vacant or underused land and obtain approval from the owner. A sunny location with access to water is best. For urban gardening, the City of Richmond offers an excellent resource: Richmond Grows Gardens. The webpage includes an online map showing city-owned property already approved for gardening, plus guidelines and applications. Remember: it's not the size of the garden that counts. It's the quality of harvested crops and related benefits.

**2. Take a soil test.** Crops are only as good as the soil. A soil test helps determine what nutrients are missing and what amendments should be made. For urban properties, probably most important is determining if any toxins or contaminants have leached into the soil. "Many homes built in the 1920s and '30s, torn down and hauled away, left heavy metals and carcinogens in the soil, such as lead, mercury or asbestos," Chavis warned. Soil testing is available through Virginia Cooperative Extension and the City of Richmond. A nominal fee may apply. If the onsite soil is deemed contaminated or unusable, resort to raised beds and a supplemental soil mixture.

**3. Work on neighborhood buy-in.** "It's very important to include more people in the garden than just yourself," Chavis said. "Have conversations with folks closest to the site and get their involvement." He recommended asking about the history of the site, what neighbors want to see growing and how they want to be involved. "Get to know the community voices," he said.

https://beautifulrva.org/10-steps-community-garden/



**4. Secure donations or sponsors.** Soil, seeds, plants and possibly lumber (for raised beds) will be needed, so recruit support. Obtain enough funds in case permits and tools are needed, too. "Finding supporters isn't as hard nowadays," Chavis said. The public and local businesses have become more aware of the benefits of shared community gardens, including urban renewal and community pride.

5. **Plan.** "Planning is the biggest part of the work," Chavis noted. He recommended drawing a schematic of what the garden will include, from plants and trees to compost bins and benches. The Beautiful RVA website offers helpful design templates, budget guidelines, plant recommendations and planting tips. As for tools, the Richmond Community ToolBank loans gardening equipment at a nominal fee to nonprofit and community organizations. Also, consider what you hope participants will learn. Educators interested in school gardens and nature-related activities can attend Natural Connections and professional development workshops hosted by Lewis Ginter Botanical Garden. The garden staff models interdisciplinary strategies for blending science, social studies, language arts and math standards for authentic learning experiences. Advance registration is required.

**6. Plan a volunteer workday:** Excitement grows as a date is set for the garden build. Chavis recommends recruiting volunteers through social media, flyers and word-of-mouth. For potential volunteer support, check out HandsOn Greater Richmond. Community organizations can recruit volunteers and access volunteer-management resources for training and tracking. "A Ginter Urban Gardener also may help with planning and coordinating volunteers on the workday," Chavis said. Ginter Urban Gardeners offer knowledge of horticulture, enhanced through a 12-week course on project management, volunteer coordination and sustainable agriculture. To request a Ginter Urban Gardener volunteer, check out the community gardens video and then email beautifulrva@gmail.com with details. All requests will be considered, but assistance cannot be guaranteed.

**7. Host the first workday:** The garden build will be as successful as the preparation. Chavis recommends having all equipment and plants onsite before volunteers arrive. For the workers, make sure you have plenty of water and perhaps donated snacks and sandwiches. "Music is another great way to keep folks motivated," he said.

**8. Determine the garden model:** "Once the garden is planted, the fun starts," Chavis said. He suggests specifically defining the garden's purpose and beneficiaries, based on community interest. "Decide if it will be a garden in which neighbors rent plots, work for produce or donate food being grown to a food bank," he said. "Or, maybe it will be a garden that focuses on education," as in a school, nonprofit or neighborhood setting.

**9. Set up events and a point of contact:** The garden will need continual maintenance, so plan frequent workdays. Draw volunteers and build community through a mix of impromptu and planned events, possibly featuring live music, special guests, onsite games or picnics. Also determine a designated garden steward to handle questions, decisions and ongoing communications.

**10. Maximize benefits:** "A community garden produces more than just healthy, fresh vegetables," Chavis summarized. "The greenspace brings people together for social activities, exercise, beauty and stress reduction." Consider the possibilities, see what works and celebrate accomplishments. Over time, the ripple effects may be immeasurable.

*This article first published in the Richmond Times-Dispatch in February 2018.*

https://beautifulrva.org/10-steps-community-garden/



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Volunteers through HandsOn Greater Richmond and Beautiful RVA spent Martin Luther King Jr. Day 2018, building raised gardens for the Garber Street CSA (Community-Supported Agriculture), which provides produce for elderly and homebound residents in the underserved community.

https://beautifulrva.org/10-steps-community-garden/





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# Project Minutes

| | | | |
|---|---|---|---|
| Project: | Stoneham High School Feasibility Study | Project No.: | 20033 |
| Prepared by: | Joel Seeley | Meeting Date: | 12/16/2020 |
| Re: | School Building Committee Meeting | Time: | 7:00pm |
| Location: | Remote Participation | Meeting No: | 16 |
| Distribution: | Attendees (MF) | | |

Attendees:

| PRESENT | NAME | AFFILIATION | VOTING MEMBER |
|---|---|---|---|
| Attended Remote | Marie Christie | Co-Chair, School Building Committee | **Voting Member** |
| Attended Remote | David Bois | Co-Chair, School Building Committee; Community Member with Architecture Experience | **Voting Member** |
| Attended Remote | Nicole Nial | School Committee Member | **Voting Member** |
| Attended Remote | Raymie Parker | Chair Select Board | **Voting Member** |
| | | Community Member with Building Commissioner Experience | **Voting Member** |
| Attended Remote | Douglas Gove | Community Member with Engineering Experience | **Voting Member** |
| Attended Remote | Stephen O'Neill | Community Member with Engineering Experience | **Voting Member** |
| Attended Remote | Josephine Thomson | Community Member | **Voting Member** |
| Attended Remote | Jeanne Craigie | Town Moderator | **Voting Member** |
| Attended Remote | Lisa Gallagher | Community Member, School Secretary, Past member of Middle School Building Committee | **Voting Member** |
| Attended Remote | Sharon Iovanni | Community Member | **Voting Member** |
| Attended Remote | Cory Mashburn | Community Member, Finance and Advisory Board | **Voting Member** |
| Attended Remote | Paul Ryder | Community Member with Construction Experience | **Voting Member** |
| Attended Remote | David Pignone | Athletic Director, Member knowledgeable in educational mission and function of facility | **Voting Member** |
| Attended Remote | Kevin Yianacopolus | Local Official responsible for Building Maintenance | **Voting Member** |
| Attended Remote | Dennis Sheehan | Town Administrator / MCPPO Certified | Non-Voting Member |
| Attended Remote | John Macero | Superintendent of Schools, Secretary of School Building Committee | Non-Voting Member |
| Attended Remote | Bryan Lombardi | Stoneham High School Principal | Non-Voting Member |
| Attended Remote | Brian McNeil | Facilities Director | Non-Voting Member |
| Attended Remote | Brooke Trivas | Perkins and Will | |
| Attended Remote | Patrick Cunningham | Perkins and Will | |
| Attended Remote | Leo Liu | Perkins and Will | |
| Attended Remote | David Warner | Warner Larson | |
| Attended Remote | Joel Seeley | SMMA | |
| | | | |

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Project: Stoneham High School Feasibility Study
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| Item # | Action | Discussion |
|---|---|---|
| 16.1 | Record | Call to Order, 6:00 PM, meeting opened by roll call. |
| 16.2 | Record | In accordance with the executive order issued by the Governor on March 10, 2020, this meeting will be held via video conference and a recording of such will be posted on the Town's website. |
| 16.3 | Record | A motion was made by J. Craigie and seconded by L. Gallagher to approve the 12/7/20 School Building Committee meeting minutes. No discussion, motion passed unanimous by roll call vote. |
| 16.4 | Record | J. Seeley reviewed the Updated Schematic Design Phase Meetings and Agenda Schedule, attached. |
| 16.5 | Record | J. Seeley reviewed the MSBA Facilities Assessment Subcommittee, (FAS) meeting guidelines, attached. |
| 16.6 | J. Macero | J. Macero to review if there is a Pre-K Guideline that the proposed Pre-K program can be compared to. *(from prior meeting)* |
| 16.7 | J. Macero | J. Macero to review and provide direction on how close the middle school is to capacity and if it will need the space for the potential District Offices in the future? *(from prior meeting)* |
| 16.8 | Record | B. Trivas indicated the costs of relocating the stadium to a new location and renovating at the current location are the same, assuming both options would have a turf field with upgraded track, bleachers, lighting, and AV. |
| 16.9 | Record | B. Trivas indicated the calculated PreK parking spaces are 23 spaces. |
| 16.10 | Record | B. Trivas indicated the calculated parking spaces per the Zoning Bylaw is 273 spaces, including PreK. |
| 16.11 | J. Seeley | J. Seeley to break out the costs in a series of categories: Base High School Project followed by a listing of the Community Related Enhancements such as the synthetic playfields, concession/locker room building, traffic signals, PreK Program, District Offices, Larger Auditorium, Larger Gymnasium, District Kitchen in the SD Phase. *(from prior meeting)* |
| 16.12 | D. Warner | D. Warner to provide construction and maintenance costs comparing synthetic and natural turf fields. *(from prior meeting)* |
| 16.13 | PR Subcommittee D. Sheehan | The PR Subcommittee will review Town policies related to creating a Project Facebook page with D. Sheehan. *(from prior meeting)* |

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| Item # | Action | Discussion |
|---|---|---|
| 16.14 | B. Trivas | P. Cunningham presented and reviewed Site Plans for New Construction Options 4A1 and 4A2, attached.<br>Committee Discussion:<br>1. J. Craigie asked if the softball field is further from the neighbors in Option 4A2?<br>*D. Warner indicated yes, slightly.*<br>2. S. Iovanni asked if the parking spaces are the same in each option?<br>*D. Warner indicated yes, both include 350 spaces, but Option 4A2 has more paving due to the geometry of the east parking lot.*<br>3. J. Thomson asked if the outdoor classrooms and amphitheater will be provided in each option?<br>*D. Warner indicated yes, both options can accommodate the outdoor classrooms and amphitheater.*<br>4. D. Bois asked how does the landscaped path traverse thru the paved loading dock and receiving area?<br>*P. Cunningham indicated there will be a pedestrian bridge over the loading dock and receiving area.*<br>5. M. Christie asked if either of the options were over the culvert?<br>*D. Warner indicated that the west end of the building structure may straddle the culvert.*<br>6. D. Gove asked if the retaining wall between the baseball field and softball field in Option 4A2 was over the culvert?<br>*D. Warner indicated the retaining wall would be east of the culvert.*<br>7. S. Iovanni asked if the football field can be used for multiple sports?<br>*D. Pignone indicated yes it could, however there will need to be a discussion on what lines will be permanently stitched and what will be seasonally painted.*<br>8. B. Trivas will rename the football stadium to Spartan Stadium on the site plan legends.<br>9. J. Craigie indicated that a basketball court should be added for the neighboring community's benefit as there are no courts on this side of town. |
| 16.15 | Record | P. Cunningham provided a detailed review of Options 4A and 4B, attached.<br>Committee Discussion: |

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| Item # | Action | Discussion |
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| | | 1. N. Nial indicated she prefers Option 4B due to its open space, building footprint efficiency, location of Spartan Plaza, interior lighting, smaller service drive, PreK playground location, and potential operational efficiency.<br>2. R. Parker indicated she prefers Option 4A due to the location of the auditorium, gymnasium and cafeteria in the west wing as a hub of public spaces and does not prefer the embedded gymnasium in Option 4B.<br>3. D. Gove indicated he prefers Option 4B due to its site organization, least impact to the students during construction, more efficient playfield layout and potential for cost efficiencies due to constructing on the side of the existing school.<br>4. S. O'Neill indicated Option 4A provides greater opportunity for architectural expression, has the school placed at the heart of the site, and has a nice relationship between the stadium and the gymnasium, but also agrees with the positive attributes stated for Option 4B.<br>5. J. Thomson indicated she originally preferred Option 4A, but does not like that there is a 4th floor needed to access the cafeteria and gymnasium, and that she likes the site layout of Option 4B.<br>6. J. Craigie indicated she likes the site layout of Option 4B, it would be safer to construct, has the potential for cost efficiencies, and re-orients the fields for safety, but she does not like the parking lot PV canopies. Option 4A is not preferred due to its sprawling floor plan and having a 4th floor.<br>7. L. Gallagher indicated she prefers Option 4B due to its site layout, green spaces and building plan.<br>8. S. Iovanni indicated she likes the architecture of Option 4A, but is more concerned with how the building supports education and likes the compactness of the Option 4B plan.<br>9. C. Mashburn indicated he prefers Option 4B due to its layout as a high school complex, likes the PV canopies, location of the amphitheater and PreK playfield.<br>10. P. Ryder indicated he prefers Option 4B which has a solid feeling of campus, and is concerned with having a 4th floor in Option 4A.<br>11. D. Pigone indicated he is leaning towards Option 4A due to its building design, but likes the site layout in Option 4B.<br>12. K. Yianacopolus likes both options, though he likes the green space and loading dock placement in Option 4B. |

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| Item # | Action | Discussion |
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| | | 13. D. Sheehan indicated Perkins and Will developed two excellent options and he would be happy with either option.<br>14. J. Macero indicated he prefers Option 4B which represents the inclusive nature of the high school campus and Stoneham.<br>15. B. McNeil indicated preference for Option 4A due to its separation of the public and academic spaces, but does not like the 4th floor.<br>16. B. Lombardi indicated preference for Option 4B due to its campus feel, clear student circulation thru the building, entry drive looking at the arts wing and the transparency thru to Spartan Plaza, however he would like to understand who will be maintaining the community garden.<br>17. D. Bois indicated preference for Option 4B which supports the arts, academics and athletics, has easier construction phasing being to the east of the existing building, has potential for cost efficiencies and attractive building design.<br>18. M. Christie indicated she originally preferred a front facing building and re-use of the existing gymnasium, but both Options 4A and 4B have very good merits, like the embedded gymnasium in Option 4B. |
| 16.16 | Record | J. Seeley reviewed the results of Community Wide Survey No. 1A and No. 2, attached. |
| 16.17 | Record | J. Seeley reviewed the Detailed Construction Cost Estimate, Project Cost, Construction Cost Comparison, Reimbursement and Cost to Stoneham Summaries for each Option, attached. |
| 16.18 | Record | A motion was made by N. Nial and seconded by R. Parker to remove Options 1A, 2A and 3A from further consideration. No discussion, motion passed unanimous by roll call vote. |
| 16.19 | Record | A motion was made by J. Craigie and seconded by C. Mashburn to select Option 4B as the Preferred Option. No discussion, motion passed 12 in favor and 2 against (R. Parker, D.Pignone) by roll call vote. |
| 16.20 | Record | A motion was made by J. Craigie and seconded by R. Parker to approve the PSR Submittal and authorize submission to the MSBA. No discussion, motion passed unanimous by roll call vote. |
| 16.21 | PR Subcommittee<br>CM Prequalification Committee | **Subcommittee Updates**<br>**Public Relations Subcommittee**<br>1. S. Iovanni indicated a press release on the SSBC's vote will be released this week. |

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Project: Stoneham High School Feasibility Study
Meeting Date: 12/16/20
Meeting No.: 16
Page No.: 6

| Item # | Action | Discussion |
|---|---|---|
| | | 2. J. Seeley reviewed an email from a community member on the Community Survey, attached.<br>**Green Building Initiatives**<br>1. J. Seeley reviewed the 12/7/20 Green Building Initiatives Committee Meeting Minutes, attached.<br>**CM at Risk Prequalification Committee**<br>1. J. Seeley indicated the CM Prequalification Committee will be meeting on 1/4/21 to prequalify the CMs to receive the RFP. |
| 16.22 | Record | **Committee Questions** - none |
| 16.23 | Record | **Old or New Business** - none |
| 16.24 | Record | **Public Comment** - none |
| 16.25 | Record | Next **SSBC Meeting: January 12, 2021 at 7:00 pm.** |
| 16.26 | Record | A Motion was made by S. Iovanni and seconded by C. Mashburn to adjourn the meeting. No discussion, motion passed unanimous by roll call vote. |

Attachments: Agenda, Updated Schematic Design Phase Meetings and Agenda Schedule, MSBA Facilities Assessment Subcommittee Meeting Guidelines, Detailed Construction Cost Estimate, Project Cost, Construction Cost Comparison, Reimbursement and Cost to Stoneham Summaries for each Option, Results of Community Wide Survey No. 1A and No. 2, 12/7/20 Green Building Initiatives Committee Meeting Minutes, Email from community member, Powerpoint

The information herein reflects the understanding reached. Please contact the author if you have any questions or are not in agreement with these Project Minutes

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# Agenda

| | | | |
|---|---|---|---|
| Project: | Stoneham High School Feasibility Study | Project No.: | 20033 |
| Re: | School Building Committee Meeting | Meeting Date: | 12/16/2020 |
| Prepared by: | Joel Seeley | Meeting Time: | 7:00 PM |
| Location: | Remote Participation | | |
| Distribution: | Attendees (MF) | | |

1. Call to Order
2. Approval of Minutes
3. Approval of Invoices and Commitments
4. Schedule and Budget Update
5. Decide the One Preferred Construction Alternative
6. Vote to Submit Preferred Schematic Report to MSBA
7. Subcommittee Updates
8. New or Old Business
9. Committee Questions
10. Public Comments
11. Next Meeting: January 12, 2021
12. Adjourn

**Join GoToMeeting:**
https://global.gotomeeting.com/join/235246173
**Dial-In:** +1 (571) 317-3122
**Access Code:** 235-246-173

1000 Massachusetts Avenue



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Massachusetts School Building Authority

## Facilities Assessment Subcommittee ("FAS") Guidance Memo
## Preparing for your presentation to the FAS

*Note: This document is meant to provide considerations for FAS presentations. It is not an all-inclusive list, nor does it represent requirements of the district and its consultants, or all of the MSBA's requirements.*

### THE ROLE OF THE OPM AND DESIGNER

1) Encourage the district to start the Educational Program as soon as possible. Ideally there will be a first draft completed for the Designer's review by the time the Designer joins the project team.
2) Encourage the district to plan the shift to a different instructional approach, where applicable. This can take years and requires substantial professional development as well as the support of school and district leadership.
3) Encourage the district to plan for student transitions, which may include the transition to a new building and in many cases to a new school community (e.g., teachers, classmates, administrators, families). This should also begin early.
4) Encourage the district to review the Educational Program template and sample plans on the MSBA website.
5) Encourage the district, as it develops its Educational Program, to include staff who can share hands-on, day-to-day operational perspectives (e.g., the curriculum director, principal, Special Education director, other staff).
6) Review the district's daily course schedule and assist the district in evaluating whether sufficient time is allotted for hands-on, set-up-intensive courses such as Science. If the district is considering changing its schedule, assist the district in presenting this information clearly.
7) Assist the district in understanding how flexible spaces can be used to support multiple programmatic needs and can increase the efficiency of the preferred schematic.
8) Proof-read the district's Educational Program. Check for typos, grammar, clarity, content (check against MSBA template), and specificity.
9) As part of the updated Educational Program included in the district's Preferred Schematic Report, supplement the district's Educational Program by providing the design response, including desired features and/or layout considerations. (See Appendix 3A of Module 3 for more information.)
10) Share with the district examples of previous projects that provided cost-effective, efficient schools that maximized multiple uses in spaces providing for long-term flexibility.

### FAS PRESENTATION CONSIDERATIONS (DISCUSSION)

1) Focus the presentation exclusively on the preferred schematic.
2) Focus the presentation on the ways the architecture has been developed to support and reinforce the Educational Program prepared by the district.





3) Begin with an opening statement of the overall vision/concept of the proposed project so the FAS members understand the district's approach to developing its preferred schematic. Provide corresponding slides as appropriate.
4) Have the district or Designer identify and summarize the following information from the Educational Program as applicable:
    a. overview of the overall program including any special programs
    b. proposed changes in grades or consolidation of facilities (Describe how these changes impact the Preferred Schematic.)
    c. proposed changes in teaching methodology or schedule
    d. key adjacency requirements
    e. flexible or multiple use spaces
    f. distribution of Special Education spaces and any programs that require co-location
    g. outdoor learning spaces
    h. ongoing and future professional development efforts to prepare faculty and staff to occupy and take full advantage of the Preferred Schematic.

### FAS PRESENTATION CONSIDERATIONS (VISUALS)

1) Ensure that graphics are clear, labeled, and legible.
2) Begin presentation with a map of the town/city/regional school district and the facility's proposed location relative to the public school buildings and various neighborhoods within the district.
3) Document site conditions that have informed the location of the building on the site including:
    a. solar orientation
    b. topography (If the site is sloped, provide site and building sections that identify different entrances and key programs at different levels.)
    c. wetlands/rivers/streams
    d. drainage
    e. resiliency and water control measures
    f. traffic
    g. site ownership
    h. areas subject to conservation commission review
    i. any other constraints or assets that are located on the selected site
4) Show the transition from the site to the building. Identify any buffers separating traffic and parking from building areas and indicate the number of parking spaces provided.
5) Show the ground floor plan in the site plan in order to clearly illustrate the connections between exterior and interior spaces.
6) Show outdoor learning spaces described in the Educational Program on the site plan and describe how the location and the vision of the area fits the proposed educational use.
7) Provide massing diagrams and exterior views of the building that show the relationship of the building to the site and to its surroundings (e.g., neighboring houses, urban density,



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woods, open fields). The diagrams and exterior views should also illustrate how parking, landscape, play areas, fields, and loading docks relate to the building and the site.

8) Provide a concept diagram or simple axonometric that shows the relationship of the programs, parts, and volumes. This is especially important if two schools are being combined.
9) If the project is an addition/renovation, provide an axonometric drawing that clearly differentiates the addition areas from the existing areas that will be renovated.
10) Describe the envisioned character of key project spaces. Using precedent images can be effective for this purpose. (Be sure to credit precedent designers if you take this approach.)
11) Note the distribution of Special Education spaces and include any programmatic reasons for co-located or specially-located spaces.
12) Document how the building could be organized in multiple ways. (i.e., demonstrate the design's future flexibility.)
13) The presentation should conclude with presenting the preliminary costs of the options studied, using the Preliminary Pricing Table format as submitted in the Preferred Schematic Report.
14) The presentation should be in PowerPoint and consist of no more than 15 slides.

**COMMON TOPICS IN FAS DISCUSSIONS**

1) Sustainability:
   a. East-West classroom orientation for best solar efficiency and cost impact to projects with classrooms oriented in a North-South direction.
   b. Assessment of water flow from elevated areas of the site to lower areas including neighboring homes, roads, and off-site structures.
   c. Loss of water-absorption areas caused by the introduction of impervious surfaces to the site (e.g., large building footprints, parking lots, black-top play areas) and ways to mitigate such loss.
   d. Sources of information for flood zones beyond current flood-zone maps.

2) Accessibility:
   a. Protection from adverse weather conditions at building entries for individuals with mobility impairments.
   b. Braille and large-print instructions positioned at appropriate heights for use by wheelchair-bound, young, and short individuals.
   c. Assistive listening technology throughout the facility, including in non-instructional spaces.
   d. Benefits of at least two sinks in each grade K-5 classroom, one of which should be compliant with the Americans with Disabilities Act (ADA).
   e. Importance of designing the gymnasium so that it appropriately supports Adaptive PE (e.g. protects users from excessive noise, visual distraction, and physical harm).

3) Outdoor Learning Spaces:









   a. Year-round maintenance, including care and use during non-school times of the year, and optimization for local climate.
   b. Involvement of custodial and maintenance staff in the design and care of outdoor gardening spaces, especially at the elementary level.
   c. Courtyard use and maintenance for snow removal and routine care as described in the Educational Program
   Access and navigational time for persons with mobility impairments.

4) Interior Learning Spaces:
   a. Multiple use and long-term flexibility of performance facilities:
      i. Combinations of dining/cafeteria/gymnasium space with appropriate sound amplification that can accommodate large assemblies.
      ii. Educational benefits of including small auditorium-like spaces rather than large, theatrically equipped auditoria.
   b. Staffing and maintenance of one or more maker spaces. (Refer to the Review and Recommendations of Best Practices for K-12 STEM Learning Spaces report- http://www.massschoolbuildings.org/sites/default/files/edit-contentfiles/Building_With_Us/Ed_Facilities_Planning/FINAL%20STEM%20Spaces%20Report%20Foster%2012-2018.pdf)
   c. Program adjacencies and flexibility of spaces over time.
   d. Distribution of Special Education spaces.

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**STONEHAM HIGH SCHOOL**
**STONEHAM SCHOOL BUILDING COMMITTEE**

**MEETINGS SCHEDULE AND AGENDAS**
**November 16, 2020** ***Updated December 11, 2020***

| DATE | AGENDA |
|---|---|
| ***Schematic Design Phase (SD)*** | |
| | |
| | |
| January 12, 2021 | SCHOOL BUILDING COMMITTEE MEETING (TUESDAY) |
| | Review Schematic Design Phase Schedule and Deliverables |
| | |
| January 13, 2020 or<br>January 20, 2020 | *MSBA FAS MEETING* |
| | |
| January 25, 2021 | SCHOOL BUILDING COMMITTEE MEETING |
| | Review Site and Floor Plans |
| | |
| February 8, 2021 | SCHOOL BUILDING COMMITTEE MEETING |
| | Review Progress Site and Floor Plans |
| | Prepare for MSBA Board Meeting |
| | |
| *February 11, 2021* | *MSBA BOARD MEETING* |
| | |
| TBD | COMMUNITY FORUM NO. 5 |
| | |
| February 22, 2021 | SCHOOL BUILDING COMMITTEE MEETING |
| | Review MSBA Board Meeting |
| | CM Recommendation and Introduction |
| | Review Progress Site and Floor Plans |
| | Review Preliminary Exterior Imagery |
| | |
| March 8, 2021 | SCHOOL BUILDING COMMITTEE MEETING |
| | Review Sustainable Design Features |
| | Review Mechanical and Electrical Systems |
| | |
| March 22, 2021 | SCHOOL BUILDING COMMITTEE MEETING |
| | Review Progress Site and Floor Plans |
| | Review Updated Exterior Elevations |
| | Review Structural Systems |
| | |
| TBD | COMMUNITY FORUM NO. 6 |
| | |
| TBD | TRI-BOARD MEETING NO. 3 |
| | |
| April 5, 2021 | SCHOOL BUILDING COMMITTEE MEETING |
| | Review Preliminary Interior Materials |
| | Review Preliminary Exterior Materials |
| | |

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**STONEHAM HIGH SCHOOL**
**STONEHAM SCHOOL BUILDING COMMITTEE**

**MEETINGS SCHEDULE AND AGENDAS**
**November 16, 2020** ***Updated December 11, 2020***

| DATE | AGENDA |
|---|---|
| April 19, 2021 | SCHOOL BUILDING COMMITTEE MEETING |
| | Review Progress Site and Floor Plans |
| | Review Updated Mechanical and Electrical Systems |
| | Review Progress Technology Systems |
| | Review Progress FFE Layout |
| | |
| May 4, 2021 | SCHOOL BUILDING COMMITTEE MEETING (TUESDAY) |
| | Review Progress Site and Floor Plans |
| | Review Updated Exterior Elevations and Materials |
| | Review Updated Interior Materials |
| | |
| May 17, 2021 | SCHOOL BUILDING COMMITTEE MEETING |
| | Review Preliminary Cost Model |
| | Review Value Engineering Options |
| | |
| TBD | COMMUNITY FORUM NO. 7 |
| | |
| June 1, 2021 | SCHOOL BUILDING COMMITTEE MEETING (TUESDAY) |
| | Review Site Plan, Floor Plans and Elevations |
| | Review Final Mechanical and Electrical Systems |
| | Review Final Sustainable Design Features |
| | Review Updated Cost Model |
| | |
| TBD | TRI-BOARD MEETING NO. 3 |
| | |
| June 14, 2021 | SCHOOL BUILDING COMMITTEE MEETING |
| | Final Site Plan, Floor Plans and Elevations |
| | Final Project Cost |
| | Final Project Schedule |
| | Vote to submit Schematic Design Cost Estimate to MSBA |
| | |
| *June 23, 2021* | *SUBMIT SCHEMATIC DESIGN COST ESTIMATE TO MSBA* |
| | |
| June 28, 2021 | SCHOOL BUILDING COMMITTEE MEETING |
| | Vote to submit Schematic Design Package to MSBA |
| | |
| *July 7, 2021* | *SUBMIT SCHEMATIC DESIGN PACKAGE TO MSBA* |
| | |
| | ADDITIONAL MEETINGS TO BE SCHEDULED |

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# STONEHAM HIGH SCHOOL
# Building Committee Meeting

12.16.2020

## AGENDA

**Design Options Recap**

- Option 2A – Renovation Only
- Option 3A – Renovation Addition
- Option 4A – New Construction (Revised Site Options)
- Option 4B – New Construction (Section at Pre-K Area)

**Project Cost**



→ Aerial View of Stoneham High School

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# Design Options Recap

Building Committee Meeting

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## Design Options Summary

| CODE UPGRADE | RENOVATION | RENOVATION ADDITION | NEW CONSTRUCTION |
|---|---|---|---|
| *Option 1A* ☑<br>• *NO Educational upgrades*<br>• *Code Upgrades*<br>• *System Upgrades*<br>• *Exterior Envelope Repairs*<br>• *Interior Repairs*<br>• *No Sitework* | *Option 2A* ☑ | *Option 3A* ☑ | *Option 4A* ☑<br>*Option 4B* ☑ |

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# Option 2A – Renovation Only

Building Committee Meeting

## Option 2A – Site Plan

**PROGRAM**

1 - TENNIS (5 Courts)
2 - SOFTBALL
3 - BASEBALL
4 - SOCCER
5 - TRACK
6 - WETLAND
7 - PARKING
8 - HALF SIZED FIELD
9 - FOOTBALL
10 - FIELD HOCKEY
11 - PICKLEBALL
12 - BASKETBALL
13 - ATHLETIC BUILDING
14 - PREK PLAY
15 - SPARTAN PLAZA
16 - HOME BLEACHERS
17 - PORTABLE VISITOR BLEACHERS

**CIRCULATION**

- VEHICULAR DRIVE
- LIMITED ACCESS: EMERGENCY, MAINTENANCE, BICYCLES
- SERVICE DRIVE
- BIKE LANE
- ACCESSIBLE PEDESTRIAN PATH
- HIKING TRAIL (NOT ADA ACCESSIBLE)

**KEY ENTRANCES**

- HS MAIN ENTRY
- PRE-K MAIN ENTRY
- LOADING

**FIELD MATERIAL**

- GRASS
- SYNTHETIC TURF




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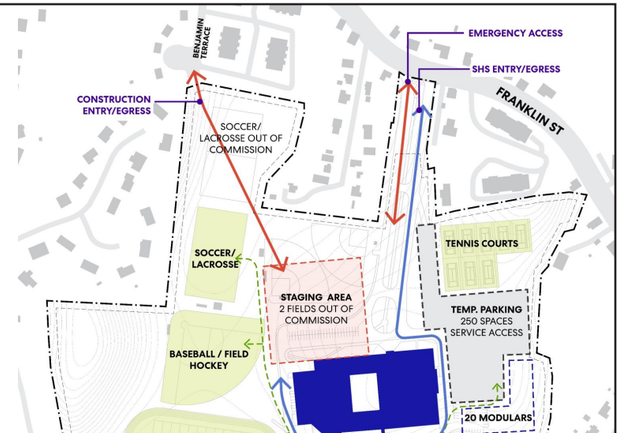
## Option 2A – Construction Phasing

**Fields out of Commission:**

- (8) Tennis Courts
- (2) Softball Fields

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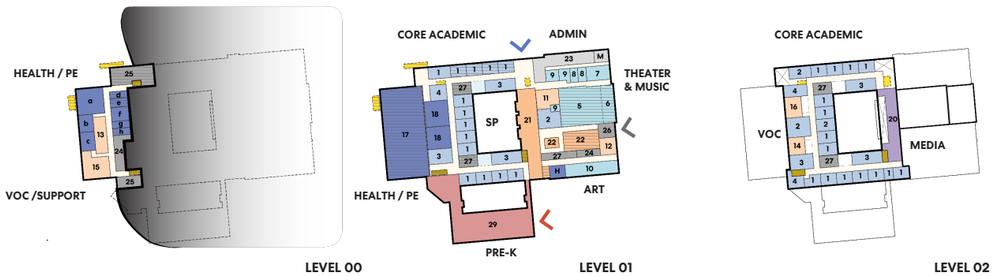
## Option 2A - Floor Plans

District Offices do Not Fit




CORE ACADEMIC
1/ CLASSROOM
2/ SPED
3/ SCIENCE
4/ TEACHER PLANNING
BREAK OUT SPACE

ART & MUSIC
5/ AUDITORIUM
6/ STAGE
7/ BAND
8/ PRACTICE
9/ THEATER
10/ ART CLASSROOM

VOC & TECH
11/ PERFORMANCE
12/ CULINARY
13/ VIDEO PRODUCTION
14/ BIOMEDICAL
15/ ENGINEERING
16/ MAKER SPACE

HEALTH & PE
17/ GYMNASIUM
18/ LOCKERS
SB/STADIUM BLEACHERS
AF/ATHLETIC FIELDS
19/ ATHLETICS
a – ALT PE
b – ATHL. OFFICES
c – TRAINER
d – PE STORAGE
e – COACH SHOWERS
f – EQUIPMENT ROOM
g – GYMNASTICS STOR.
h – ATHLETICS STOR.

MEDIA CENTER
20a/ OPEN MEDIA
20b/ CLOSED MEDIA
DINING
21/ CAFETERIA
22/ KITCHEN
SP/ SPARTAN PLAZA

ADMIN
23/ ADMIN
SUPPORT
24/ CUSTODIAL
25/ MECHANICAL
26/ LOADING
27/ RESTROOMS

OTHER
28/ DISTRICT OFFICE
29/ PRE-K
CIRCULATION
OPEN STAIR
CLOSED EGRESS STAIR

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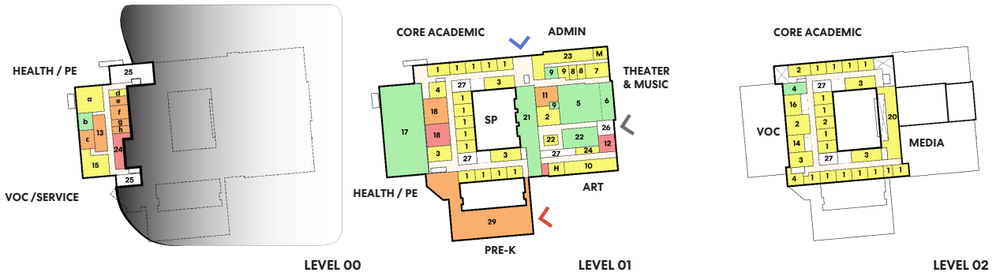
## Option 2A – MSBA Space Summary Analysis

District Offices do Not Fit



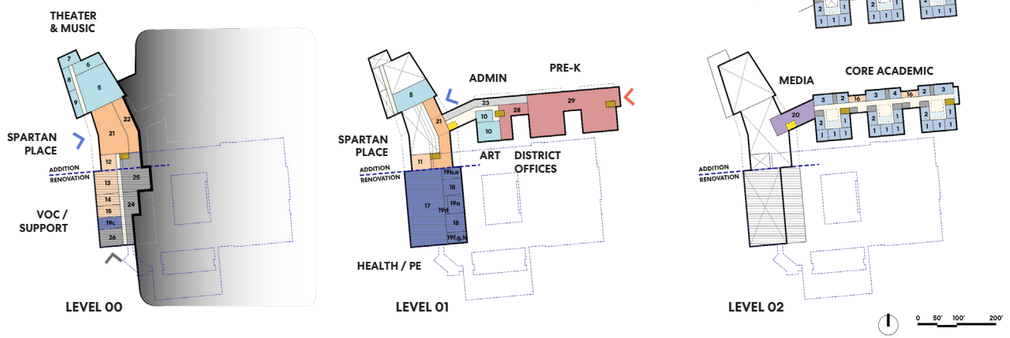

- Greater than MSBA Guideline
- Meets MSBA Guideline
- Less than MSBA Guideline
- Proposed variation from MSBA Guideline



## Option 3A – Site Plan


BENJAMIN TERRACE
FRANKLIN ST
145
180
25
25
25

## Option 3A - Floor Plans




CORE ACADEMIC
1/ CLASSROOM
2/ SPED
3/ SCIENCE
4/ TEACHER PLANNING
BREAK OUT SPACE

ART & MUSIC
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19/ ATHLETICS
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c – TRAINER
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e – COACH SHOWERS
f – EQUIPMENT ROOM
g – GYMNASTICS STOR.
h – ATHLETICS STOR.

MEDIA CENTER
20a/ OPEN MEDIA
20b/ CLOSED MEDIA

DINING
21/ CAFETERIA
22/ KITCHEN
SP/ SPARTAN PLAZA

ADMIN
23/ ADMIN

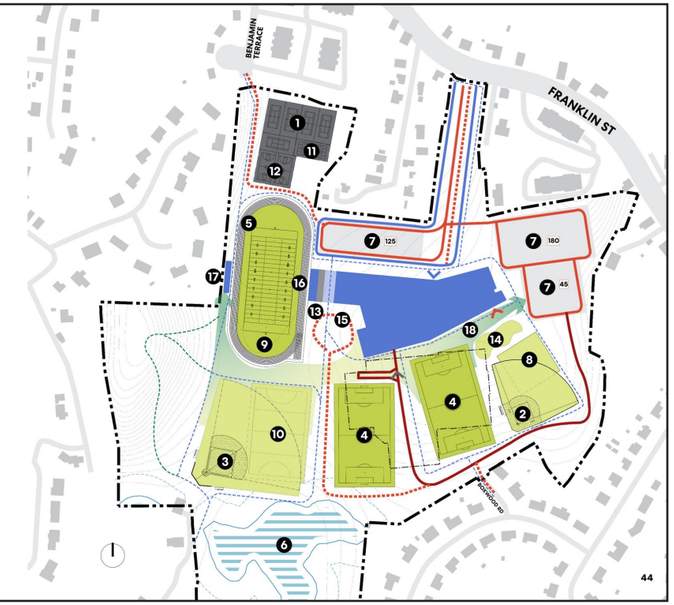
SUPPORT
24/ CUSTODIAL
25/ MECHANICAL
26/ LOADING
27/ RESTROOMS

OTHER
28/ DISTRICT OFFICE
29/ PRE-K

CIRCULATION
OPEN STAIR
CLOSED EGRESS STAIR



## Option 4A1 – Softball East




**PROGRAM**

1 - TENNIS (5 Courts)
2 - SOFTBALL
3 - BASEBALL
4 - SOCCER
5 - TRACK
6 - WETLAND
7 - PARKING
8 - HALF SIZED FIELD
9 - FOOTBALL
10 - FIELD HOCKEY
11 - PICKLEBALL
12 - BASKETBALL
13 - ATHLETIC BUILDING
14 - PREK PLAY
15 - SPARTAN PLAZA
16 - HOME BLEACHERS
17 - VISITOR BLEACHERS
18 - LANDSCAPE PATH

**CIRCULATION**

- VEHICULAR DRIVE
- LIMITED ACCESS: EMERGENCY, MAINTENANCE, BICYCLES
- SERVICE DRIVE
- BIKE LANE
- ACCESSIBLE PEDESTRIAN PATH
- HIKING TRAIL (NOT ADA ACCESSIBLE)
- LANDSCAPE PEDESTRIAN PATH W/ EMERGENCY VEHICLE ACCESS ABILITY

**KEY ENTRANCES**

- HS MAIN ENTRY
- PRE-K MAIN ENTRY
- LOADING

**FIELD MATERIAL**

- GRASS
- SYNTHETIC TURF



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# Option 4A – New Construction

Building Committee Meeting



## Option 4A2 – Softball West

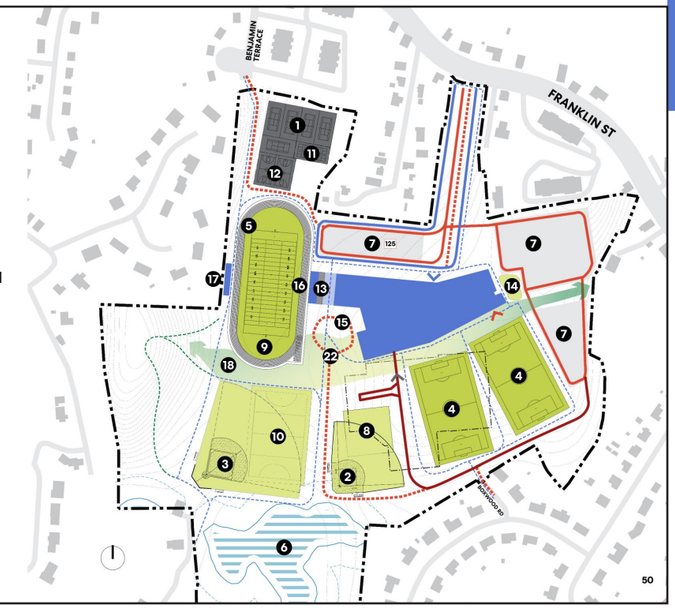
**KEY CONSIDERATIONS:**

**Both Options:**

- Spartan Place is the Civic Green
- Green space South of building as Landscape buffer between building and fields
- Challenges to accommodate grade change with most fields on the South of site (potential retaining walls)
- Lot geometry adds inefficiency to PV and parking

**Option 4A2 (compared to Option 4A1):**

- Possibility of Spartan Place expanding South for outdoor activities
- Pre-K Play close to parking/drop-off
- Parking near Soccer/LAX field can be inefficient



## Option 4A1




## Option 4A2

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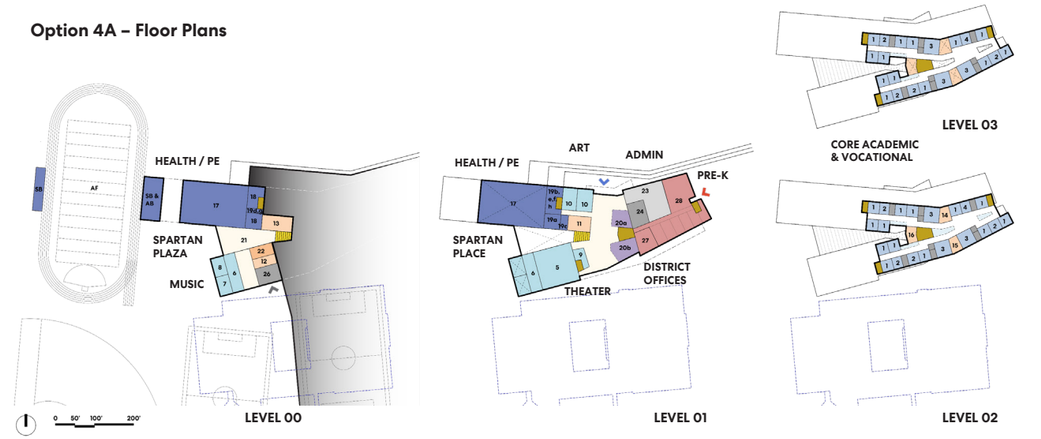
## Option 4A – Floor Plans

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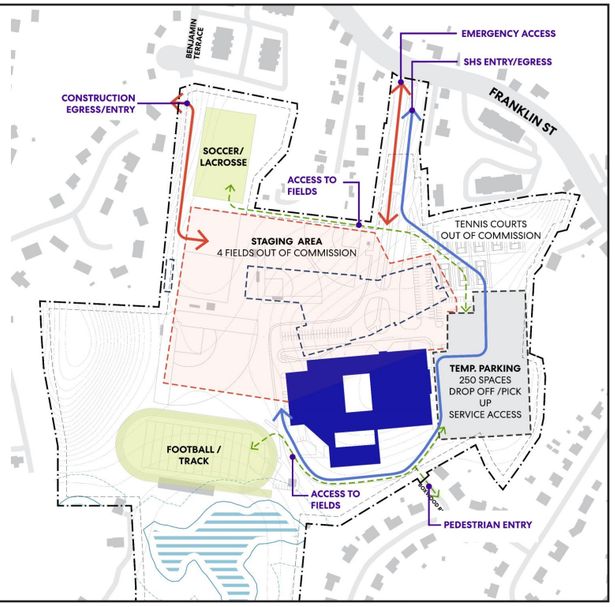
## Option 4A – Construction Phasing

**Fields out of Commission:**

- (8) Tennis Courts
- (2) Softball Fields
- (1) Baseball Field
- (1) Soccer Field

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# Option 4B – New Construction

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## Option 4B – Site Plan




**PROGRAM**

1 - TENNIS (5 Courts)
2 - SOFTBALL
3 - BASEBALL
4 - SOCCER
5 - TRACK
6 - WETLAND
7 - PARKING
8 - PRACTICE FIELD W/ RETAINING WALL
9 - FOOTBALL
10 - FIELD HOCKEY
11 - PICKLEBALL
13 - ATHLETIC BUILDING
14 - PREK PLAY
15 - SPARTAN PLAZA
16 - HOME BLEACHERS
17 - VISITOR BLEACHERS
18 - LANDSCAPE LOOP
19 - OUTDOOR CLASSROOMS
20 - COMMUNITY GARDEN
21 - AMPHITHEATER
22 - CIVIC GREEN

**CIRCULATION**

- VEHICULAR DRIVE
- LIMITED ACCESS: EMERGENCY, MAINTENANCE, BICYCLES
- SERVICE DRIVE
- BIKE LANE
- ACCESSIBLE PEDESTRIAN PATH
- HIKING TRAIL (NOT ADA ACCESSIBLE)
- NATURE WALK & HYDROLOGY LOOP

**KEY ENTRANCES**

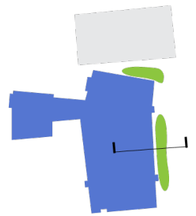
- HS MAIN ENTRY
- PRE-K/DISTRICT OFFICES
- LOADING

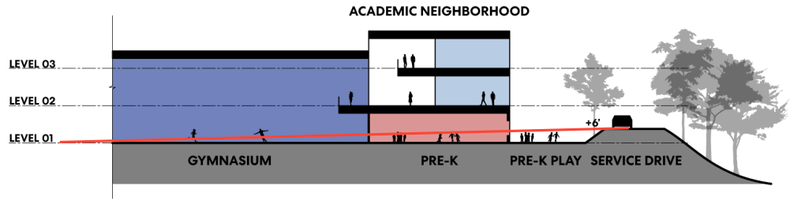
**SITE PROGRAM**

- EDUCATION/RECREATION
- GRASS FIELD
- SYNTHETIC TURF FIELD



## Option 4B – Section through Pre-K Play



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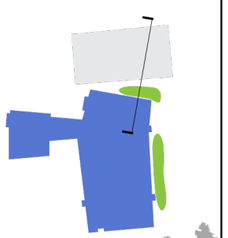
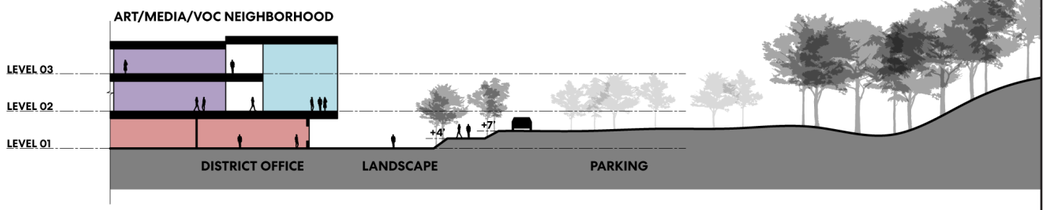
## Option 4B – Section through District Offices



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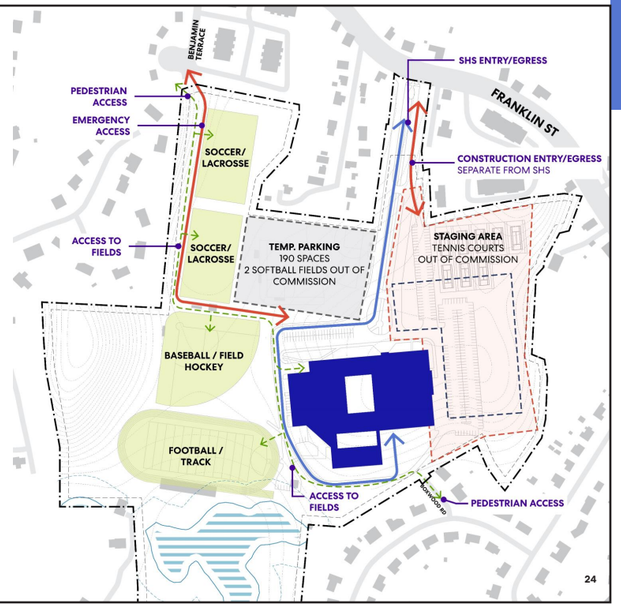
## Option 4B – Construction Phasing

**Fields out of Commission:**

- **(8) Tennis Courts**
- **(2) Softball Fields**



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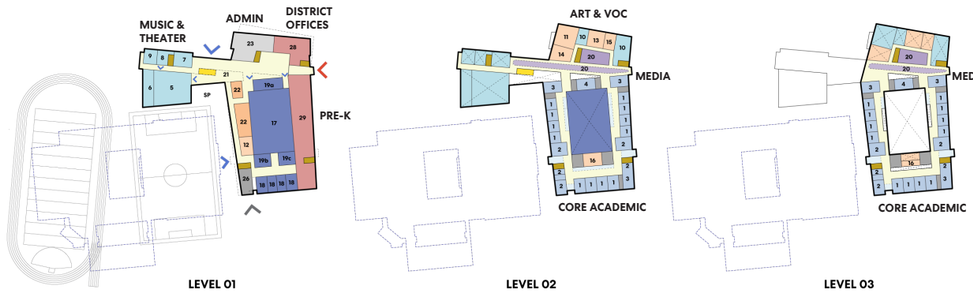
## Option 4B – Floor Plans

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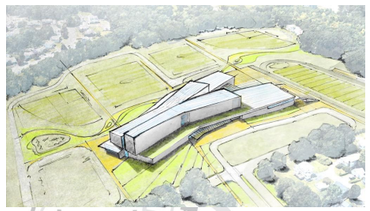
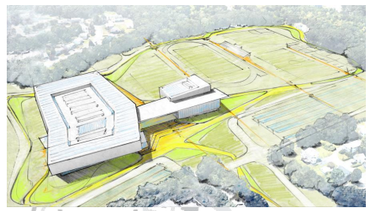
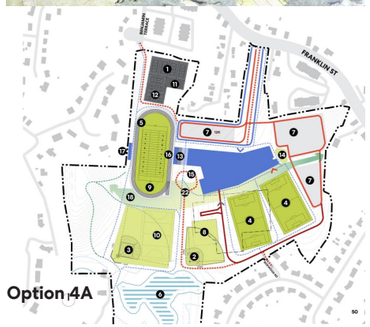
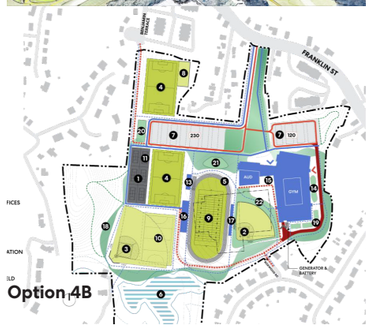
## Option 4A vs Option 4B








Option 4A




Option 4B

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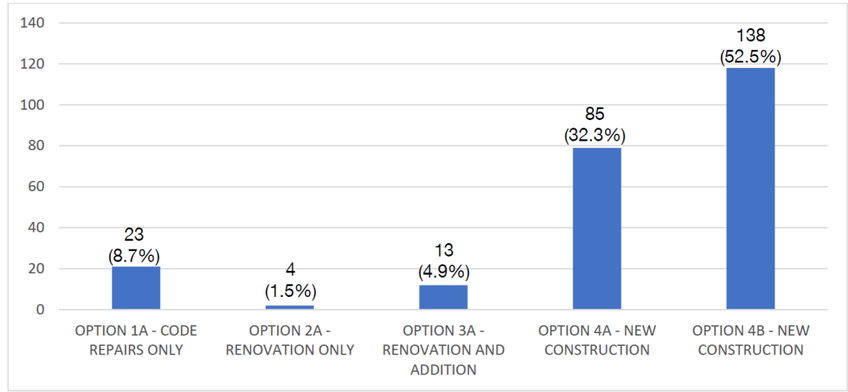
## Community Survey Results

1. Which of the design alternatives above provides the Stoneham Community the best long-term plan for educating its high school students?

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# Project Cost

Building Committee Meeting



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## Cost Estimate



| | Code Repair Only Option 1 | Renovation Only Option 2 | Renovation/ Addition Option 3A | New Construction Option 4A | New Construction Option 4B |
|---|---|---|---|---|---|
| Approximate Total Project Cost | $115.5M | $168.4M | $181.9M | $177.4M | $176.2M |
| Approximate Cost to Stoneham | $62.9M | $110.1M | $128.7M | $126.4M | $125.3M |

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## Tax Impact Schedule

Stoneham High School Feasibility Study
Average Homeowner Tax Impact
PSR Submission
12/3/20 *(updated 12/7/20)*

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**DRAFT - FOR DISCUSSION PURPOSES ONLY**

| PDP Phase | Code Repair Only Option 1A | Renovation Only Option 2A | Renovation/ Addition Option 3A | New Construction Option 4A | New Construction Option 4B |
|---|---|---|---|---|---|
| ***Stoneham Share*** | $61,024,855 | $111,500,522 | $120,278,104 | $123,733,473 | $121,986,054 |
| Rate | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% |
| Term (years) | 20 | 20 | 20 | 20 | 20 |
| Yearly Payment-20 yr Average | $ 4,101,829 | $ 7,494,586 | $ 8,084,578 | $ 8,316,833 | $ 8,199,379 |
| Average Home Value | $ 577,700 | $ 577,700 | $ 577,700 | $ 577,700 | $ 577,700 |
| **Annual Tax Increase Average Home-20 yr Average** | $ 475 | $ 868 | $ 937 | $ 964 | $ 950 |
| Annual Tax Increase per $1,000 Valuation | $ 0.82 | $ 1.50 | $ 1.62 | $ 1.67 | $ 1.65 |

| PSR Phase | Code Repair Only Option 1A | Renovation Only Option 2A | Renovation/ Addition Option 3A | New Construction Option 4A | New Construction Option 4B |
|---|---|---|---|---|---|
| ***Stoneham Share*** | $62,956,915 | $110,147,850 | $128,690,402 | $126,421,381 | $125,289,311 |
| Rate | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% |
| Term (years) | 20 | 20 | 20 | 20 | 20 |
| **Yearly Payment-20 yr Average** | $ 4,231,694 | $ 7,403,666 | $ 8,650,016 | $ 8,497,503 | $ 8,421,410 |
| Average Home Value | $ 577,700 | $ 577,700 | $ 577,700 | $ 577,700 | $ 577,700 |
| **Annual Tax Increase Average Home-20 yr Average** | $ 490 | $ 858 | $ 1,002 | $ 985 | $ 976 |
| **Annual Tax Increase per $1,000 Valuation** | $ 0.85 | $ 1.49 | $ 1.74 | $ 1.71 | $ 1.69 |

Assumptions: Tax rate based on Fiscal 2023 assessed valuation and AVERAGE house value of $577,700.
Yearly impact will change based upon subsequent year tax rates and valuations.
Code Repair Only Option 1 does not include any site and playing field work or any educational improvement work in the building.
Costs subject to change as Feasibility Study progresses.

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# Discussion

Building Committee Meeting

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PROJECT MANAGEMENT SMMA

Stoneham High School Feasibility Study
Average Homeowner Tax Impact
PSR Submission
12/3/20 *(updated 12/7/20)*

**DRAFT - FOR DISCUSSION PURPOSES ONLY**

| **PDP Phase** | **Code Repair Only Option 1A** | **Renovation Only Option 2A** | **Renovation/ Addition Option 3A** | **New Construction Option 4A** | **New Construction Option 4B** |
|---|---|---|---|---|---|
| ***Stoneham Share*** | **$61,024,855** | **$111,500,522** | **$120,278,104** | **$123,733,473** | **$121,986,054** |
| Rate | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% |
| Term (years) | 20 | 20 | 20 | 20 | 20 |
| Yearly Payment-20 yr Average | $ 4,101,829 | $ 7,494,586 | $ 8,084,578 | $ 8,316,833 | $ 8,199,379 |
| Average Home Value | $ 577,700 | $ 577,700 | $ 577,700 | $ 577,700 | $ 577,700 |
| **Annual Tax Increase Average Home-20 yr Average** | **$ 475** | **$ 868** | **$ 937** | **$ 964** | **$ 950** |
| Annual Tax Increase per $1,000 Valuation | $ 0.82 | $ 1.50 | $ 1.62 | $ 1.67 | $ 1.65 |

| **PSR Phase** | **Code Repair Only Option 1A** | **Renovation Only Option 2A** | **Renovation/ Addition Option 3A** | **New Construction Option 4A** | **New Construction Option 4B** |
|---|---|---|---|---|---|
| ***Stoneham Share*** | **$62,956,915** | **$110,147,850** | **$128,690,402** | **$126,421,381** | **$125,289,311** |
| Rate | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% |
| Term (years) | 20 | 20 | 20 | 20 | 20 |
| **Yearly Payment-20 yr Average** | **$ 4,231,694** | **$ 7,403,666** | **$ 8,650,016** | **$ 8,497,503** | **$ 8,421,410** |
| Average Home Value | $ 577,700 | $ 577,700 | $ 577,700 | $ 577,700 | $ 577,700 |
| **Annual Tax Increase Average Home-20 yr Average** | **$ 490** | **$ 858** | **$ 1,002** | **$ 985** | **$ 976** |
| **Annual Tax Increase per $1,000 Valuation** | **$ 0.85** | **$ 1.49** | **$ 1.74** | **$ 1.71** | **$ 1.69** |

Assumptions: Tax rate based on Fiscal 2023 assessed valuation and AVERAGE house value of $577,700.
Yearly impact will change based upon subsequent year tax rates and valuations.
Code Repair Only Option 1 does not include any site and playing field work or any educational improvement work in the building.
Costs subject to change as Feasibility Study progresses.





Stoneham High School Feasibility Study
Preliminary PSR Total Project Cost Estimate Comparison
12/3/2020

PROJECT MANAGEMENT SMMA

**DRAFT**

PM&C Estimate
Dated 12/3/20

| | | | PDP Phase Project Costs | | | PSR Phase Project Costs | |
|---|---|---|---|---|---|---|---|
| **SF** | **Option** | | | **Project Cost/SF** | | | **Project Cost/SF** |
| 208,113 | **Code Repairs Only Option 1A** | Construction Cost | $88,047,467 | | | $87,064,326 | |
| | | Building Cost | $78,183,395 | | | $77,258,529 | |
| | | Site Cost | $3,795,310 | | | $3,750,414 | |
| | | Concession/Locker Room Building | $0 | | | $0 | |
| | | Demo/HazMat Cost | $6,068,762 | | | $6,055,383 | |
| | | Temporary Classroom Modulars | $5,600,000 | | | $5,600,000 | |
| | | Fees,Testing, Utilities, and Expenses | $15,156,408 | | | $15,023,684 | |
| | | FFE/Technology | $0 | | | $0 | |
| | | Contingencies | $6,163,323 | | | $7,835,789 | |
| | | **total** | **$114,967,198** | **$552** | **total** | **$115,523,799** | **$555** |
| 208,113 | **Renovation Only Option 2A** | Construction Cost | $134,079,253 | | | $129,540,192 | |
| | | Building Cost | $101,123,150 | | | $97,665,445 | |
| | | Site Cost | $24,824,019 | | | $26,005,549 | |
| | | Concession/Locker Room Building | $2,250,000 | | | $0 | |
| | | Demo/HazMat Cost | $5,882,084 | | | $5,869,198 | |
| | | Temporary Classroom Modulars | $5,600,000 | | | $5,600,000 | |
| | | Fees,Testing, Utilities, and Expenses | $22,036,949 | | | $21,727,926 | |
| | | FFE/Technology | $2,502,000 | | | $2,502,000 | |
| | | Contingencies | $9,228,048 | | | $9,067,813 | |
| | | **total** | **$173,446,250** | **$833** | **total** | **$168,437,931** | **$809** |
| 207,827 | **Renovation/Addition Option 3A** | Construction Cost | $140,176,603 | | | $145,405,962 | |
| | | Building Cost | $102,795,319 | | | $109,855,783 | |
| | | Site Cost | $28,287,704 | | | $25,953,240 | |
| | | Concession/Locker Room Building | $2,250,000 | | | $2,880,106 | |
| | | Demo/HazMat Cost | $6,843,580 | | | $6,716,833 | |
| | | Fees,Testing, Utilities, and Expenses | $22,860,091 | | | $23,869,805 | |
| | | FFE/Technology | $2,502,000 | | | $2,502,000 | |
| | | Contingencies | $9,654,862 | | | $10,178,417 | |
| | | **total** | **$175,193,556** | **$858** | **total** | **$181,956,184** | **$876** |
| 207,827 | **New Construction Option 4A** | Construction Cost | $139,833,139 | | | $141,652,636 | |
| | | Building Cost | $102,795,502 | | | $103,847,292 | |
| | | Site Cost | $28,051,645 | | | $28,390,704 | |
| | | Concession/Locker Room Building | $2,250,000 | | | $2,838,789 | |
| | | Demo/HazMat Cost | $6,735,992 | | | $6,575,851 | |
| | | Fees,Testing, Utilities, and Expenses | $22,813,724 | | | $23,363,106 | |
| | | FFE/Technology | $2,502,000 | | | $2,502,000 | |
| | | Contingencies | $9,630,820 | | | $9,915,684 | |
| | | **total** | **$174,779,683** | **$856** | **total** | **$177,433,426** | **$854** |
| 207,827 | **New Construction Option 4B** | Construction Cost | $138,271,461 | | | $140,636,495 | |
| | | Building Cost | $101,572,664 | | | $103,056,537 | |
| | | Site Cost | $27,709,717 | | | $28,176,998 | |
| | | Concession/Locker Room Building | $2,250,000 | | | $2,835,267 | |
| | | Demo/HazMat Cost | $6,739,080 | | | $6,567,693 | |
| | | Fees,Testing, Utilities, and Expenses | $22,602,897 | | | $23,225,927 | |
| | | FFE/Technology | $2,502,000 | | | $2,502,000 | |
| | | Contingencies | $9,521,502 | | | $9,844,555 | |
| | | **total** | **$172,897,860** | **$847** | **total** | **$176,208,977** | **$848** |

Costs subject to change as Feasibility Study progresses

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PROJECT MANAGEMENT

Stoneham High School Feasibility Study
Preliminary PSR Approximate Reimbursement Comparison
12/3/2020

**DRAFT**

PM&C Estimate
Dated 12/3/20

| | Code Repair Only Option 1A | Renovation Only Option 2A | Renovation/ Addition Option 3A | New Construction Option 4A | New Construction Option 4B |
|---|---|---|---|---|---|
| **Total Project Cost** | $115,523,799 | $168,437,931 | $181,956,184 | $177,433,426 | $176,208,977 |
| **Approximate MSBA Reimbursement** | $52,566,884 | $58,290,081 | $53,265,782 | $51,012,045 | $50,919,666 |
| **Approximate Cost to the Town** | **$62,956,915** | **$110,147,850** | **$128,690,402** | **$126,421,381** | **$125,289,311** |
| **Summary of Approximate Ineligible Costs** | | | | | |
| **Temporary Classroom Modulars** | $5,600,000 | $5,600,000 | $0 | $0 | $0 |
| **Site Costs above 8% Cap** | $0 | $14,262,288 | $20,585,314 | $21,030,236 | $20,875,561 |
| **Concession/Locker Room Building** | na | na | $2,050,000 | $2,050,000 | $2,050,000 |
| **Building Costs above $333/SF Cap** | $11,295,314 | $40,295,849 | $47,133,471 | $42,948,685 | $42,094,670 |
| **Building Costs Ineligible SF** | $5,150,628 | $4,530,798 | $10,084,905 | $10,084,905 | $10,084,905 |
| **OPM and Designer Fees on Ineligible SF** | $768,691 | $1,143,710 | $1,362,752 | $1,339,392 | $1,332,057 |
| **Asbestos Flooring Abatement** | $412,000 | $412,000 | $412,000 | $412,000 | $412,000 |
| **FFE/Technology over $2,400/student** | na | $834,000 | $834,000 | $834,000 | $834,000 |
| **Legal Fees, Moving Expenses, Contingencies** | $4,773,216 | $4,306,206 | $4,782,179 | $6,086,106 | $6,045,460 |
| | $27,999,849 | $71,384,851 | $87,244,621 | $84,785,324 | $83,728,653 |

Costs subject to change as Feasibility Study progresses
Code Repair Only Option 1 does not include any site and playing field work or any educational improvement work in the building





Stoneham High School Feasibility Study
PSR Construction Cost Comparison
12/3/2020

PROJECT MANAGEMENT SMMA

**DRAFT**

PM&C Estimate
Dated 12/3/20

| | Code Repair Only Option 1A | Renovation Only Option 2A | Renovation/ Addition Option 3A | New Construction Option 4A | New Construction Option 4B |
|---|---|---|---|---|---|
| **Building Costs** | | | | | |
| Foundations | $573,250 | $573,250 | $4,875,810 | $5,631,605 | $3,234,067 |
| Superstructure | $1,289,522 | $1,905,068 | $6,368,864 | $8,810,031 | $8,661,362 |
| Exterior Closure | $3,250,002 | $9,328,752 | $12,786,440 | $10,834,295 | $12,501,463 |
| Roofing | $2,748,488 | $2,995,896 | $2,048,500 | $2,262,244 | $2,746,324 |
| Interior Construction | $3,826,957 | $8,405,443 | $6,342,867 | $8,001,167 | $8,001,167 |
| Staircases | $222,000 | $222,000 | $246,436 | $274,723 | $319,723 |
| Interior Finishes | $7,217,986 | $7,217,986 | $5,434,118 | $7,066,118 | $7,066,118 |
| Conveying Systems | $220,000 | $220,000 | $120,000 | $160,000 | $120,000 |
| Plumbing | $3,347,726 | $3,329,808 | $2,557,232 | $3,325,232 | $3,325,232 |
| HVAC | $11,446,215 | $14,567,910 | $11,187,890 | $14,547,890 | $14,547,890 |
| Fire Protection | $1,248,678 | $1,248,678 | $958,962 | $1,246,962 | $1,246,962 |
| Electrical | $8,589,892 | $8,718,417 | $6,998,765 | $8,723,426 | $8,723,426 |
| Equipment | $1,453,600 | $1,453,600 | $1,259,100 | $1,832,600 | $1,710,100 |
| Furnishings | $2,588,914 | $2,588,914 | $1,814,056 | $2,275,882 | $2,309,748 |
| Selective Renovations | $0 | $0 | $14,694,049 | $0 | $0 |
| Selective Demolition | $1,834,616 | $2,250,842 | $0 | $0 | $0 |
| Building Demolition | $0 | $0 | $1,280,904 | $1,248,678 | $1,248,678 |
| Hazardous Materials | $4,025,000 | $4,025,000 | $3,500,000 | $3,500,000 | $3,500,000 |
| Phasing | $1,495,735 | $1,950,797 | $500,000 | $0 | $0 |
| **Subtotal** | **$55,378,581** | **$71,002,361** | **$82,973,993** | **$79,740,853** | **$79,262,260** |
| **Sitework** | | | | | |
| General Sitework | $2,492,892 | $8,500,933 | $10,936,737 | $10,915,787 | $10,786,737 |
| Concession/Locker Room | $0 | $0 | $2,050,000 | $2,050,000 | $2,050,000 |
| Two Synthetic Soccer Fields | $0 | $1,686,000 | $1,686,000 | $1,686,000 | $1,686,000 |
| Synthetic Football Field, Track, Bleachers | $0 | $3,207,246 | $3,207,246 | $3,207,246 | $3,207,246 |
| Sports Lighting - three Fields | $0 | $1,440,000 | $1,440,000 | $1,440,000 | $1,440,000 |
| Two New Traffic Signals | $0 | $3,000,000 | $3,000,000 | $3,000,000 | $3,000,000 |
| Temporary Utilities | $0 | $0 | $253,000 | $253,000 | $253,000 |
| **Subtotal** | **$2,492,892** | **$17,834,179** | **$22,572,983** | **$22,552,033** | **$22,422,983** |
| **Mark-ups** | | | | | |
| Escalation | $3,761,646 | $5,774,375 | $6,582,706 | $7,302,062 | $7,074,544 |
| Design Contingency | $8,680,721 | $13,325,481 | $12,665,637 | $12,275,146 | $12,202,229 |
| General Conditions | $7,680,000 | $7,680,000 | $5,760,000 | $5,280,000 | $5,280,000 |
| General Requirements | $3,515,692 | $5,396,820 | $4,991,813 | $4,874,804 | $4,838,481 |
| Bonds | $703,138 | $1,079,364 | $1,247,953 | $1,218,701 | $1,209,620 |
| Insurance | $984,394 | $1,511,110 | $1,747,134 | $1,706,181 | $1,693,468 |
| Permit | $0 | $0 | $0 | $0 | $0 |
| Temporary Classrooms | $5,600,000 | $5,600,000 | $0 | $0 | $0 |
| CM Fee | $1,757,846 | $2,698,410 | $3,119,883 | $3,046,752 | $3,024,050 |
| CM Contingency | $2,109,415 | $3,238,092 | $3,743,860 | $3,656,103 | $3,628,860 |
| **Subtotal** | **$34,792,852** | **$46,303,652** | **$39,858,986** | **$39,359,749** | **$38,951,252** |
| **TOTAL** | **$92,664,325** | **$135,140,192** | **$145,405,962** | **$141,652,635** | **$140,636,495** |

Costs subject to change as Feasibility Study progresses

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Project Management | SMMA

# Project Minutes

| | | | |
|---|---|---|---|
| Project: | Stoneham High School Feasibility Study | Project No.: | 20033 |
| Prepared by: | Joel Seeley | Meeting Date: | 12/7/2020 |
| Re: | Green Building Initiatives Meeting | Time: | 10:00am |
| Location: | Remote Locations | Meeting No: | 7 |
| Distribution: | Attendees (MF) | | |

Attendees:

| PRESENT | NAME | AFFILIATION |
|---|---|---|
| | Marie Christie | Co-Chair, School Building Committee |
| | David Bois | Co-Chair, School Building Committee |
| ✓ | Raymie Parker | Chair, Select Board |
| ✓ | Dennis Sheehan | Town Administrator |
| ✓ | John Macero | Superintendent of Schools |
| ✓ | Brian McNeil | Facilities Director |
| ✓ | Erin Wortman | Director, Planning and Community Development |
| ✓ | Susan McPhee | Energy Conservation Coordinator |
| | David Mauer | School Committee |
| | Kimberly Cullinane | Eversource - Electricity |
| | Mark Rooney | Eversource - Electricity |
| | Denise Rouleau | National Grid - Gas |
| ✓ | Vamshi Gooje | Thornton Tomasetti |
| ✓ | Xiaoshu Du | Thornton Tomasetti |
| ✓ | Brooke Trivas | Perkins and Will |
| ✓ | Patrick Cunningham | Perkins and Will |
| | Kevin Caddle | BALA |
| ✓ | Edward Dolan | BALA |
| ✓ | Joel Seeley | SMMA |
| | | |

| Item # | Action | Discussion |
|---|---|---|
| 7.1 | P. Cunningham<br>V. Gooje | **12/7/20 SSBC Presentation**<br>The 12/7/20 Zero Net Energy Strategy presentation was reviewed.<br>1. The ZNE presentation should be moved to be before the Design Options presentation.<br>2. Add a slide introducing the presenters. |

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Cambridge, MA 02138
617.547.5400

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| Item # | Action | Discussion |
|---|---|---|
| | | 3. Move the PV slides forward before the HVAC systems slides and change the baseline electricity cost to 25 cents/kWh.<br>4. Separate out the data on the cumulative cash flow slide to be clearer.<br>5. Add the annual water savings to the capital cost/operating cost slide. |
| 7.2 | E. Wortman<br>D. Sheehan<br>V. Gooje<br>E. Wortman | **Photovoltaic (PV) System**<br>1. E. Wortman will share the PV RFP once received from JD at A-B. *(from prior meeting)*<br>2. D. Sheehan will confirm with Town Counsel on the whether the School Committee or Select Board will sign the Letter of Support with the PV Vender for the SMART Program. *(from prior meeting)*<br>3. V. Gooje to provide E. Dolan a copy of the Basis of Design relative to degree day decisions used on the A-B school. *(from prior meeting)*<br>4. E. Wortman will ask JD the following question: *(from prior meeting)*<br>a. How did A-B estimate the Alternative Energy Credits for the Geothermal System? |
| 7.3 | P. Cunningham | **Geo-Thermal System**<br>1. P. Cunningham reviewing scope of services to be performed during the Schematic Design Phase versus in the Design Development Phase to develop a fee proposal within the available budget. *(from prior meeting)* |
| 7.4 | D. Sheehan | **Domestic Water Main Heat Exchanger System**<br>1. D. Sheehan will confirm with the Water Department if there are any restrictions or regulations on altering the water temperature. *(from prior meeting)* |
| 7.5 | P. Cunningham | P. Cunningham indicated there will potentially be gas use in the kitchen and science rooms and he will provide direction as the project design progresses. *(from prior meeting)* |
| 7.6 | J. Seeley | J. Seeley to develop a ZNE decision timeline for the SSBC to use in deciding the final extent of ZNE in the Schematic Design Phase. *(from prior meeting)* |
| 7.7 | P. Cunningham | P. Cunningham is developing a draft LEED Scorecard for review at the next meeting. *(from prior meeting)* |

The information herein reflects the understanding reached. Please contact the author if you have any questions or are not in agreement with these Project Minutes

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JGS/sat/P:\2020\20033\04-MEETINGS\4.3 Mtg_Notes\Green Building Initiatives Working Group\7_2020_7December\Greenbuildinginitiativesmeeting_7December2020.Docx



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**Subject:** Fw: 12.9 forum

**From:** mmw <mmw@copper.net>
**Sent:** Wednesday, December 9, 2020 8:26 PM
**To:** SSBC Email <ssbc@stoneham-ma.gov>
**Subject:** 12.9 forum

I did not vote as there is not sufficient information to answer the question about 'the best longterm plan for educating high schools students'.

I asked previously and will beg/demand again that the next series of forums provide as much detail about the inside of the building as you have about the Sports Complex which happens to surround a school building!

It is disturbing that the committee is providing a bricks & mortar decision to the state without having considered the education piece. Perhaps that is the state approach, but if it is, it certainly is not intuitive.

Marcia M Wengen

Sent from my T-Mobile 4G LTE Device

1

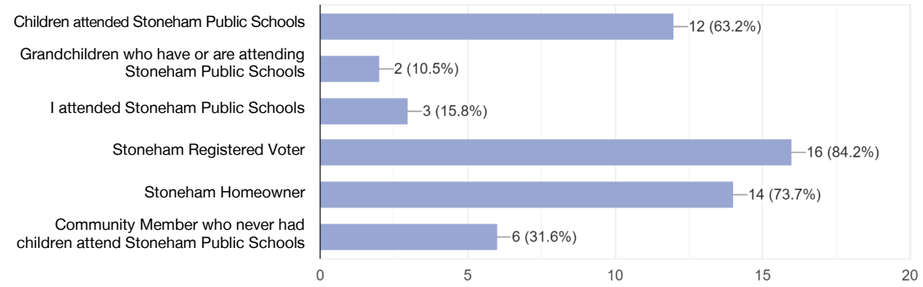




## STONEHAM HIGH SCHOOL FEASIBILITY STUDY
## COMMUNITY-WIDE SURVEY NO. 1A
### NOVEMBER 25, 2020 TO DECEMBER 16, 2020
## SURVEY RESULTS

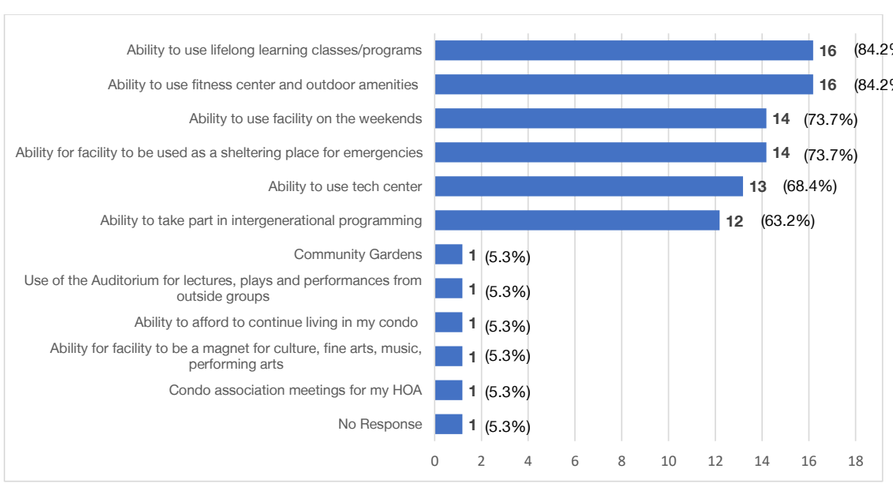
1. Please select all stakeholder groups that apply to you.

19 responses




2. With a new/improved community facility, I would like to see:

19 responses

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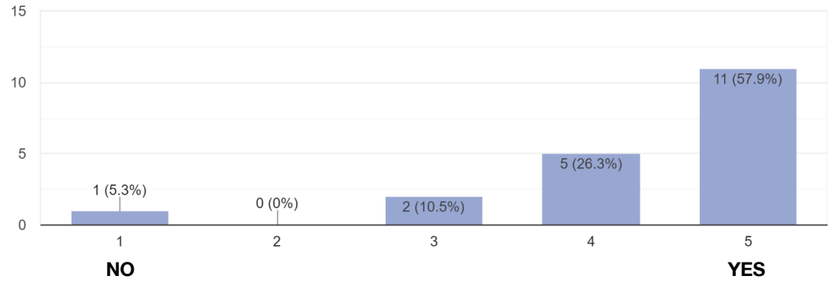
## STONEHAM HIGH SCHOOL FEASIBILITY STUDY
## COMMUNITY-WIDE SURVEY NO. 1A
### NOVEMBER 25, 2020 TO DECEMBER 16, 2020
## SURVEY RESULTS

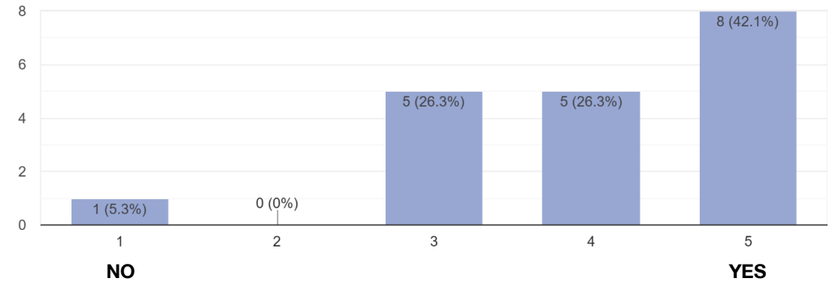
3. I would support the construction of a new high school complex as a long-term solution.

19 responses




4. I believe Stoneham's urgent need for improving the high school complex must be addressed now.

19 responses

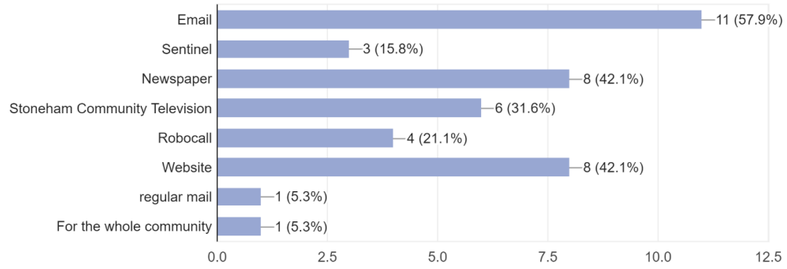





## STONEHAM HIGH SCHOOL FEASIBILITY STUDY
## COMMUNITY-WIDE SURVEY NO. 1A
### NOVEMBER 25, 2020 TO DECEMBER 16, 2020
## SURVEY RESULTS

5. How can the School Building Committee improve communication with you regarding this project and state grant?

19 responses




6. Is there another important consideration that is not listed in the previous questions? If so, please explain.

- I would like to see more of the grounds to be opened up to the community for individual gardens. Also I foresee the school being opened year round for educational and community programs.
- I believe that there should be tennis courts included in the rebuild. It is a sport for a lifetime that the community would benefit having access to.
- While we are senior citizens interested in education for our Stoneham students, we realize many of the things the townspeople may want could be very costly. If the budget is cut, education first but lay out the foundation for future improvements when doing the building. (Needs A/C so school can be used in summer.)
- How much will taxes increase under each proposal? How much warning will residents have so they can relocate if necessary?
- Not enough info to understand what school now has versus what is needed to make it a 21st century school and community center, as well as other facilities in town that could be adapted for community needs.
- Music, Performing arts. Modify existing facilities or create new space. See Galvin Middle School, Wakefield. Used for students and the community. Music is for life. In Stoneham, the bond created through music has enriched the life of Spartan Choral Alumni to the present, making many of them caring friends for life. P.S. If everything has to be focused on "sports", create a space where the community can dance salsa, tango, mambo, etc. They are great aerobic exercise integrating rhythm and music. Some spaces can be used for Yoga and Tai Chi. Integrate into one outdoor space, build a music shell, miniature of the Esplanade. Save the space, Build in future.
- I am an abutter (Emerald Court) concerned about excessive traffic on Franklin Street (now, in normal times [non-COVID] and especially during construction/refurbishment.



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## STONEHAM HIGH SCHOOL FEASIBILITY STUDY
## COMMUNITY-WIDE SURVEY NO. 1A
**NOVEMBER 25, 2020 TO DECEMBER 16, 2020**
## SURVEY RESULTS

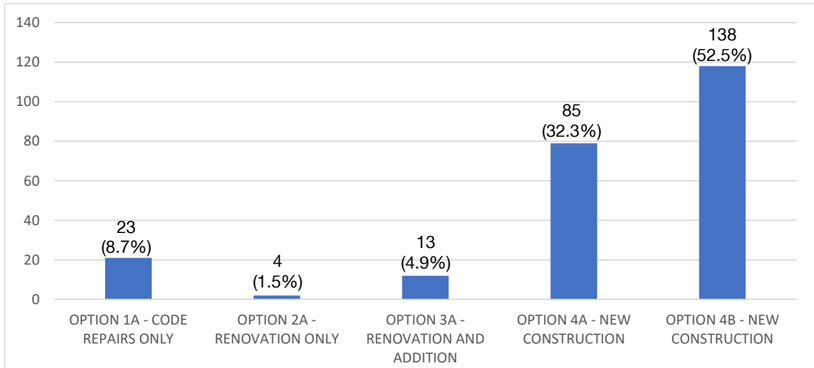
What/How will this construction and possible development/construction of Weiss Farm project be handled?

- Because I am an abutter to property having been located there for 45 years, I would like updated information as it develops.



## STONEHAM HIGH SCHOOL FEASIBILITY STUDY
## COMMUNITY-WIDE SURVEY NO. 2
**DECEMBER 5, 2020 TO DECEMBER 12, 2020**
## SURVEY RESULTS

1. Which of the design alternatives above provides the Stoneham Community the best long-term plan for educating its high school students?




2. Please provide any additional feedback you have on any of these specific options

**Code Repair, Renovation and Renovation/Addition Options**

- Important to keep gym and track in place
- It seems 1a meets the students' needs, i.e., no district offices. at the lowest taxpayer cost.
- Repairs or renovating this current building are frankly an unacceptable option.
- Doing a code update on the existing building is unacceptable. We need to invest in the future of the school, students and district.
- 1 and 2 are a waste of time and money

**New Construction Options**

- I think new build is the way to go! The timeline of the project is also quicker which I think is better for the students living through construction.
- I whole heartedly support a complete tear down and new construction of the HS. It is hard to tell what the differences are in 4A and 4B, but I think the more amenities, the better, Stoneham needs to be brought into the 21st century!
- I like the green spaces around 4B. I think the layout of the grounds is the best. And, I like new build as opposed to renovation because it will be faster.
- Do not quite understand the differences between 4B and 4A
- I prefer either new construction since it will be less disruptive to on site students and will be constructed more quickly.
- The old building should be demolished. This vibrant community needs a vibrant building.
- From the images in this survey it's difficult to tell the difference between 4A and 4B



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- Difficult to Judge 4A vs 4B at a glance. I preferred A because of better axial symmetry. It would be disappointing to pay a small fortune for code repairs. We might as well bite the bullet & take care of our kids (4A or 4B).
- The priority should both be the long-term ideal with the least amount of disruption. In other words NOT REPEATING THE AWFUL SITUATION OF MIDDLE SCHOOL CONSTRUCTION for these students. The building needs to come down - renovating and repairing is a waste of money and very short sighted
- I feel a new building is best and will be less disruptive to current students.
- Not clear what the functional difference is between 4B and 4A.
- The flow of the building is optimized in 4B. PreK placement is good. Cost to the town is slightly less than 4A
- Everything should be new this is crazy it's taking this long to figure things out.
- I was not quite sure what the major difference is between 4A and 4B is other than layout? I would weigh them equally and defer to the committee as to which is best.
- New construction is usually the most efficient choice. Renovating always adds costs due to the base structure limitations.
- Love these options and the ranges. Hard to argue for anything less than new construction.
- Very excited about the options for community space in the 4B option, the surrounding greenwalk, community gardens, amphitheater, etc. I was originally thinking a renovation plus new would make sense but hate the idea of burying all the maker spaces, etc. in the basement under the gym, especially for a higher cost.
- There are a lot of advantages on new construction that will provide better service to future generations to come in the long run, educational spaces like this are an investment that should not be nickel and dime for.
- We need a new building.
- I do not like option 4A which places the tennis courts close to the residential houses. The sound of balls being consistently hit would be a nuisance.
- I am not really clear what the diff is between 4a and 4bbut just pick the BEST most long-lasting option and DO NOT CHEAP OUT on construction. 1 and 2 are a waste of time and money
- Tear it down and build a new high school.
- I like both 4A and 4B but I prefer 4A because the whole school is surrounded by green space/athletic fields. I also think the preschool looks like it has more play space.
- With the exception of code repair only (which is a non-starter) the cost differentials are not so great as to exclude the best options which are new construction.
- I think we need a whole new building, a fresh start. Times have changed and our students need to be given every opportunity to succeed, and teachers need to be given everything they need to help our students succeed. That starts with a new building.
- I originally selected 4A as my preferred choice but after seeing the 3d sketches I overwhelming would prefer option 4B. I do not think the images included in this survey do justice to how wonderful option 4B would be with the green space, etc.
- Do not understand the differences between 4 a & b

### PreK Program

- I feel strongly that the preschool needs to move out of the elementary schools--there is no room. Those classrooms should be used for K.
- Let us get it done correctly and offer our students from pre-k through grade 12 the bet educational experience. Our preschool programs are growing and they deserve an appropriate space!

### Cost

- Given the current economic situation and increase in remote learning, the town should be looking for ways to reduce the cost to taxpayers.



- If you choose to build new the Students/Parents should Pay for the Building. Retired residents should not have to foot the bill. We already paid for our children. We senior Residents cannot afford to live in Stoneham much longer. :-(
- If they are remote learning for most of the time. Money can be spent on after school activities instead. Or use the million in surplus that's supposed to be there right now

### Maintenance

- I hope there is also a plan for the maintenance & upkeep of the school.
- A building manager should be staffed (not a janitor /custodian) Maintenance program put in place for services and checkups of HVAC plumbing and overall building Durability.

### Athletics

- I think all varsity athletes/sports should have a chance to play in the 'Spartan Main Stadium' on a regular basis. Every student-athlete should get the feeling to play in front of an audience. (stands). Calling it only a football field seems outdated & not inclusionary. I know plenty of communities that use their main stadium for various sports. You also, have a better chance of hosting MIAA tournaments for various sports that could be a revenue generator, albeit small.
  I also, think not including basketball courts is a mistake. Basketball is probably one of the most socially economical sports in the USA. Not having courts does a disservice to families of economic disadvantage in our town. Besides, the outside courts can be used for various activities and has probably the highest ROI of any sport in this discussion. Basketball hoops & pavement is not a high-ticket item. I am surprised, discussions of paying up to 128 million dollars for a new H.S., the committee does not see value in a few basketball courts for the youth of the town. Thank you.
- Preserve athletic fields pricing on an indoor track
- It is unclear if option for a includes synthetic fields
- Multiple turf fields are necessary in the design. Stoneham is the only town in the Middlesex League without a single turf field in the town. Having multiple turf fields not only allows the field to be used in any weather but also allows for more rental income when the turf is rented for club sports, etc.

### Academics

- Hard to tell if new construction will include Auditorium. I hope it does.
- Please take into consideration students who do not play sports. Technology, STEAM, Life Skills are just as important. An amphitheater is important. Walking /Nature trails would be amazing. A place for a garden.
- The outside blueprint is less important to me than the specifics of the inside structure and how it might create better teaching and learning environments for the teachers and students, a safe and healthy environment with access to sun and air, and sustainable energy features. I do not see descriptions of the inside in the PowerPoints online.
- Need space for labs and vocational activities i.e., robotics and basic construction
- Please make sure every classroom has windows. As a teacher in another district without windows in her classroom this was a major design flaw. It is best for airflow and for safety. Keep traffic flow in mind. Keep safety a top priority.

### Outdoor Space

- I love the outdoor space that consists of both athletics and arts- outdoor amphitheater, etc.

### Environment

- I sincerely appreciate the committee’s work to make the best possible decisions for the environment.



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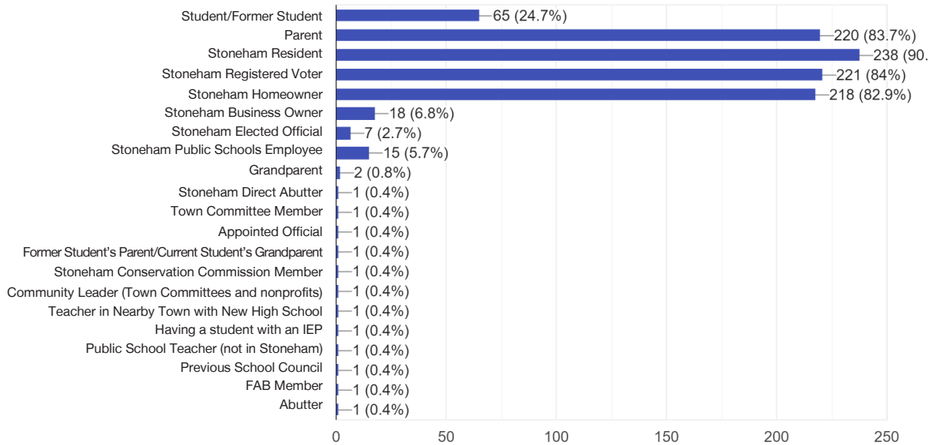
### General

- I am a resident and a real estate attorney who participates in underwriting large acquisitions for redevelopment such as hotels and large multifamily development- based on experience I've ranked the above
- We will regret it if we think small. The town is growing and will continue to do so.
- This survey will only be slightly useful because most people do not have time to figure out the differences between these plans. More details are needed and most won't take the time to review the meetings or knowledge that they can watch the meetings online after the fact.
- I like the idea of a centrally located main building.
- We know of other high schools built less than 10 years ago and are already too small and getting outdated. With Stoneham's location and amenities we will be growing
- Include key to numbers on plans
- We need to move forward on this for the future of our children and the town.
- I was hoping to see a pool included in the plans, I think it would be a great addition to the high school and the community.

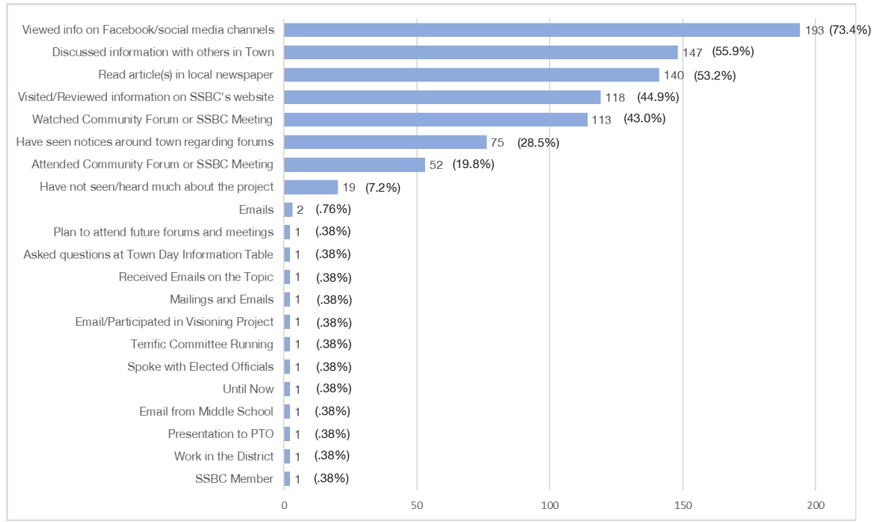
3. Please select all stakeholder groups that apply to you.

263 responses




4. Please check all the following ways in which you have learned about the status of the project.

263 responses

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Perkins&Will

# STONEHAM HIGH SCHOOL FEASIBILITY STUDY Community Forum 03

11.07.2020

## SCHOOL COMMITTEE MEMBERS

| | | | |
|---|---|---|---|
| Marie Christie | Co-Chair | Jeanne Craigie | Town Moderator |
| David Bois | Co-Chair | Lisa Gallagher | Middle School Admin. |
| Raymie Parker | Chair Select Board | Kevin Yianacopolus | High School Facilities |
| Nicole Nial | School Committee Member | Albert Talarico | Community Member |
| Cory Mashburn | Finance and Advisory Board | Douglas Gove | Community Member |
| Dennis Sheehan | Town Administrator | Stephen O'Neill | Community Member |
| John Macero | Superintendent of Schools | Josephine Thomson | Community Member |
| Bryan Lombardi | High School Principal | Sharon Iovanni | Community Member |
| David Pignone | Athletic Director | Paul Ryder | Community Member |
| Brian McNeil | Town Facilities Director | | |

**ARCHITECT** Perkins and Will

**OPM** Symmes Maini and McKee Associates

Perkins&Will | SMMA Project Management



## AGENDA

1\ Introduction
2\ MSBA Process
3\ Site Selection Process
4\ Site Planning Considerations
5\ Design Options
6\ Cost Analysis
7\ Tax Impact
8\ Next Steps



→ Aerial View of Stoneham High School

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## FEASIBILITY STUDY GOALS

- **Develop a long-term solution to our aging High School**
- **Provide spaces for Community use**
- **Provide Flexible, 21st Century Educational Spaces that meet MSBA Standards**
- **Meet the goals established in the Visioning Workshops**
- **Include the Pre-K Program in the High School to create space for our growing Elementary School population**
- **Provide a school that is accessible to all students and citizens**
- **Engineer a school that is energy efficient and capable of being zero energy reliant**
- **Improve the Traffic Conditions along Franklin Street**
- **Provide the school and community state of the art outdoor athletic facilities**
- **Provide a High School that is safe, code-compliant and a place Stoneham residents can be proud of**

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## A COMMUNITY WIDE RESOURCE

- **For our Students**
  Provide a school building that prepares our children for the challenges of today and tomorrow
- **For our Neighborhood**
  Provide synchronized traffic control at Franklin Place and Stevens Street to alleviate the congestion on Franklin Street and provide walking and bike paths to the school
- **For our Community**
  Provide multiple lighted synthetic turf playfields, running track, tennis courts and an indoor jogging/walking track for shared community use and nature trails into the bordering eco system
- **For our Environment**
  Provide a community facility that does not rely on fossil fuels and is powered by solar energy

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5

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# MSBA Process

Community Forum 03

957

## MASSACHUSETTS SCHOOL BUILDING AUTHORITY (MSBA)

- **MSBA is an independent public authority that administers and funds a program for grants to eligible cities, towns, and regional school districts for school construction and renovation projects.**
- **MSBA mandates a multi-step rigorous study and approval process**
- **MSBA will fund 52.06% plus incentives of eligible project costs for an approved project if accepted by the voters of Stoneham**

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## PDP FEASIBILITY STUDY SCOPE

**The MSBA has agreed to participate with Stoneham in a feasibility study for a 695 student High School.**

**Scope items include:**

- **Educational Visioning**
- **Existing Conditions Review**
- **Sustainable Design Achievement**
- **Design Alternatives**
  - **Renovation**
  - **Renovation / Addition**
  - **All New Construction**
- **Cost Estimates**

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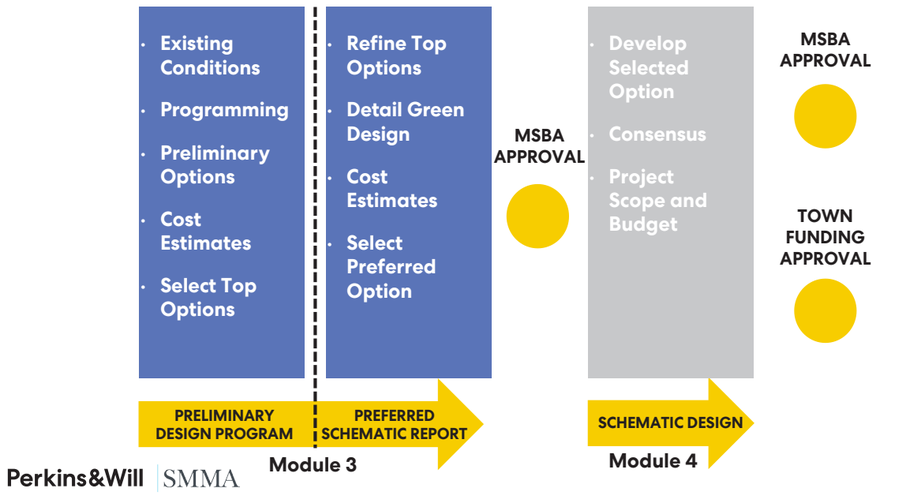
## MSBA PROCESS / FEASIBILITY STUDY AND SCHEMATIC DESIGN PHASES

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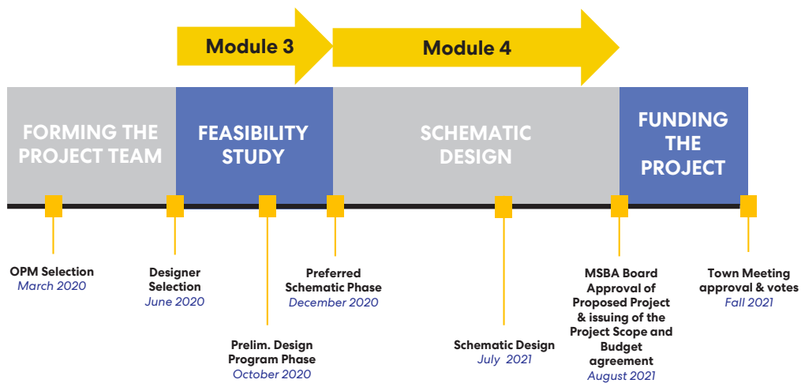
## PROJECT SCHEDULE – Feasibility & Schematic Design

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# Site Selection Process

Community Forum 03

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### Alternative Sites Review

- SSBC reviewed the June 2018 Stoneham Open Space and Recreational Plan
- SSBC found only three sites large enough to support a high school project
  - Bear Hill Golf Club
  - Unicorn Golf Course
  - Current High School Site
- Bear Hill Golf Club is not town-owned land
- Unicorn Golf Course is subject to Article 97 development restrictions
- SSBC determined that the Current High School site is the only viable site for the project

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Community Forum 03

# Conditions of Existing SHS

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## Existing Conditions

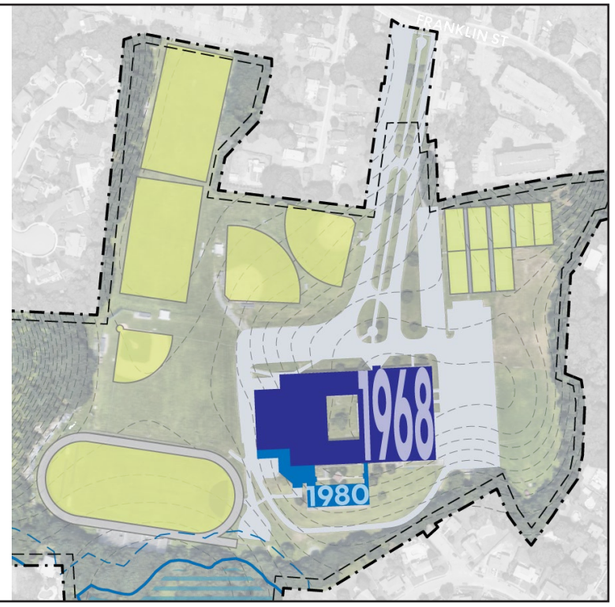
### Current Campus

**Junior High School (1968)**

**52 YEARS OLD**

**Senior High School (1980)**

**40 YEARS OLD**

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## Site Conditions











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## Exterior Conditions









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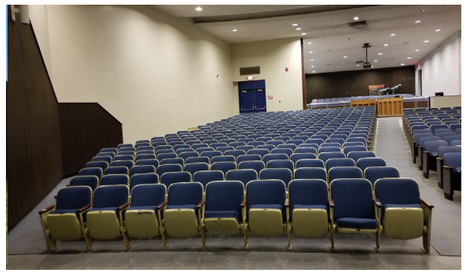
### Interior Conditions











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### Educational Visioning

## 2 Weeks / 8 days

| | | | | |
|---|---|---|---|---|
| WEEK 1 | **Day 1** Where Have We Been and Where Are We Going? | **Day 2** Future Ready | **Day 3** Planning Concepts | **Day 4** Learning about Exterior Space Needs |
| WEEK 2 | **Day 5** Critical Adjacencies | **Day 6** Learning from Subject Matter Experts | **Day 7** Sustainability – Net Zero Energy / Carbon Neutral | **Day 8** Hearing from the Community |

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### Community Forum 03

# Educational Visioning and Program

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### Educational Programming Summary

- 208,000 SF
- Appropriately sized general Classrooms
- Engineering and Technology Labs
- Maker Space and Fabrication Labs
- Music and Art Spaces
- SPED, RISE, and STRIDE Spaces
- Gymnasium
- Auditorium
- Interdisciplinary Project / Performance
- Library / Media Center
- Town-Wide Pre-K Program
- Concessions/Bathrooms/Storage for Athletics

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# Site Planning Considerations

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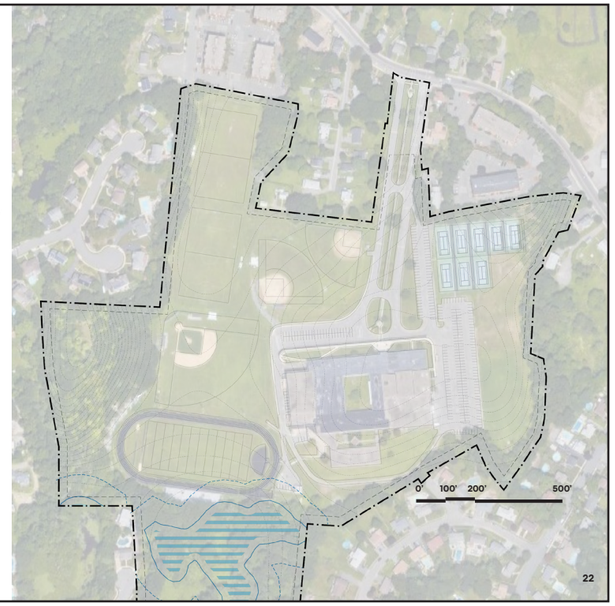
## High School Site / Overview

- 39.63 Acre Site
- 208,000sf Existing High School
- Formal Pedestrian and Vehicular Entry off Franklin Street
- Traffic Concerns
- Middlesex Fells Reservation Area
- Proximity to Neighborhood
- Significant Ledge on the West and Northeast of the Site
- Informal Expeditionary Trails

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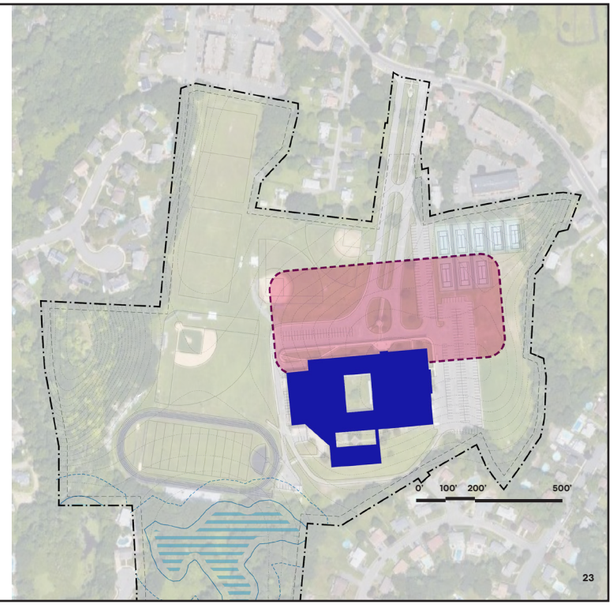
## High School Site / Building on the North

Site Considerations:

- Franklin St Civic Presence
- Optimum Building Orientation for Optimal Daylight
- Existing Utility Line through Entry Driveway
- 15'-20' Grade Drop from East to West
- Existing Building Access During Construction
- Proximity to Existing Gym (Reno+Add Option)

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## High School Site / Building on the East

Site Considerations:

- Lack Franklin St Civic Presence
- Poor Building Orientation for Optimal Daylight
- Highest Point on Site
- Ledge Condition at Northeast Corner
- Proximity to Neighboring Residents
- Away from Existing Gym (Reno+Add Option)




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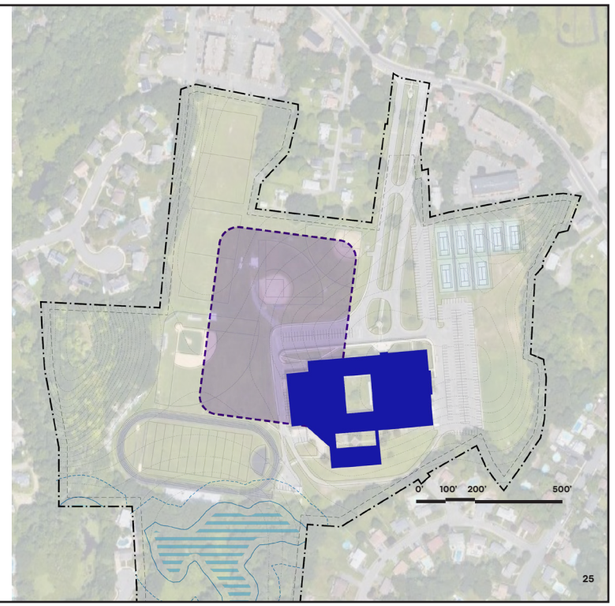
High School Site / Building on the West

Site Considerations:

- Lack Franklin St Civic Presence
- Poor Building Orientation for Optimal Daylight
- Lowest Point on Site
- Building over Culverted Stream
- Biggest Impact on Existing Fields
- Proximity to Existing Gym (Reno+Add Option)

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Design Options Summary

| CODE UPGRADE | RENOVATION | RENOVATION ADDITION | NEW CONSTRUCTION |
|---|---|---|---|
| • *NO Educational upgrades* | • *Option 2* | • *Option 3A1* | • *Option 4A1* |
| • *Code Upgrades* | | • *Option 3A2* | • *Option 4A2* |
| • *System Upgrades (Code)* | | • *Option 3B* | • *Option 4A3* |
| • *Exterior Envelope Repairs (Code)* | | | • *Option 4B* |
| • *Interior Repairs (Code)* | | | • *Option 4C* |
| • *No Sitework* | | | |
| • *No Pre-K* | | | |
| • *No Traffic Signals* | | | |

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# Design Options

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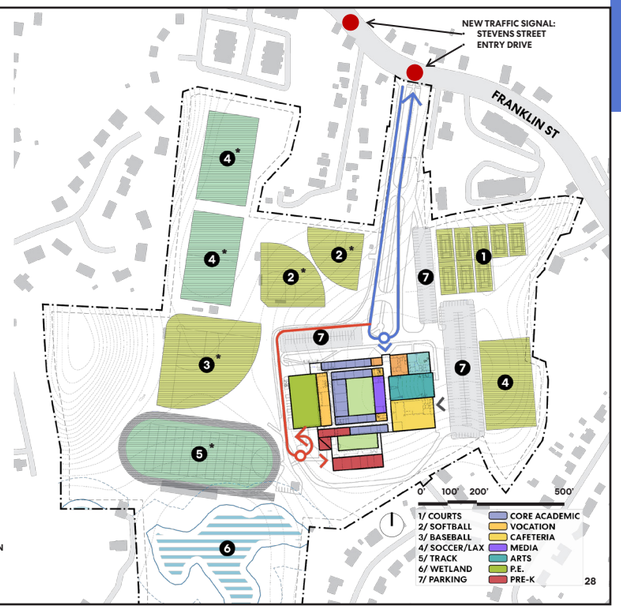
Renovation Option
2



- **Pros:**
  - Least disruption to site
  - Adequate square footage
  - Re-use existing structure
- **Cons:**
  - Lengthy Occupied phased construction (longer construction duration)
  - Difficult to meet ZNE goal
  - Highly disruptive to building users during construction
  - Requires Modular Classrooms
  - Hazardous abatement in occupied building

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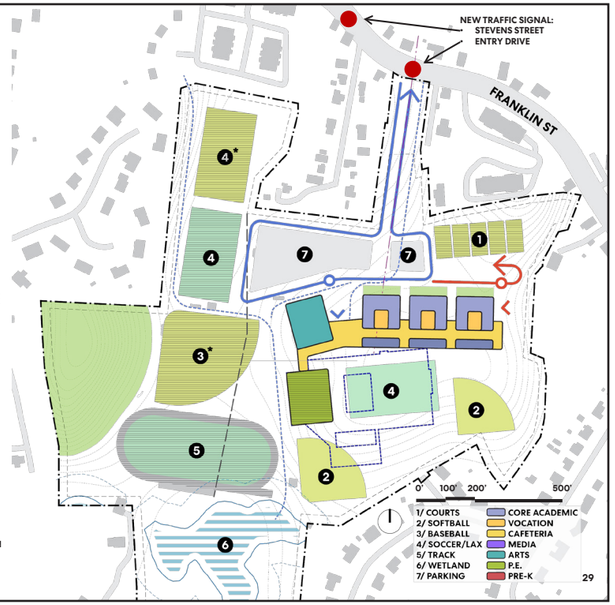
FIELDS:
EXISTING TO REMAIN
SYNTHETIC
* NON-COMPLIANT

Renovation Addition Option

## 3A2



- **Pros:**
  - Maximizes visibility of new building and its entry from Franklin St
  - Minimal change to existing athletic fields Single community entry
  - Central turf field as commons
  - Optimized building orientation for daylighting/ZNE
- **Cons:**
  - Pedestrian path from Franklin Street crossing vehicular path
  - Exist. fields do not meet regulation size
  - Utilities relocation required to keep existing in operation during construction

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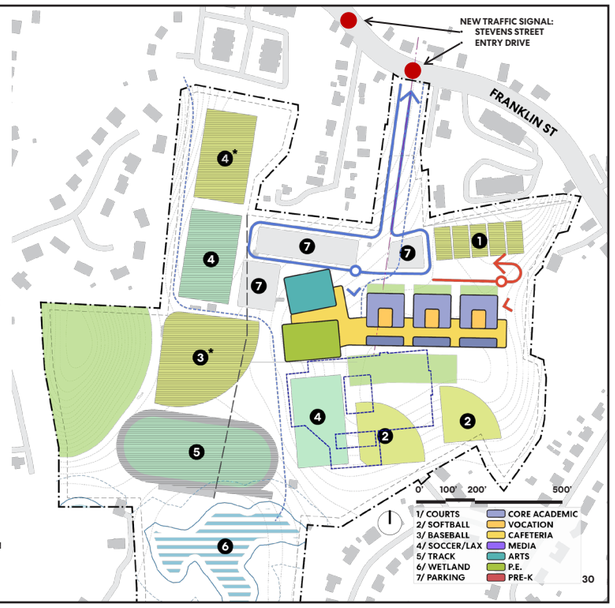
FIELDS:
EXISTING TO REMAIN
NEW
SYNTHETIC
* NON-COMPLIANT

New Construction Option

## 4A3



- **Pros:**
  - Maximizes visibility of new building and its entry from Franklin St
  - Minimal change to existing athletic fields (softball fields out of commission during construction)
  - Single community entry
  - Optimized building orientation for daylighting/ZNE
- **Cons:**
  - Pedestrian path from Franklin Street crossing vehicular path
  - Exist. fields don't meet size requirements
  - Constrained space for parking
  - Utilities relocation required to keep existing building in operation during construction

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FIELDS:
EXISTING TO REMAIN
NEW
SYNTHETIC
* NON-COMPLIANT

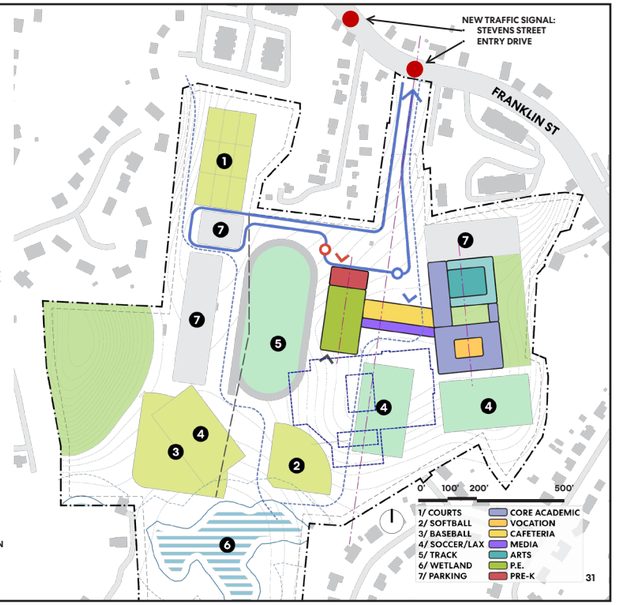


New Construction Option

## 4B



- **Pros:**
  - Optimized orientation of ALL athletic facilities
  - Parking near main entry and stadium
  - Pedestrian connection from community to expeditionary trail
  - Optimized building orientation for daylighting/ZNE
- **Cons:**
  - Cost of relocated stadium
  - Building encroaches on areas of known ledge
  - Sub-optimal orientation for classroom daylighting
  - Utilities relocation required to keep existing building in operation during construction

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FIELDS:
EXISTING TO REMAIN
NEW
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# Cost Analysis

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State Reimbursement Incentives

**The MSBA will reimburse all Eligible Costs, at a Base Rate of 52.06 plus incentive points for an approved project if accepted by the voters of Stoneham.**

**Examples of Ineligible Costs include:**

- **Site Costs over 8%**
- **Building Costs over $333/SF**
- **Gymnasium and Auditorium Space over MSBA Guidelines**
- **Asbestos Flooring abatement**
- **Hazardous Material removal associated with sitework**
- **Concession Stand, Press Box and associated Outdoor Toilet Facilities**
- **FFE/Technology costs over $2,400 per student**
- **Legal Fees, Moving Expenses, construction contingencies over 1% for new construction or 2% for renovation**
- **Classroom Modulars for swing space**

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State Reimbursement Incentives

**The MSBA provides incentives to reimburse up to an estimated additional 3.0% to 9.0% of eligible costs. The incentives fall under the following categories:**

- **Energy Efficiency (2%)**
- **Renovation (up to 5%)**
- **Maintenance Programs (up to 2%)**

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Cost Estimate



| | Code Repair Only Option 1 | Renovation Only Option 2 | Renovation/ Addition Option 3A2 | New Construction Option 4A3 | New Construction Option 4B |
|---|---|---|---|---|---|
| Approximate Total Project Cost | $115.0M | $173.4M | $175.2M | $174.8M | $172.9M |
| Approximate Cost to Stoneham | $61.0M | $111.5M | $120.3M | $123.7M | $122.0M |

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# Tax Impact

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### Single-Family Tax Calculation Assumptions

- Impact Date - Fiscal Year 2023
- Levy Estimate Trended from FY21
- 2.5% increases in Tax Levy
- New Growth ***
- FY23 Debt Exclusion Payment Used
- RO and CIP Value Percentages Remain Consistent from FY21

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### Tax Impact

| | Code Repair Only Option 1 | Renovation Only Option 2 | Renovation/ Addition Option 3A2 | New Construction Option 4A3 | New Construction Option 4B |
|---|---|---|---|---|---|
| ***Stoneham Share*** | **$ 61,024,855** | **$111,500,522** | **$120,278,104** | **$123,733,473** | **$121,986,054** |
| | | | | | |
| Rate | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% |
| Term (years) | 20 | 20 | 20 | 20 | 20 |
| Yearly Payment-20 yr Average | $ 4,101,829 | $ 7,494,586 | $ 8,084,578 | $ 8,316,833 | $ 8,199,379 |
| Average Home Value | $ 577,700 | $ 577,700 | $ 577,700 | $ 577,700 | $ 577,700 |
| **Annual Tax Increase Average Home-20 yr Average** | **$ 475** | **$ 868** | **$ 937** | **$ 964** | **$ 950** |
| Annual Tax Increase per $1,000 Valuation | $ 0.82 | $ 1.50 | $ 1.62 | $ 1.67 | $ 1.65 |

Assumptions: Tax rate based on Fiscal 2023 assessed valuation and AVERAGE house value of $577,700
Yearly impact will change based upon subsequent year tax rates and valuations.
Code Repair Only Option 1 does not include any site and playing field work or any educational improvement work in building.
Costs subject to change as Feasibility Study progresses.

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### Tax Impact Comparison

| Assessed Value | No Debt Exclusion Estimated Tax Bill | Option 4B 20 Years 3.0% | | Option 4B 30 Years 3.5% | |
|---|---|---|---|---|---|
| 1,200,000 | 13,597 | $15,572 | $1,975 | $15,195 | $1,598 |
| 1,100,000 | 12,464 | $14,275 | $1,811 | $13,929 | $1,465 |
| 1,000,000 | 11,331 | $12,977 | $1,646 | $12,663 | $1,332 |
| 900,000 | 10,198 | $11,679 | $1,482 | $11,396 | $1,199 |
| 800,000 | 9,065 | $10,382 | $1,317 | $10,130 | $1,065 |
| 700,000 | 7,932 | $9,084 | $1,152 | $8,864 | $932 |
| 600,000 | 6,799 | $7,786 | $988 | $7,598 | $799 |
| **577,195** | **6,540** | **$7,490** | **$950** | **$7,309** | **$769** |
| 500,000 | 5,665 | $6,489 | $823 | $6,331 | $666 |
| 400,000 | 4,532 | $5,191 | $658 | $5,065 | $533 |
| 300,000 | 3,399 | $3,893 | $494 | $3,799 | $400 |

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### Tax Impact Comparison / Surrounding Communities

**Why average single-family tax bill used as a basis of comparison?**

1. Variation in the level of assessment
2. Variation in percentage of Residential and Commercial classes
3. Variation in CIP Shift Percentages

| Town | FY20 Avg SF TB | FY23 |
|---|---|---|
| Woburn | $4,677 | $5,037 |
| Peabody | $4,751 | $5,116 |
| Saugus | $5,368 | $5,781 |
| Burlington | $5,466 | $5,886 |
| Billerica | $5,522 | $5,947 |
| **Stoneham w/ No Debt Exlcusion** | **$6,098** | **$6,540** |
| Danvers | $6,451 | $6,947 |
| **Stoneham - 4B 30 Yr** | **$6,098** | **$7,309** |
| Wilmington | $6,873 | $7,401 |
| Tewksbury | $6,921 | $7,453 |
| **Stoneham - 4B 20 YR** | **$6,098** | **$7,490** |
| Melrose | $7,015 | $7,554 |
| Wakefield | $7,099 | $7,645 |
| Chelmsford | $7,362 | $7,928 |
| North Andover | $7,608 | $8,193 |
| Middleton | $8,585 | $9,245 |
| Reading | $8,748 | $9,421 |
| Lynnfield | $9,055 | $9,751 |
| Westford | $9,238 | $9,948 |
| North Reading | $9,381 | $10,102 |
| Bedford | $9,769 | $10,520 |
| Andover | $10,223 | $11,009 |
| Winchester | $14,298 | $15,397 |
| Lexington | $15,547 | $16,742 |

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# Next Steps

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## Community-Wide Surveys

**We would like to hear from you!**

**The SSBC will be sharing two Community-Wide Surveys as it prepares for its decision on the Preferred Option. The surveys are electronic, but hard copies will also be provided for community members to fill out.**

**Community-Wide Survey No. 1 - will be available to complete November 5 thru November 12, 2020.**

**The survey asks about the most important considerations in the process of recommending a capital school building project for the community's approval in mid-December. Considerations include educational benefits, sustainability components, traffic mitigation, cost impact to taxpayers, community use and construction impact.**

**Those wishing to complete the survey can use this link https://forms.gle/wkQ6TfxjJqyBgGtQA to complete and submit the completed survey. The link can also be found on the Committee webpage - https://www.stoneham-ma.gov/627/School-Building-Committee.**



## Stoneham School Building Committee

**Meetings every two weeks**

**Meetings and Agendas are posted on the SSBC website**

**Upcoming Meetings**

- **November 9, 2020**
- **November 23, 2020**
- **December 7, 2020**
- **December 16, 2020**



## Next Steps

- **November 4 2020 – South ES and High School PTO Presentation**
- **November 7 2020 - Community Forum No. 3**
- **November 10 2020 - Robin Hood ES and Central Middle School PTO Presentation**
- **November 19 2020 - Colonial Park ES PTO Presentation**
- **December 9 2020 - Community Forum No. 4**
- **December 15 2020 - Tri-Board Meeting**
- **December 16, 2020 – SSBC Vote to Select Preferred Option and Submit Preferred Schematic Report (PSR) to MSBA**
- **December 23, 2020 - Submit Preferred Schematic Report (PSR) to MSBA**
- **July 7, 2021 – Submit Schematic Design (SD) documents to MSBA**
- **August 25, 2021 – MSBA Board meeting vote to approve project**
- **Fall 2021 – Town Vote**



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Community Resources

SSBC Website:
https://www.Stoneham-Ma.Gov/hsbc

Project Email:
SSBC@Stoneham-Ma.gov




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# Thank You

Community Forum 03

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# STONEHAM HIGH SCHOOL FEASIBILITY STUDY
# Community Forum 04

12.09.2020

## SCHOOL COMMITTEE MEMBERS

| | | | |
|---|---|---|---|
| Marie Christie | Co-Chair | Jeanne Craigie | Town Moderator |
| David Bois | Co-Chair | Lisa Gallagher | Middle School Admin. |
| Raymie Parker | Chair Select Board | Kevin Yianacopolus | High School Facilities |
| Nicole Nial | School Committee Member | Albert Talarico | Community Member |
| Cory Mashburn | Finance and Advisory Board | Douglas Gove | Community Member |
| Dennis Sheehan | Town Administrator | Stephen O'Neill | Community Member |
| John Macero | Superintendent of Schools | Josephine Thomson | Community Member |
| Bryan Lombardi | High School Principal | Sharon Iovanni | Community Member |
| David Pignone | Athletic Director | Paul Ryder | Community Member |
| Brian McNeil | Town Facilities Director | | |

**ARCHITECT** Perkins and Will

**OPM** Symmes Maini and McKee Associates

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## AGENDA

1\ Introduction

2\ MSBA Process

3\ Design Options

4\ Zero Net Energy Approach

5\ Cost Analysis

6\ Tax Impact

7\ Next Steps



→ Aerial View of Stoneham High School

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## Final Step in Twenty-Year Master Plan

2001 Completed South Elementary School

2003 Completed Robin Hood and Colonial Park Elementary Schools

2015 Completed Central Middle School

2024 Complete Stoneham High School



Community Forum 04

# How was the educational program developed?

Perkins&Will

Educational Visioning

## 2 Weeks / 8 days

| | | | | |
|---|---|---|---|---|
| WEEK 1 | Day 1<br>Where Have We Been and Where Are We Going? | Day 2<br>Future Ready | Day 3<br>Planning Concepts | Day 4<br>Learning about Exterior Space Needs |
| WEEK 2 | Day 5<br>Critical Adjacencies | Day 6<br>Learning from Subject Matter Experts | Day 7<br>Sustainability – Net Zero Energy / Carbon Neutral | Day 8<br>Hearing from the Community |

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## A Future Ready Educational Program for Stoneham:

**The program includes:**

- 208,000 SF
- Appropriately sized general Classrooms
- Engineering and Technology Labs
- Maker Space and Fabrication Labs
- Music and Art Spaces
- SPED, RISE, and STRIDE Spaces
- Gymnasium
- Auditorium
- Interdisciplinary Project / Performance
- Library / Media Center
- Town-Wide Pre-K Program
- Concessions/Bathrooms/Storage for Athletics

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## More than a High School, a Community-Wide Resource

The high school complex will provide our students with flexible, 21st century educational spaces, meeting MSBA standards, that are safe, code-compliant and accessible to all students and citizens. The Community can share these High School resources:

**In the Building:**

- Pre-K Classrooms to create space in our elementary schools
- Offices for the Superintendent and Staff
- Indoor Jogging/Walking Track
- Auditorium to support Town Meeting
- Gymnasium for multiple community use, including gymnastics
- Central Kitchen to support our elementary schools
- Stoneham History Room

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## More than a High School, a Community-Wide Resource

**On the Site:**

- A synchronized Traffic Signals at Stevens Street and at Franklin Place
- Nature Trails into the bordering woodlands
- Three Synthetic Turf Fields with Lighting, One of which in a New Stadium with a Brand-New Track and Bleachers
- Reconstructed Natural Turf Baseball and Softball Fields
- Reconstructed Tennis Courts
- Outdoor Locker Room, Toilet and Concession Building

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## More than a High School, a Community-Wide Resource

**For the Environment:**

- Triple Glazed Windows
- Geothermal Heat Exchange Well
- Robust Building Envelope Insulation
- Electricity Producing Photovoltaic Panels and Battery Storage through a PPA

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# What is the MSBA Process?

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## MASSACHUSETTS SCHOOL BUILDING AUTHORITY (MSBA)

- **MSBA** is an independent public authority that administers and funds a program for grants to eligible cities, towns, and regional school districts for school construction and renovation projects.
- **MSBA** mandates a multi-step rigorous study and approval process
- **MSBA** will fund **52.06%** plus incentives of eligible project costs for an approved project if accepted by the voters of Stoneham

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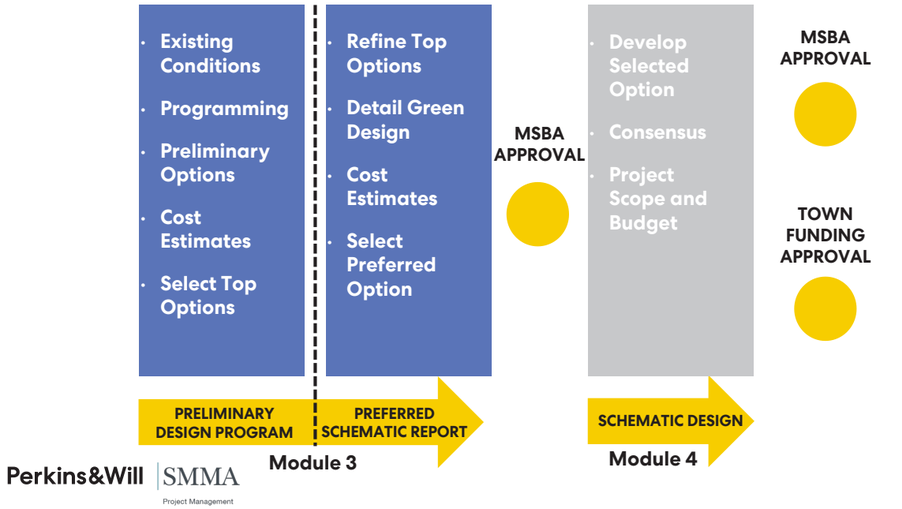
## MSBA PROCESS / FEASIBILITY STUDY AND SCHEMATIC DESIGN PHASES

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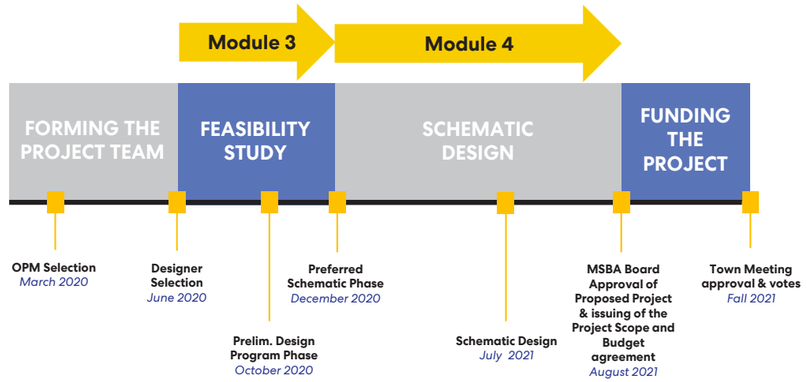
## PROJECT SCHEDULE – Feasibility & Schematic Design

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Community Forum 04

# What are the Conditions of Existing Stoneham High School?

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Existing Conditions

## Current Campus

**Junior High School (1968)**

**52 YEARS OLD**

**Senior High School (1980)**

**40 YEARS OLD**

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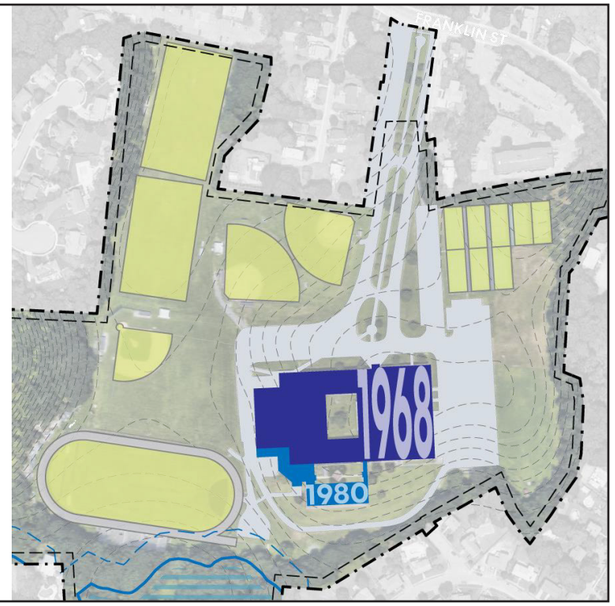




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# Design Options

Community Forum 04

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Design Options Summary

| CODE UPGRADE | RENOVATION | RENOVATION ADDITION | NEW CONSTRUCTION |
|---|---|---|---|
| • *NO Educational upgrades*<br>• *Code Upgrades*<br>• *System Upgrades (Code)*<br>• *Exterior Envelope Repairs (Code)*<br>• *Interior Repairs (Code)*<br>• *No Sitework*<br>• *No Pre-K*<br>• *No Traffic Signals* | • *Option 2A* | • *Option 3A1*<br>• *Option 3A2*<br>• *Option 3B* | • *Option 4A1*<br>• *Option 4A2*<br>• *Option 4A3*<br>• *Option 4B*<br>• *Option 4C* |

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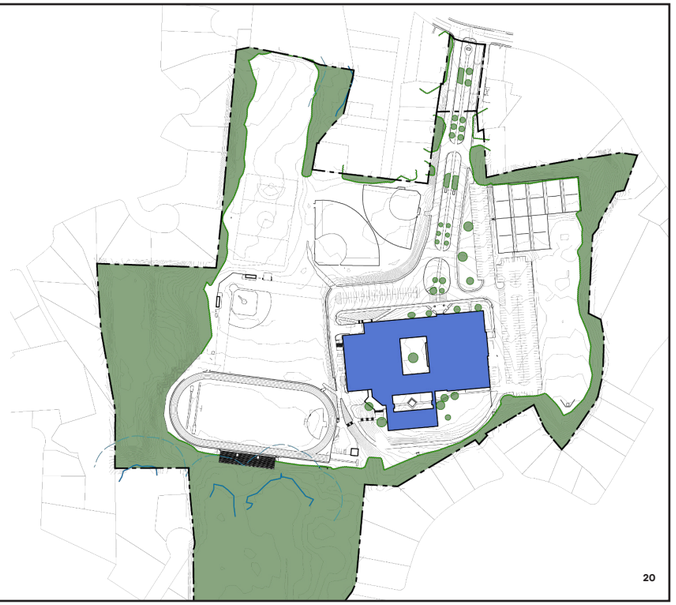
**Option 1A – Code Upgrade Only**

- Upgrades the existing building to current building codes only
- Includes District Offices
- No renovations for educational improvement
- Does not include PreK Program
- No Zero Net Energy Design
- No upgrades to playfields, roadways or parking
- No traffic improvements on Franklin Street
- 48 months estimated project duration (phased student occupancy)
- Temporary classroom trailer cost
- Initial estimated cost to the taxpayers of Stoneham of $62.9M





**Option 1A – Code Upgrade Only**
**Site Conditions**











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**Option 1A – Code Upgrade Only**
**Exterior Conditions**









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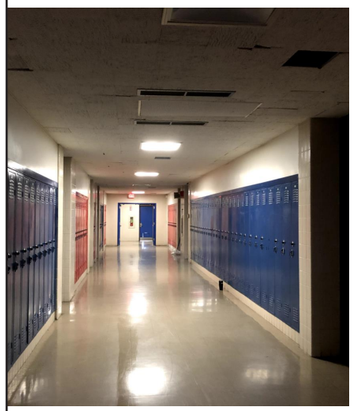
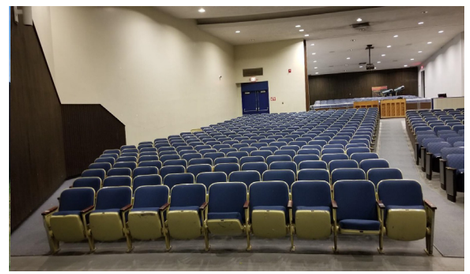
**Option 1A – Code Upgrade Only**
**Interior Conditions**











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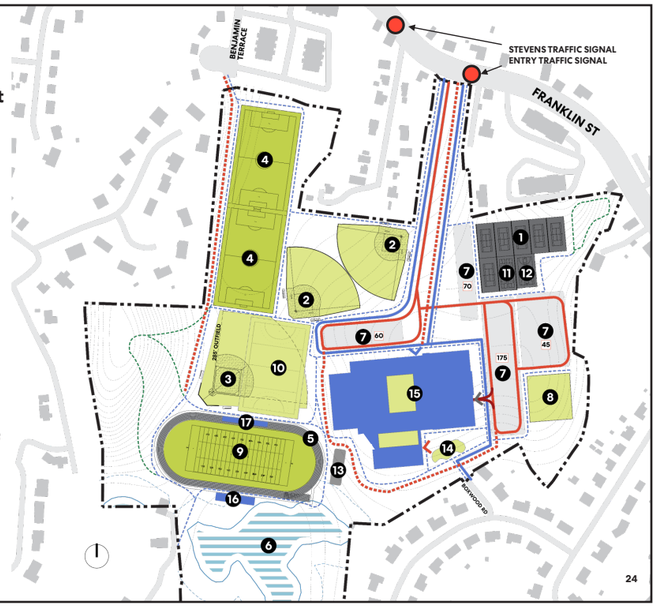
## Option 2A – Renovation Only

- Upgrades the existing building to current building codes
- Does not include District Offices
- Renovates existing building for educational improvements
- Includes PreK program
- Includes Zero Net Energy Design
- Upgrades playfields, roadways and parking
- Improves traffic on Franklin Street
- 48 months estimated project duration (phased student occupancy)
- Temporary classroom trailer cost
- Initial estimated cost to the taxpayers of Stoneham of $110.1M



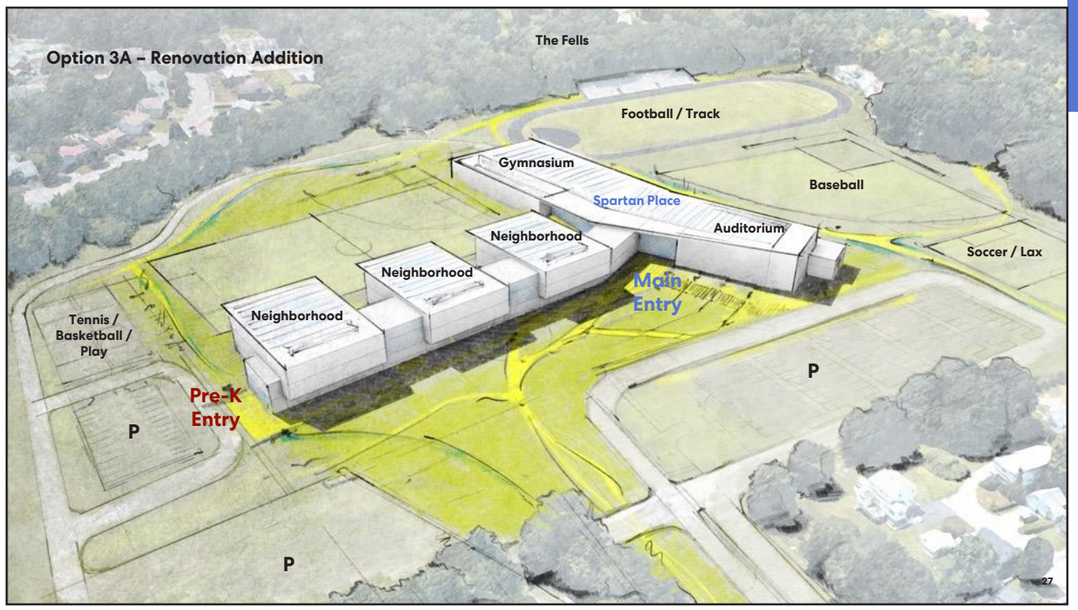




## Option 3A – Renovation Addition

- Renovates gymnasium and lower level spaces
- Includes District Offices
- Demolishes remaining portion of existing building
- New addition housing all other school functions including auditorium, cafeteria, classrooms, and administrative offices
- Includes PreK program
- Includes Zero Net Energy Design
- Upgrades playfields, roadways and parking
- Improves traffic on Franklin Street
- 40 months estimated project duration
- Initial estimated cost to the taxpayers of Stoneham of $128.7M

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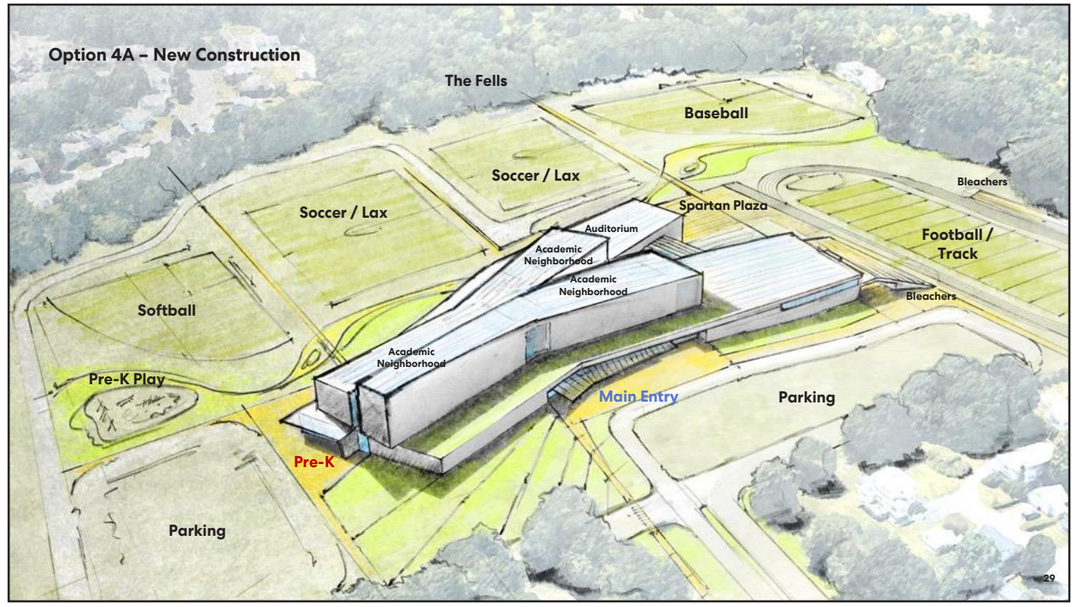
## Option 4A – New Construction

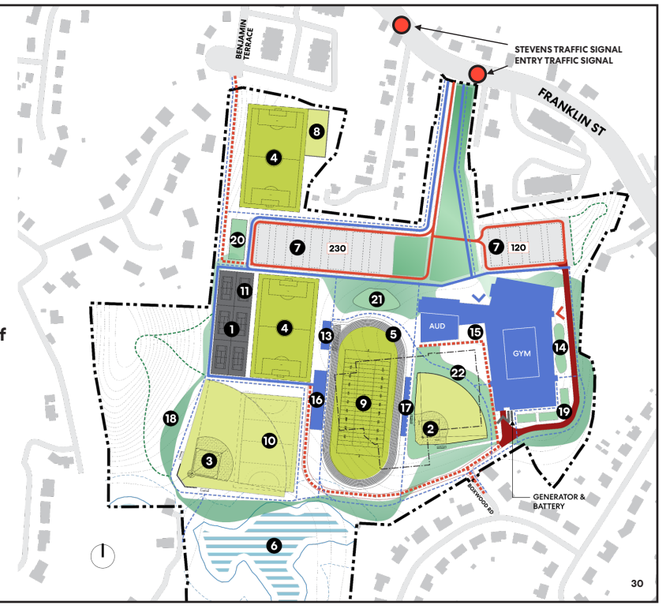
- New building located to the north of the existing building
- Includes District Offices
- Includes PreK program
- Includes Zero Net Energy Design
- Upgrades playfields, roadways and parking
- Improves traffic on Franklin Street
- 33 months estimated project duration
- Initial estimated cost to the taxpayers of Stoneham of $126.4M

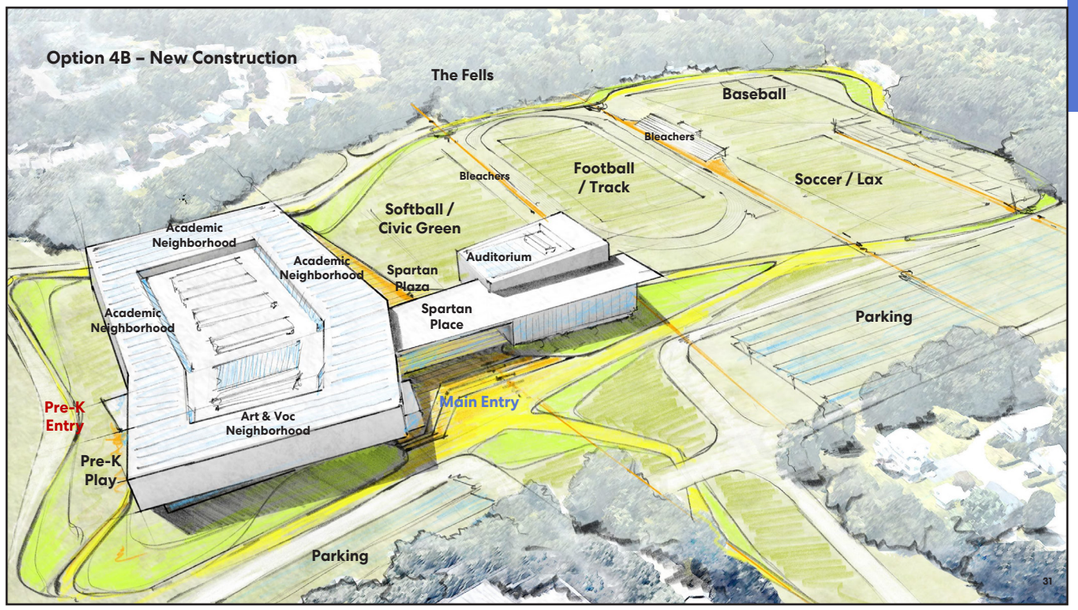



## Option 4B – New Construction

- New building located to the north and east of the existing building
- Includes District Offices
- Includes PreK program
- Includes Zero Net Energy Design
- Upgrades playfields, roadways and parking
- Improves traffic on Franklin Street
- 33 months estimated project duration
- Initial estimated cost to the taxpayers of Stoneham of $125.3M

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# Menti Survey

Community Forum 04

Menti Survey




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Menti Survey

**Which of the options provides the Stoneham Community the best long-term plan for educating its high school students?**



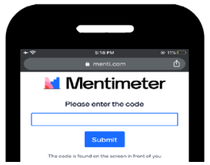
1

ON YOUR PHONE / TABLET / COMPUTER




2

GO TO MENTI.COM




3

ENTER THE CODE 81 04 41 8 AND VOTE!

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# Zero Net Energy Approach

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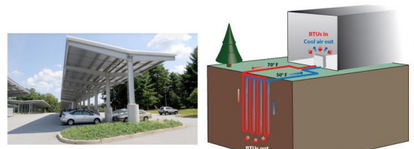
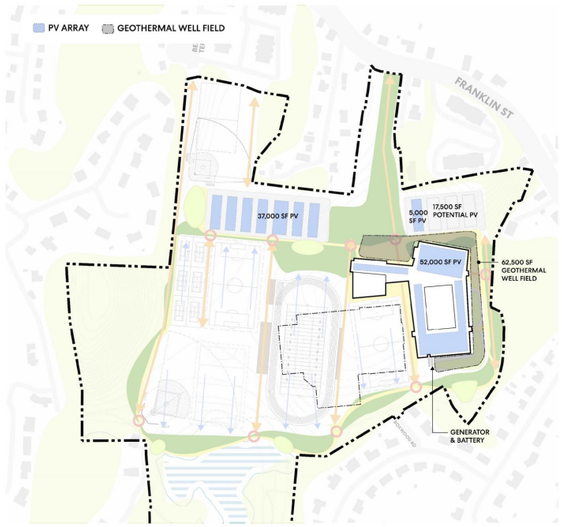
**High Performance Building**

- **Closed Loop Geoexchange System**
  - Energy use intensity target (EUI) of 25
  - Allows for zero net energy
  - Additional Incentives from state and Utilities
  - No fossil fuels, additional water savings
- **Solar Power Purchase Agreement**
  - Low upfront costs to Stoneham
  - Powers an all-electric building
  - Reduced electricity bill
  - Contract to be approved at town meeting



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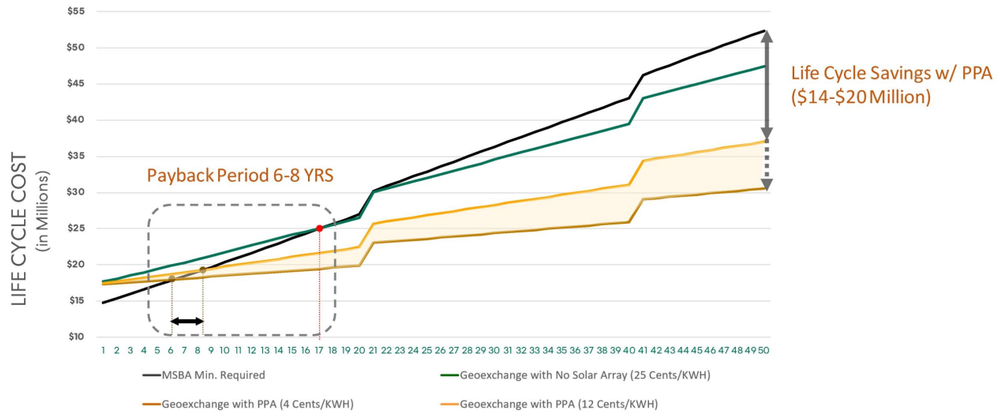
**Life Cycle Cost Assessment**

CUMULATIVE CASH FLOW: CAPITAL, OPERATIONAL, MAINTENANCE & REPLACEMENT COSTS

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# Cost Analysis

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**State Reimbursement Incentives**

**The MSBA will reimburse all Eligible Costs, at a Base Rate plus incentive points for an approved project if accepted by the voters of Stoneham.**

**Examples of Ineligible Costs include:**

- **Site Costs over 8%**
- **Building Costs over $333/SF**
- **Gymnasium and Auditorium Space over MSBA Guidelines**
- **Asbestos Flooring abatement**
- **Hazardous Material removal associated with sitework**
- **Concession Stand, Press Box and associated Outdoor Toilet Facilities**
- **FFE/Technology costs over $2,400 per student**
- **Legal Fees, Moving Expenses, construction contingencies over 1% for new construction or 2% for renovation**
- **Classroom Modulars for swing space**

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State Reimbursement Incentives

The MSBA provides incentives to reimburse up to an estimated additional 3.0% to 9.0% of eligible costs. The incentives fall under the following categories:

- Energy Efficiency (2%)
- Renovation (up to 5%)
- Maintenance Programs (up to 2%)

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Cost Estimate



| | Code Repair Only Option 1 | Renovation Only Option 2 | Renovation/ Addition Option 3A2 | New Construction Option 4A3 | New Construction Option 4B |
|---|---|---|---|---|---|
| Approximate Total Project Cost | $115.5M | $168.4M | $181.9M | $177.4M | $176.2M |
| Approximate Cost to Stoneham | $62.9M | $110.1M | $128.7M | $126.4M | $125.3M |

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# Tax Impact

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Single-Family Tax Calculation Assumptions

- Impact Date - Fiscal Year 2023
- Levy Estimate Trended from FY21
- 2.5% increases in Tax Levy
- New Growth ***
- FY23 Debt Exclusion Payment Used
- RO and CIP Value Percentages Remain Consistent from FY21

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## Tax Impact

| | Code Repair Only Option 1A | Renovation Only Option 2A | Renovation/ Addition Option 3A | New Construction Option 4A | New Construction Option 4B |
|---|---|---|---|---|---|
| **Stoneham Share** | **$62,956,915** | **$110,147,850** | **$128,690,402** | **$126,421,381** | **$125,289,311** |
| Rate | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% |
| Term (years) | 20 | 20 | 20 | 20 | 20 |
| **Yearly Payment-20 yr Average** | **$ 4,231,694** | **$ 7,403,666** | **$ 8,650,016** | **$ 8,497,503** | **$ 8,421,410** |
| Average Home Value | $ 577,700 | $ 577,700 | $ 577,700 | $ 577,700 | $ 577,700 |
| **Annual Tax Increase Average Home-20 yr Average** | **$ 490** | **$ 858** | **$ 1,002** | **$ 985** | **$ 976** |
| **Annual Tax Increase per $1,000 Valuation** | **$ 0.85** | **$ 1.49** | **$ 1.74** | **$ 1.71** | **$ 1.69** |

Assumptions: Tax rate based on Fiscal 2023 assessed valuation and AVERAGE house value of $577,700.
Yearly impact will change based upon subsequent year tax rates and valuations.
Code Repair Only Option 1 does not include any site and playing field work or any educational improvement work in the building.
Costs subject to change as Feasibility Study progresses.

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## Tax Impact Comparison

| Assessed Value | No Debt Exclusion Estimated Tax Bill | Option 4B 20 Years 3.0% | | Option 4B 30 Years 3.5% | |
|---|---|---|---|---|---|
| 1,200,000 | 13,597 | $15,626 | $2,029 | $15,238 | $1,641 |
| 1,150,000 | 13,030 | $14,975 | $1,944 | $14,603 | $1,573 |
| 1,100,000 | 12,464 | $14,324 | $1,860 | $13,969 | $1,505 |
| 1,000,000 | 11,331 | $13,022 | $1,691 | $12,699 | $1,368 |
| 900,000 | 10,198 | $11,719 | $1,522 | $11,429 | $1,231 |
| 800,000 | 9,065 | $10,417 | $1,353 | $10,159 | $1,094 |
| 700,000 | 7,932 | $9,115 | $1,184 | $8,889 | $957 |
| 600,000 | 6,799 | $7,813 | $1,014 | $7,619 | $821 |
| **577,195** | **6,540** | **$7,516** | **$976** | **$7,330** | **$789** |
| 500,000 | 5,665 | $6,511 | $845 | $6,349 | $684 |
| 400,000 | 4,532 | $5,209 | $676 | $5,079 | $547 |
| 300,000 | 3,399 | $3,906 | $507 | $3,810 | $410 |

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## Tax Impact Comparison / Surrounding Communities

**Why average single-family tax bill used as a basis of comparison?**

1. **Variation in the level of assessment**
2. **Variation in percentage of Residential and Commercial classes**
3. **Variation in CIP Shift Percentages**

| Town | FY20 Avg SF TB | FY23 |
|---|---|---|
| Woburn | $4,677 | $5,037 |
| Peabody | $4,751 | $5,116 |
| Saugus | $5,368 | $5,781 |
| Burlington | $5,466 | $5,886 |
| Billerica | $5,522 | $5,947 |
| **Stoneham w/ No Debt Exclusion** | **$6,098** | **$6,540** |
| Danvers | $6,451 | $6,947 |
| **Stoneham - 4B 30 Yr** | **$6,098** | **$7,330** |
| Wilmington | $6,873 | $7,401 |
| Tewksbury | $6,921 | $7,453 |
| **Stoneham - 4B 20 YR** | **$6,098** | **$7,516** |
| Melrose | $7,015 | $7,554 |
| Wakefield | $7,099 | $7,645 |
| Chelmsford | $7,362 | $7,928 |
| North Andover | $7,608 | $8,193 |
| Middleton | $8,585 | $9,245 |
| Reading | $8,748 | $9,421 |
| Lynnfield | $9,055 | $9,751 |
| Westford | $9,238 | $9,948 |
| North Reading | $9,381 | $10,102 |
| Bedford | $9,769 | $10,520 |
| Andover | $10,223 | $11,009 |
| Winchester | $14,298 | $15,397 |
| Lexington | $15,547 | $16,742 |

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# Next Steps

Community Forum 04

## Community-Wide Surveys

We would like to hear from you!

The SSBC has issued Community-Wide Survey No. 2 in preparation for its decision on the Preferred Option. The survey is electronic but hard copies are being provided for community members to fill out.

Community-Wide Survey No. 2 is available to complete December 8 through December 15, 2020.

The survey asks which of the design options provides the Stoneham Community the best long-term plan for educating its high school students.

Those wishing to complete the survey can use this link https://forms.gle/3fv68yW7m17w8uvm8 to complete and submit the completed survey. The link can also be found on the Committee webpage: http://www.stoneham-ma.gov/hsbc

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## Stoneham School Building Committee

Meetings every two weeks

Meetings and Agendas are posted on the SSBC website

Upcoming Meetings

- December 16, 2020
- January 12, 2021
- January 25, 2021
- February 8, 2021
- February 22, 2021

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## Next Steps

- December 9, 2020 - Community Forum No. 4
- December 15, 2020 - Tri-Board Meeting
- December 16, 2020 – SSBC Vote to Select Preferred Option and Submit Preferred Schematic Report (PSR) to MSBA
- December 23, 2020 - Submit Preferred Schematic Report (PSR) to MSBA
- February 2021 – Community Forum No. 5
- February 11, 2021 – MSBA Board Meeting to approve PSR Submission
- February 22, 2021 – Approve Construction Manager Firm
- April 2021 – Community Forum No. 6
- June 2021 – Community Forum No. 7
- July 7, 2021 – Submit Schematic Design (SD) documents to MSBA
- August 25, 2021 – MSBA Board meeting vote to approve project
- Fall 2021 – Town Vote

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## Community Resources

SSBC Website:
https://www.Stoneham-Ma.Gov/hsbc

Project Email:
SSBC@Stoneham-Ma.gov




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# Thank You

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1003

Alternative Sites Review

- SSBC reviewed the June 2018 Stoneham Open Space and Recreational Plan
- SSBC found only three sites large enough to support a high school project
  - Bear Hill Golf Club
  - Unicorn Golf Course
  - Current High School Site
- Bear Hill Golf Club is not town-owned land
- Unicorn Golf Course is subject to Article 97 development restrictions
- SSBC determined that the Current High School site is the only viable site for the project

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# Site Planning Considerations

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1004

## High School Site / Overview

- 39.63 Acre Site
- 208,000sf Existing High School
- Formal Pedestrian and Vehicular Entry off Franklin Street
- Traffic Concerns
- Middlesex Fells Reservation Area
- Proximity to Neighborhood
- Significant Ledge on the West and Northeast of the Site
- Informal Expeditionary Trails

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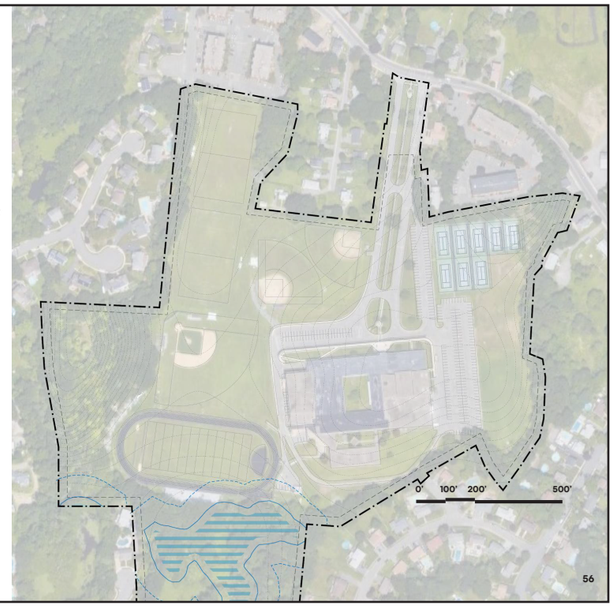


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## High School Site / Building on the North

**Site Considerations:**

- Franklin St Civic Presence
- Optimum Building Orientation for Optimal Daylight
- Existing Utility Line through Entry Driveway
- 15'-20' Grade Drop from East to West
- Existing Building Access During Construction
- Proximity to Existing Gym (Reno+Add Option)

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## High School Site / Building on the East

**Site Considerations:**

- Lack Franklin St Civic Presence
- Poor Building Orientation for Optimal Daylight
- Highest Point on Site
- Ledge Condition at Northeast Corner
- Proximity to Neighboring Residents
- Away from Existing Gym (Reno+Add Option)

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## High School Site / Building on the West

**Site Considerations:**

- Lack Franklin St Civic Presence
- Poor Building Orientation for Optimal Daylight
- Lowest Point on Site
- Building over Culverted Stream
- Biggest Impact on Existing Fields
- Proximity to Existing Gym (Reno+Add Option)

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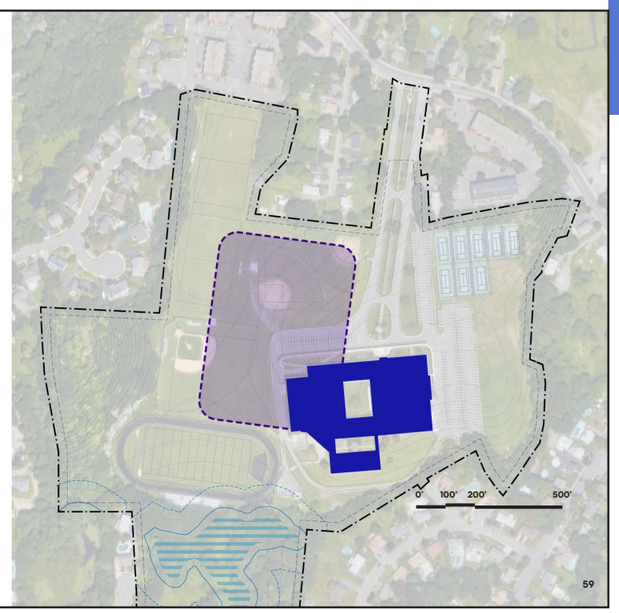


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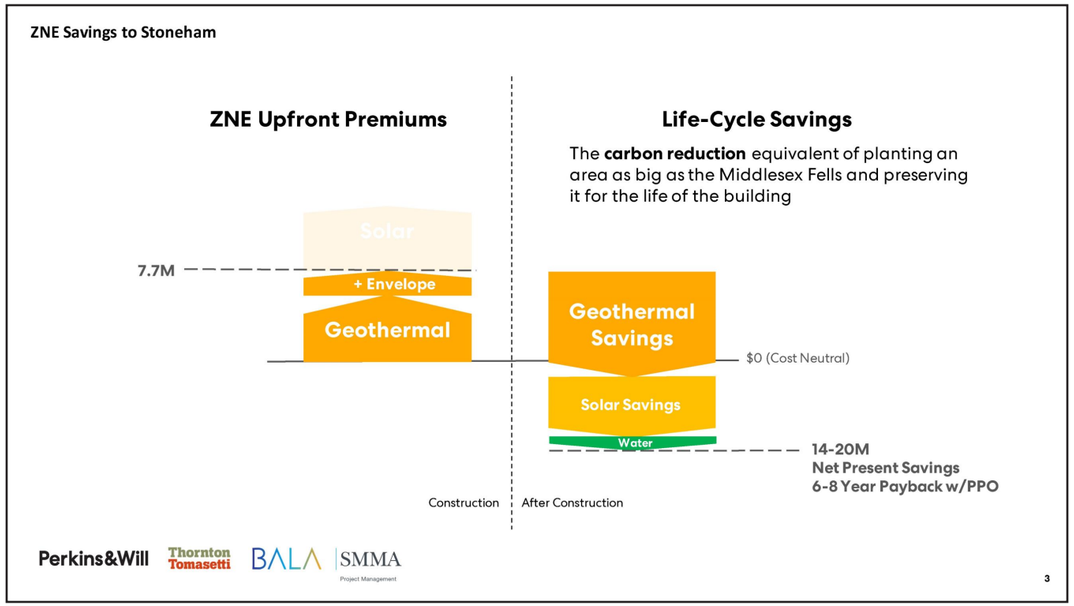


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