

Perkins&Will

**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

AGENDA

1\ Introduction

2\ MSBA Process

3\ Design Options

4\ Zero Net Energy Approach

5\ Cost Analysis

6\ Tax Impact

7\ Next Steps



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

How was the educational program developed?

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

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**

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**

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**

More than a High School, a Community-Wide Resource

For the Environment:

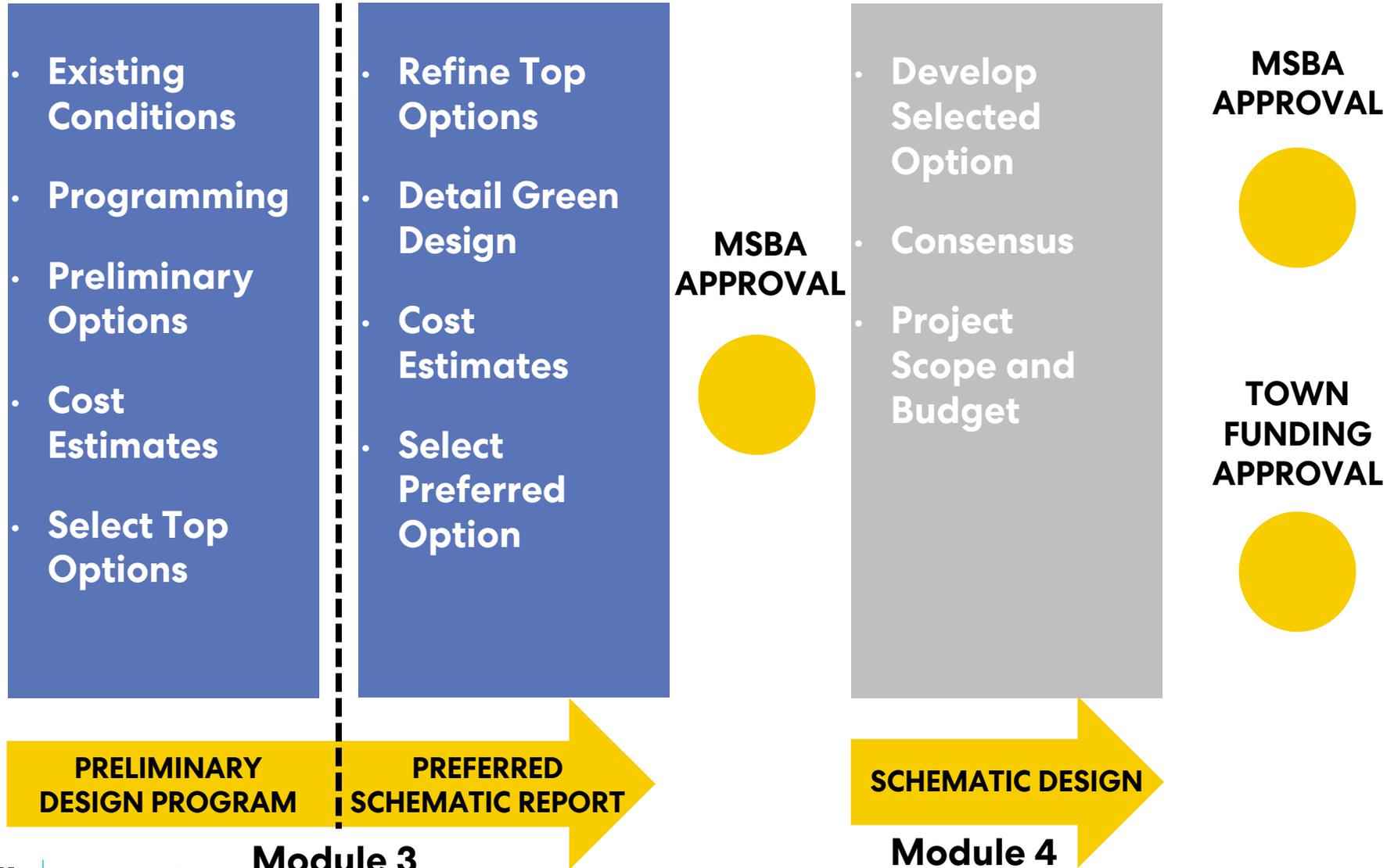
- Triple Glazed Windows
- Geothermal Heat Exchange Well
- Robust Building Envelope Insulation
- Electricity Producing Photovoltaic Panels and Battery Storage through a PPA

What is the MSBA Process?

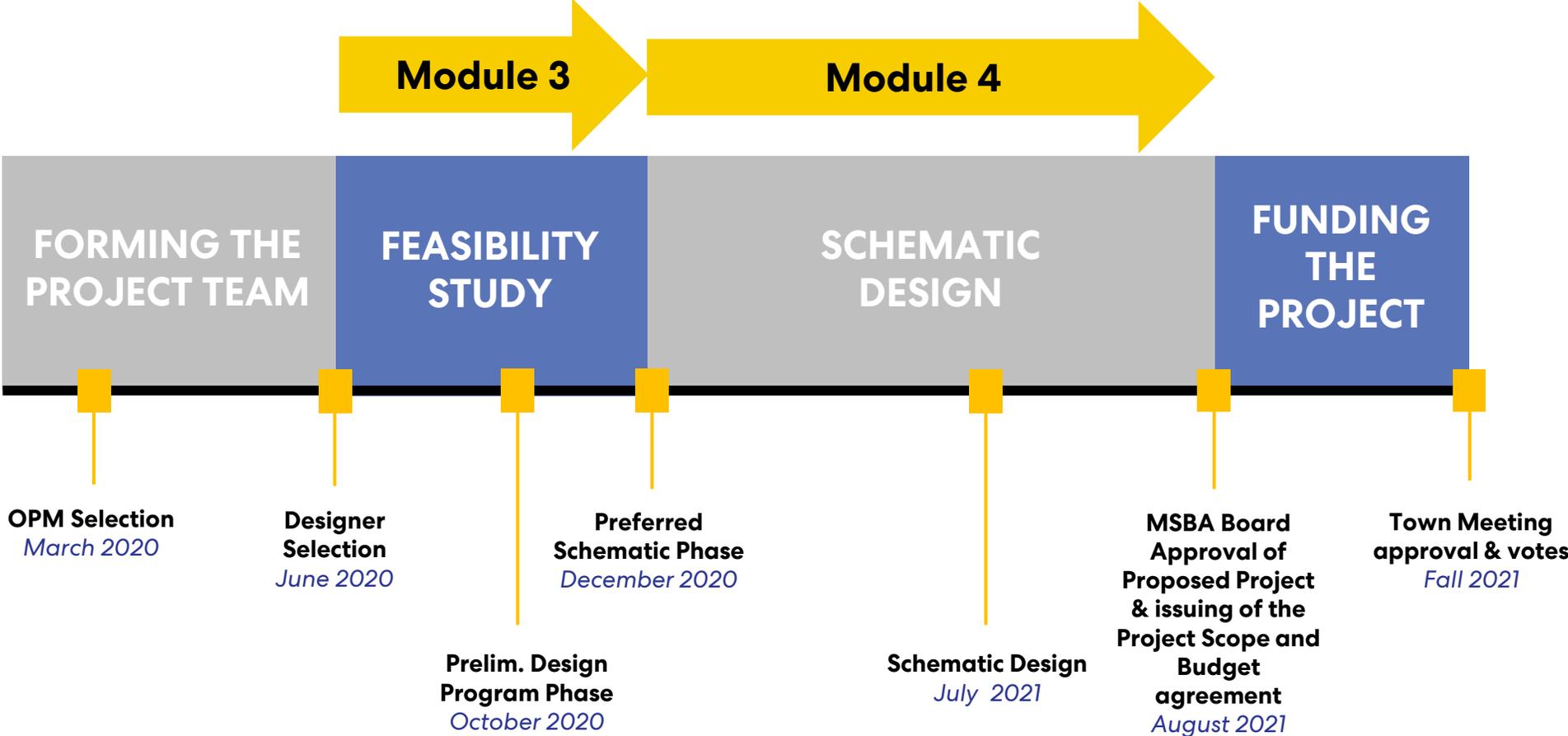
MASSACHUSETTS SCHOOL BUILDING AUTHORITY (MSBA)

- **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

MSBA PROCESS / FEASIBILITY STUDY AND SCHEMATIC DESIGN PHASES



PROJECT SCHEDULE – Feasibility & Schematic Design



What are the Conditions of Existing Stoneham High School?

Existing Conditions

Current Campus

Junior High School (1968)

52 YEARS OLD

Senior High School (1980)

40 YEARS OLD

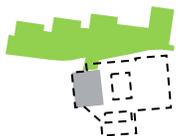
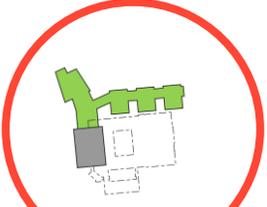
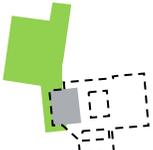
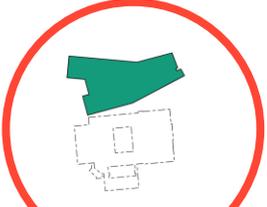
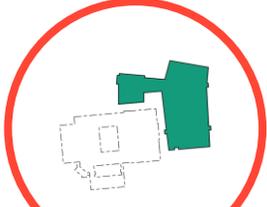


Perkins&Will

Design Options

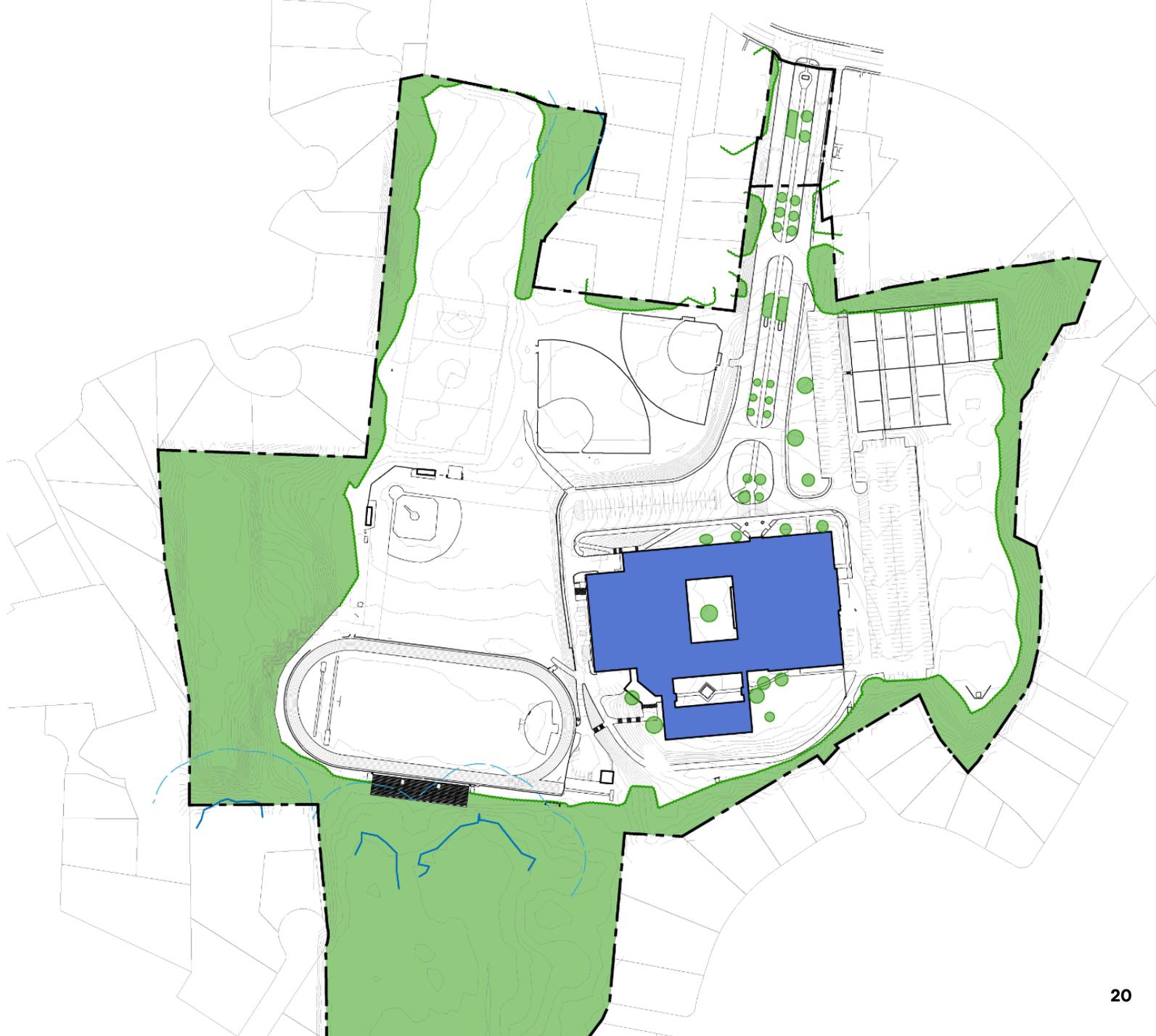
Community Forum 04

Design Options Summary

CODE UPGRADE	RENOVATION	RENOVATION ADDITION	NEW CONSTRUCTION	
<ul style="list-style-type: none">• NO Educational upgrades• Code Upgrades• System Upgrades (Code)• Exterior Envelope Repairs (Code)• Interior Repairs (Code)• No Sitework• No Pre-K• No Traffic Signals	<ul style="list-style-type: none">•  Option 2A	<ul style="list-style-type: none">•  Option 3A1•  Option 3A2•  Option 3B	<ul style="list-style-type: none">•  Option 4A1•  Option 4A2•  Option 4A3•  Option 4B•  Option 4C	

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



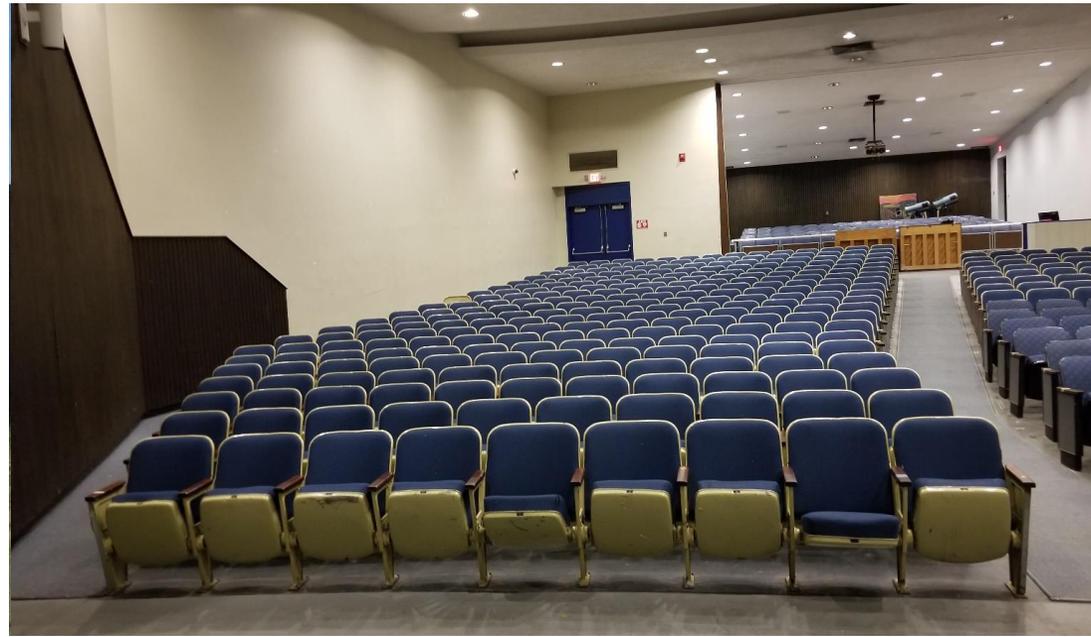
Option 1A – Code Upgrade Only Site Conditions



**Option 1A – Code Upgrade Only
Exterior Conditions**

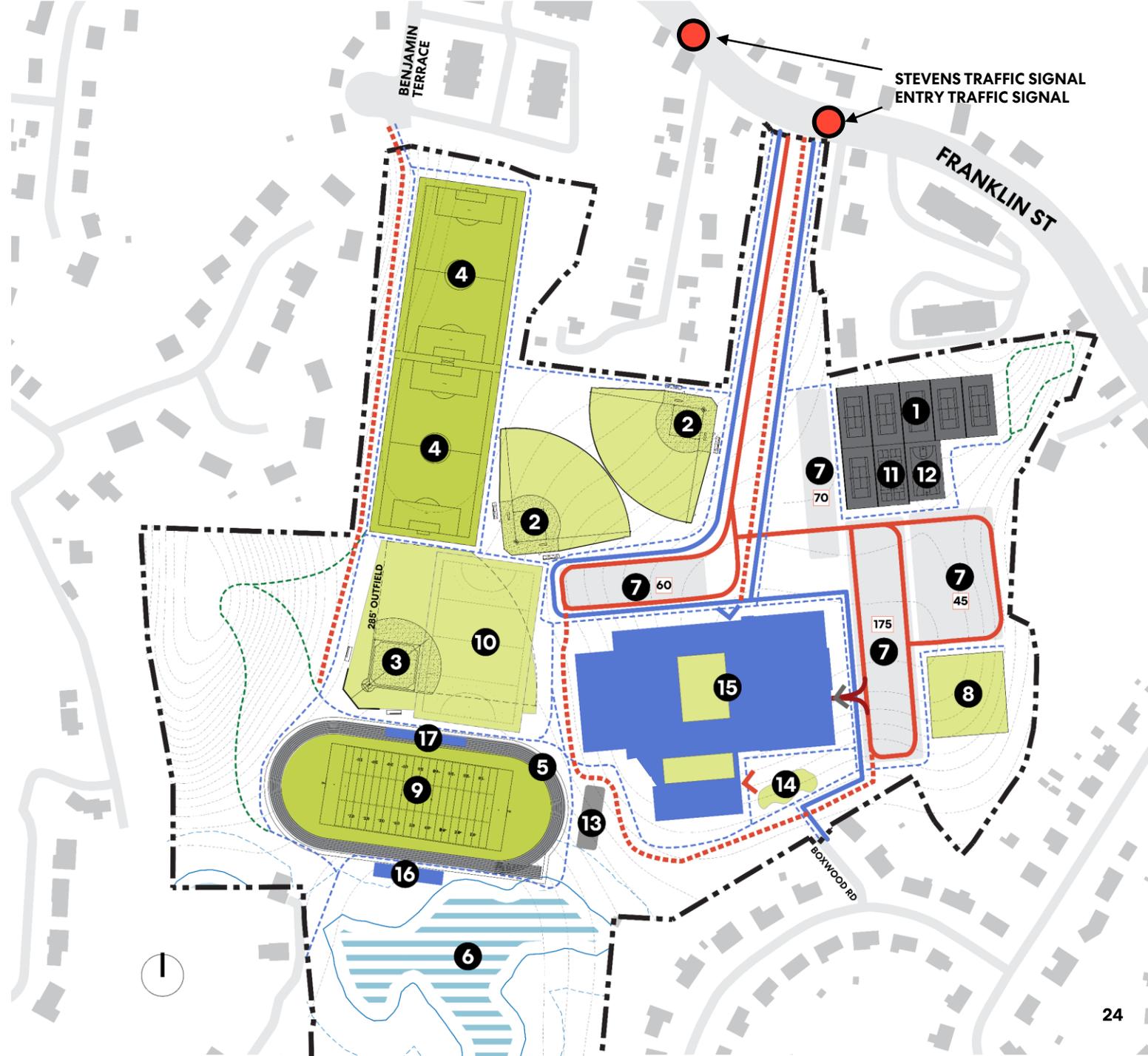


Option 1A – Code Upgrade Only Interior Conditions



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 2A – Renovation Only



Stoneham High School

Field 1

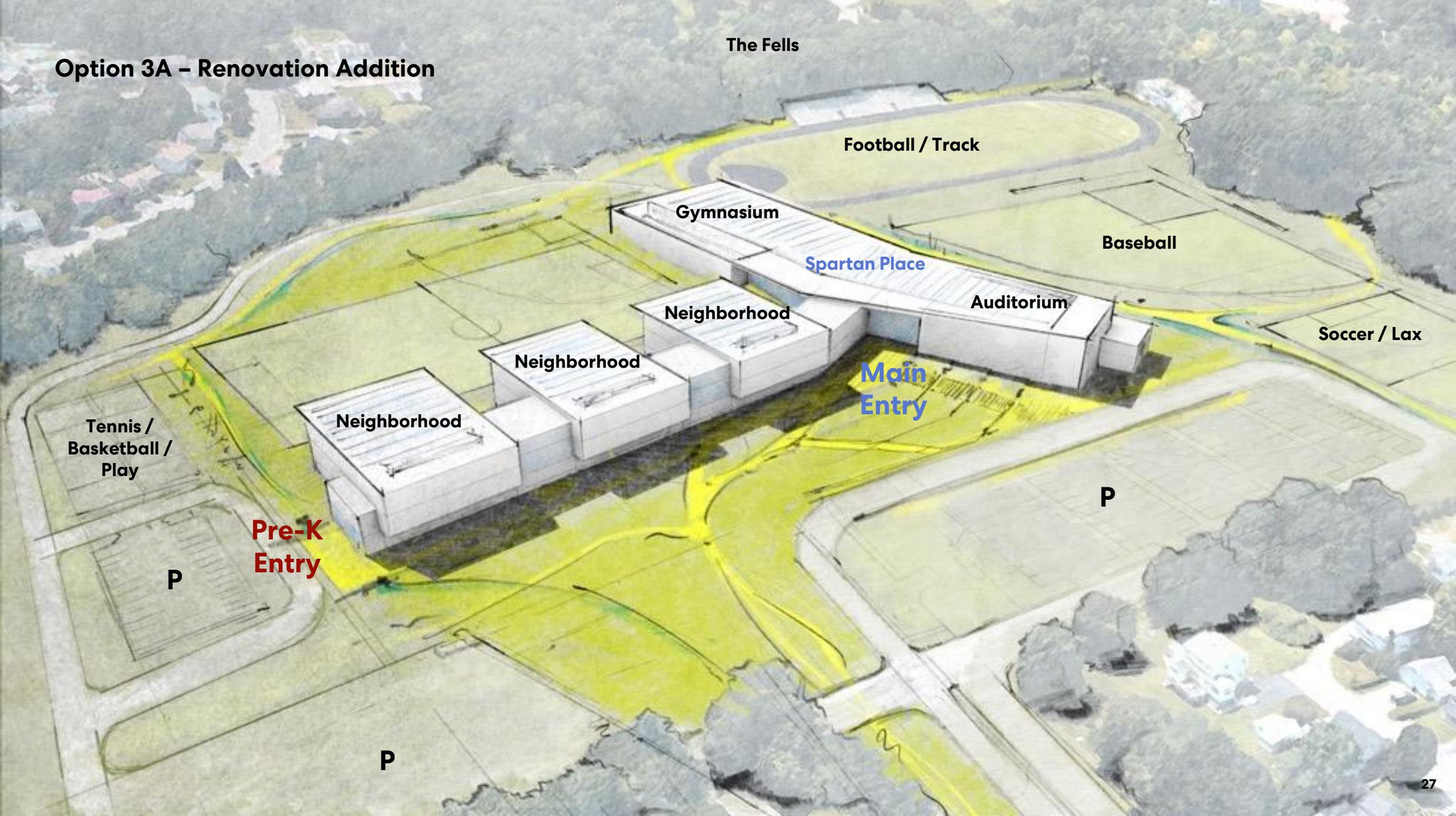
Stoneham High
Baseball Field 2

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



Option 3A - Renovation Addition



The Fells

Football / Track

Gymnasium

Baseball

Spartan Place

Neighborhood

Auditorium

Soccer / Lax

Neighborhood

Main Entry

Tennis /
Basketball /
Play

Pre-K
Entry

Neighborhood

P

P

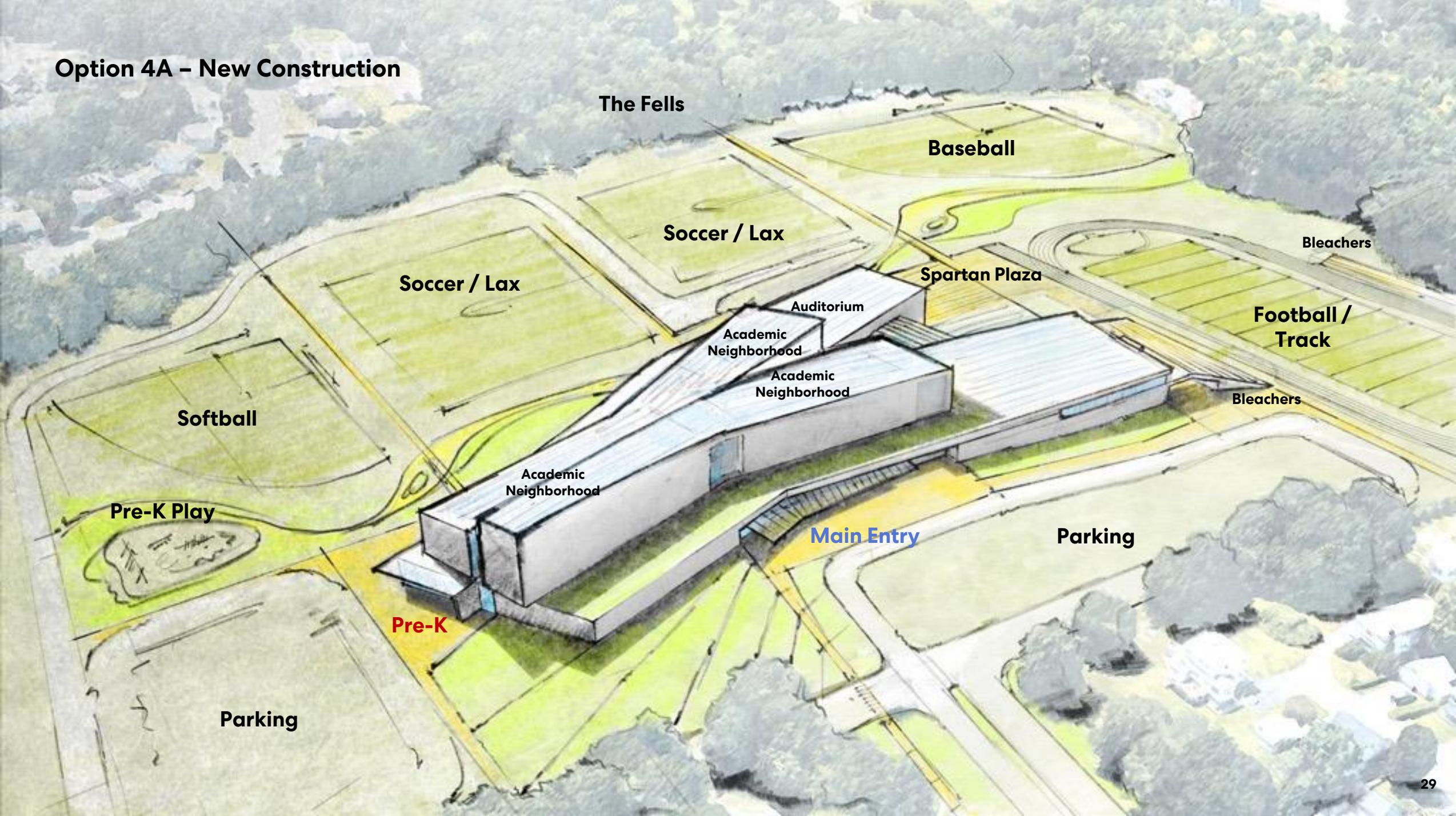
P

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 4A – New Construction



The Fells

Baseball

Soccer / Lax

Bleachers

Soccer / Lax

Spartan Plaza

Football /
Track

Auditorium

Academic
Neighborhood

Bleachers

Academic
Neighborhood

Softball

Academic
Neighborhood

Pre-K Play

Main Entry

Parking

Pre-K

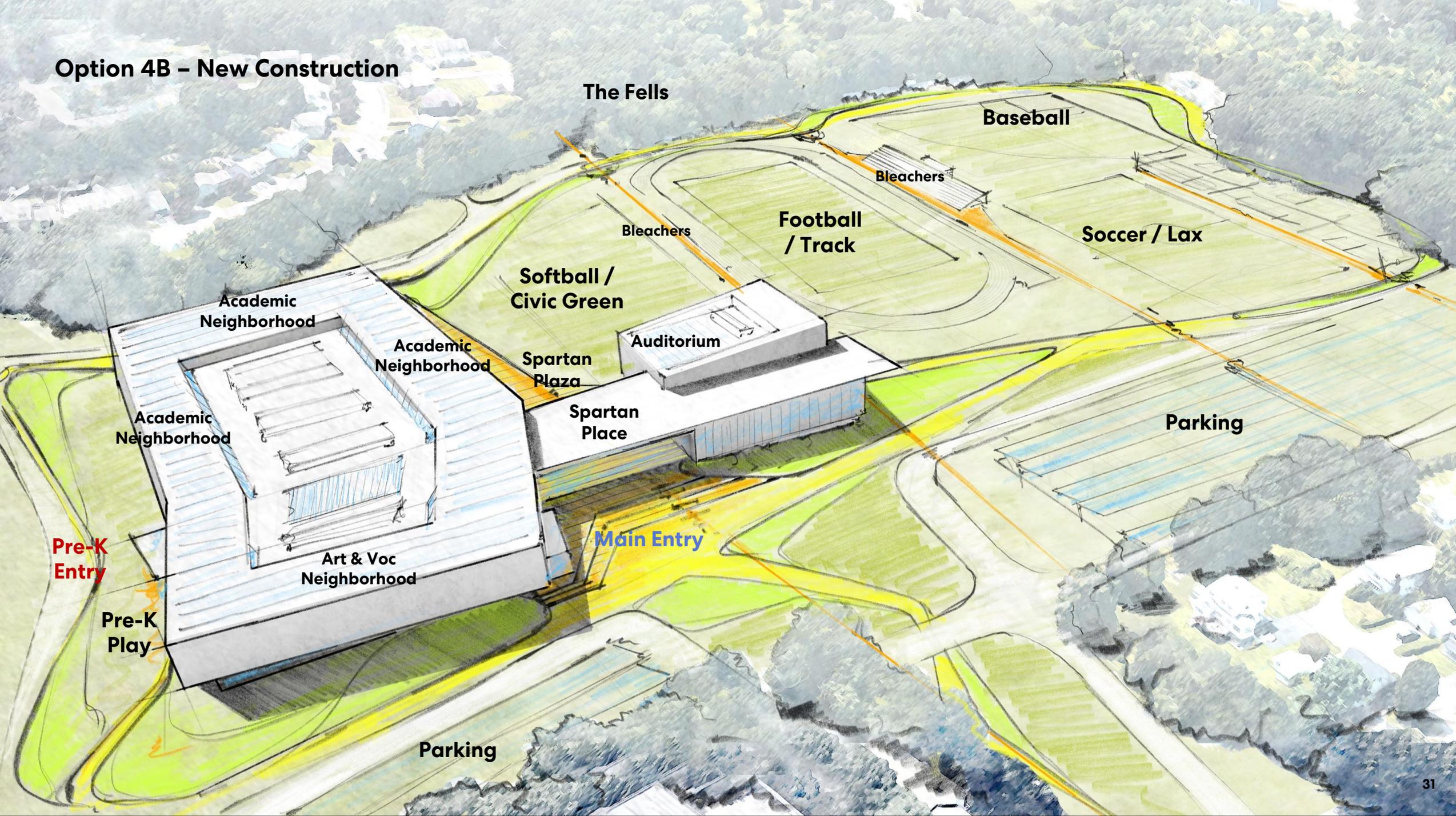
Parking

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



Option 4B - New Construction



The Fells

Baseball

Bleachers

Football / Track

Soccer / Lax

Bleachers

Softball / Civic Green

Academic Neighborhood

Academic Neighborhood

Auditorium

Spartan Plaza

Spartan Place

Parking

Academic Neighborhood

Pre-K Entry

Main Entry

Art & Voc Neighborhood

Pre-K Play

Parking

Perkins&Will

Menti Survey

Community Forum 04

Which of the options provides the Stoneham Community the best long-term plan for educating its high school students?



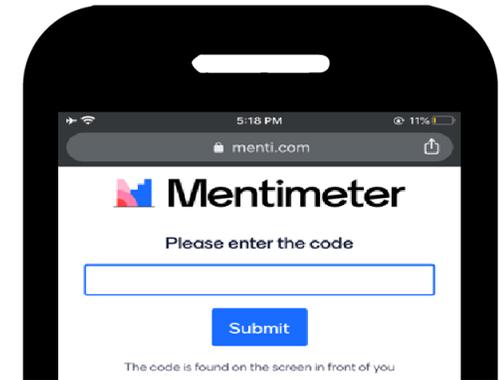
1

**ON YOUR PHONE /
TABLET / COMPUTER**



2

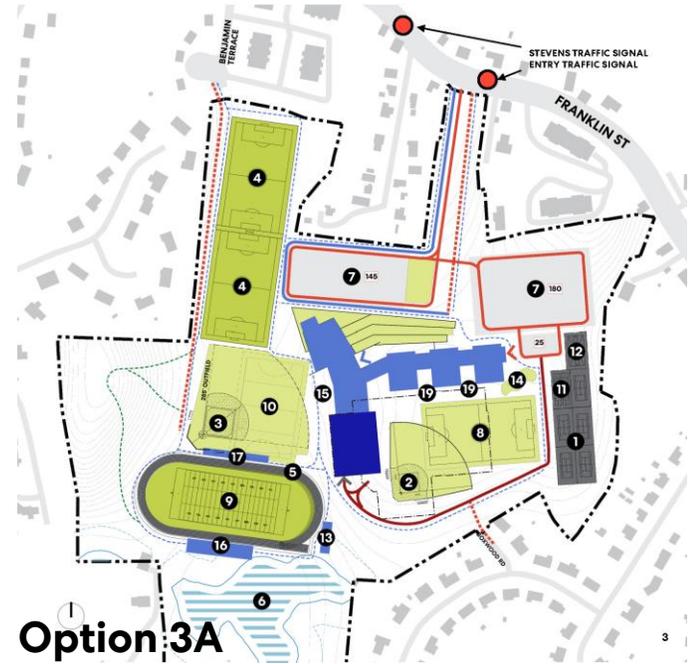
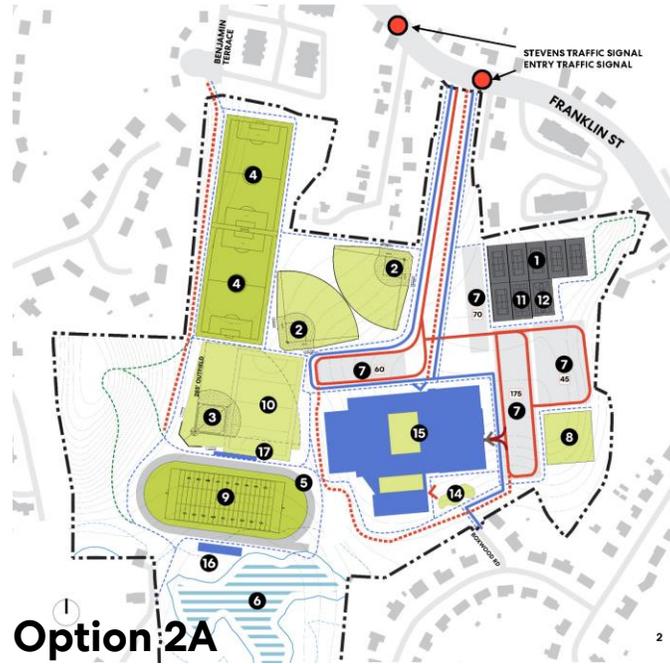
GO TO MENTI.COM



3

**ENTER THE CODE 81 04 41 8
AND VOTE!**

Menti Survey



Perkins&Will

Zero Net Energy Approach

Community Forum 04

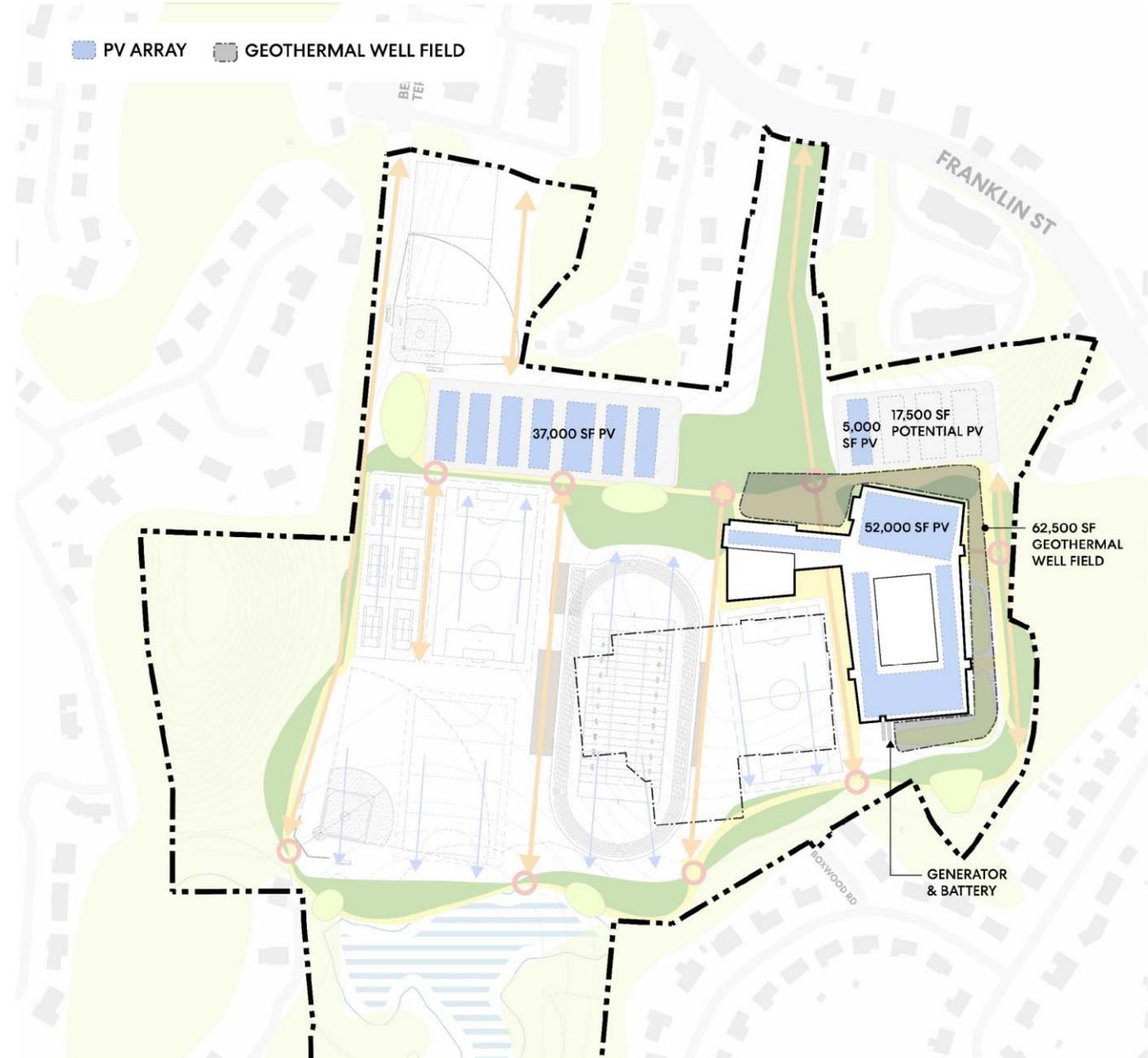
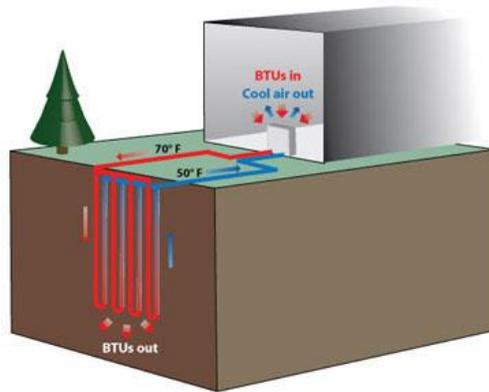
High Performance Building

- **Closed Loop Georexchange 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

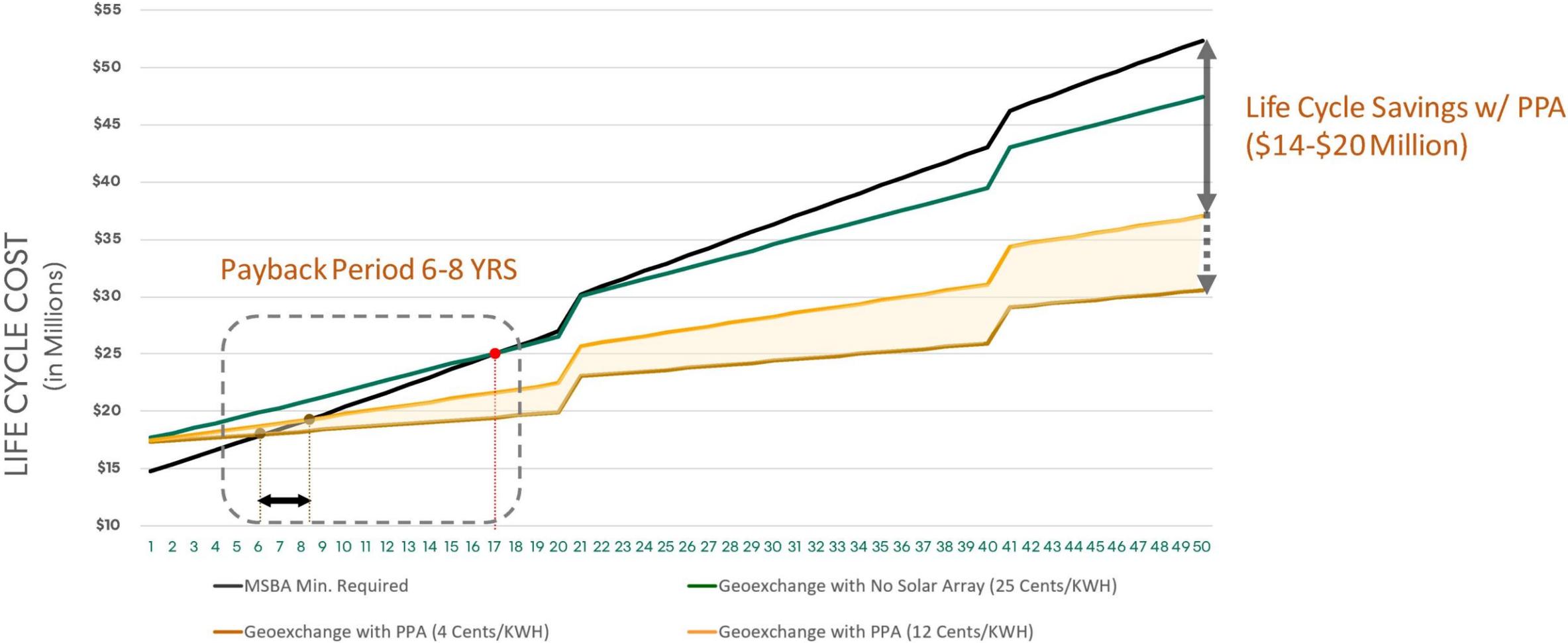
- **Solar Power Purchase Agreement**

- Low upfront costs to Stoneham
- Powers an all-electric building
- Reduced electricity bill
- Contract to be approved at town meeting



Life Cycle Cost Assessment

CUMULATIVE CASH FLOW: CAPITAL, OPERATIONAL, MAINTENANCE & REPLACEMENT COSTS



Perkins&Will

Cost Analysis

Community Forum 04

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:

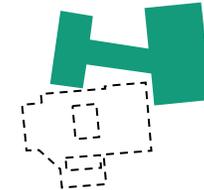
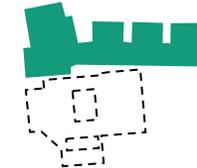
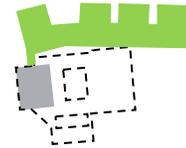
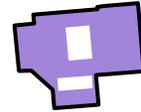
- Site Costs over **8%**
- Building Costs over **\$333/SF**
- Gymnasium and Auditorium Space over MSBA Guidelines
- Asbestos Flooring abatement
- Hazardous Material removal associated with sitework
- Concession Stand, Press Box and associated Outdoor Toilet Facilities
- FFE/Technology costs over **\$2,400** per student
- Legal Fees, Moving Expenses, construction contingencies over **1%** for new construction or **2%** for renovation
- Classroom Modulars for swing space

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%**)

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

Perkins&Will

Tax Impact

Community Forum 04

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

Stoneham Share

Rate

Term (years)

Yearly Payment-20 yr Average

Average Home Value

Annual Tax Increase Average Home-20 yr Average

Annual Tax Increase per \$1,000 Valuation

Code Repair Only Option 1A	Renovation Only Option 2A	Renovation/ Addition Option 3A	New Construction Option 4A	New Construction Option 4B
\$62,956,915	\$110,147,850	\$128,690,402	\$126,421,381	\$125,289,311
3.00%	3.00%	3.00%	3.00%	3.00%
20	20	20	20	20
\$ 4,231,694	\$ 7,403,666	\$ 8,650,016	\$ 8,497,503	\$ 8,421,410
\$ 577,700	\$ 577,700	\$ 577,700	\$ 577,700	\$ 577,700
\$ 490	\$ 858	\$ 1,002	\$ 985	\$ 976
\$ 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.

Tax Impact Comparison

Assessed Value	No Debt Exclusion Estimated Tax Bill	Option 4B		Option 4B	
		20 Years	3.0%	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

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

Perkins&Will

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>

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**

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**

Community Resources

SSBC Website:

<https://www.Stoneham-Ma.Gov/hsbc>

Project Email:

SSBC@Stoneham-Ma.gov



Perkins&Will

Thank You

Community Forum 04