

Perkins&Will

**STONEHAM HIGH SCHOOL
FEASIBILITY STUDY
Community Forum 07**

5.26.2021

SCHOOL COMMITTEE MEMBERS

Marie Christie	Co-Chair	Jeanne Craigie	Town Moderator
David Bois	Co-Chair	Lisa Gallagher	Middle School Admin.
Raymie Parker	Select Board Member	Kevin Yianacopolus	High School Facilities
Nicole Nial	School Committee Member	April Lanni	Town Procurement Officer
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

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OPM

Symmes Maini and McKee Associates

CONSTRUCTION MANAGER

Consigli Construction Co.

Perkins&Will

SMMA
Project Management


CONSIGLI
Est. 1905

AGENDA

1\ Introduction

2\ MSBA Process

3\ Project Design

4\ Managing the Construction

5\ Preliminary Cost Analysis

6\ Preliminary Timeline

7\ Next Steps

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Introduction

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Final Step in Twenty-Year Master Plan

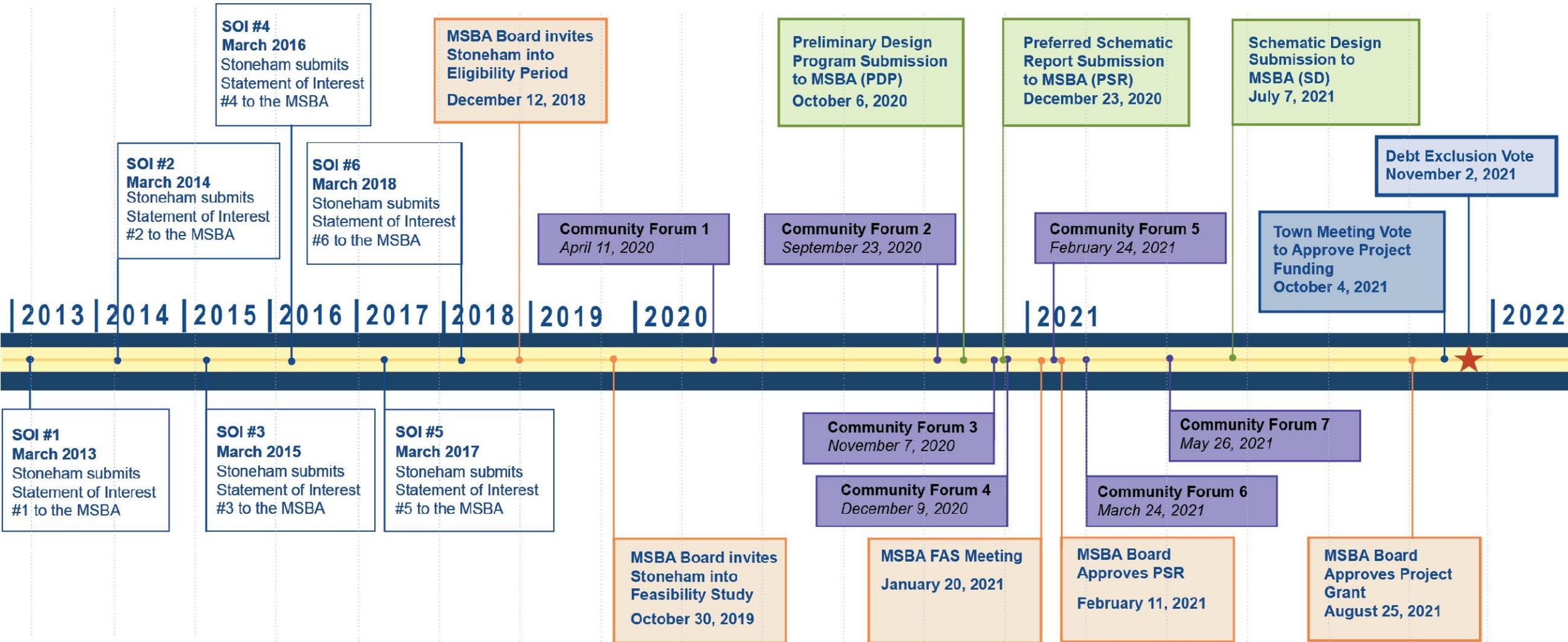
2001 Completed South Elementary School

2003 Completed Robin Hood and Colonial Park Elementary Schools

2015 Completed Central Middle School

2024 Complete Stoneham High School

Eight Years of Planning



Stoneham High School Project Goals

- **Provide flexible, 21st Century educational spaces with learning communities that promote interdisciplinary, project-based learning**
- **Provide a school that is healthy, safe, code-compliant, and a place the Stoneham residents can be proud of**
- **Develop a long-term solution to our aging High School**
- **Engineer a school that is energy efficient and capable of operating at Zero Net Energy**
- **Develop outdoor classrooms, gathering spaces, healthy connections to nature, and athletic facilities**
- **Include a safe Pre-K Program environment for our growing Elementary School population**
- **Mitigate the effects the High School has on surrounding traffic challenges**

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

Stoneham High School Educational Program – Interior & Exterior

- **Appropriately Sized Educational Spaces**
- **SPED, RISE and STRIDE Spaces**
- **STEAM Innovation Hubs**
- **Engineering and Technology Labs**
- **Maker Space and Fabrication Labs**
- **Music and Art Spaces**
- **Collaboration Spaces**
- **Interdisciplinary Project and Performance Room**
- **Library / Media Center**
- **Auditorium**
- **Gymnasium**
- **Town-Wide Pre-K Program**
- **District Offices**
- **Outdoor Learning Classrooms**
- **Three Synthetic Turf Fields with Lighting, One of which a New Stadium with Track and Bleachers**
- **Reconstructed Natural Turf Baseball and Softball Fields**
- **Reconstructed Tennis Courts**
- **Outdoor Locker Room, Toilet and Concession Building**
- **Access to Nature Trails**
- **Synchronized traffic signalization at Entry Drive and at Stevens Street**

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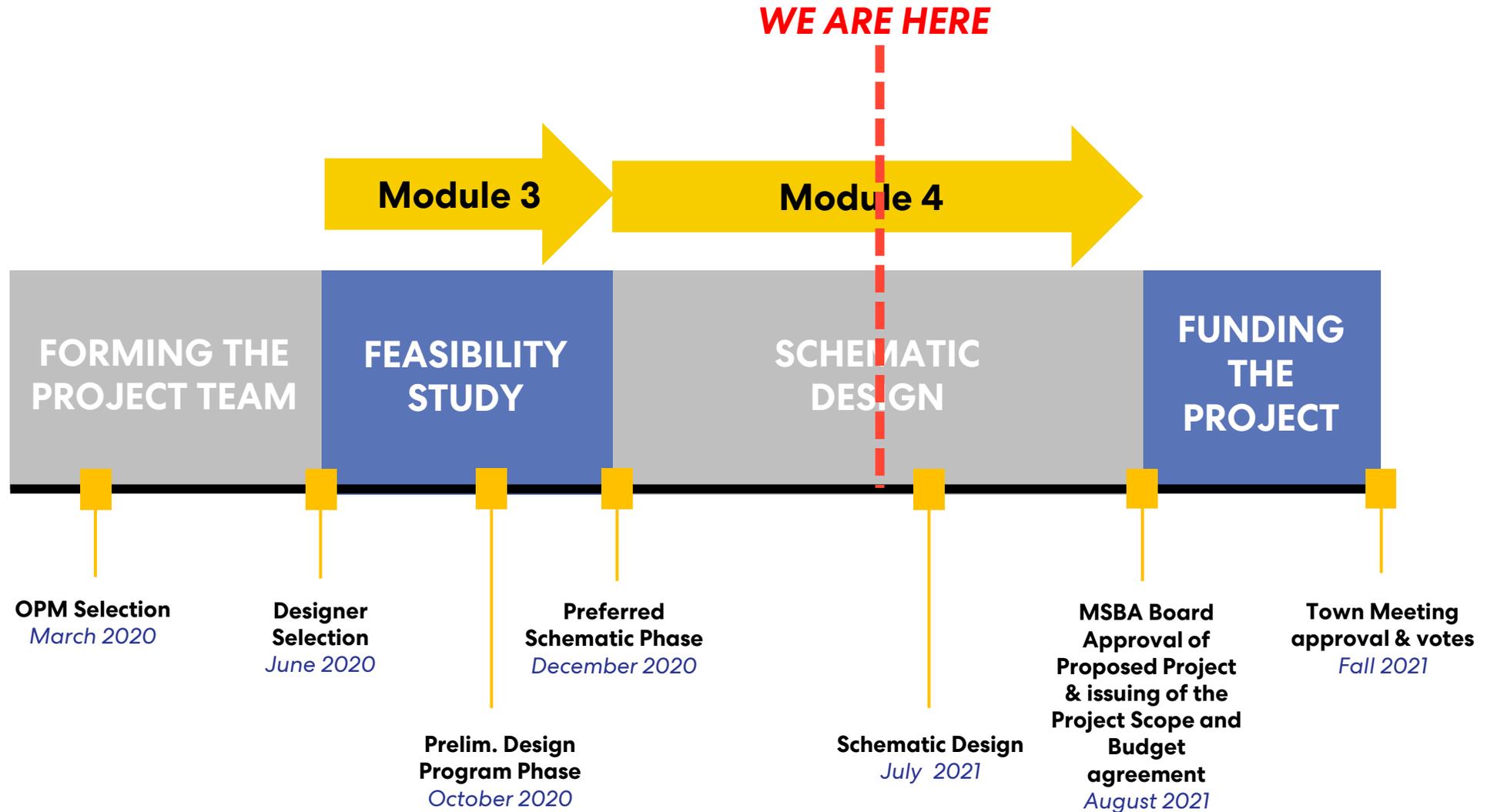
MSBA Process

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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 provide a grant for a portion of eligible project costs for an approved project if accepted by the voters of Stoneham

MSBA Process / Feasibility Study and Schematic Design Phases



Engaging the Community

Six Community Forums:

8/11/20, 9/23/20, 11/7/20, 12/9/20, 2/24/21, 3/24/21

Four Community Information Flyers

September '20, October '20, January '21, May '21

Three Tri-Board Meetings

10/15/20, 12/15/20, 3/3/21

Four PTO Meetings:

11/4/20, 11/10/20, 11/19/20, 4/7/21

Rotary Club of Stoneham and Chamber of Commerce Meetings

10/20/20, 4/27/21

Three Community Surveys

11/25/20, 12/2/20, 12/5/20

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Press Releases:

- OPM Selection
- Designer Selection
- Community Forums
- SSBC Design Option Reviews
- PDP Submission
- PSR Submission
- Construction Manager Selection
- Feasibility Study Progress Updates

Social Media Posting

- Community Groups Facebook
- Stoneham Public Schools Facebook

Twenty-Five School Building Committee Meetings all broadcast on Stoneham TV

What are the Conditions of Existing Stoneham High School?

Existing Conditions

Current Campus

Junior High School (1968)

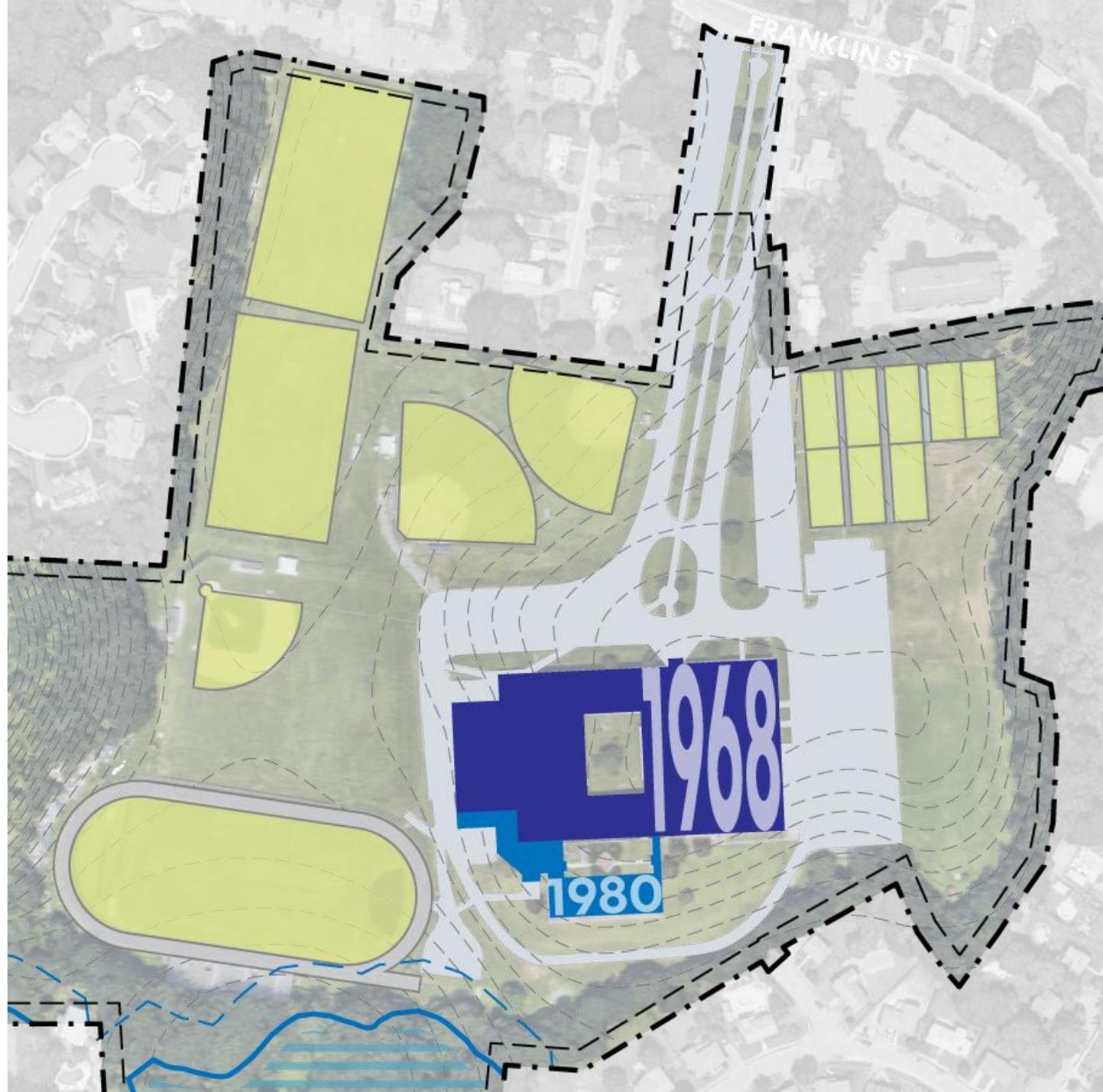
52 YEARS OLD

Senior High School (1980)

40 YEARS OLD

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Project Design

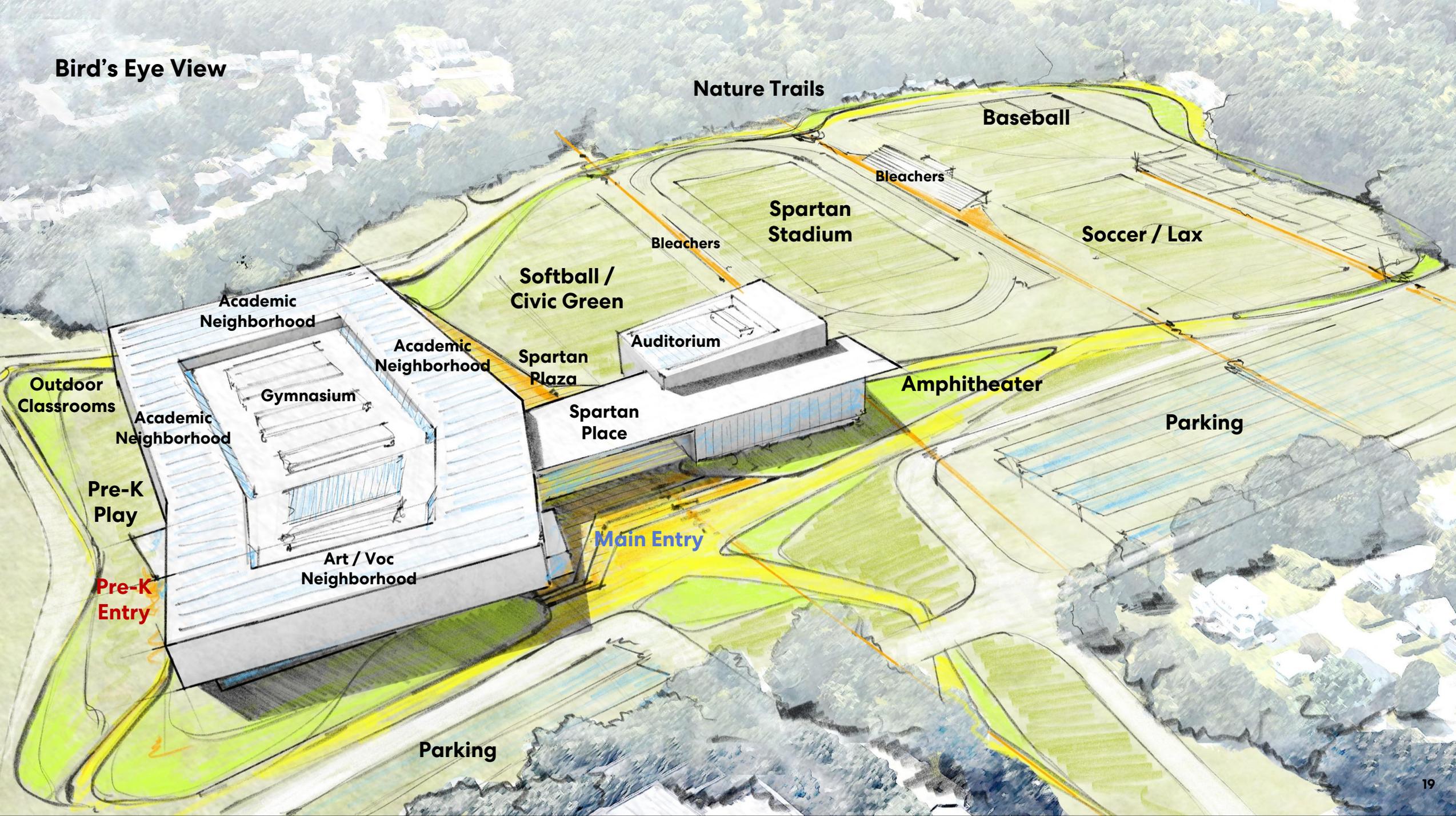
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Site Plan

- 1 - TENNIS
- 2 - SOFTBALL
- 3 - BASEBALL
- 4 - SOCCER
- 5 - SPARTAN STADIUM
- 6 - WETLAND
- 7 - PARKING
- 8 - AMPHITHEATER
- 9 - FIELD HOCKEY
- 10 - PICKLEBALL
- 11 - HOME BLEACHERS
- 12 - PRE-K PLAY
- 13 - SPARTAN PLAZA
- 14 - VISITOR BLEACHERS
- 15 - LANDSCAPED PATH
- 16 - OUTDOOR CLASSROOM
- 17 - COMMUNITY ORCHARD



Bird's Eye View



Nature Trails

Baseball

Bleachers

Spartan Stadium

Bleachers

Soccer / Lax

Softball / Civic Green

Academic Neighborhood

Auditorium

Academic Neighborhood

Spartan Plaza

Amphitheater

Parking

Spartan Place

Gymnasium

Outdoor Classrooms

Academic Neighborhood

Pre-K Play

Pre-K Entry

Art / Voc Neighborhood

Main Entry

Parking

PROGRAM LEVEL 1

ADMINISTRATION

1. GENERAL OFFICE & WAITING
2. MAIL & TIME ROOM
3. GUIDANCE OFFICE
4. SUPERVISORY OFFICE
5. PRINCIPAL OFFICE
6. PRINCIPAL SECRETARY
7. ASSISTANT PRINCIPAL OFFICE
8. SPED TRANSITION OFFICE
9. SPED OFFICE
10. PSYCHOLOGY OFFICE
11. ADJUSTMENT COUNSELOR
12. DUPLICATING / COPY ROOM
13. RECORD ROOM
14. CONFERENCE ROOM
- CC CAREER CENTER
- M MEDICAL SUITE
- W GUIDANCE WAITING

THEATER & MUSIC

60. AUDITORIUM STAGE
61. AUDITORIUM HOUSE
62. AUD. CONTROL ROOM
63. AUD. STORAGE / COSTUMES
64. DRESSING ROOM
65. BAND
66. MUSIC STORAGE
67. MUSIC PRACTICE

SUPPORT & CIRCULATION

44. CUSTODIAL SUITE
45. LOADING / RECEIVING
46. TRASH / RECYCLING
47. STOREROOM
48. NETWORK / TELECOM
49. MAIN MECHANICAL ROOM
- CS CHAIR & TABLE STORAGE
- E ELEVATOR
- FE FREIGHT ELEVATOR
- EF EXTERIOR FREEZER
- S STORAGE
- ST STAIR
- TE TECH / ELECTRICAL
- WC WATER CLOSET

DISTRICT OFFICES

14. CONFERENCE ROOM
15. BUDGET DIRECTOR'S OFFICE
16. PAYROLL OFFICE
17. ACCOUNTS PAYABLE OFFICE
18. ASSIST. SUPER. OFFICE
19. SUPERINTENDENT OFFICE
20. SECRETARY
21. HUMAN RESOURCES OFFICE
22. SPED ASSIST. SUPER. OFFICE

ATHLETICS

34. TEAM LOCKER ROOM
35. P.E. LOCKER ROOM
36. COACH OFFICE / WC
37. P.E. OFFICE
38. ATHLETIC DIRECTOR'S OFFICE
39. P.E. STORAGE
40. GYMNASTICS STORAGE
41. ATHLETICS STOREROOM
42. EQUIPMENT & LAUNDRY
43. TRAINING
72. ALTERNATIVE P.E.

DINING

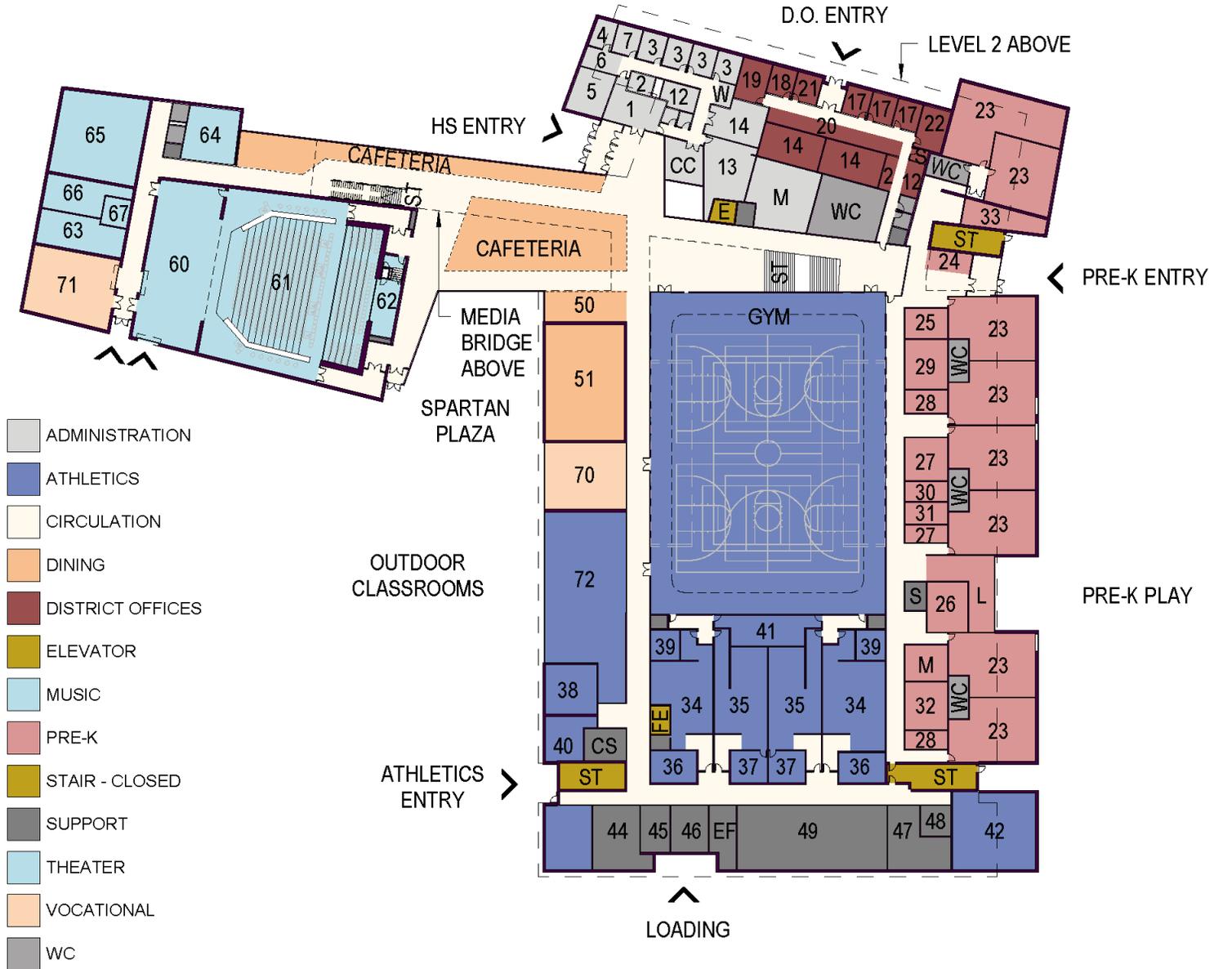
50. SERVERY
51. KITCHEN

VOCATIONAL

70. CULINARY
71. SCENE SHOP

PRE-K

23. PRE-K CLASSROOM
24. PRE-K RECEPTION
25. PRE-K DIRECTOR'S OFFICE
26. CONFERENCE ROOM
27. SPEECH
28. OBSERVATION AREA
29. PRE-K OT / PT
30. SOCIAL WORKER OFFICE
31. BCBA OFFICE
32. SENSORY
33. TEACHER WORK ROOM
- M MEDICAL / NURSE
- L LUNCH ROOM



LEVEL 01

1" = 60'-0"

PROGRAM LEVEL 2

CORE ACADEMIC

1. GENERAL CLASSROOM
2. BREAK-OUT SPACE
3. SCIENCE CLASSROOM
4. TEACHER PLANNING
5. SMALL GROUP SEMINAR
6. CHEMICAL STORAGE
7. HEALTH CLASSROOM
8. PREP ROOM (FOR SCIENCE)

SPECIAL EDUCATION

9. RISE CLASSROOM A
10. RISE CLASSROOM B
11. RISE WC
12. STRIDE CLASSROOM
13. STRIDE OFF 1
14. STRIDE OFF 2
15. STRIDE WC

MEDIA

20. OPEN MEDIA
21. CLOSED MEDIA
22. HISTORY LAB
- MT MEDIA TERRACE

ART & VOCATIONAL

23. PERFORMANCE ROOM
24. PERF. STORAGE & CNTRL RM
25. ART CLASSROOM A
26. ART CLASSROOM B
27. ART WORKROOM
28. BIOMEDICAL
29. VIDEO PRODUCTION
30. MAKER SPACE
31. MAKER BREAK-OUT SPACE

ADMINISTRATION

32. STAFF LUNCH
33. MOTHER'S ROOM
- H HUDDLE ROOM

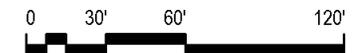
SUPPORT & CIRCULATION

- S SUPPORT / MEP / TECH
 E ELEVATOR
 FE FREIGHT ELEVATOR
 ST STAIR
 WC WATER CLOSET



LEVEL 02

1" = 60'-0"



PROGRAM LEVEL 3

CORE ACADEMIC

1. GENERAL CLASSROOM
2. BREAK-OUT SPACE
3. SCIENCE CLASSROOM
4. TEACHER PLANNING
5. SMALL GROUP SEMINAR
6. CHEMICAL STORAGE
7. ESL SERVICES CLASSROOM
8. PREP ROOM (FOR SCIENCE)

SPECIAL EDUCATION

9. RESOURCE CLASSROOM A
10. RESOURCE CLASSROOM B
11. ASSES. CENTER 1
12. ASSES. CENTER 2
13. SPEECH & LANG SMALL CR
14. SPEECH & LANG. OFF.
15. OT / PT
16. LANGUAGE-BASED CR

ART & VOCATIONAL

17. ENG. / COMP. DRAFTING

ADMINISTRATION

18. TEACHERS' WORK ROOM
19. DEPT. HEAD OFFICES
20. BOOK STORAGE
- H HUDDLE ROOM
- SS SCHOOL STORE

SUPPORT & CIRCULATION

- S SUPPORT / MEP / TECH
 E ELEVATOR
 FE FREIGHT ELEVATOR
 ST STAIR
 WC WATER CLOSET

- ADMINISTRATION
- BREAK OUT SPACE
- CIRCULATION
- CORE ACADEMIC
- ELEVATOR
- SPED
- STAIR - CLOSED
- SUPPORT
- VOCATIONAL
- WC



LEVEL 03

1" = 60'-0"



Perspective – Spartan Place / Spartan Plaza



Perspective – Exterior View of Academic Neighborhood



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Perspective – Interior View of Spartan Place



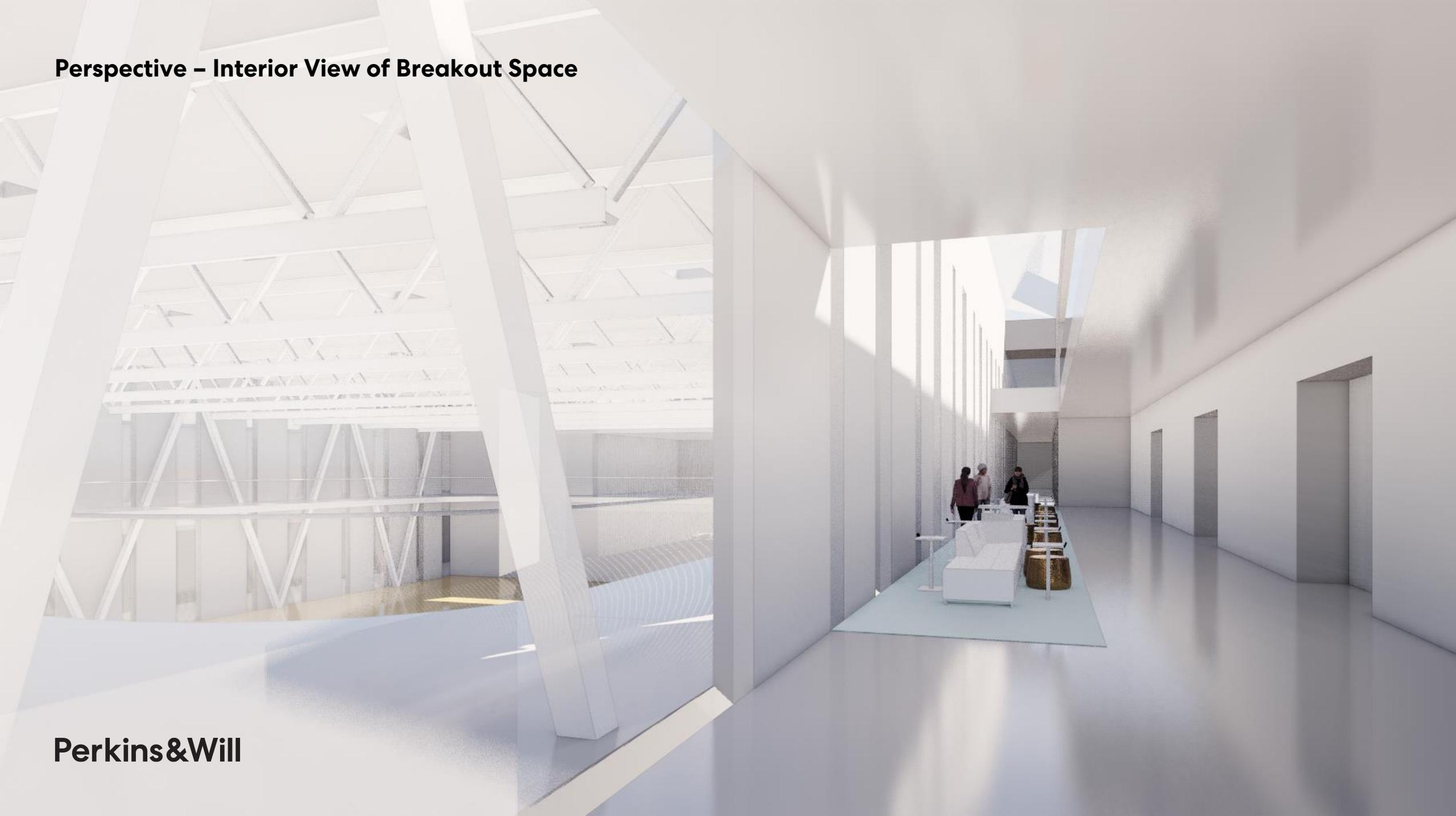
Perspective – Interior View of Communicating Stair and Gymnasium



Perspective – Interior View of Media Bridge



Perspective – Interior View of Breakout Space



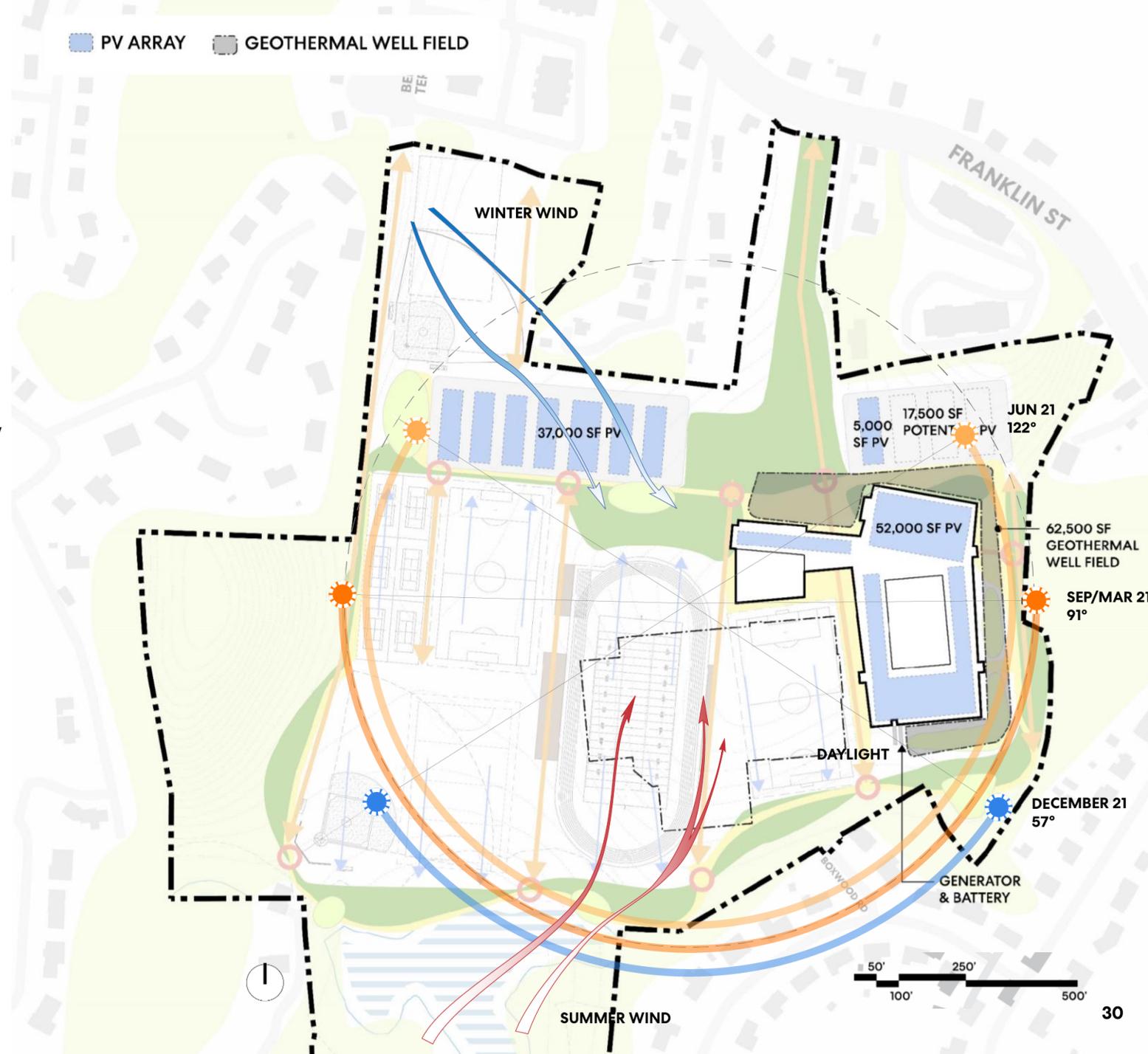
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Zero Net Energy Approach

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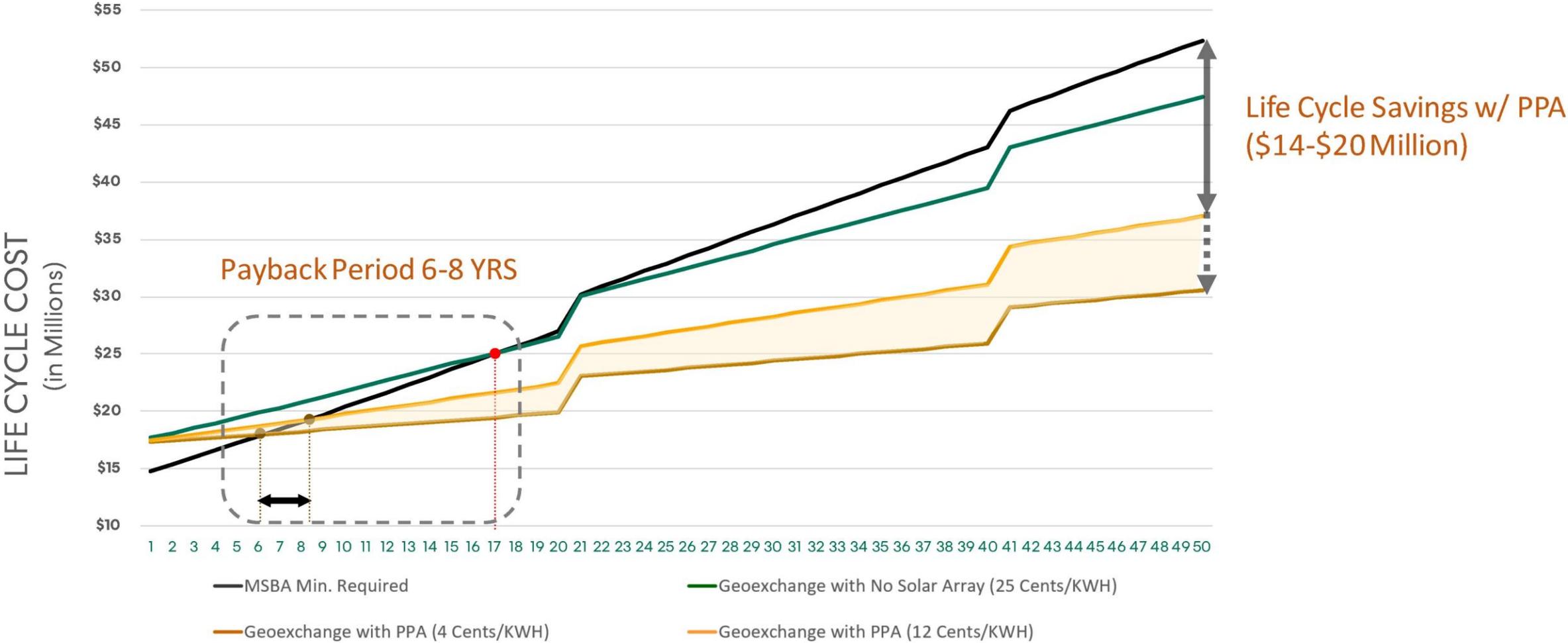
Sustainable Design Strategies

- Zero Net Energy Goal - Energy use intensity target (EUI) of 25
- No Fossil Fuels / all electric building
- Concise Massing / High Performance Windows
- Robust Envelope with Optimized Window to Wall Ratio (28%)
- Geothermal Heat Exchange System
- Planning for PPA Photovoltaic Array
- Planning for PPA Battery / Peak Demand Optimization
- Focusing on Low Carbon / Material Health
- Water-Use Reduction Target of 40%



Life Cycle Cost Assessment

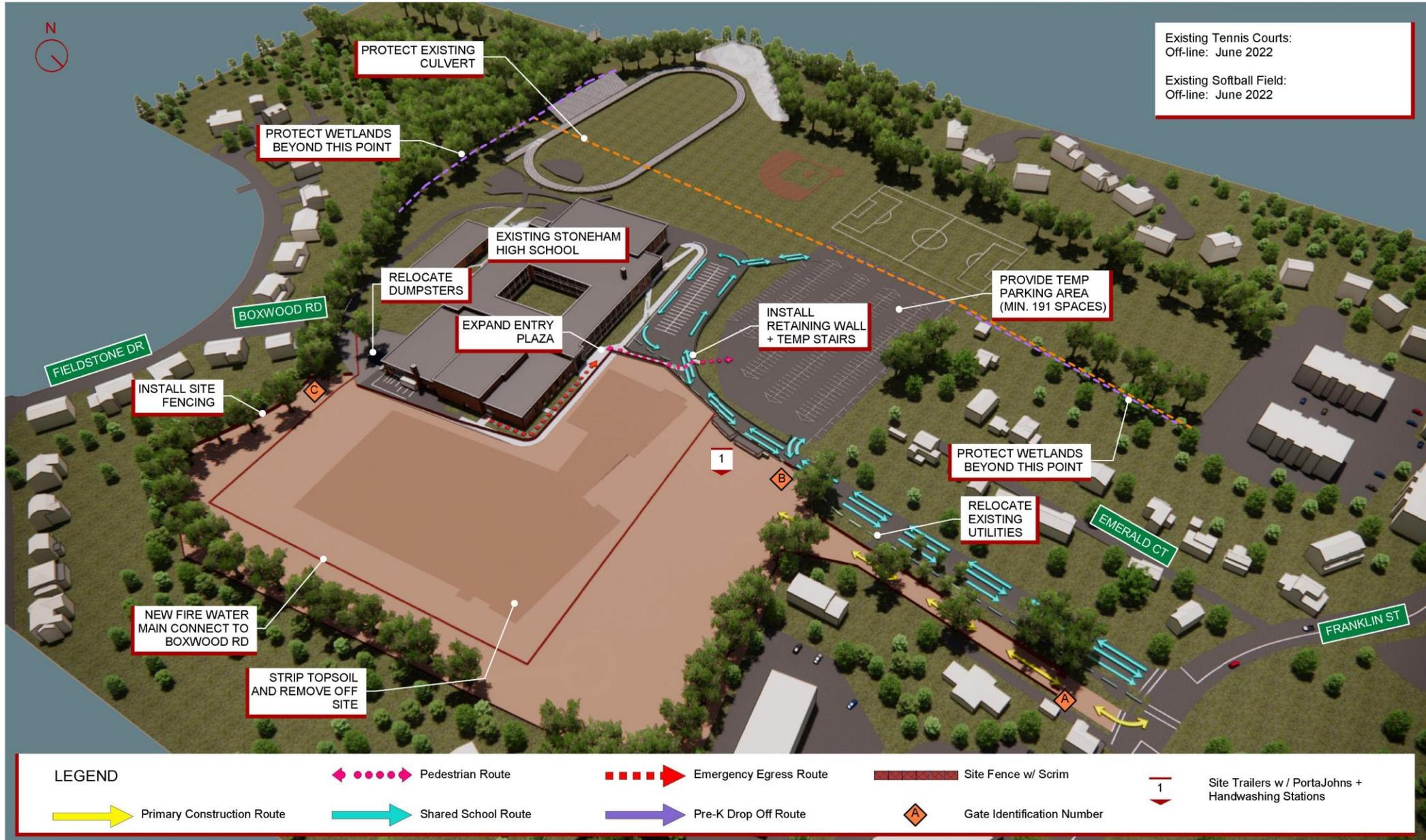
CUMULATIVE CASH FLOW: CAPITAL, OPERATIONAL, MAINTENANCE & REPLACEMENT COSTS



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Managing the Construction

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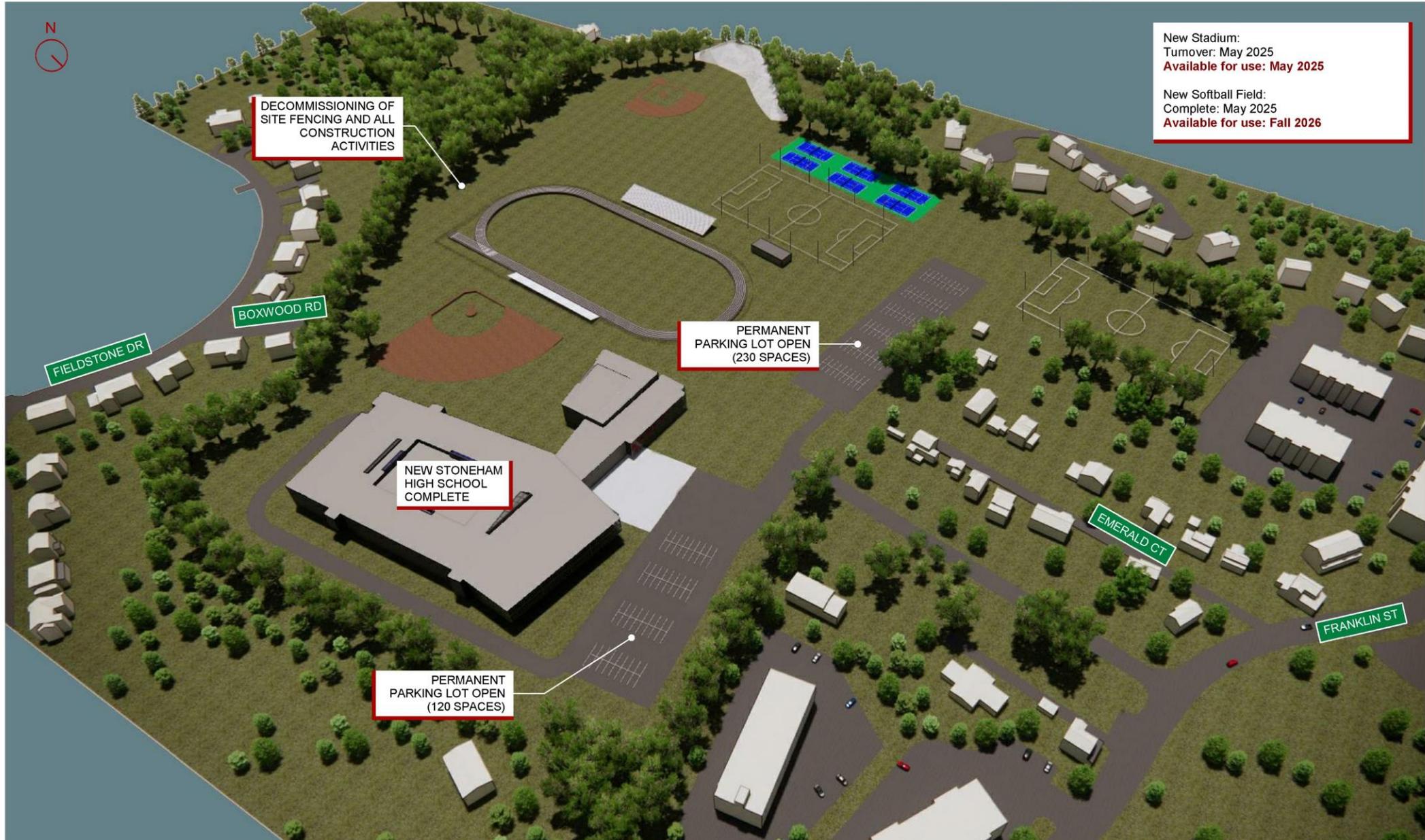




Stoneham High School



Complete
May 2025



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Preliminary Cost Analysis

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Preliminary Cost Analysis

Total Project Cost	\$176.2 M
MSBA Share	\$50.9M
Stoneham Share	\$125.3M

MSBA Grant Calculation

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
- District Offices and Pre-K Program
- 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

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Preliminary Tax Impact Analysis

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Preliminary Tax Impact Analysis

Stoneham Share **\$125.3M**

Estimated Average Cost/Year
Average Residential Taxpayer \$789 ~ \$976*

Based on average home value of \$577,700, 30-year bond at 3.5%, or 20-year bond at 3%
Costs are preliminary and subject to change

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

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Preliminary Timeline

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Preliminary Timeline

Construction Start

Summer 2022

School Building Completion

Summer 2024

Demolition / Playfields / Parking

Late 2024 / Early 2025

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Next Steps

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Stoneham School Building Committee

Continue to refine the design and costs

Meetings every two weeks

Meetings and Agendas posted on the SSBC website

Upcoming Meetings

- **June 1, 2021**
- **June 14, 2021**
- **June 21, 2021**
- **June 28, 2021**

Next Steps

- **June 8, 2021 - Tri-Board Meeting No. 4**
- **July 7, 2021 – Submit Schematic Design (SD) documents to MSBA**
- **August 25, 2021 – MSBA Board meeting vote to approve project**
- **September 8, 2021 – Community Forum No. 8**
- **September 22, 2021 – Community Forum No. 9**
- **October 4, 2021 - Town Meeting Vote to Appropriate Project Funding**
- **November 2, 2021 - Ballot Vote for Debt Exclusion**

Community Resources

SSBC Website:

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

Project Email:

SSBC@Stoneham-Ma.gov



Town of
STONEHAM | MA

I'm looking for...



Government

Residents

Businesses

Contact Us



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Thank You

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