

PUBLIC SCHOOLS OF BROOKLINE



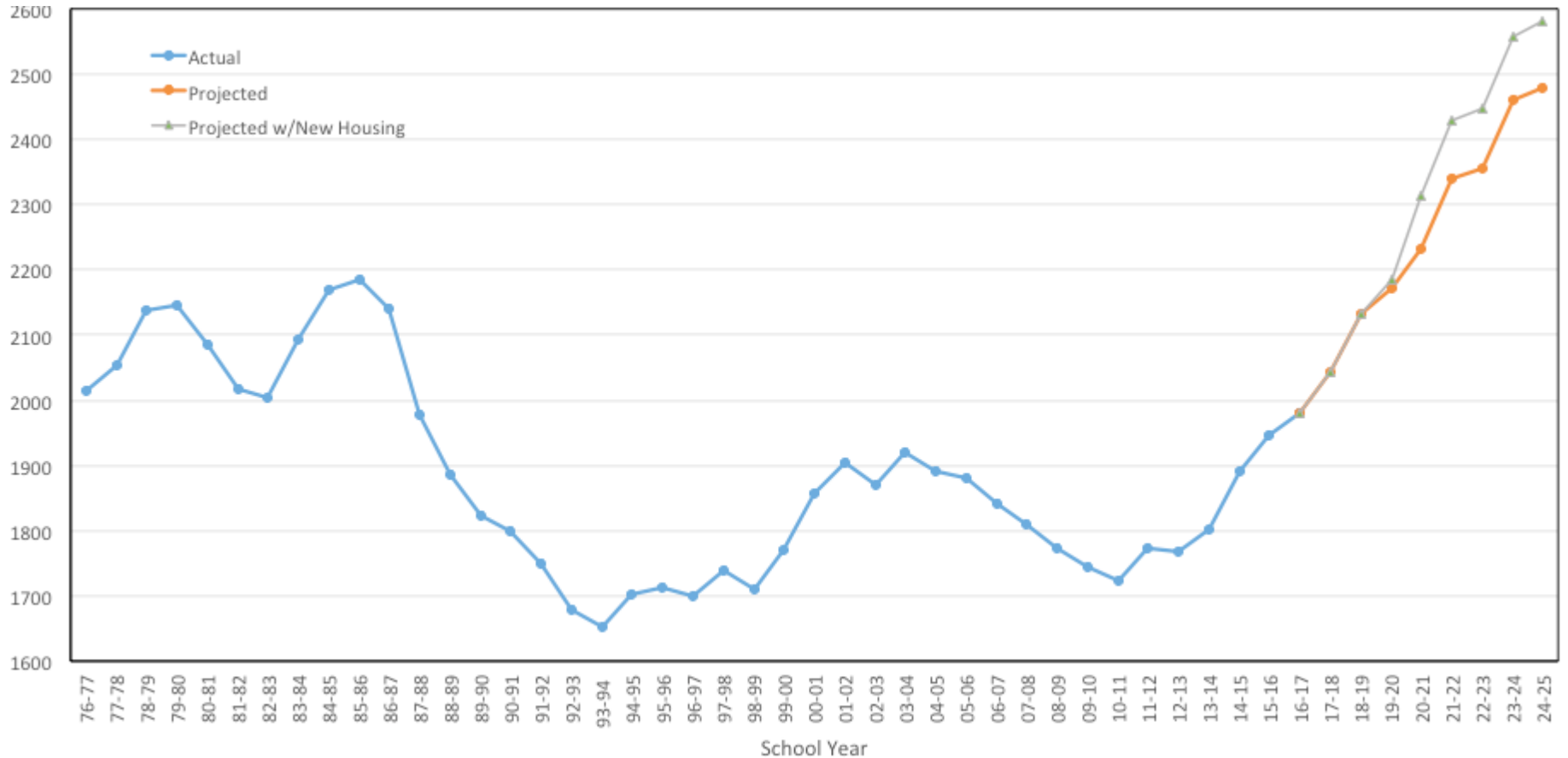
**Brookline High School Expansion
Feasibility Phase
Community Update Meeting
March 15, 2017**

For updates and information go to: www.brookline.k12.ma.us/BHSexpansion

Why do we need to expand BHS?



BHS Enrollment: 1976 – 2026



BHS Enrollment is increasing rapidly

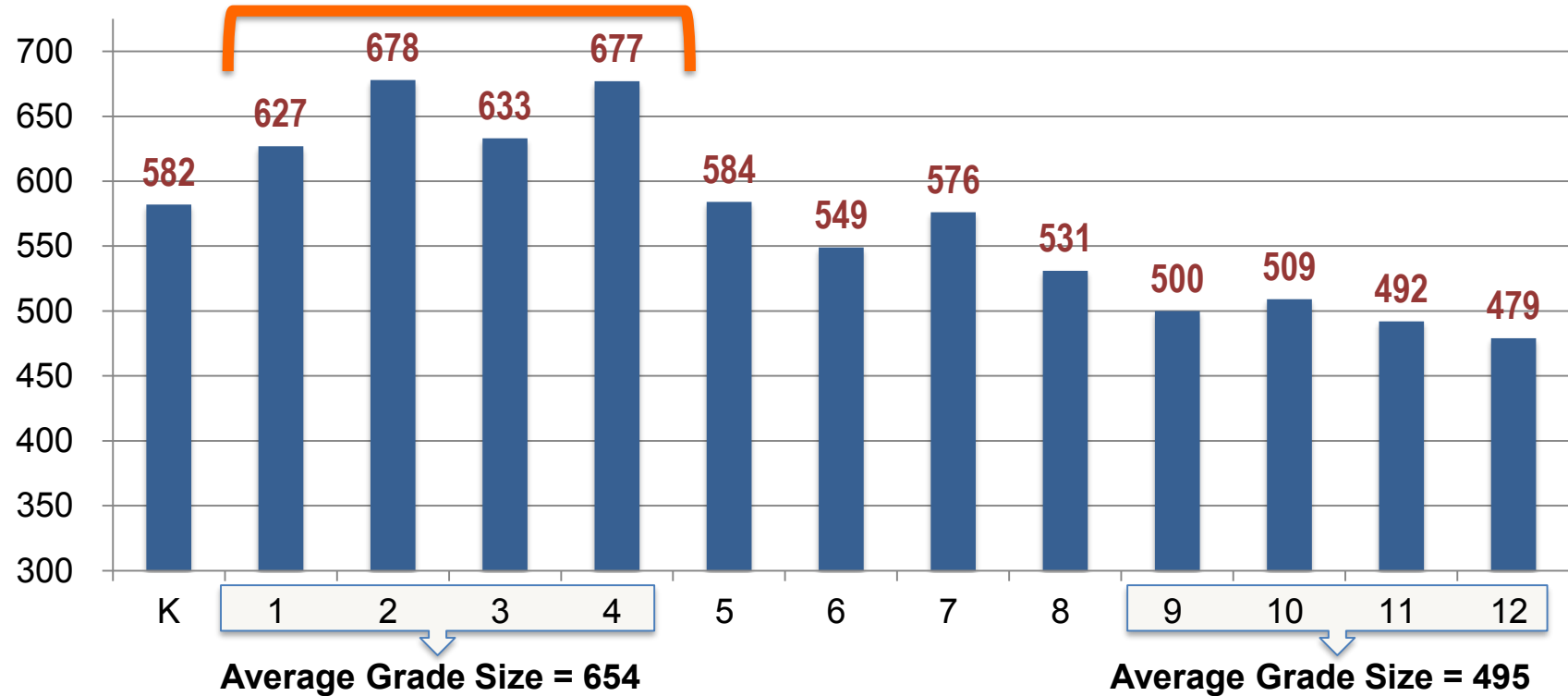


- 2010 - 2011 BHS Student Enrollment: 1,726
- 2016 – 2017 Current Enrollment: 1,980 (+254)
- 2021 – 2022 (Short Term Increase): 2,428 (+702)
- 2024 – 2025 (Longer Term Projection): 2,582 (+856)

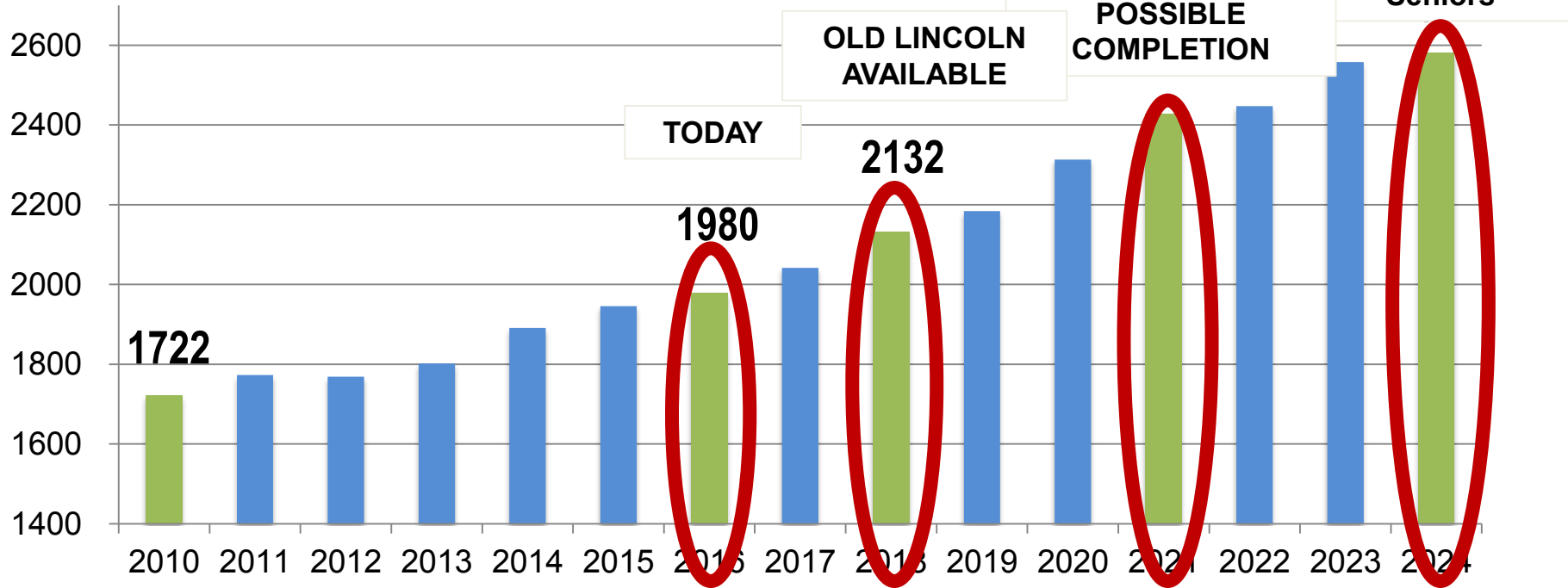
50% growth between 2010 and 2024

PSB Enrollment by Grade 2016 - 2017

@ BHS IN Fall 2024



BHS Enrollment Growth 2010 - 2024



Notes on January 2017 Enrollment Projections:

- Does not include BEEP enrollment
- Does include projected school-age population from proposed development filed with town.

What happens if we don't expand BHS



- Average class sizes increase (from 21.5 today to 27.5 in Fall 2021)
- Unsafe science rooms due to overcrowding
- Core spaces become inadequate and programming must be reduced (phys ed, library, cafeteria)
- Insufficient space for substantially separate programs so students placed out of district
- Insufficient faculty workspace

The BHS Education Plan



Our Framing Questions



1. **How will we more deeply engage all students at BHS** so their education is personally meaningful, positively impacts themselves and others, and prepares them for the changes and challenges ahead?
2. **How do we better serve all students so they are connected to BHS**, are supported to be full, thriving members of our community, and succeed academically and socially?
3. **How do we accommodate growth and expansion and still retain the essential unity, feel, and cohesion of the Brookline High School campus?**

Visioning - Guiding Principles for Design



- Big School, Small Feel
- Allows for Integration Between Disciplines & Departments
- Allows for self-directed, hands-on and experiential learning
- Flexible learning spaces – allow for performance, presentation, collaboration, socializing, independent and group study
- Use of the Entire Building/Campus for Teaching & Learning
- Green/Sustainable

Developing a Comprehensive Transition Plan



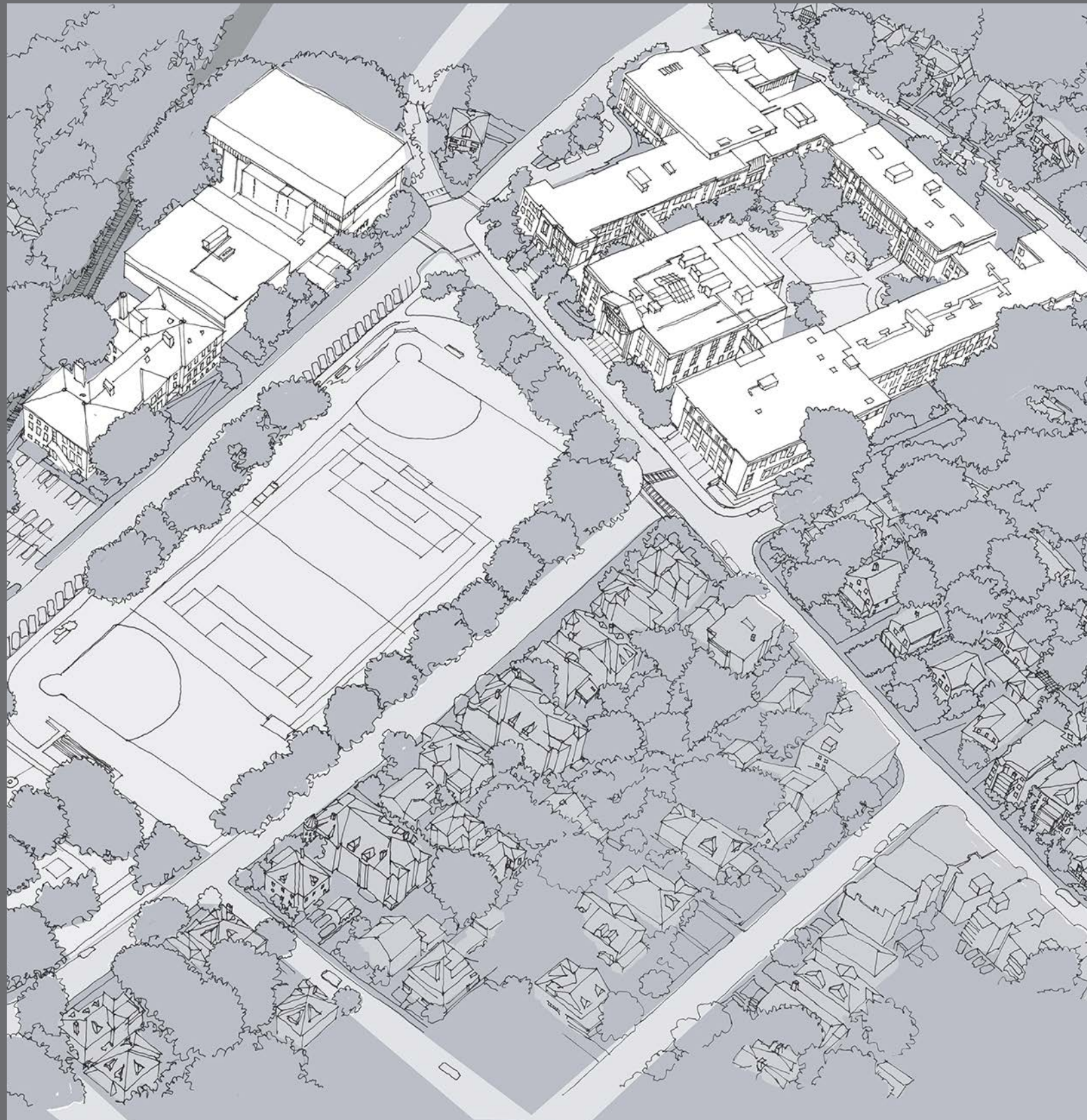
Comprehensive Transition Plan will be developed in Fall 2017

- Construction phasing plan will determine which spaces will be offline and when
- Will include potential uses for Old Lincoln as a temporary space available Fall 2018



Work being done now to account for growth and begin implementation of Education Plan

- 5 spaces to be converted back to their original use as classrooms for 2017-18
- Additional staff to lower class sizes in key areas
- New course offerings expand access and focus on innovation/interdisciplinary study
- Review of alternative programs beginning in Spring 2017 to assess need for expansion or additional programming
- Redefining the administrative and student support structure



Community Meeting



Brookline High School
Campus Expansion Update

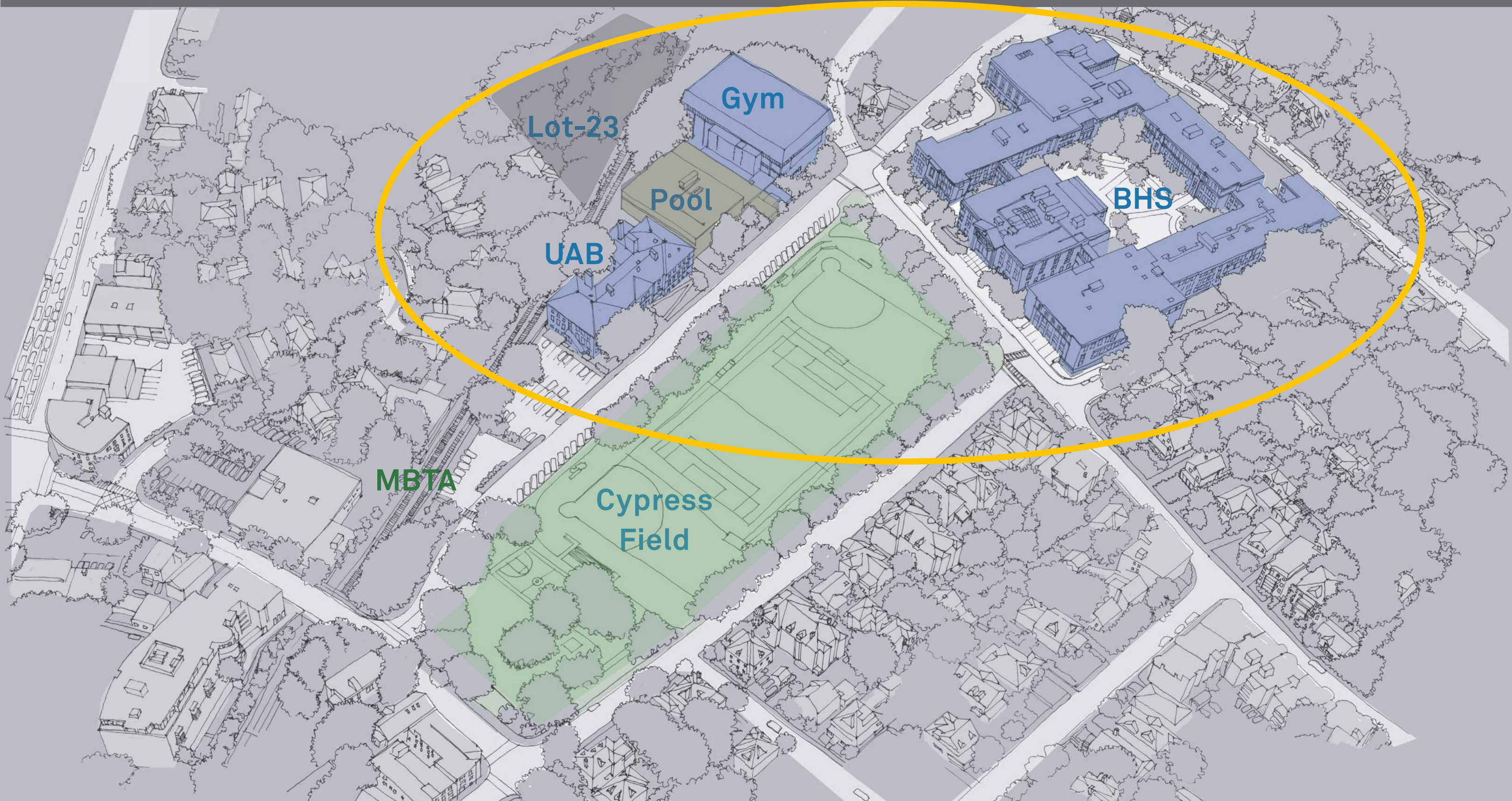
Feasibility Study

MARCH 15, 2017

HMFH ARCHITECTS

130 Bishop Allen Drive, Cambridge, MA 02139 617 492 2200 hmfh.com

PRELIMINARY CAMPUS MASSING OPTIONS



GUIDING STATEMENTS

2700 ENROLLMENT

BHS currently accommodates 2,000 students satisfactorily. Therefore, take only those measures required to accommodate the growth to 2,700 plus improvements to the Science Department facilities.

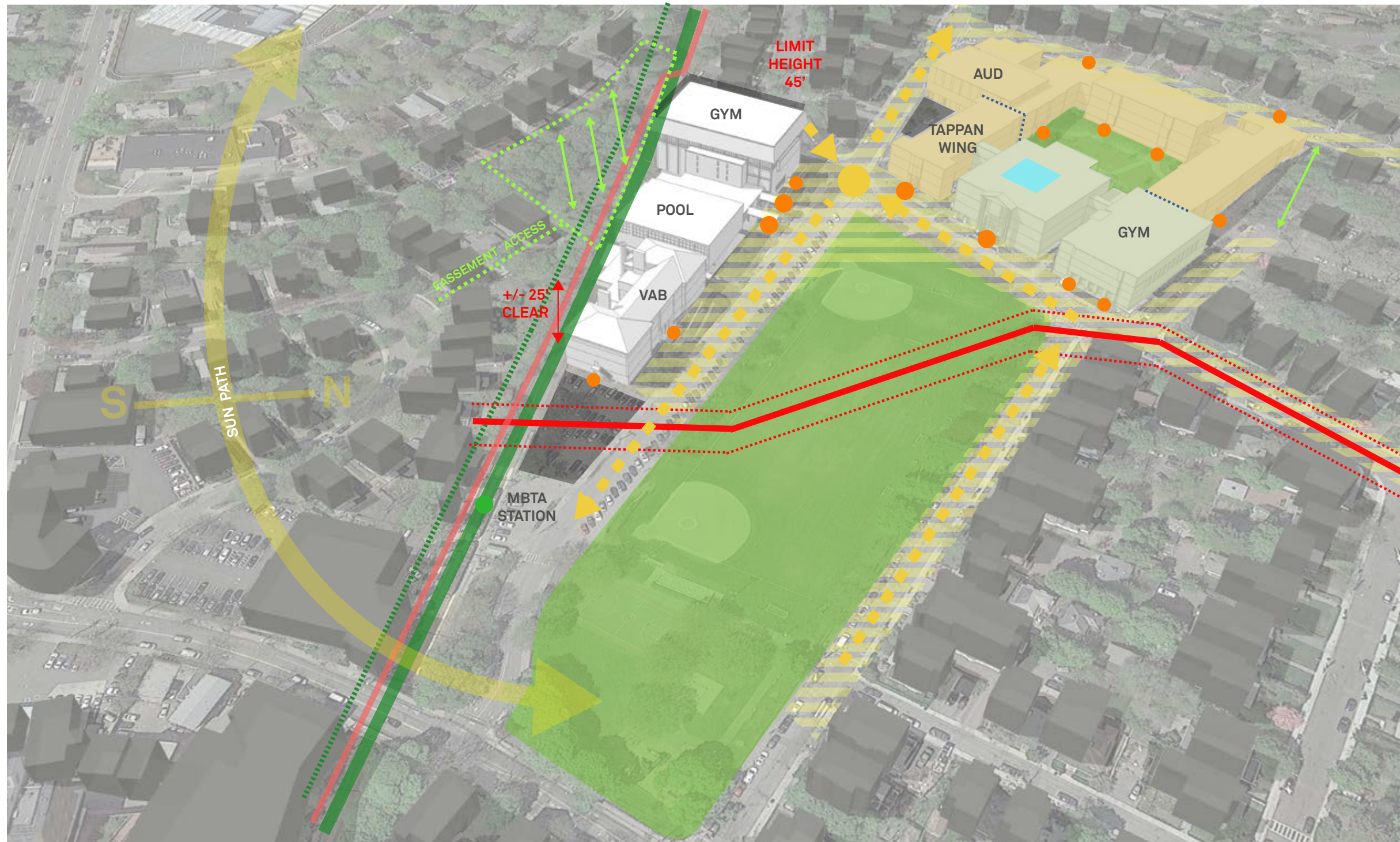
MA HS STANDARDS

The BHS expansion would be planned to generally conform to the standards currently used for other Massachusetts High Schools. Most other communities partner with the MSBA for funding, and are largely based on MSBA guidelines






BHS EDUCATION PLAN

The BHS expansion would be planned to accommodate the goals set forth by the BHS community during the visioning sessions from the past 2 years and as set out in the Education Plan

EXISTING CAMPUS CONDITIONS



- LEGEND**
- ENTRANCE
 - ▬ PEDESTRIAN
 - ▶ CIRCULATION
 - LANDSCAPE OPEN SPACE
 - ATRIUM
 - WOOD-FRAMED BUILDING
 - STEEL/CONCRETE BUILDING
 - OFF-STREET PARKING
 - ▬ MBTA
 - ▬ UTILITY SUBSURFACE
 - ⋯ BUILDING SEPARATION
 - ↔ TOPOGRAPHY

-  Extent of Demolition
-  Light Renovations at Existing to Remain
-  Code Renovations
-  Program Renovations
-  New Construction

EXTENT OF INTERVENTION

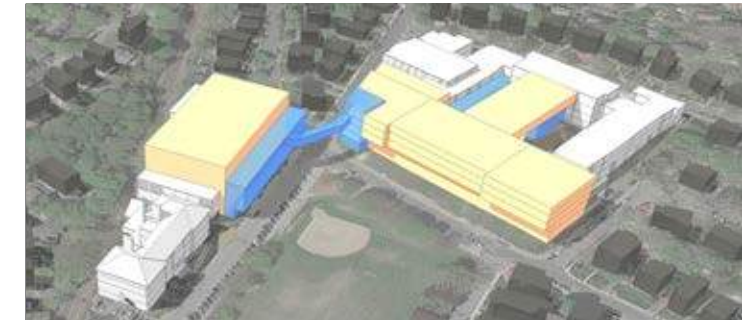
ENROLLMENT ACCOMMODATION
OPTION 1



MA HS STANDARDS
OPTION 2



EDUCATION PLAN
OPTION 3



BHS

Extent of Demolition



Light Renovations



Code Renovations



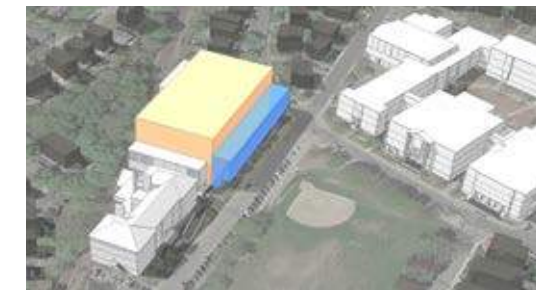
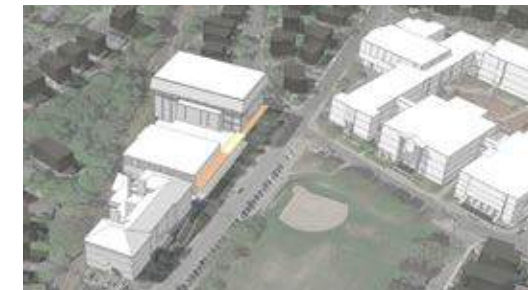
Program Renovations



New Construction



Tappan Gym



Renovations / New



UAB

Renovations / New



OTHER (not shown)

Parking, Cypress Park, Field, and Playground



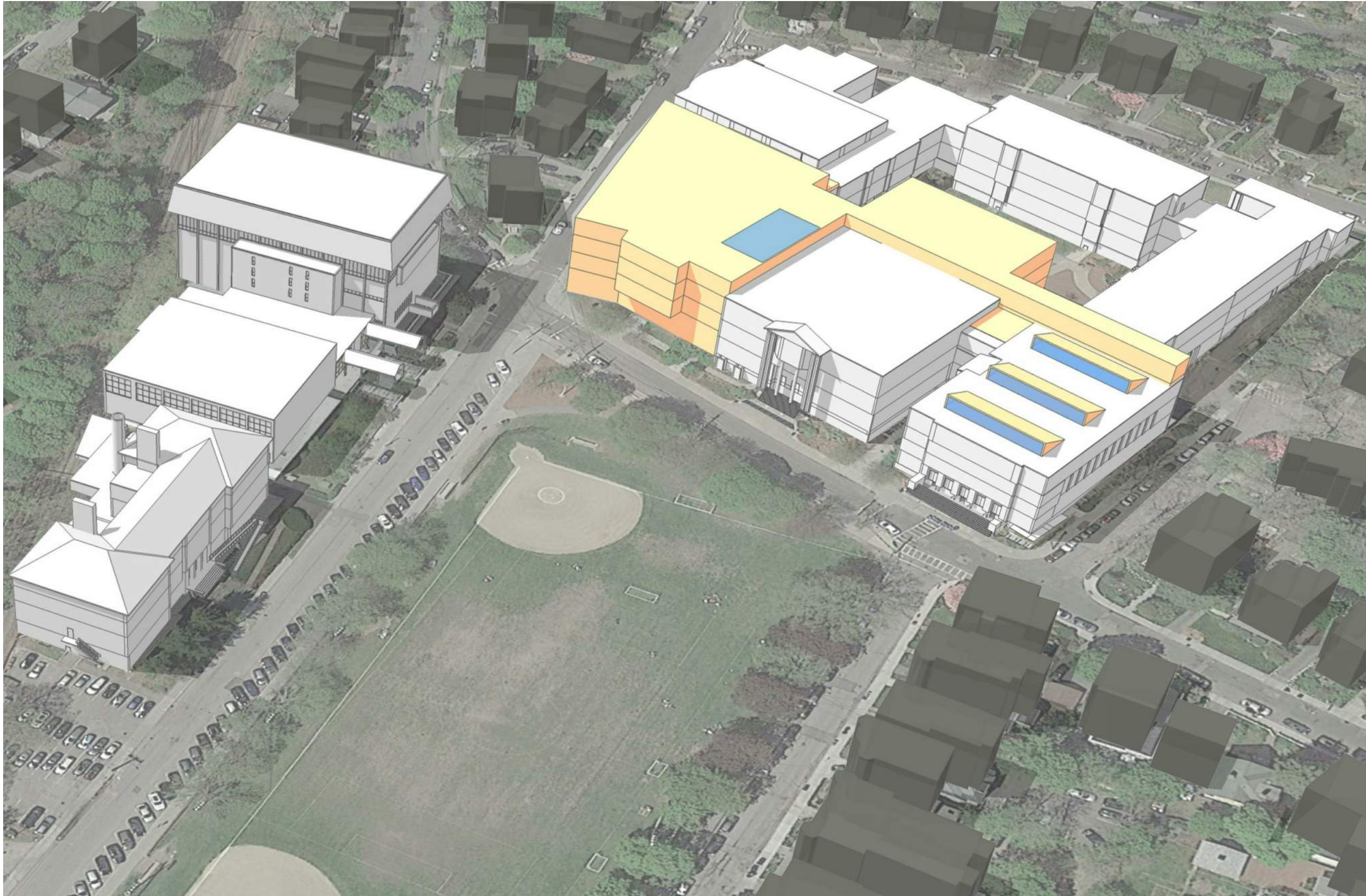
Existing - Massing

Brookline High School Expansion Feasibility Study

Brookline, MA

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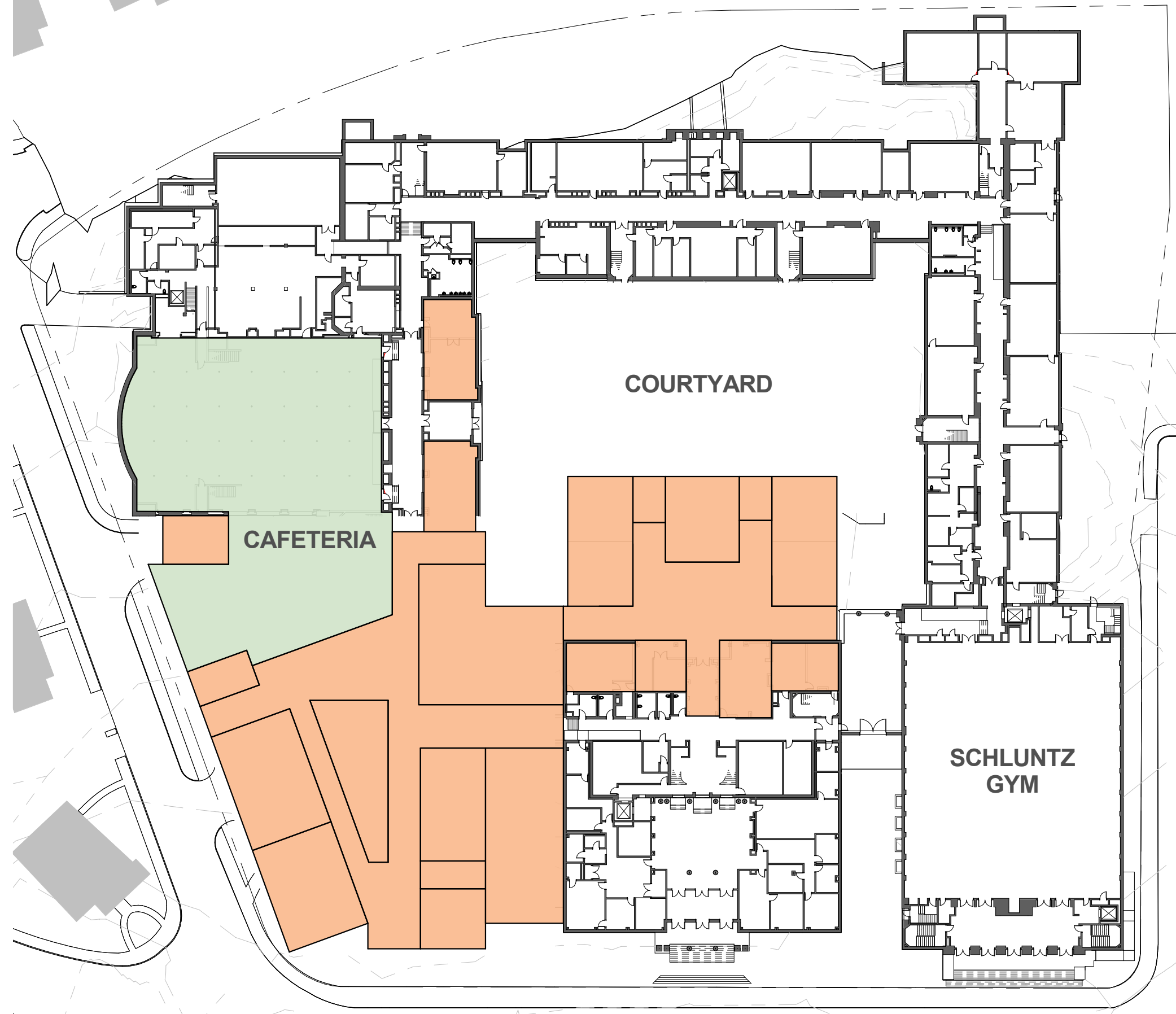
Enrollment Accommodation - Option 1 - Massing

Brookline High School Expansion Feasibility Study

Brookline, MA

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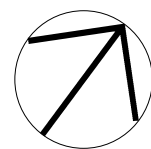
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Enrollment Accomodation - Option 1 - First Floor

Brookline High School Expansion Feasibility Study

Brookline, MA

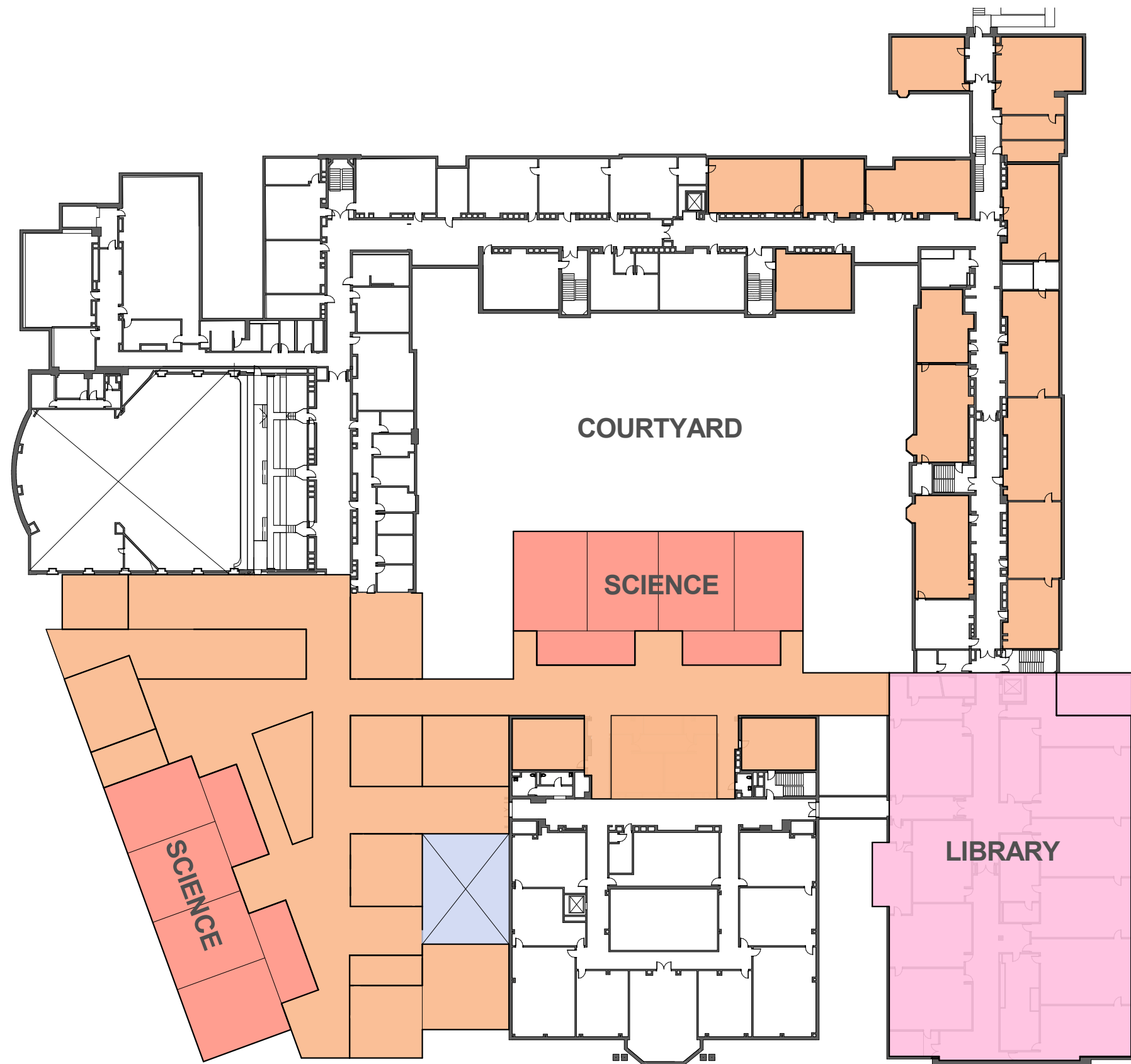


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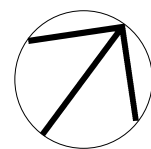
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Enrollment Accomodation - Option 1 - Third Floor

Brookline High School Expansion Feasibility Study

Brookline, MA



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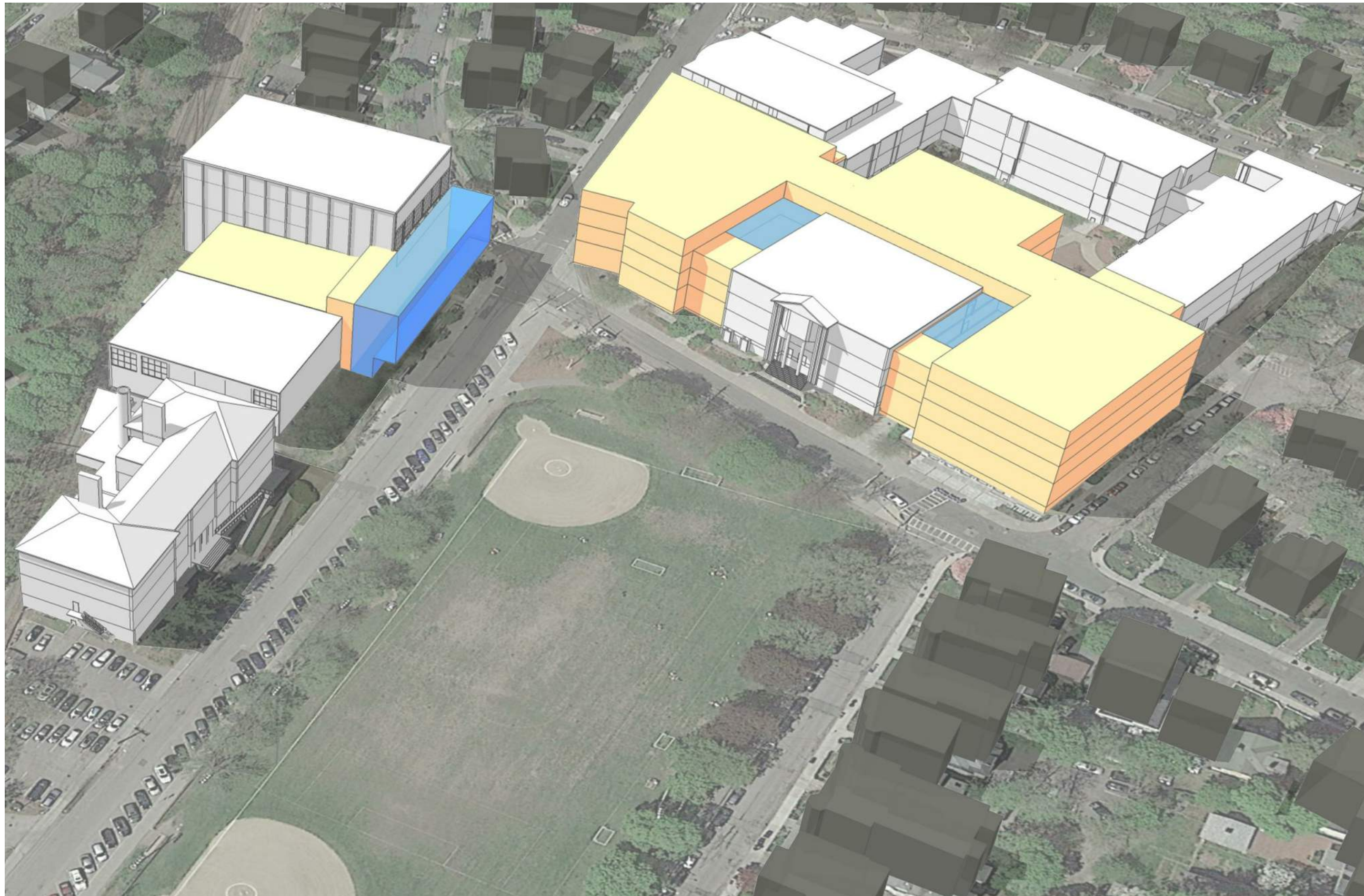
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Existing - Massing
Brookline High School Expansion Feasibility Study
Brookline, MA



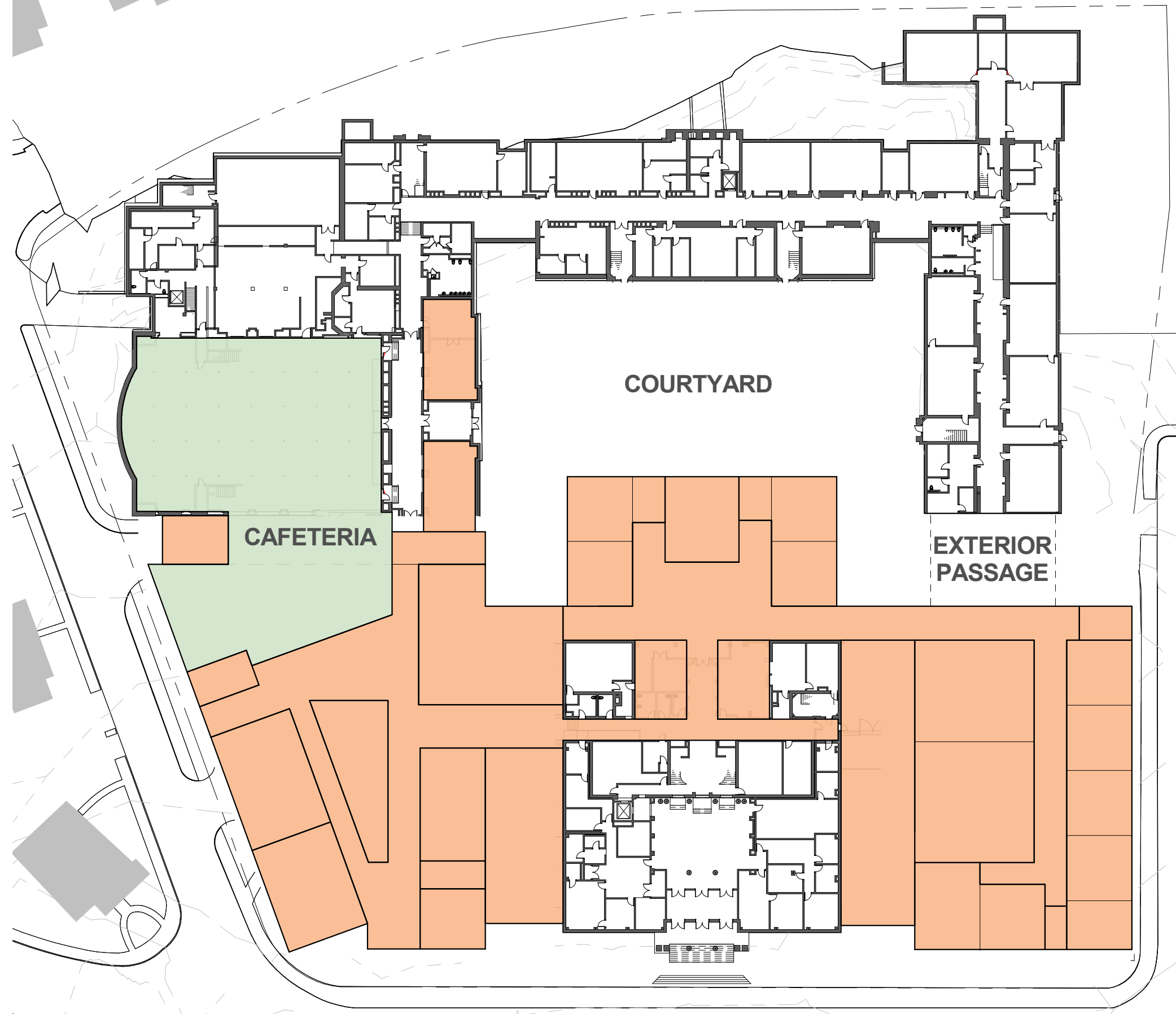
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MA HS Standards - Option 2 - Massing
Brookline High School Expansion Feasibility Study
Brookline, MA



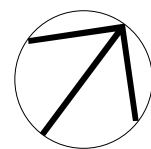
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MA HS Standards - Option 2 - First Floor

Brookline High School Expansion Feasibility Study

Brookline, MA

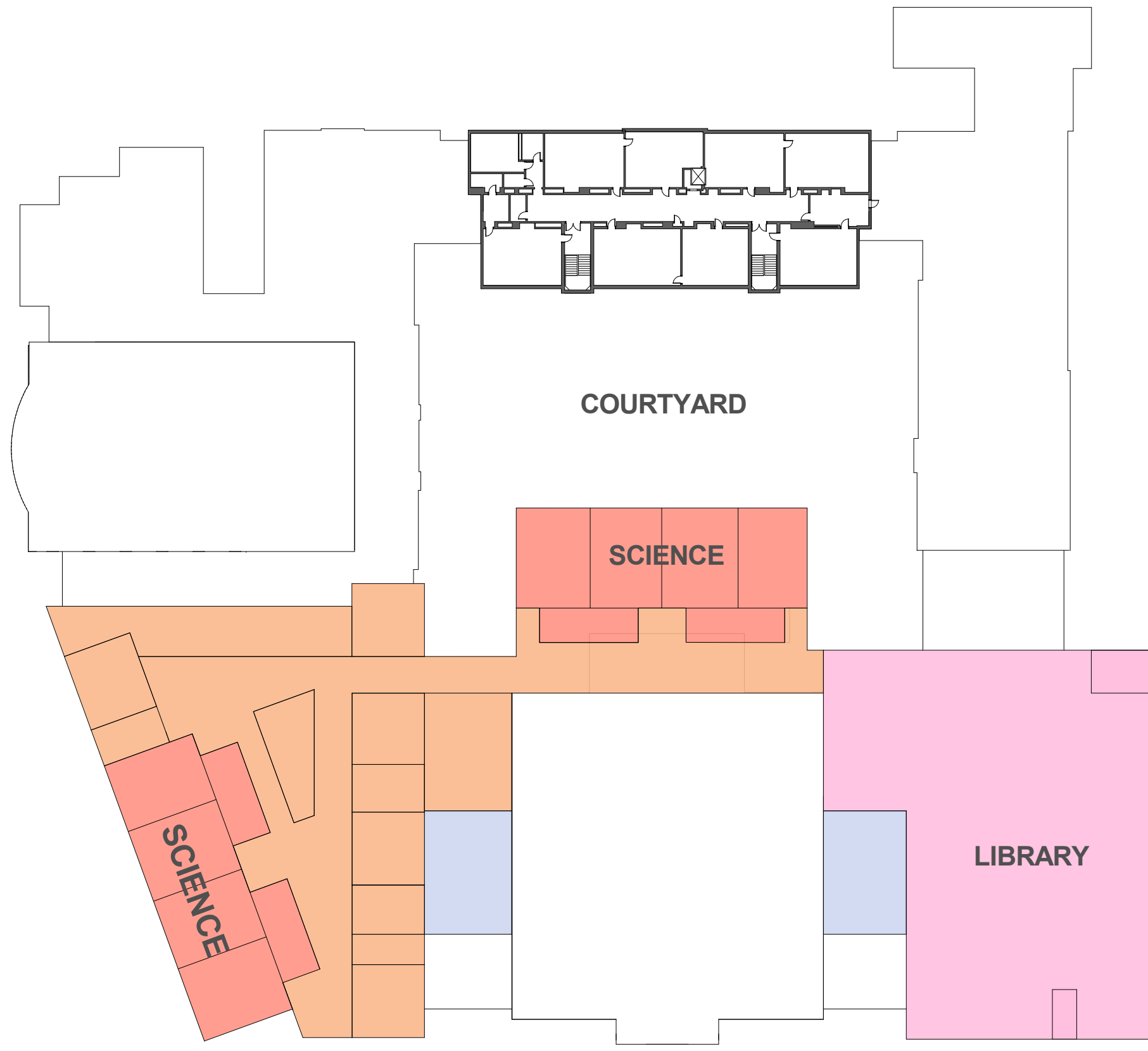


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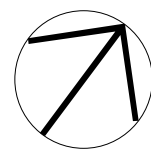
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MA HS Standards - Option 2 - Fourth Floor

Brookline High School Expansion Feasibility Study

Brookline, MA



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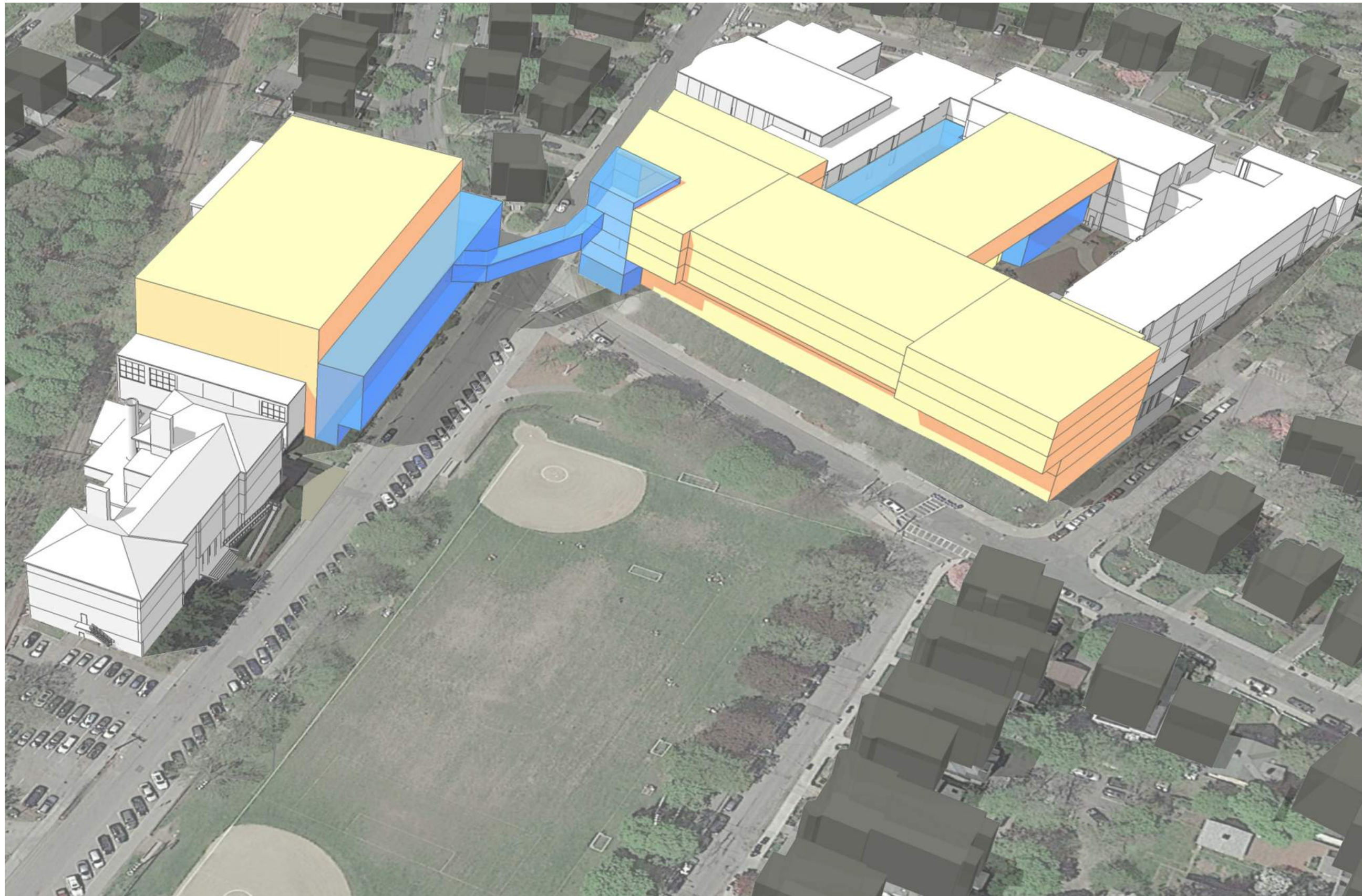
Existing - Massing

Brookline High School Expansion Feasibility Study

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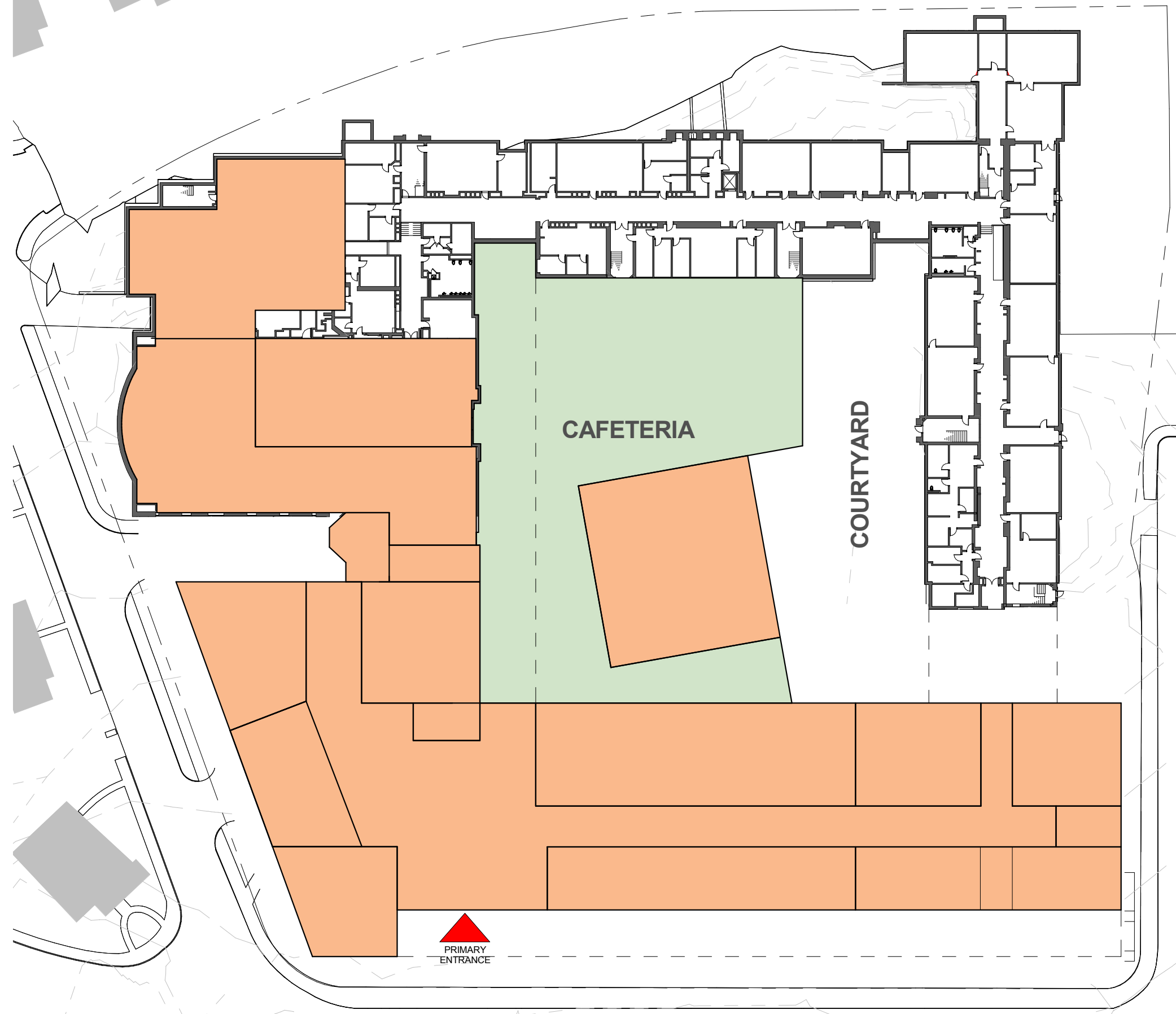
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BHS Education Plan - Option 3 - Massing
Brookline High School Expansion Feasibility Study
Brookline, MA



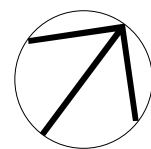
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BHS Education Plan - Option 3 - First Floor Plan

Brookline High School Expansion Feasibility Study

Brookline, MA

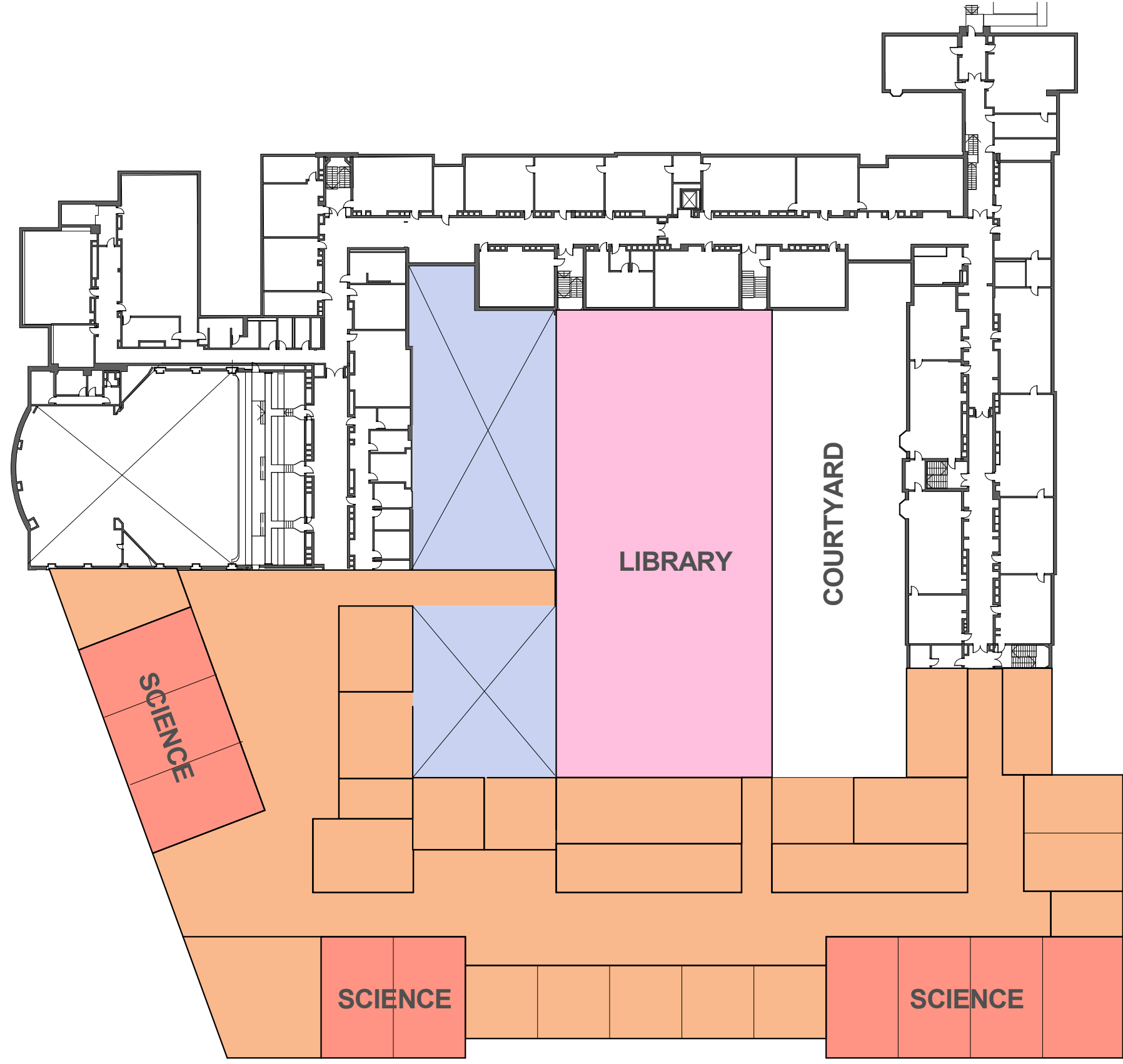


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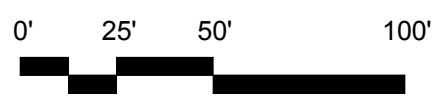
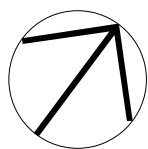
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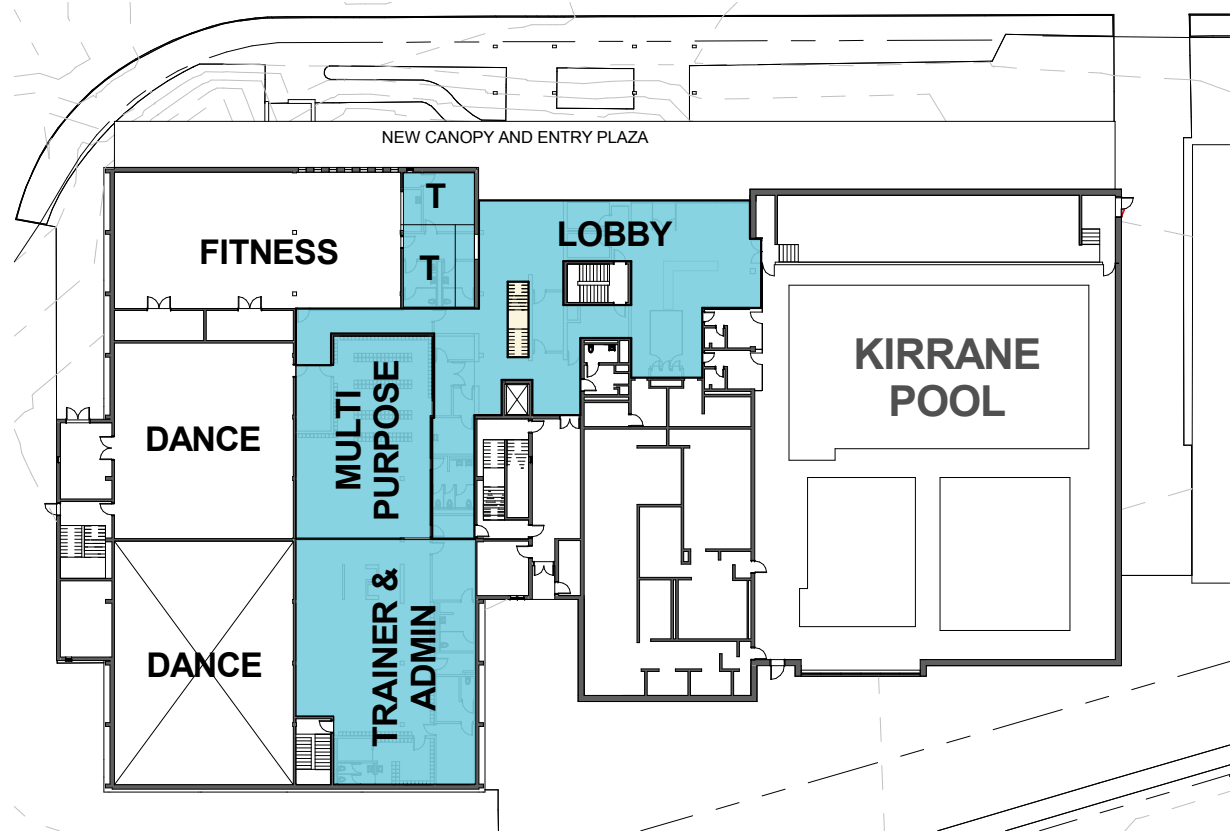
BHS Education Plan - Option 3 - Third Floor Plan

Brookline High School Expansion Feasibility Study

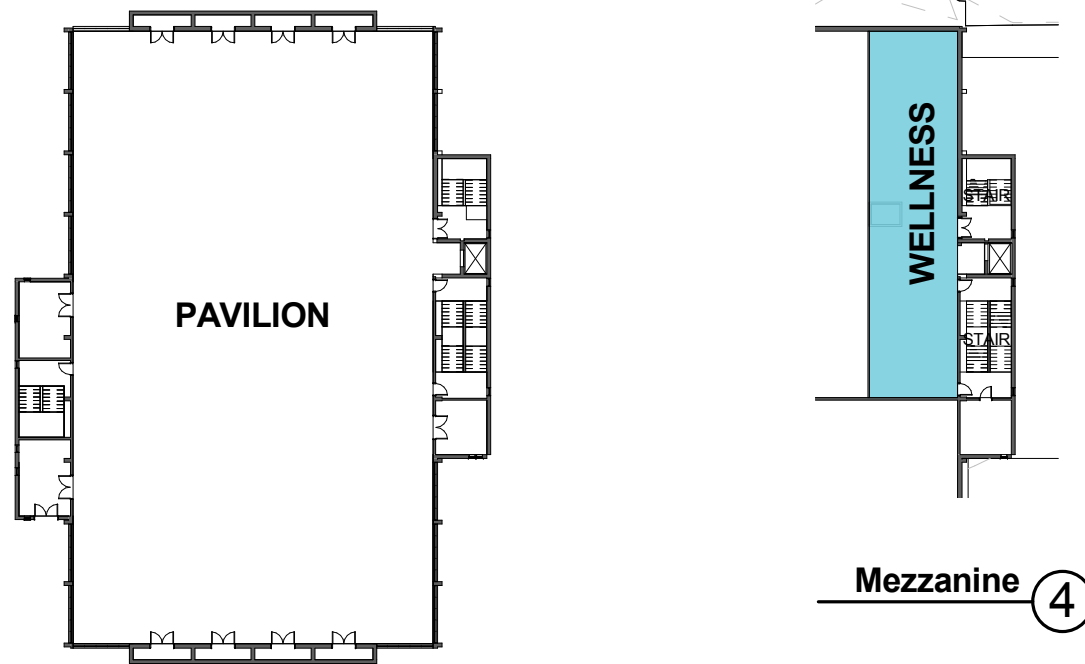
Brookline, MA



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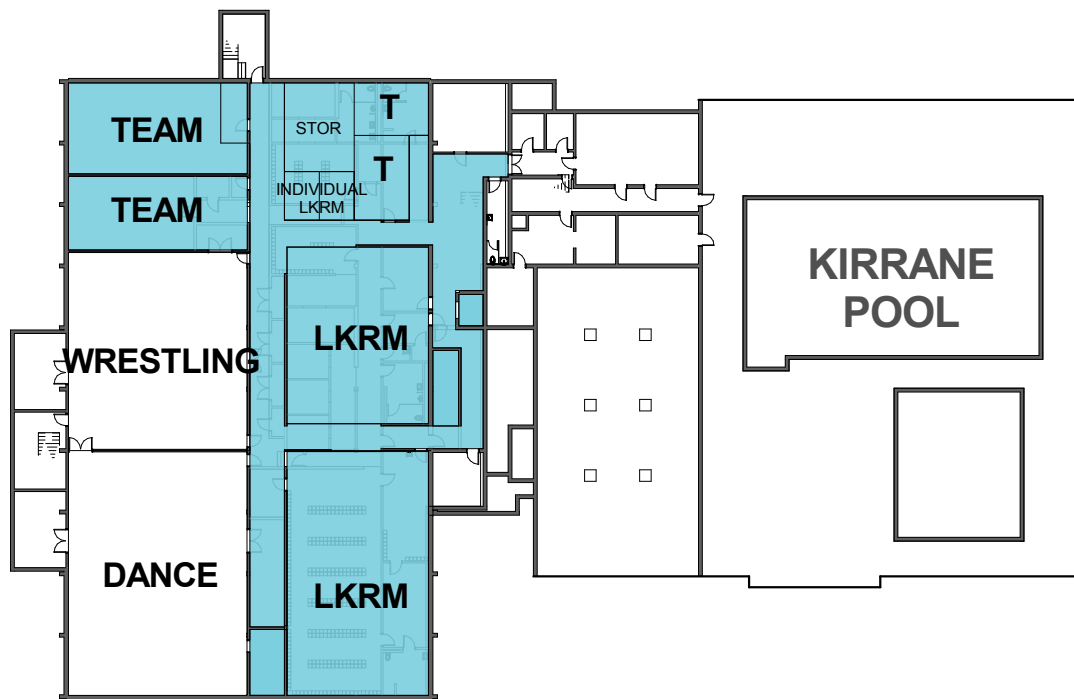
1.0 FIRST FLOOR ①



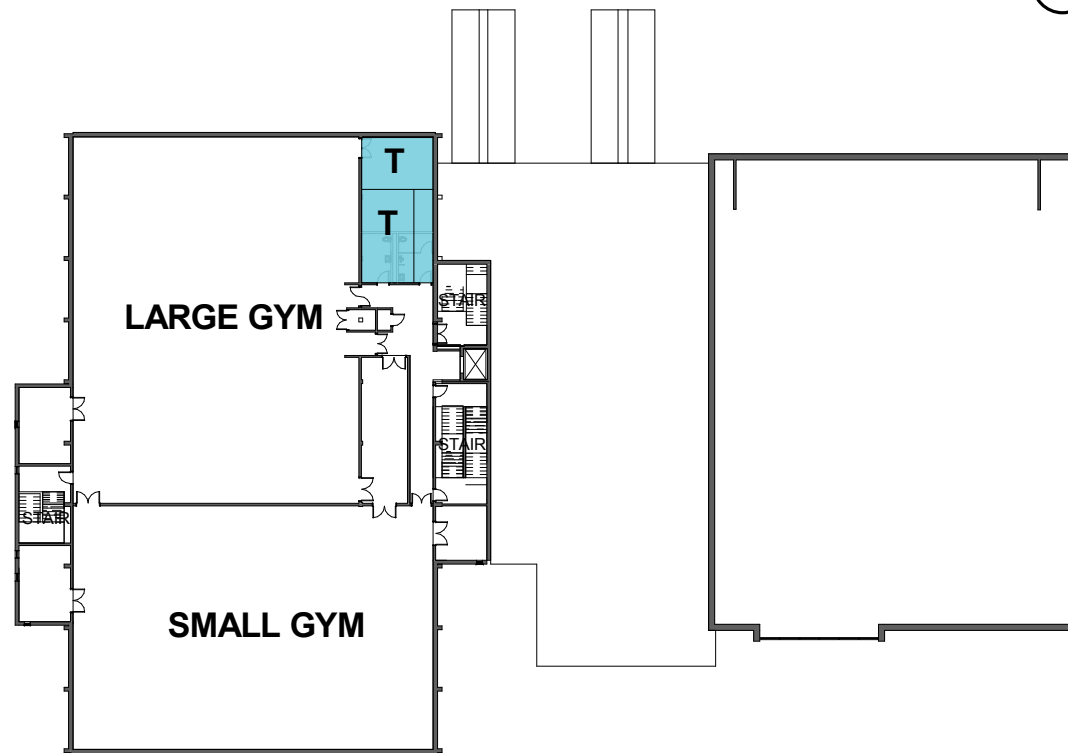
3.0 THIRD FLOOR ③



Massing View

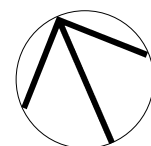


0.0 BASEMENT ④



2.0 SECOND FLOOR ②

Tappan Gym - Option 1 - Enrollment Accomodation
 Brookline High School Expansion Feasibility Study
 Brookline, MA

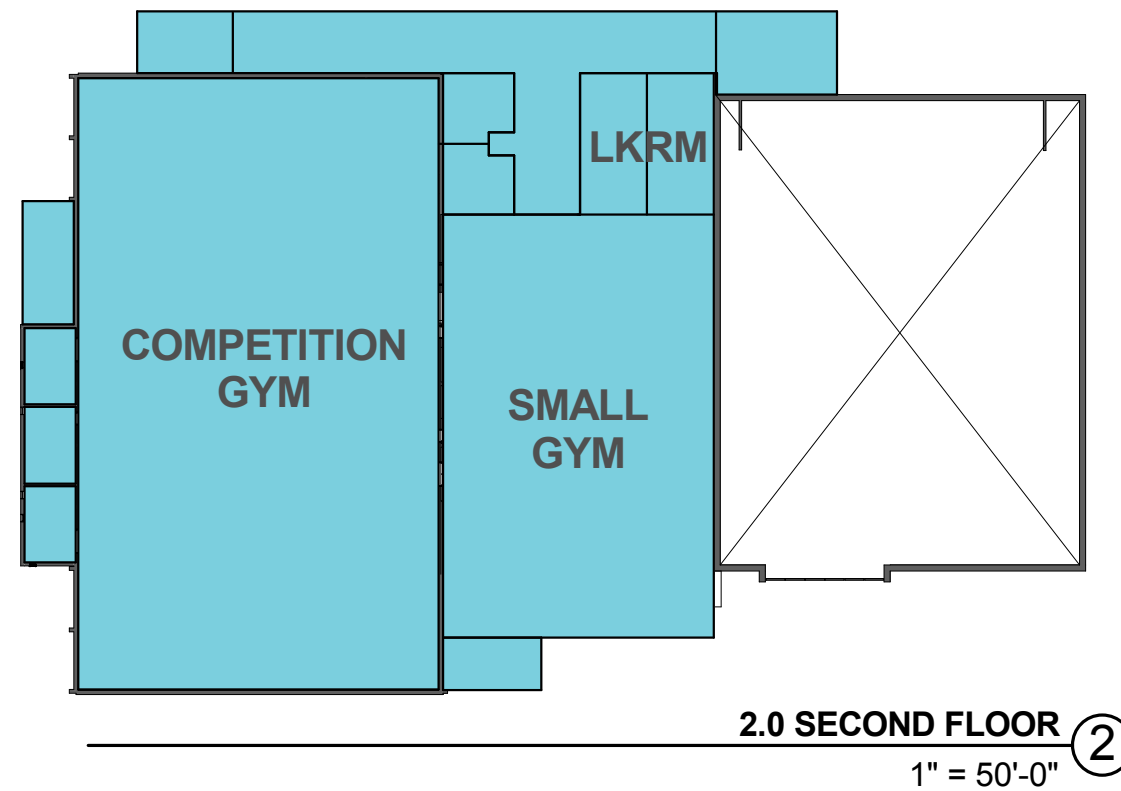
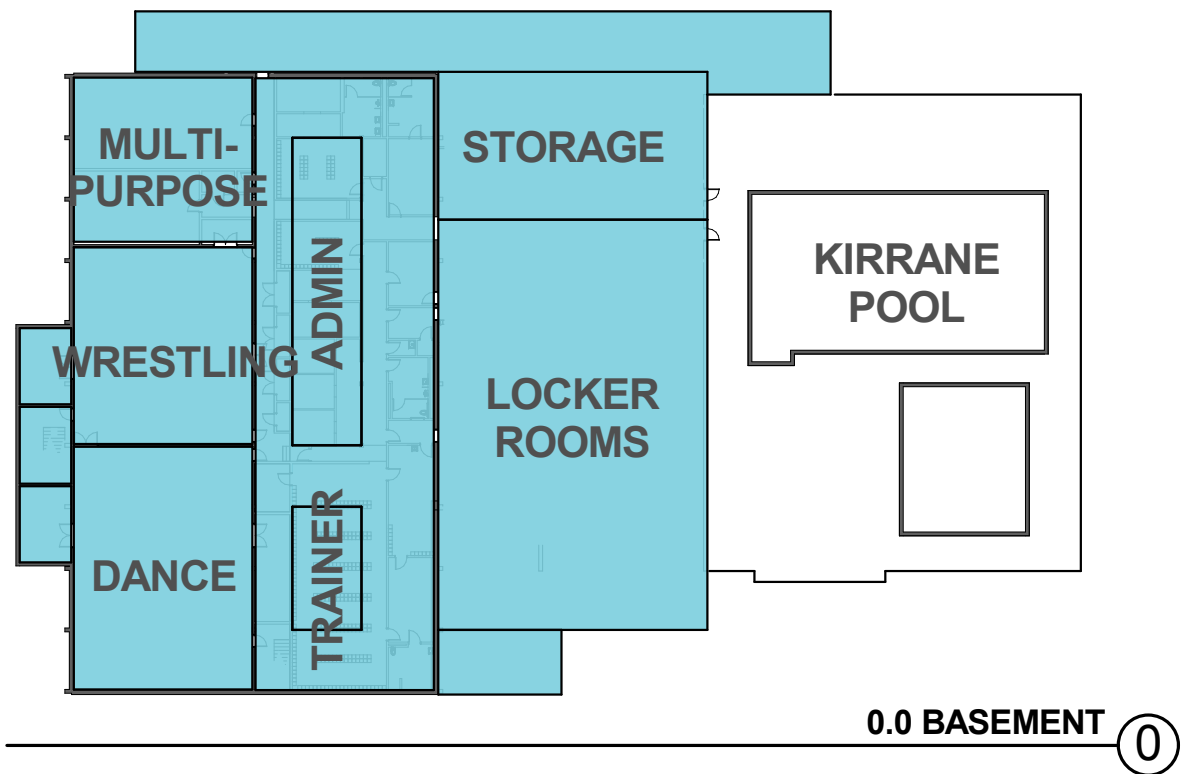
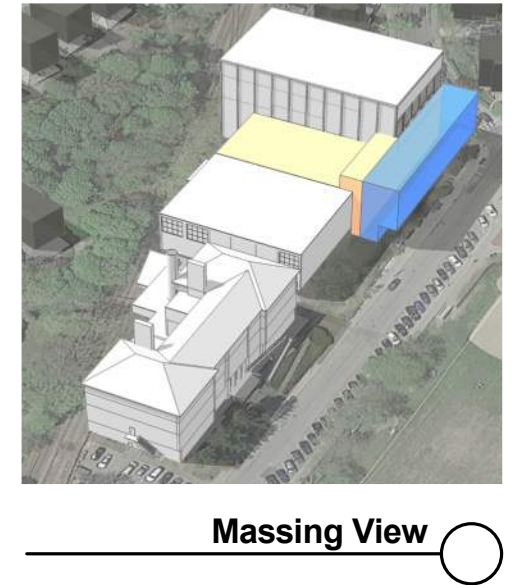
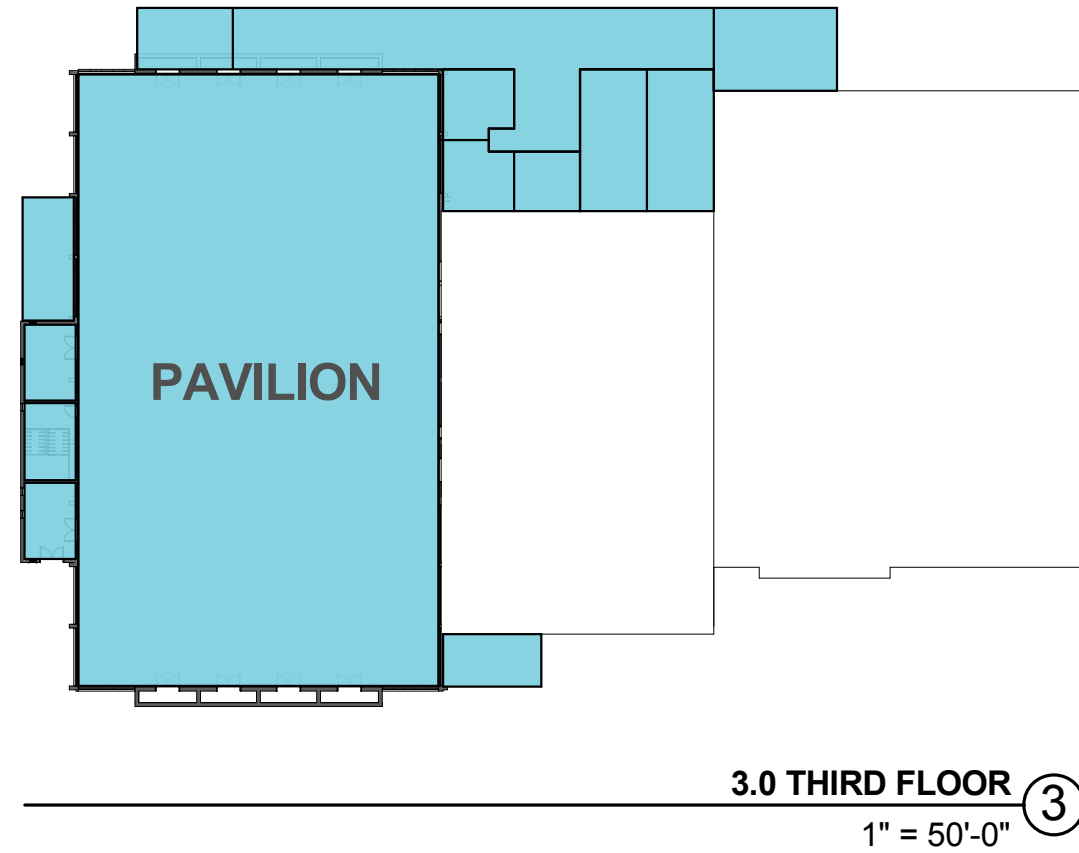
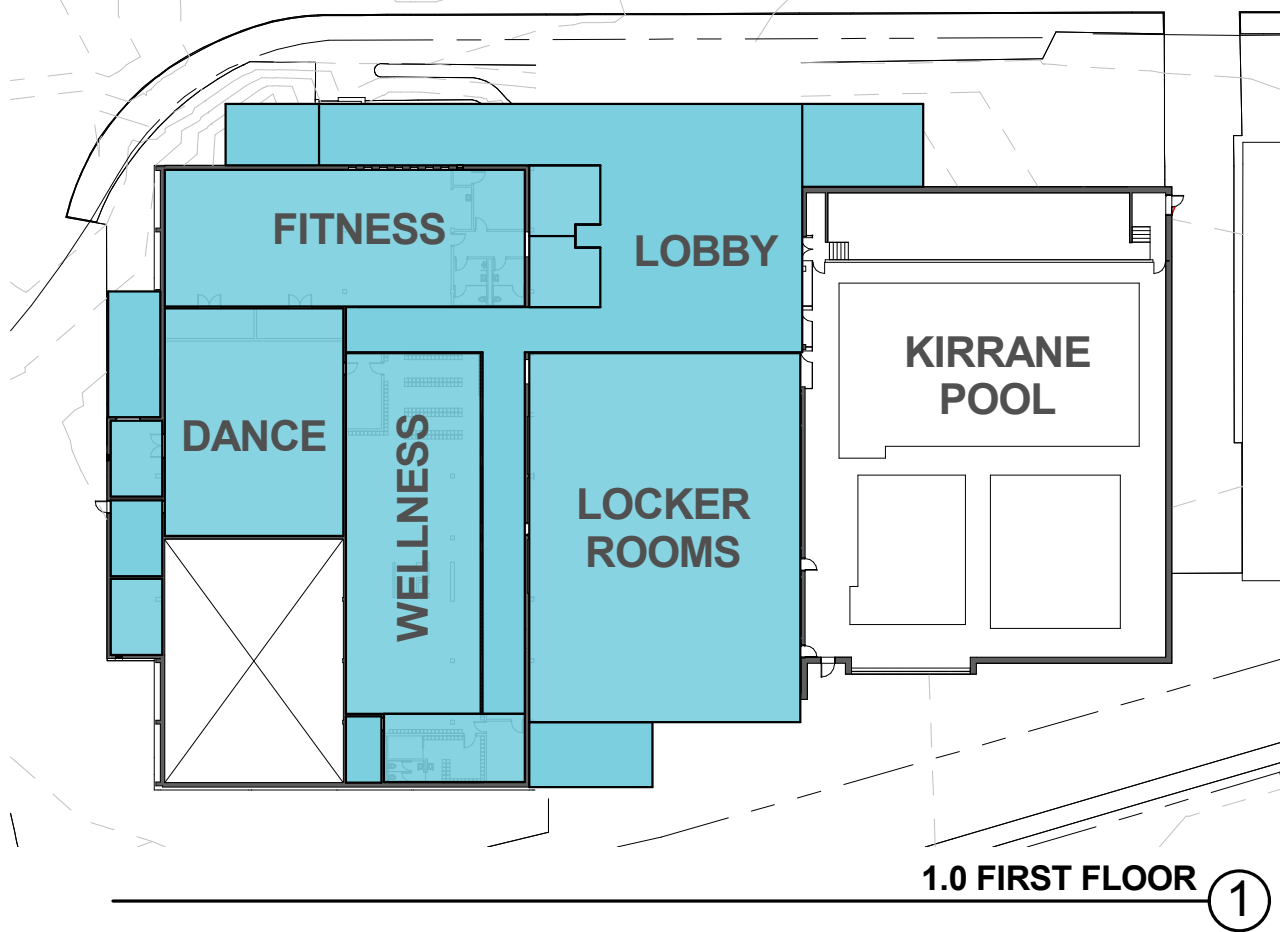


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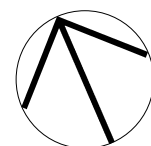


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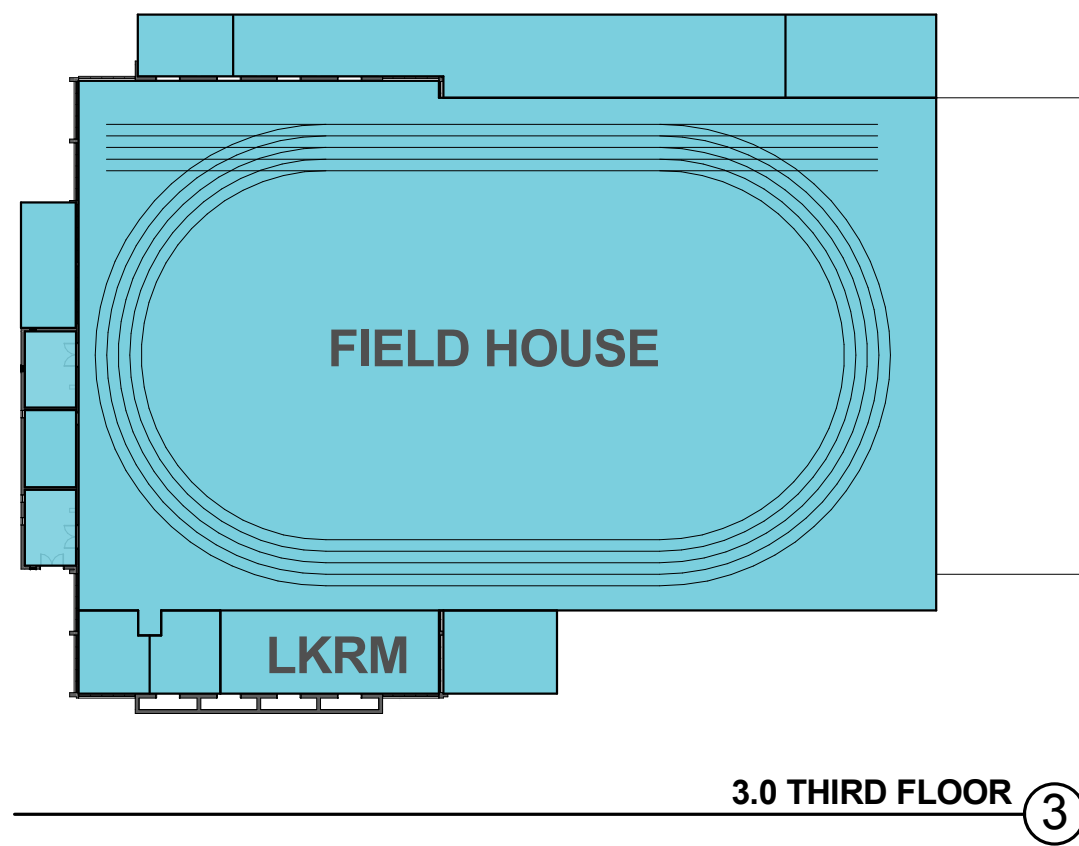
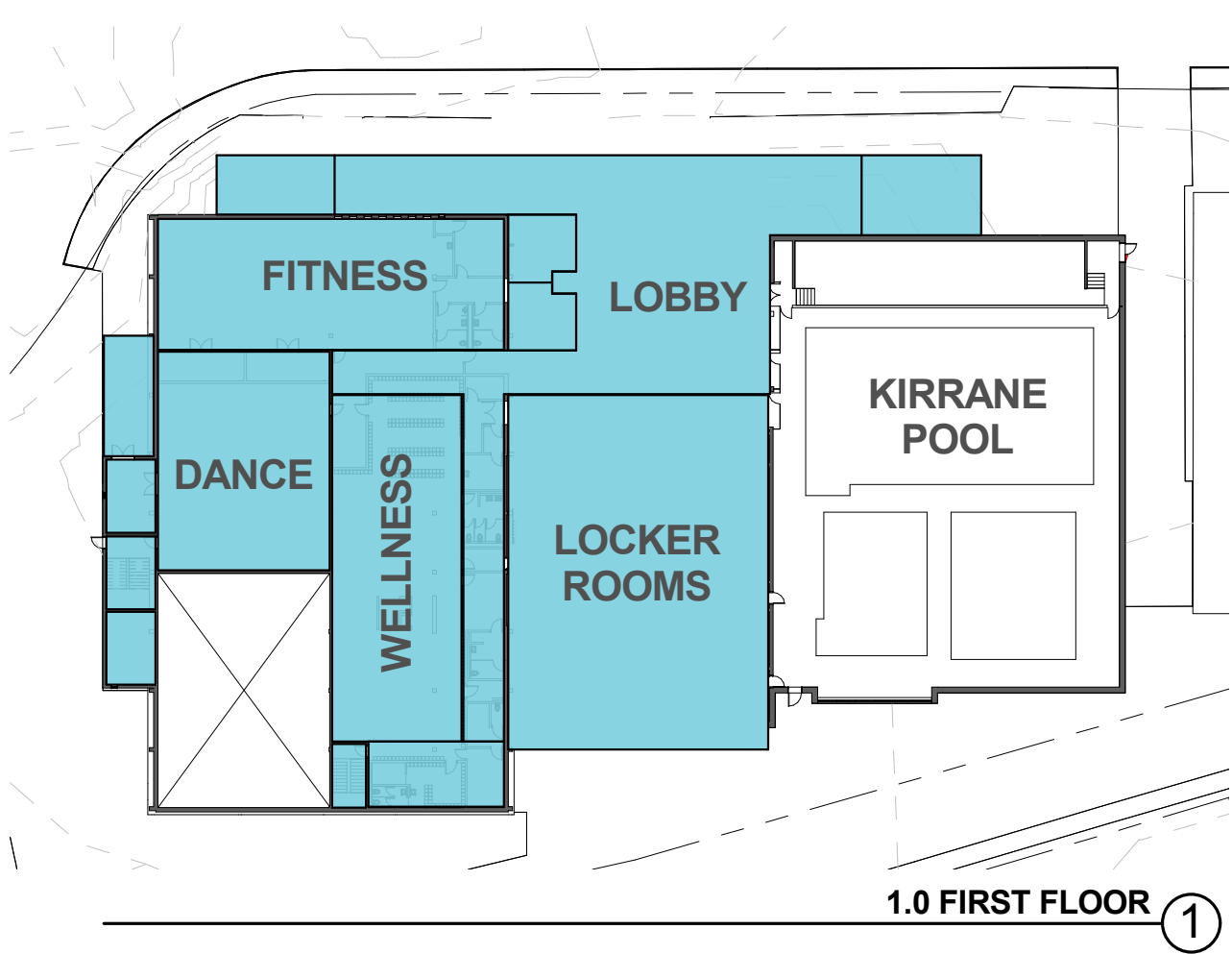


Tappan Gym - Option 2 - MA Standards
Brookline High School Expansion Feasibility Study
Brookline, MA

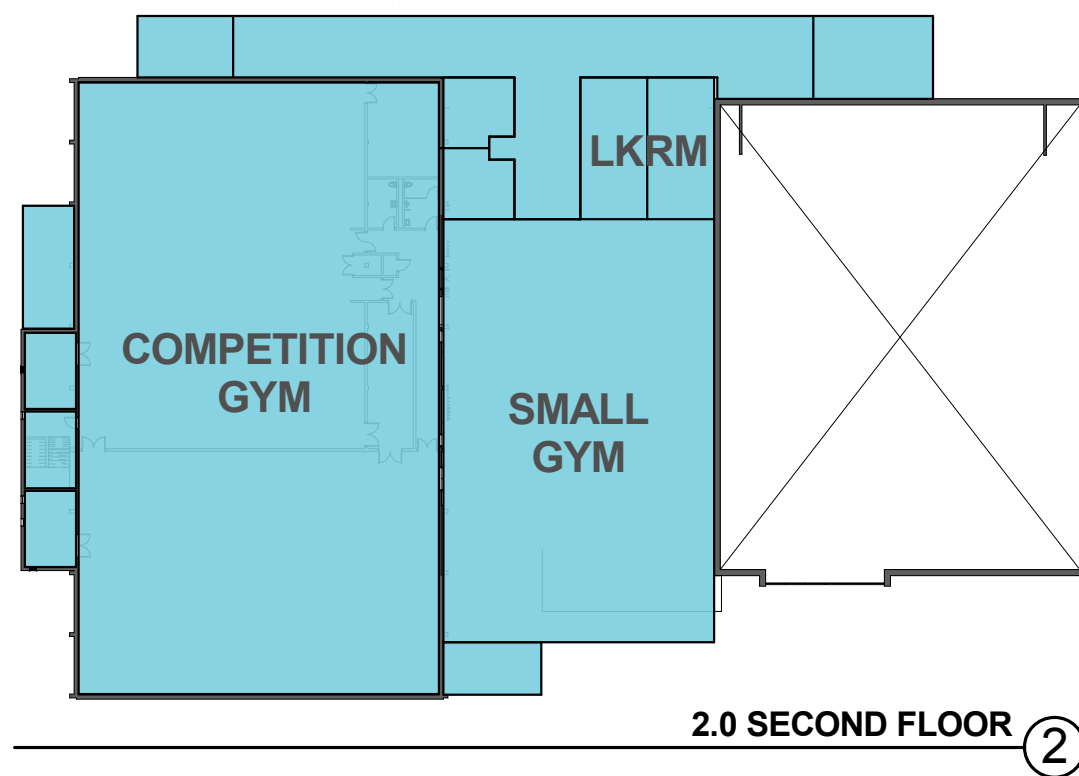
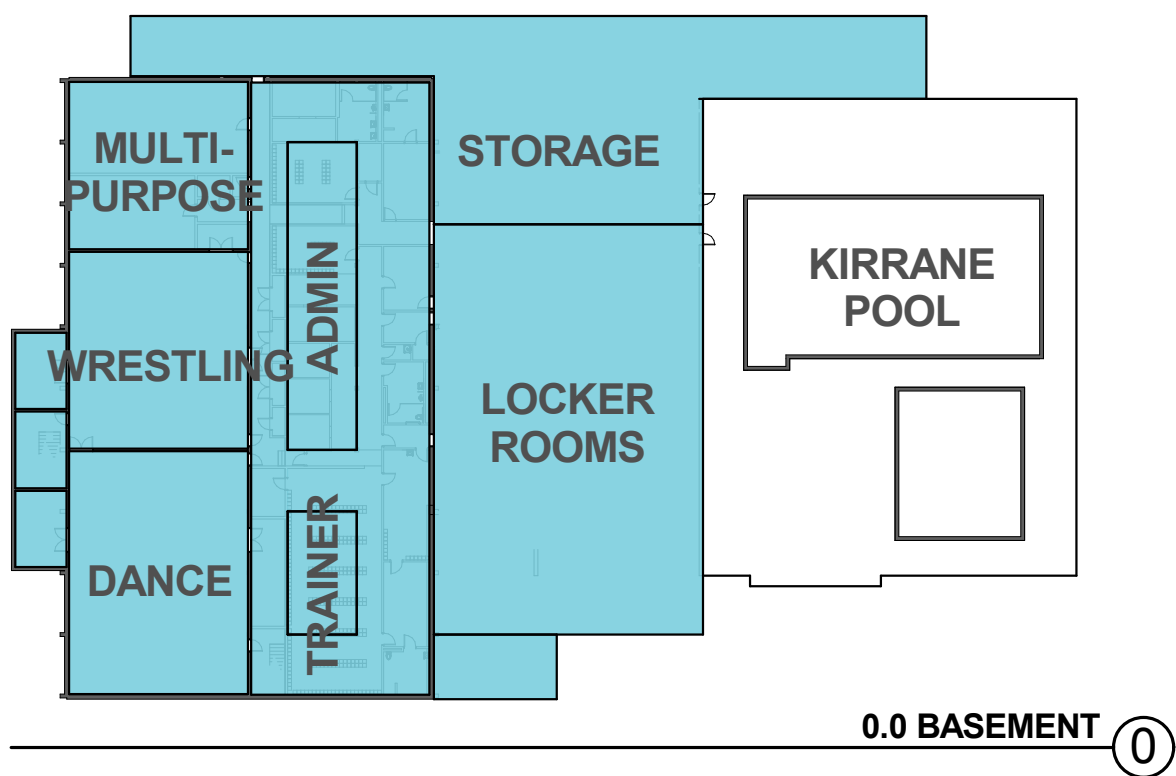


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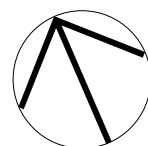
Massing View



Tappan Gym - Option 3 - Education Plan

Brookline High School Expansion Feasibility Study

Brookline, MA



0' 25' 50' 100'



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Brookline High School Expansion Feasibility Study

Design Alternate Comparisons

HMFH Architects Inc.

March 15, 2017

Improving Classroom Spaces

	OPTION 1 Enrollment Accommodation	OPTION 2 State High School Standards	OPTION 3 Education Plan
Current BHS Classrooms	69 Classrooms	69 Classrooms	69 Classrooms
Total Classrooms after expansion	92 Classrooms	95 Classrooms	98 Classrooms
Renovated, but still undersized Classrooms	29 Classrooms	5 Classrooms	0
Renovated Classrooms	42 Classrooms	45 Classrooms	46 Classrooms
New Classrooms	21 Classrooms	45 Classrooms	52 Classrooms
New Science Classrooms/Labs	24 Classrooms/Labs	24 Classrooms/Labs	24 Classrooms/Labs

Brookline High School Expansion Feasibility Study

Design Alternate Comparisons

HMFH Architects Inc.

March 15, 2017

Program Expansion

	OPTION 1 Enrollment Accommodation	OPTION 2 State High School Standards	OPTION 3 Education Plan
Cafeteria	Expand Existing	Expand Existing	New Cafeteria
Library	Relocate and Renovate	Relocate and Renovate	New Expanded Library
Collaborative Learning Commons	Minimal Additions	Moderate Additions	Significant Additions
Performing Arts			
Black Box Theater	Keep Existing	Replace	Replace
White Box Theater	Replace	Replace	Replace
Additional Dance Studio	No	Yes	Yes
400-Seat Theater	No	No	Yes
Physical Education Facilities			
Schluntz Gym	Keep Existing	Replace at Tappan	Replace at Tappan
Tappan Facility	Keep Existing	Moderate Expansion and Renovation	Major Renovation and Expansion including new Field House

Brookline High School Expansion Feasibility Study

Design Alternate Comparisons

HMFH Architects Inc.

March 15, 2017

Area Expansion

	OPTION 1 Enrollment Accommodation	OPTION 2 State High School Standards	OPTION 3 Education Plan
Main BHS Building			
Renovation Area	294,000 sq ft	229,000 sq ft	181,000 sq ft
New Construction Area	165,000 sq ft	242,000 sq ft	298,000 sq ft
Total Gross Sq Ft	459,000 sq ft	470,000 sq ft	479,000 sq ft
Tappan Gym			
Renovation Area		60,000 sq ft	60,000 sq ft
New Construction Area		49,000 sq ft	64,000 sq ft
Total Gross Sq Ft		109,000 sq ft	124,000 sq ft
Total Project Area	459,000 sq ft	579,000 sq ft	603,000 sq ft

Brookline High School Expansion Feasibility Study

Order of Magnitude Cost Comparison

HMFH Architects Inc.

March 15, 2017

Brookline High School Options	No. of Students	Project Cost	Cost/Student
OPTION 1 Enrollment Accommodation	2,700 range	\$ 168,000,000	\$ 62,222
		\$ 184,000,000	\$ 68,148
		\$ 245,000,000	\$ 90,741
with Optional Projects			
Minimal Tappan Renovation			
Parking			
Cypress Field Renovation			
OPTION 2 State High School Standards	2,700 range	\$ 258,000,000	\$ 95,556
		\$ 286,000,000	\$ 105,926
		\$ 336,000,000	\$ 124,444
(Tappan Renovation included)			
with Optional Projects			
Parking			
Cypress Field Renovation			
OPTION 3 Education Plan	2,700	\$ 348,000,000	\$ 128,889
		\$ 363,000,000	\$ 134,444
(Tappan Renovation included)			
(Parking included)			
with Optional Projects			
Cypress Field Renovation			

Brookline High School Expansion Feasibility Study

Order of Magnitude Cost Comparison

HMFH Architects Inc.

March 15, 2017

BHS OPTIONS

No. of Students

Project Cost

Cost/Student

2,700 range	\$	168,000,000	\$	62,222
	\$	363,000,000	\$	134,444

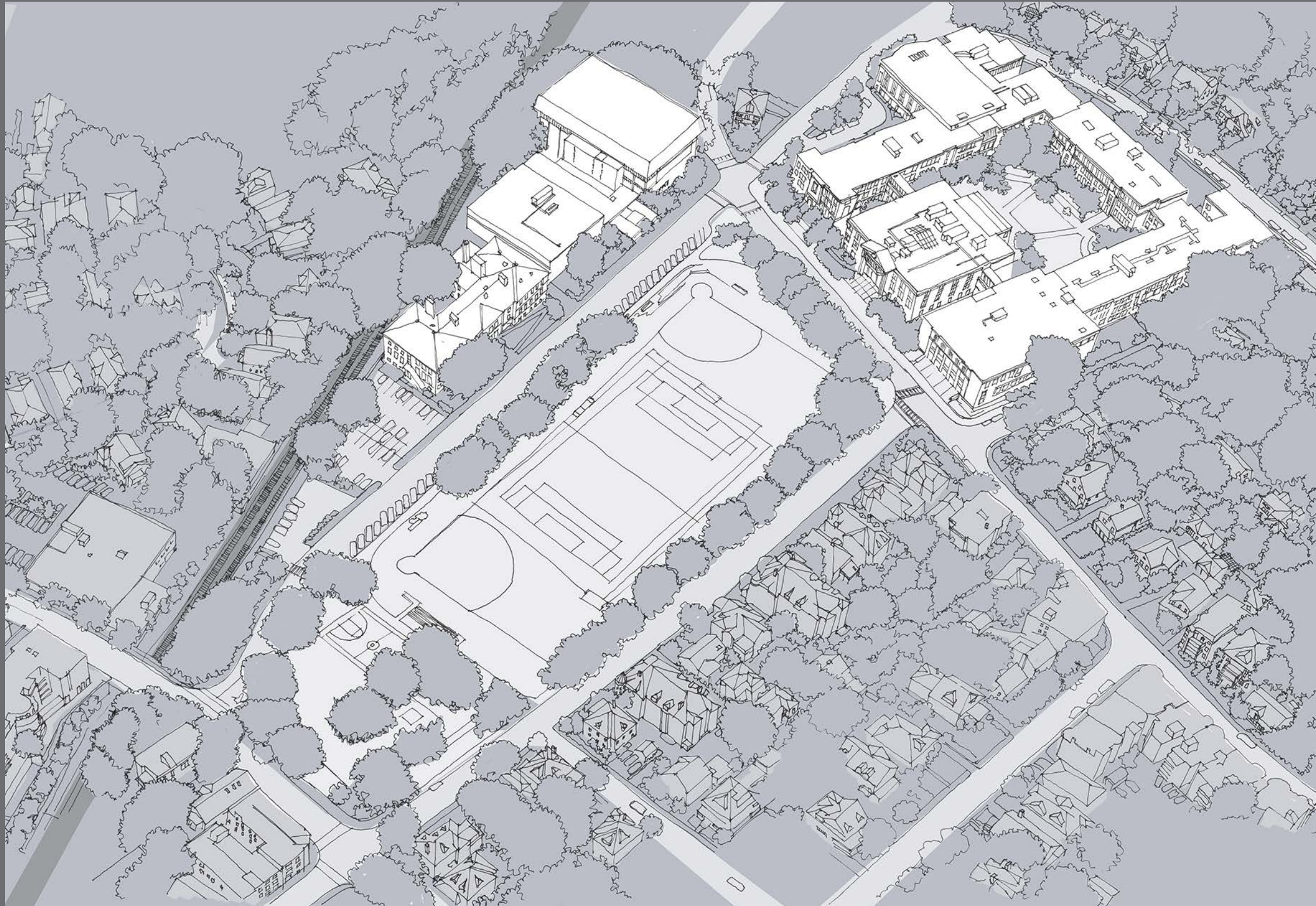
Current MA High School Projects

No. of Students

Project Cost

Cost/Student

Lowell - Renovation & Addition	3,520	\$	380,000,000	\$	107,955
Billerica - New	1,610	\$	176,000,000	\$	109,317
Stoughton - New	1,065	\$	123,500,000	\$	115,962
Saugus - New	1,360	\$	161,000,000	\$	118,382
Attleboro - New	1,725	\$	260,000,000	\$	150,725
Somerville - Renovation & Addition	1,590	\$	257,000,000	\$	161,635
Waltham - New	1,700	\$	283,500,000	\$	166,765



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Q & A



For updates and information go to: www.brookline.k12.ma.us/BHSexpansion

BHS Expansion Building Committee



George Cole Co-Chair - Building Commission

Nancy Heller Co-Chair - Selectmen

Susan Wolf Ditkoff Co-Chair - School Committee

Nancy O'Connor Park & Recreation Commission

Ian Roffman School Parent Community Rep

Jordan Meranus School Parent Community Rep

Matthew Oudens Greater BHS Community Rep

Bobbie Knable Greater BHS Community Rep

Mel Kleckner Town Administrator

Daniel Bennett

Building Commissioner

Andrew Bott

Superintendent of Schools

Mary Ellen Dunn

Deputy Superintendent for
Administration and Finance

Nicole Gittens

Deputy Superintendent for Teaching
and Learning

Anthony Meyer

BHS Headmaster

Jenee Ramos

BHS Dean of Faculty

Nicholas Gerszten

BHS Student Representative

Ray Masak

Project Manager, Building
Department

Next Steps and Timeline



For updates and information go to: www.brookline.k12.ma.us/BHSexpansion

Timeline this Spring



- January – March:** HMFH develops Design Alternatives
- March:** Design Alternatives presented to Building Committee and Community
- April:** Building Committee selects Preferred Design
Preferred Design finalized and Final Feasibility Report completed
- May:** Town Meeting: Request for Schematic Design Funding

Public Engagement During Feasibility



Building Committee Meetings

- January 1; February 1; March 1, 13, 29; April 12, 26

Community meetings

- January 12, March 15, April (TBD)

Working meetings with BHS staff and Partners

- Weeks of January 16 and 23
- Weeks of March 20 - 27
- Weeks of April 27 and May 3

Public Meetings with Town Boards and Commissions

- Parks and Recreation (monthly), Building Commission, Transportation, Preservation, Advisory Committee

Aspirational Timeline Beyond Feasibility Phase



October 2017

- Complete Schematic Design
- Public presentations and hearings

Winter 2017-8

- Debt Exclusion Override to fund Construction Drawings and Construction

January 2019

- Groundbreaking for construction
- Duration = 29 months; depends heavily on phasing

Fall 2021: Construction Complete