

# SELECTBOARD MEETING

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## John R. Pierce K-8 School

September 28, 2022



# TODAY'S AGENDA

- 01 PIERCE SCHOOL
  - Opening Remarks
  - Introductions
  - Public Process
  - Existing Conditions & Needs
- 02 MSBA FEASIBILITY STUDY/SCHEMATIC DESIGN
  - MSBA Process Overview
  - Summary of Options Studied
  - Schedule
- 03 DESIGN UPDATE
  - Revised Site Plan
  - Revised Floor Plans
  - Revised Renderings
- 04 PROJECT COSTS
  - Schematic Design Estimate
  - Proposed Value Engineering
  - How we got to Current Budget
  - Proposed Total Project Budget
  - Additional Town Requests
  - Conclusion
- 05 QUESTIONS & ANSWERS

# PIERCE SCHOOL

## OPENING REMARKS



PUBLIC SCHOOLS of  
**BROOKLINE**

# PIERCE SCHOOL

## SCHOOL BUILDING COMMITTEE



**Bernard Greene**, Co-Chair

*Select Board*

**Janet Fierman**, Co-Chair

*Building Commission*

**Helen Charlupski**, Co-Chair

*School Committee*

**Charles Carey**

*Town Administrator*

**Melissa Goff**

*Deputy Town Administrator*

**Daniel Bennett**

*Building Commissioner*

**Carol Levin**

*Advisory Finance Committee*

**Steve Heikin**

*Planning Board*

**Charlie Simmons**

*Director of Public Buildings*

**Nancy O'Connor**

*Parks and Recreation Commission*

**Tony Guigli**

*Building Department Project Administrator*

**Linus J. Guillory Jr., PhD**

*Superintendent of Schools*

**Andy Liu**

*School Committee*

**Lesley Ryan-Miller**

*Deputy Superintendent of Teaching & Learning*

**Jamie Yadoff**

*Pierce School Principal*

**Matt Gillis**

*Director of Operations, PSB Project Manager*

**Aaron Williams**

*Pierce School Parent*

**Nurit Zuker**

*Pierce School Parent*



# PIERCE SCHOOL

## PROJECT TEAM



Better design, together.



CONSIGLI  
*Est. 1905*



### Eligibility & Preliminary Design Program Phase Meetings – 21 Public Meetings (June 3, 2019 – June 15, 2021)

- |                                  |   |
|----------------------------------|---|
| - SBC Meeting April 22, 2020     | - Building Commission Meeting May 12, 2020      |
| - SBC Meeting June 18, 2020      | - Building Commission Meeting June 9, 2020      |
| - SBC Meeting September 23, 2020 | - Building Commission Meeting August 11, 2020   |
| - SBC Meeting October 6, 2020    | - Building Commission Meeting September 8, 2020 |
| - SBC Meeting January 28, 2021   | - Building Commission Meeting October 13, 2020  |
| - SBC Meeting June 14, 2021      | - Building Commission Meeting November 10, 2020 |
|                                  | - Building Commission Meeting December 8, 2020  |
| - Public Forum March 2, 2021     | - Building Commission Meeting January 12, 2021  |
| - Public Forum March 15, 2021    | - Building Commission Meeting February 9, 2021  |
| - Public Forum March 18, 2021    | - Building Commission Meeting March 9, 2021     |
|                                  | - Building Commission Meeting April 13, 2021    |
|                                  | - Building Commission Meeting May 11, 2021      |



### Preferred Schematic Report Phase Meetings – 17 Public Meetings (June 16, 2021 – March 2, 2022)

- SBC Meeting August 4, 2021
- SBC Meeting September 9, 2021
- SBC Meeting September 30, 2021
- SBC Meeting October 14, 2021
- SBC Meeting October 21, 2021
- SBC Meeting October 28, 2021
- SBC Meeting November 8, 2021
- SBC Meeting December 6, 2021
- SBC Meeting December 13, 2021
- Building Commission Meeting June 15, 2021
- Building Commission Meeting July 13, 2021
- Building Commission Meeting August 10, 2021
- Building Commission Meeting September 14, 2021
- Building Commission Meeting October 12, 2021
- Building Commission Meeting November 9, 2021
- Building Commission Meeting December 14, 2021
- Public Forum October 25, 2021



### Schematic Design Phase Meetings To Date (Ongoing) – 22+ Public Meetings (March 3, 2022 – December 21, 2022)

- SBC Meeting January 13, 2022
- SBC Meeting February 3, 2022
- SBC Meeting February 17, 2022
- SBC Meeting March 7, 2022
- SBC Meeting April 1, 2022
- SBC Meeting April 14, 2022
- SBC Meeting April 28, 2022
- SBC Meeting May 19, 2022
- SBC Meeting June 16, 2022
- SBC Meeting July 6, 2022
- SBC Meeting July 13, 2022
- SBC Meeting July 20, 2022
- Building Commission Meeting January 11, 2022
- Building Commission Meeting February 15, 2022
- Building Commission Meeting March 15, 2022
- Building Commission Meeting April 12, 2022
- Building Commission Meeting May 10, 2022
- Building Commission Meeting June 14, 2022
- Building Commission Meeting June 29, 2022
- Building Commission Meeting July 12, 2022
- Building Commission Meeting August 9, 2022
- Public Forum June 13, 2022



# PIERCE SCHOOL

## PUBLIC PROCESS



PUBLIC SCHOOLS of  
**BROOKLINE**



HOME | DISTRICT | SCHOOLS | STUDENTS & FAMILIES | SCHOOL COMMITTEE | HUMAN RESOURCES | BUILDING PROJECTS | STAFF PORTAL

HOME / DISTRICT Building Projects

### BUILDING PROJECTS

Overview >

BHS Expansion Project ▼

Driscoll School Building Project ▼

Pierce School Building Project ▲

## Pierce School Building Project - Overview

- [School Street Traffic Study \(May 23, 2022\)](#)
- [Community Forum Recording \(June 13, 2022\)](#) Passcode: MXi!A1Vj
- [Preferred Schematic Report \(Published December 23, 2021\)](#)
- [Preliminary Design Program \(Includes Educational Plan and Space Summary\)](#)
- [Project Schedule \(Updated December 2021\)](#)

LEFTFIELD		JOHN R. PIERCE SCHOOL		PRELIMINARY PROJECT SCHEDULE		Schematic Design Submission		December 28, 2021	
ID	Task Name	Start	Finish	2019	2020	2021	2022	2023	2024
1	Eligibility Period	Mon 6/3/19	Wed 8/12/20						
2	MSBA Invitation to Eligibility Period	Mon 6/3/19	Mon 6/3/19						
3	Initial Compliance Certification	Thu 12/12/19	Thu 12/12/19						
4	Study Enrollment Certification	Fri 12/13/19	Wed 3/25/20						
5	MSBA Invitation to Conduct Feasibility Study	Wed 4/15/20	Wed 4/15/20						
6	City Appropriation of Funds for Feasibility Study	Mon 5/11/20	Mon 5/11/20						
7	Execution of Feasibility Study Agreement	Tue 5/12/20	Wed 5/12/20						

FAQ'S

SUBMIT A QUESTION  
OR COMMENT

SUBSCRIBE TO EMAIL  
UPDATES

Most Recent Meeting

September 28, 2022

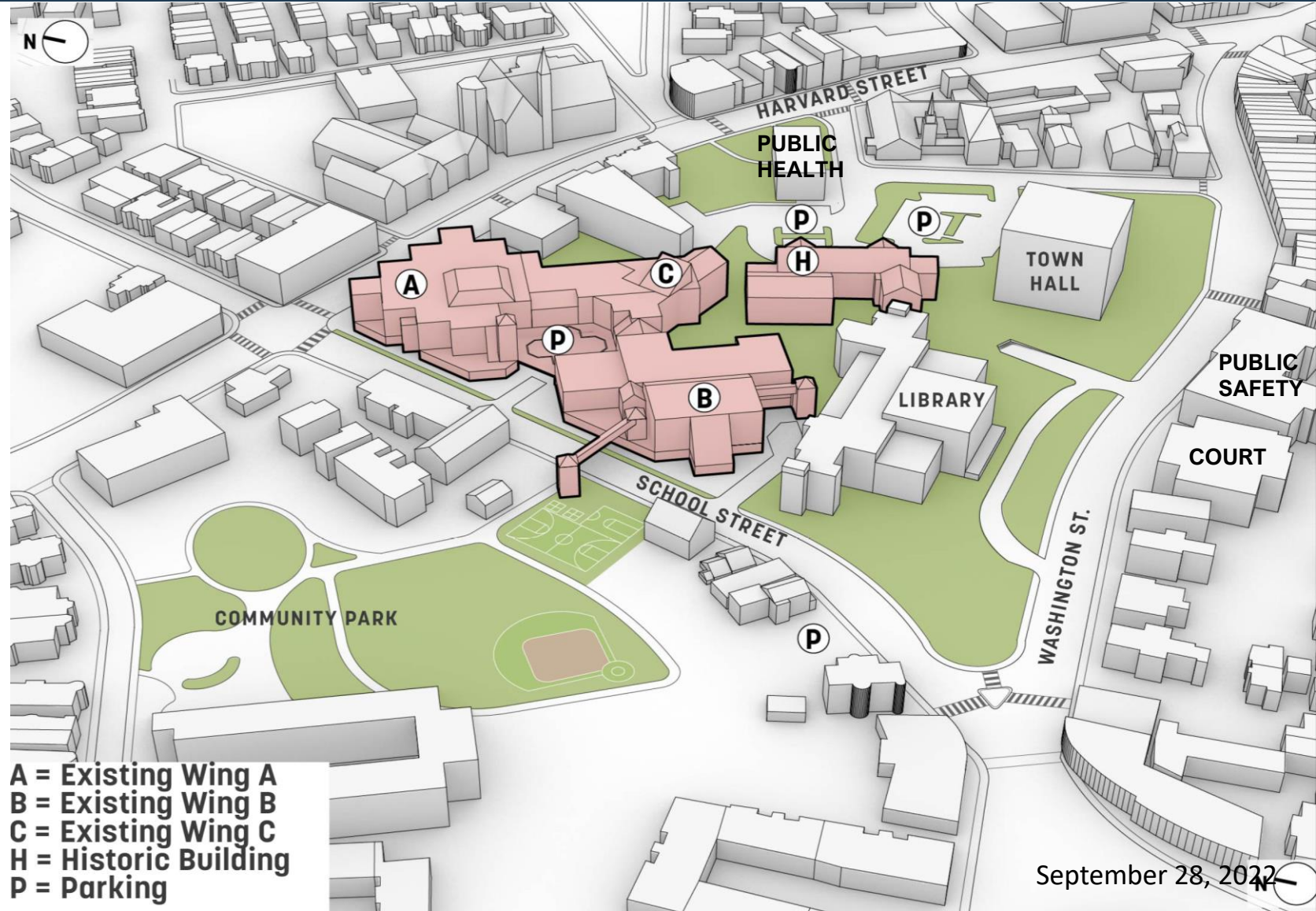
# PIERCE SCHOOL

## EXISTING CONDITIONS & NEEDS



### Pierce School Today

- Situated in Brookline Village within Government Campus
- 2.5 Acre School Campus
- 725 Students in K-8 Currently
- 800 Students in PreK-8 Proposed
- All Parking below Building in Garage Structure
- School's Playground is a Town Park
- Pick-up/Drop-Off is Off Site
- Steep Topography



A = Existing Wing A  
B = Existing Wing B  
C = Existing Wing C  
H = Historic Building  
P = Parking



# PIERCE SCHOOL

## EXISTING CONDITIONS & NEEDS



### Why the Existing Pierce School Does Not Meet Educational Needs



#### Teaching

- Constant Distractions (noise, echoes)
- Isolation from Colleagues
- Less teaching time due to transition issues





# PIERCE SCHOOL

## EXISTING CONDITIONS & NEEDS



### Learning

- Physical Disability Challenges
- Social/Emotional Challenges
- ADA/Civil Rights and Code Issues
- Equity
- Growth of Educational Programs (existing capacity)





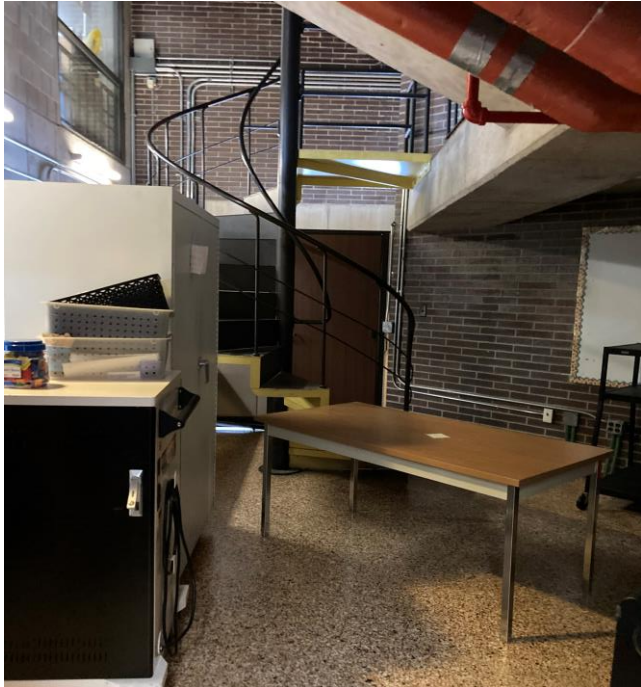
# PIERCE SCHOOL

## EXISTING CONDITIONS & NEEDS



### Accessibility

- Physical Disability Challenges
- ADA/Civil Rights and Code Issues





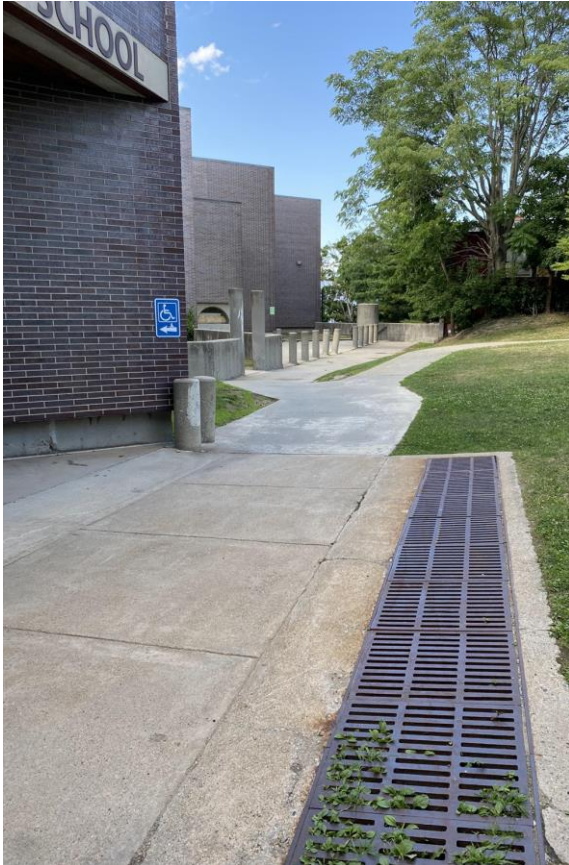
# PIERCE SCHOOL

## EXISTING CONDITIONS & NEEDS



### Safety

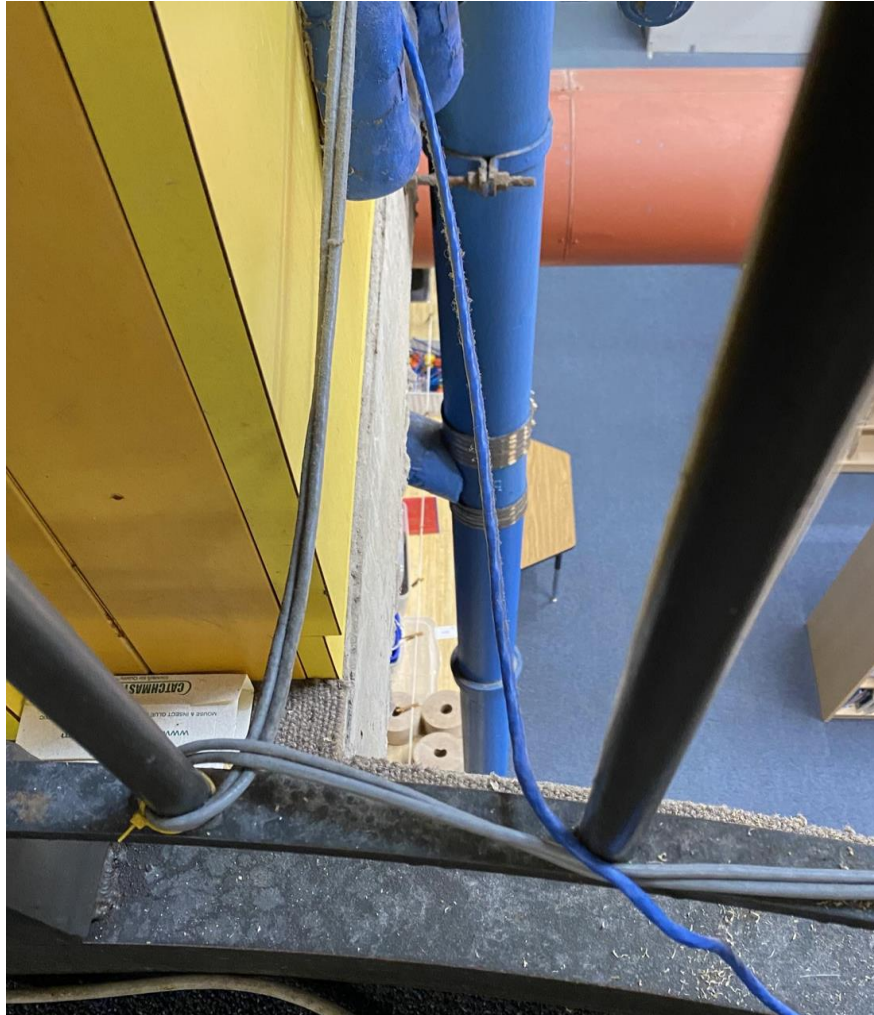
- Significant Security Issues and Concerns





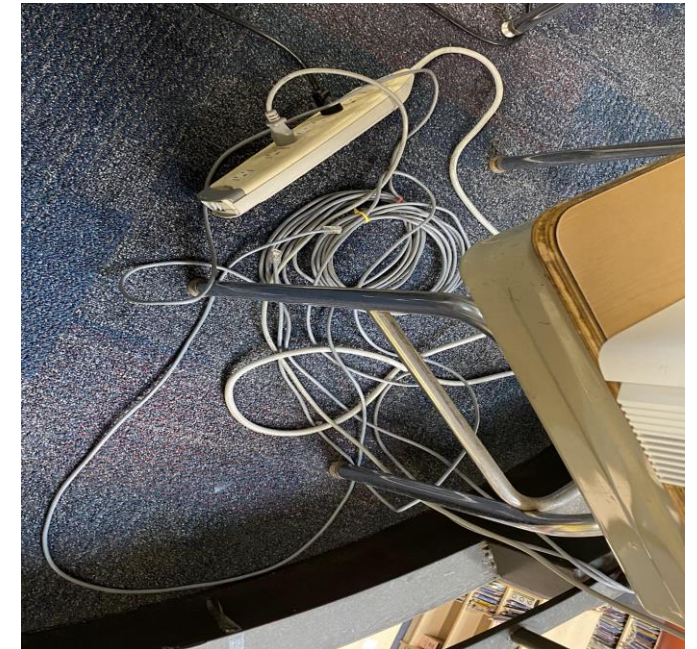
# PIERCE SCHOOL

## EXISTING CONDITIONS & NEEDS



### Code Issues

- Noncompliance Issues
- Hazardous Concerns





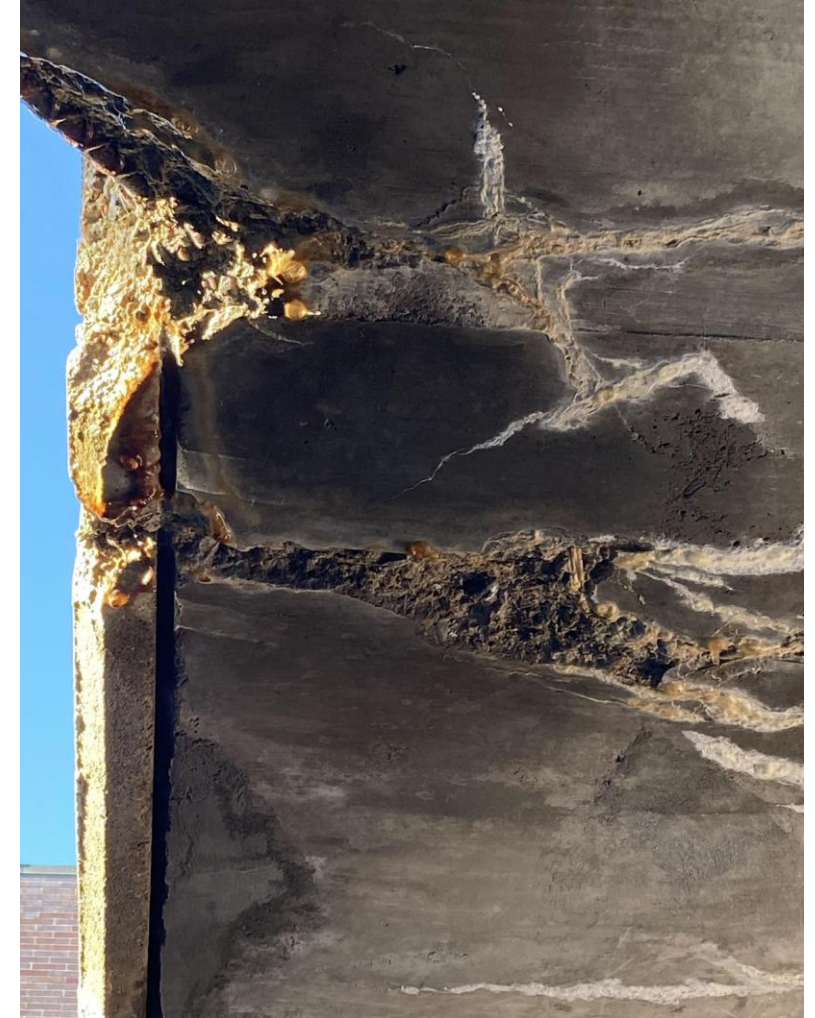
# PIERCE SCHOOL

## EXISTING CONDITIONS & NEEDS



### Maintenance, Repairs & Changes

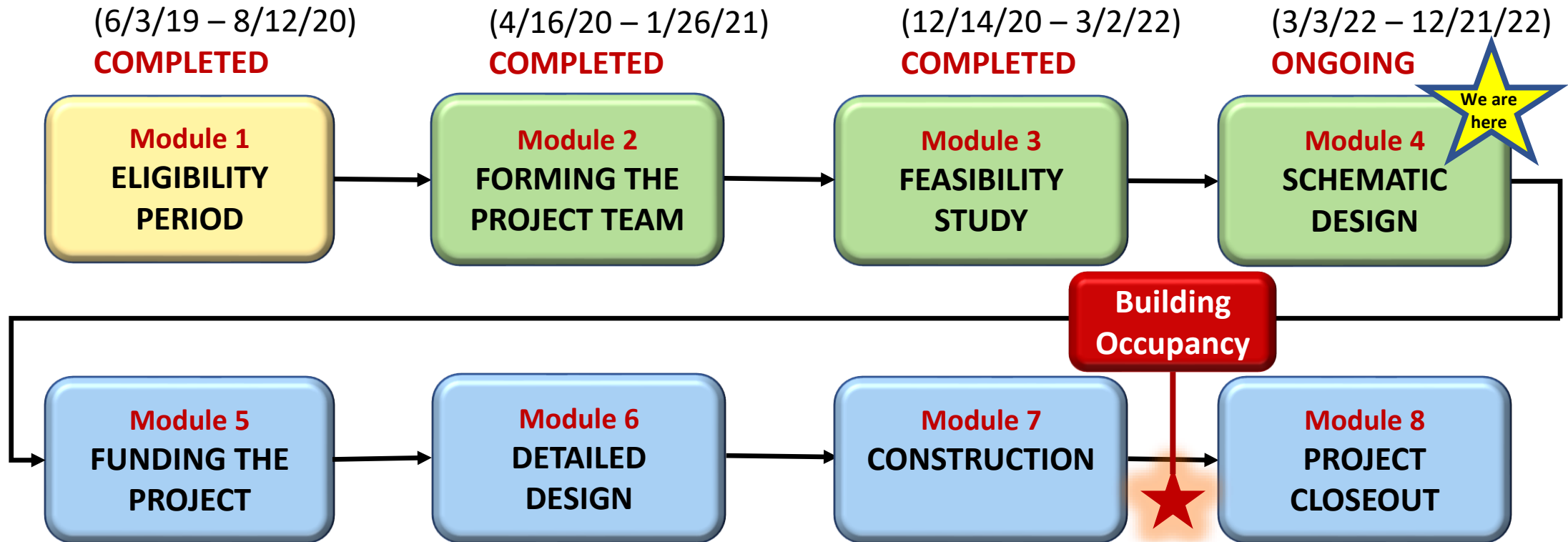
- Difficult to accomplish in an all-concrete building
- Work is costly





# MSBA PROCESS

## FEASIBILITY STUDY / SCHEMATIC DESIGN



### MSBA PROCESS

For more details about the Modules, visit:

[www.massschoolbuildings.org/building/modules\\_overview](http://www.massschoolbuildings.org/building/modules_overview)



# MSBA PROCESS

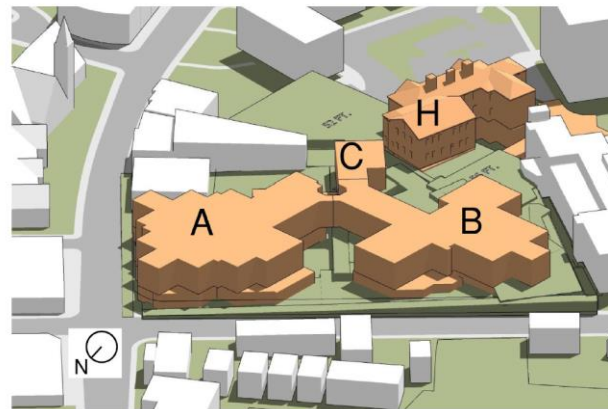
## SUMMARY OF OPTIONS STUDIED



### Summary of Preliminary Design Program (PDP) Options



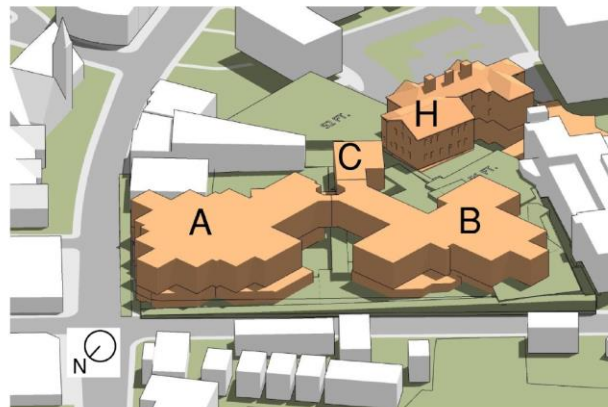
Plan View (Existing School)



Axon View East (Existing School)



Plan View (Existing School)



Axon View East (Existing School)

#### Option R – Code Upgrade Only

- Net Square Footage too small to fit Program

#### Option R1 – Renovation Only

- Net Square Footage too small to fit Program

# MSBA PROCESS

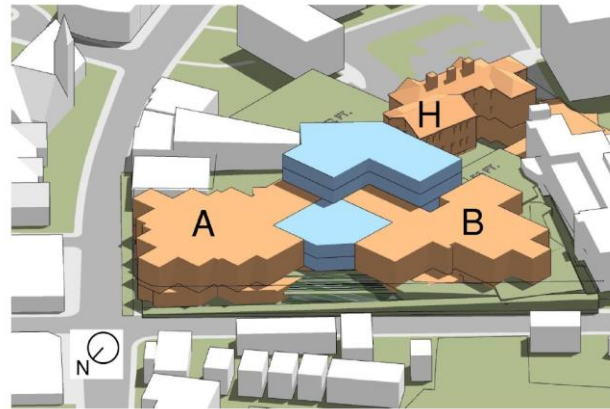
## SUMMARY OF OPTIONS STUDIED



### Summary of Preliminary Design Program (PDP) Options



Plan View (Option 1)



Axon View East (Option 1)

#### **Option 1 – Add/Reno A, B & H (Demo C)**

- Given the tight site and quirky volumes of Unit B, it would not be possible to configure the spaces to the sizes, volumes, and spatial relationships required by the Educational Program and Initial Space Summary (ISS)



Plan View (Option 2b)



Axon View East (Option 2b)

#### **Option 2 (a&b) – Add/Reno A&H (Demo B&C)**

- Due to its deep floor plate, interior daylighting would be compromised
- Increased logistical challenges
- Difficulty configuring existing building spaces to the sizes, volumes and spatial relationships required by the Educational Program and ISS



# MSBA PROCESS

## SUMMARY OF OPTIONS STUDIED



### Summary of Preliminary Design Program (PDP) Options



Plan View (Option 3c)



Axon View East (Option 3c)

#### Option 3 – New Building on Existing Site

- Keeping the existing garage has many complexities that are costly to build, logistically difficult and incur compromises to the final design.



Plan View (Option 4b)



Axon View West (Option 4b)

#### Option 4 – New Building on Existing Park

- More restrictive setbacks and less height
- Scale of new building not relative to residential neighbors
- Land Swap - Requires Article 97 process
- Loss of use of local park for 3-4 years
- Quality of new park: Grade change for existing (10') vs. proposed park (23')

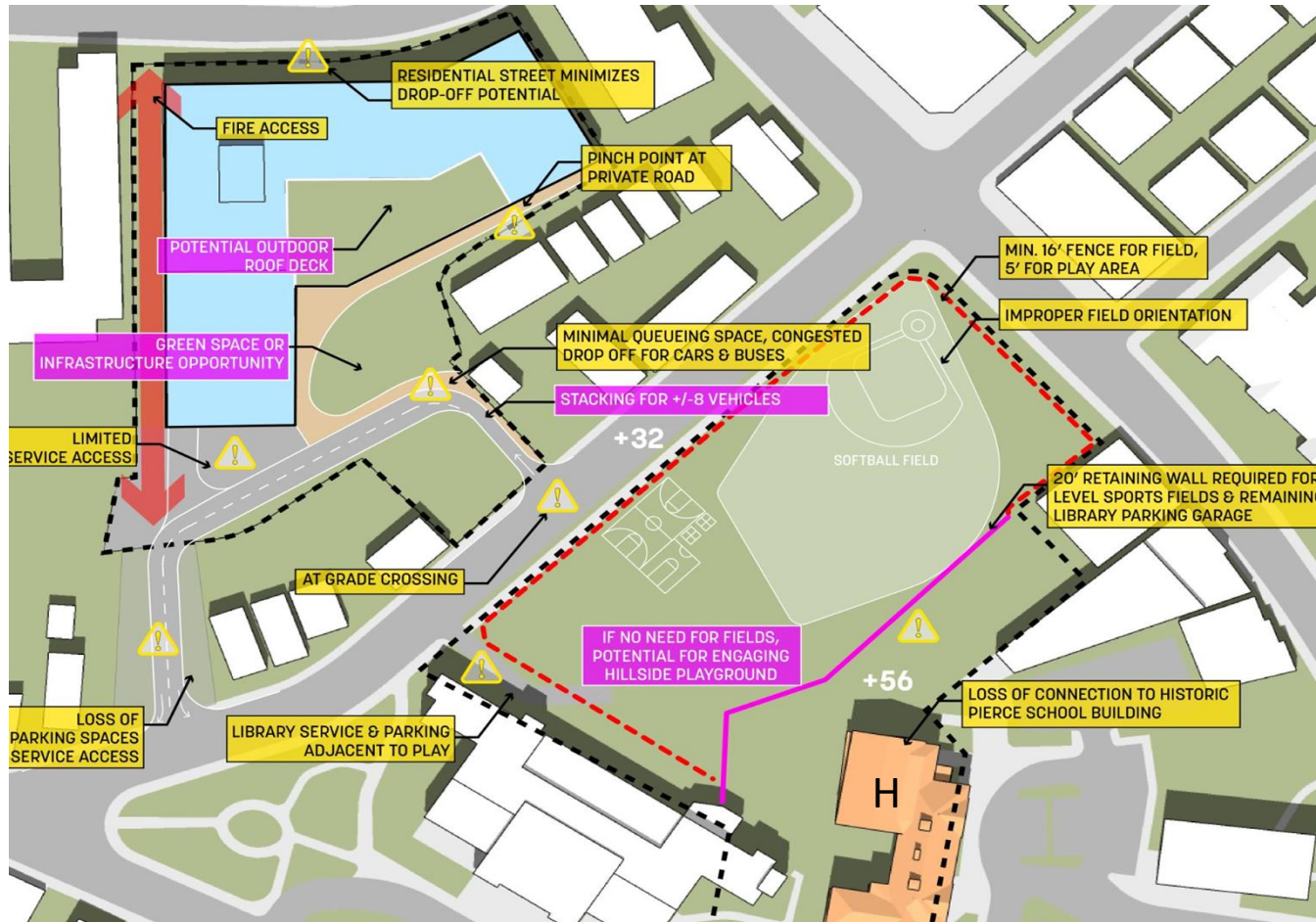


# MSBA PROCESS

## SUMMARY OF OPTIONS STUDIED



### Summary of Preliminary Design Program (PDP) Options



#### Option 4b – New Building on Existing Park

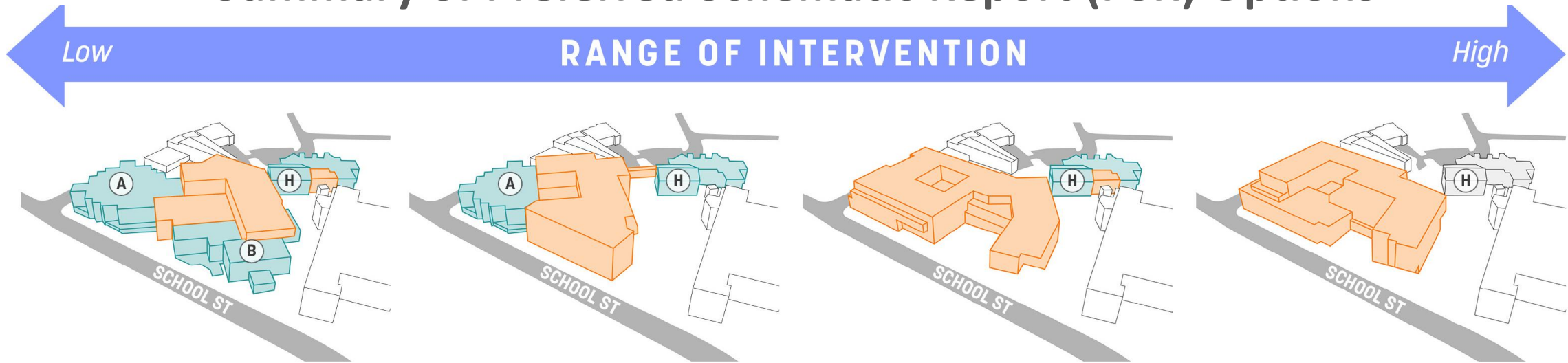
- Taller building required to fit program – not ideal for educational purposes
- Closely abuts residences – this would cause a lot of disruption during construction and would block views and sunlight after building is complete
- Article 97 Process with land swap required adding over a year to the project
- Existing 1970s building site not suitable for land swap due to grade change
- Does not provide adequate access for drop off/pick-up queuing
- Does not provide adequate service access

# MSBA PROCESS

## SUMMARY OF OPTIONS STUDIED



### Summary of Preferred Schematic Report (PSR) Options



#### OPTION 1

- Renovate existing Units A + B
- Replace Unit C with a new addition
- Connect to a renovated historic 19th century school building

#### OPTION 2b

- Renovate existing Unit A
- Replace Units B + C with a new addition
- Connect to a renovated historic 19th century school building

#### OPTION 3b-H

- New building
- Connect to a renovated historic 19th century school building

#### OPTION 3b

- New independent building
- Historic 19th century school building would need to be renovated separately for other school uses

# MSBA PROCESS

## OPTIONS DECISION MATRIX



### Notes:

1. Each subset of criteria is given a score from 1-5 based on the compliance of items in the subset.
2. Each subset of criteria is prioritized as a portion of 100% and that percentage is the multiplier on that subset.
3. Subtotals are provided for each overall category.
4. Category subtotals are added into a Total Score for each option.

			Best	Better	Good	Fair	Poor
			5	4	3	2	1
			DESIGN OPTIONS				
			Type	REPAIR	ADD/RENO	NEW	
			Option	R	1	2b	3b
			Description	Repair/ Code Only	Add/Reno Keep A & B	Add/Reno Keep A	New w/o historic
			Criteria Multiplier				
Pedagogy/Program	<b>Educational Program</b>	15	1	1	2	5	5
	Ability to map the bubble diagram to the building Media Commons as the Hub of the School Student Travel Time (Horizontal and Vertical Across Building)						
	<b>Indoor/Outdoor Connections</b>	5	1	4	4	3	5
	Secondary Public Entrances at Harvard and School Streets Pre-K Adjacency to Main Entrance and drop off loop Outdoor Early Elementary Playspace Adjacent to Classrooms						
	<b>Outdoor Classrooms and Gardens</b>	5	3	2	4	5	4
	Outdoor space extended from Makerspace Amphitheater						
	<b>Flexibility and Community Use</b>	5	1	1	2	5	5
	Future Flexibility and Growth Ability to Separate off-hours Access to Multi-purpose Room and Gym						
<b>Pedagogy/Program Subtotal</b>			30	40	50	80	140
							145

# MSBA PROCESS

## OPTIONS DECISION MATRIX



### Notes:

1. Each subset of criteria is given a score from 1-5 based on the compliance of items in the subset.
2. Each subset of criteria is prioritized as a portion of 100% and that percentage is the multiplier on that subset.
3. Subtotals are provided for each overall category.
4. Category subtotals are added into a Total Score for each option.

			Best		Better		Good		Fair		Poor	
			5		4		3		2		1	
			DESIGN OPTIONS									
			Type		REPAIR			ADD/RENO			NEW	
			Option		R		1		2b		3b	3b-H
			Description		Repair/ Code Only		Add/Reno Keep A & B		Add/Reno Keep A		New w/o historic	New w/ historic
			Criteria Multiplier									
Town/Neighborhood Impacts	<b>Costs and Risks</b>	15	2		2		2		5		5	
	Total Project Costs (including historic building renovation)											
	Constructibility and Risk											
	<b>Other Town-wide Considerations</b>	5	5		5		5		1		5	
	Maintain historic building as part of the school											
	<b>Urban Design and Planning</b>	5	1		1		4		5		4	
	Pedestrian Permeability Through Site											
	Green Space Continuity Through Site											
	Gathering Space at School Street											
	Shading at Main Entry											
	Universal Design											
	Outdoor thermal comfort											
	<b>Parking and Service Access</b>	5	5		5		2		5		5	
	Garage Parking Spaces Relative to Existing											
	Service Access											
	<b>Site Safety</b>	5	2		2		5		5		4	
	Traffic and School St. Crossing Safety											
	Off Hours Site Security											
Town/Neighborhood Impacts Subtotal			35		95		95		110		155	165



# MSBA PROCESS

## OPTIONS DECISION MATRIX



### Notes:

1. Each subset of criteria is given a score from 1-5 based on the compliance of items in the subset.
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			Best		Better		Good		Fair		Poor	
			5		4		3		2		1	
Notes: 1. Each subset of criteria is given a score from 1-5 based on the compliance of items in the subset. 2. Each subset of criteria is prioritized as a portion of 100% and that percentage is the multiplier on that subset. 3. Subtotals are provided for each overall category. 4. Category subtotals are added into a Total Score for each option.			DESIGN OPTIONS									
			Type	REPAIR		ADD/RENO					NEW	
			Option	R		1		2b		3b		3b-H
			Description	Repair/ Code Only		Add/Reno Keep A & B		Add/Reno Keep A		New w/o historic		New w/ historic
Category	Criteria	Criteria Multiplier										
Architectural Impacts	Building Interior	10	2		1		1		4		4	
	Organizational Clarity and Wayfinding Space Efficiency Universal Accessibility (All options are MAAB/ADA compliant) 4 Story Experience											
	Building Exterior	5	3		3		3		4		4	
	Massing Along School and Harvard Streets Improved Architectural and Street Level Experience											
	Health and Wellness	5	1		1		2		4		4	
	Indoor air quality, ventilation and filtration Healthy building materials and acoustics Maximizes Daylighting and Views											
	Sustainability - Carbon	5	5		5		3		4		4	
	Life Cycle Embodied Carbon (with Historic Building included in both options)											
	Sustainability - Energy	10	1		2		3		5		5	
	Building envelope Passive strategies - orientation and massing Ground source heat pumps/geoexchange Photovoltaic Energy Generation											
	Architectural Impact Subtotal		35	75		75		80		150		150

# MSBA PROCESS

## OPTIONS DECISION MATRIX



Notes:

- 1. Each subset of criteria is given a score from 1-5 based on the compliance of items in the subset.
- 2. Each subset of criteria is prioritized as a portion of 100% and that percentage is the multiplier on that subset.
- 3. Subtotals are provided for each overall category.
- 4. Category subtotals are added into a Total Score for each option.

		DESIGN OPTIONS							
		Type	REPAIR	ADD/RENO				NEW	
		Option	R	1	2b	3b	3b-H		
		Description	Repair/ Code Only	Add/Reno Keep A & B	Add/Reno Keep A	New w/o historic	New w/ historic		
Category	Criteria	Criteria Multiplier							
	Total Score	100	210	220	270	445	460		



Option 3b-H



# MSBA PROCESS

## PRICING MATRIX AT PREFERRED SCHEMATIC



Option (Description)	Total Gross Square Feet	Square Feet of Renovated Space (\$*/SF)	Square Feet of New Construction (\$*/SF)	Site, Building Takedown, Haz Mat Etc. (\$*)	Estimated Total Construction** (\$*)	Estimated Total Project Costs (\$)
<b>Option R - Code Upgrade</b> <i>Garage Reno Only:</i> <i>78,277sf / \$3,592,349*</i>	226,072 sf	226,072 sf \$ 352.86 \$/sf	- sf \$ - \$/sf	\$ 6,727,467	\$ 86,498,489 \$ 382.61 \$/sf	\$ 137,696,498
<b>Option 1 - Add / Reno</b> <i>Garage Reno: 66,004sf / \$4,080,384*</i> <i>New Garage: 27,387sf / \$5,281,263*</i>	301,445 sf	178,294 sf \$ 363.51 /sf	123,151 sf \$522.29 \$/sf	\$ 14,439,070	\$143,572,028 \$ 476.28 \$/sf	\$ 210,499,587
<b>Option 2b - Add / Reno</b> <i>Garage Reno: 48,893sf / \$3,022,566*</i> <i>New Garage: 32,378sf / \$6,243,779*</i>	298,825 sf	128,294 sf \$ 304.78 /sf	170,531 sf \$540.49 \$/sf	\$ 16,060,900	\$147,332,597 \$ 493.04 \$/sf	\$ 215,618,699
<b>Option 3b-H*** - Add / Reno</b> <i>Garage Reno: 24,646sf / \$1,523,622*</i> <i>New Garage: 47,228sf / \$8,340,771*</i>	255,363 sf	55,122 sf \$ 329.39 /sf	200,241 sf \$ 569.86 \$/sf	\$ 18,251,936	\$150,518,572 \$ 589.43 \$/sf	\$ 220,000,000
<b>Option 3b - New Construction</b> <i>Garage Reno: 25,911sf / \$1,601,825*</i> <i>New Garage: 46,912sf / \$9,071,778*</i>	203,181 sf	25,911 sf \$ 156.43 /sf	177,270 sf \$ 663.75 \$/sf	17,553,680	\$139,269,845 \$ 685.45 \$/sf	\$ 219,966,521

# MSBA PROCESS

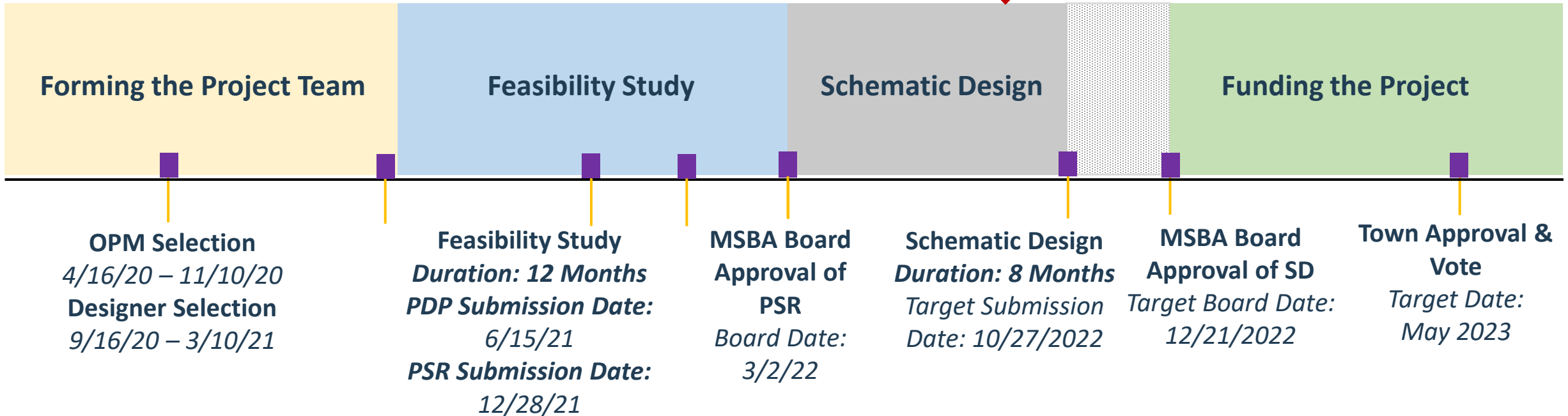
## CURRENT SCHEDULE



**Feasibility Study**  
**Duration: 22 Months**



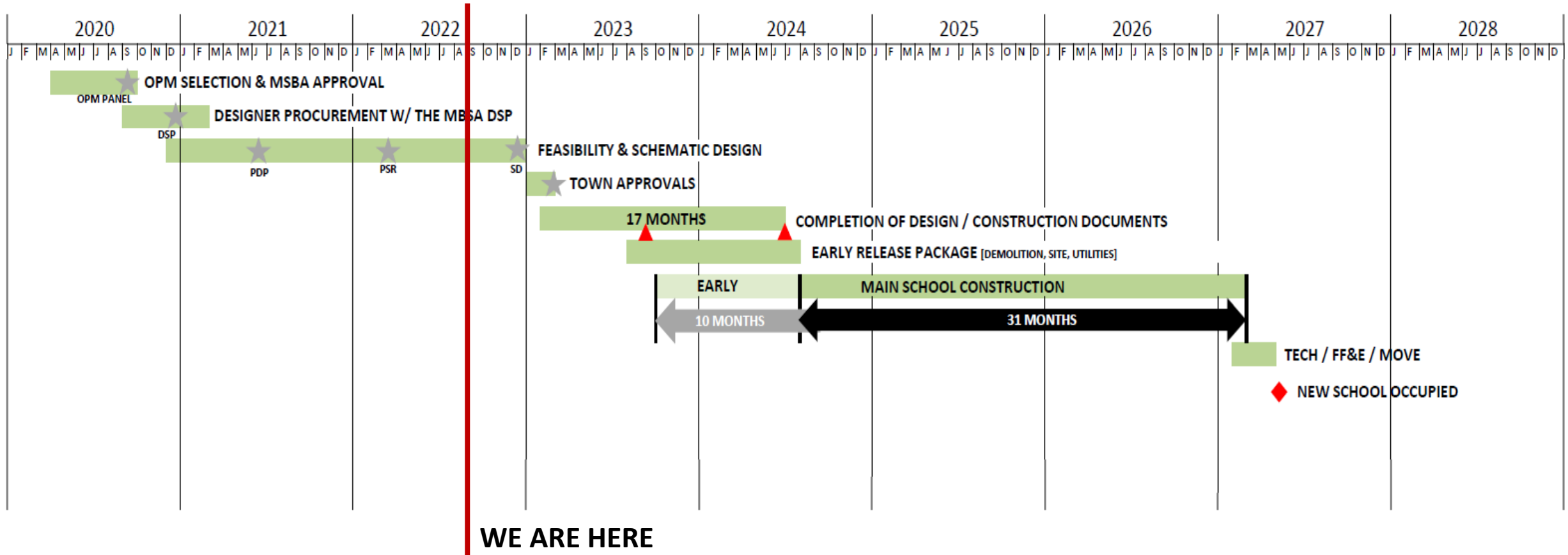
**WE  
ARE  
HERE**





# MSBA PROCESS

## CURRENT & PROPOSED SCHEDULE



# DESIGN UPDATE

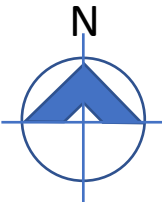
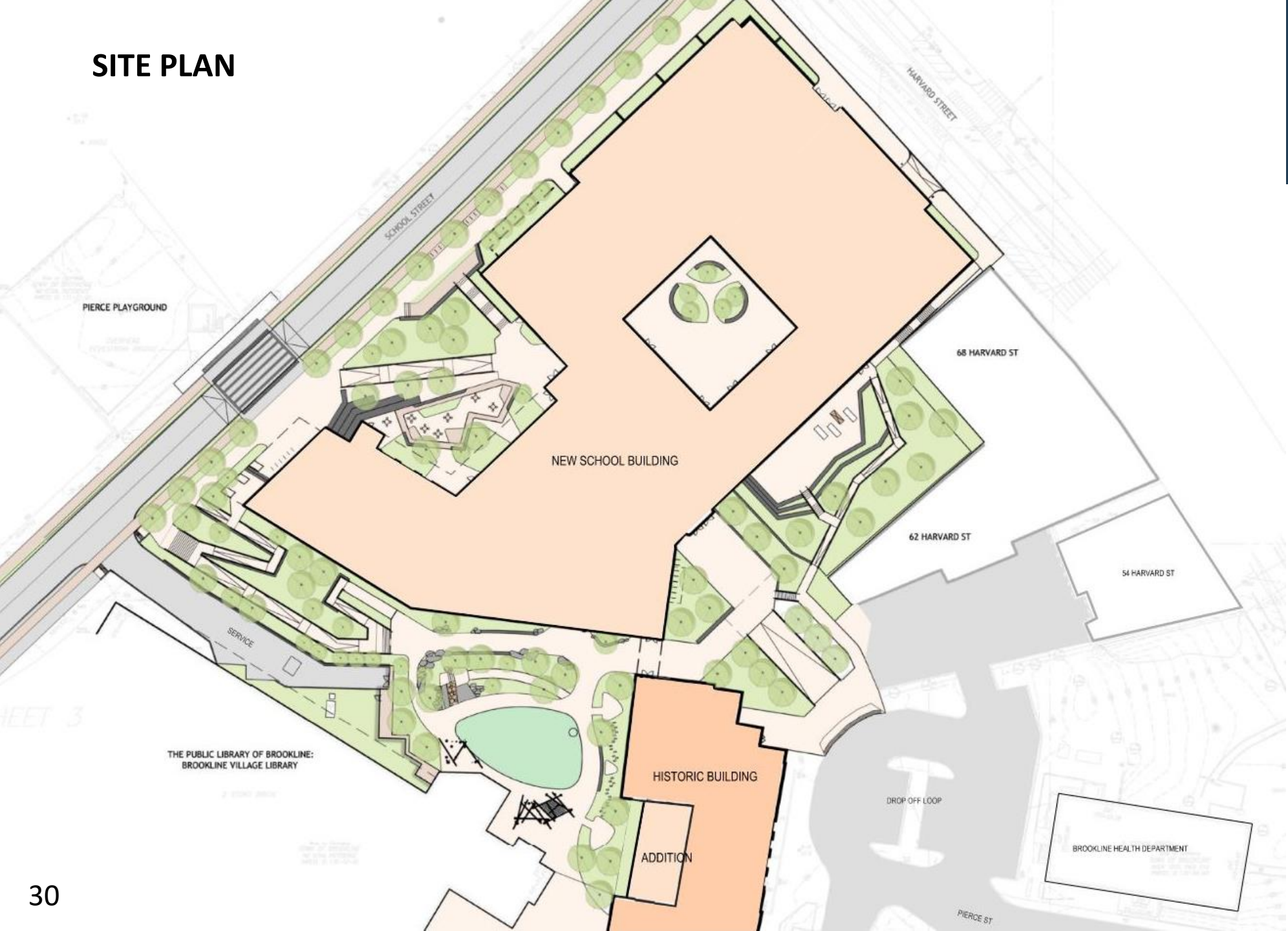
## REVISED FLOOR PLANS



Better design, together.



# SITE PLAN



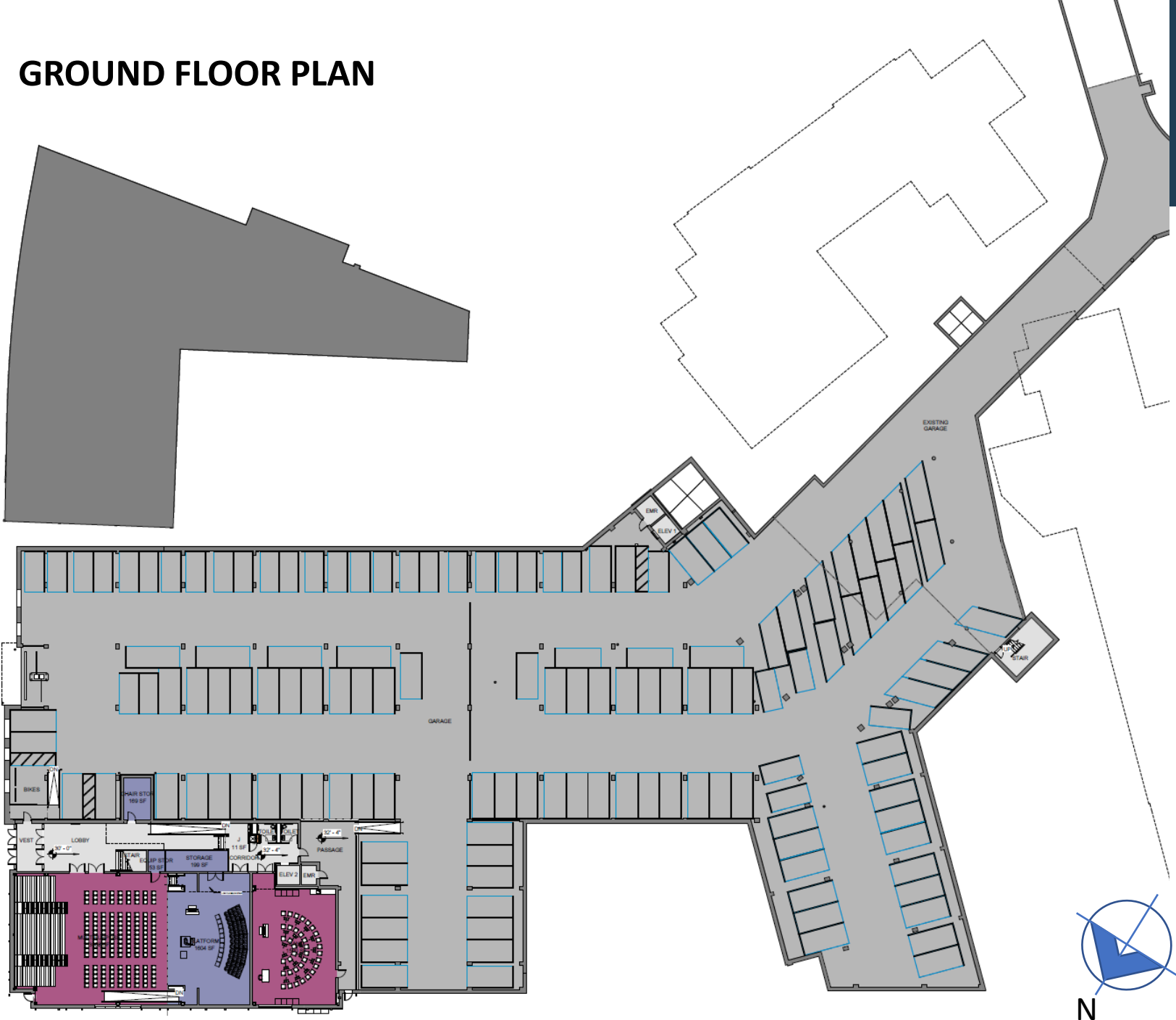
# GROUND FLOOR PLAN



## PIERCE SCHOOL

50 SCHOOL STREET  
BROOKLINE, MA 02445

- 1. CORE ACADEMIC
- 2. SPECIAL EDUCATION
- 3. ART & MUSIC
- 4. VOCATIONS & TECHNOLOGY
- 5. HEALTH & PHYSICAL EDUCATION
- 6. MEDIA CENTER
- 7. DINING & FOOD SERVICE
- 8. MEDICAL
- 9. ADMINISTRATION & GUIDANCE
- 10. CUSTODIAL & MAINTENANCE
- 11. OTHER
- 13. PARKING EXCLUDED
- 14. NON-PROGRAMED SPACE





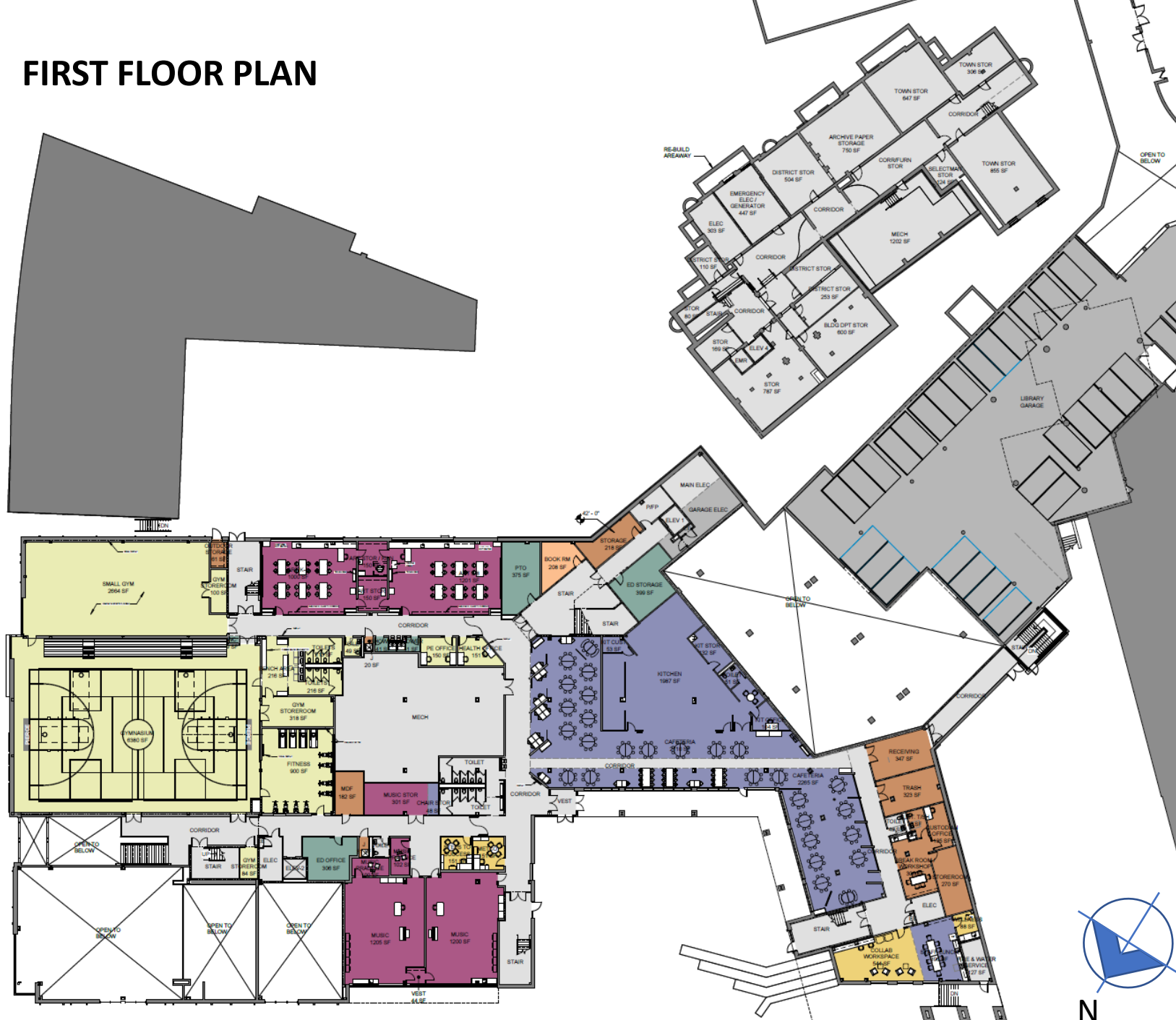
# FIRST FLOOR PLAN



## PIERCE SCHOOL

50 SCHOOL STREET  
BROOKLINE, MA 02445

- 1. CORE ACADEMIC
- 2. SPECIAL EDUCATION
- 3. ART & MUSIC
- 4. VOCATIONS & TECHNOLOGY
- 5. HEALTH & PHYSICAL EDUCATION
- 6. MEDIA CENTER
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- 8. MEDICAL
- 9. ADMINISTRATION & GUIDANCE
- 10. CUSTODIAL & MAINTENANCE
- 11. OTHER
- 13. PARKING EXCLUDED
- 14. NON-PROGRAMED SPACE



# SECOND FLOOR PLAN



## PIERCE SCHOOL

50 SCHOOL STREET  
BROOKLINE, MA 02445

- 1. CORE ACADEMIC
- 2. SPECIAL EDUCATION
- 3. ART & MUSIC
- 4. VOCATIONS & TECHNOLOGY
- 5. HEALTH & PHYSICAL EDUCATION
- 6. MEDIA CENTER
- 7. DINING & FOOD SERVICE
- 8. MEDICAL
- 9. ADMINISTRATION & GUIDANCE
- 10. CUSTODIAL & MAINTENANCE
- 11. OTHER
- 13. PARKING EXCLUDED
- 14. NON-PROGRAMED SPACE





# THIRD FLOOR PLAN



## PIERCE SCHOOL

50 SCHOOL STREET  
BROOKLINE, MA 02445

- 1. CORE ACADEMIC
- 2. SPECIAL EDUCATION
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- 4. VOCATIONS & TECHNOLOGY
- 5. HEALTH & PHYSICAL EDUCATION
- 6. MEDIA CENTER
- 7. DINING & FOOD SERVICE
- 8. MEDICAL
- 9. ADMINISTRATION & GUIDANCE
- 10. CUSTODIAL & MAINTENANCE
- 11. OTHER
- 13. PARKING EXCLUDED
- 14. NON-PROGRAMED SPACE



# DESIGN UPDATE

## REVISED RENDERINGS



SASA KI

Better design, together.



# School Street at Library





# School Street Aerial





# School Street Entrance





# Harvard Street + School Street





# Harvard Street





# Pierce Main Entrance





# Pierce Main Entrance





# Art Courtyard





# Art Courtyard





# PROJECT COSTS

## SCHEMATIC DESIGN ESTIMATE



John R. Pierce School: Brookline, MA

Schematic Design Cost Estimate Comparison

6/10/2022

Based on Cost Estimates from 6/9/22		GSF 262,787		GSF 262,787		GSF 262,787		SD Estimate Variance (high - low)	
		OPM Estimator (PM&C)		ARCH Estimator (AM Fogarty)		Consigli Construction			
		Total Amount	Cost/SF	Total Amount	Cost/SF	Total Amount	Cost/SF		
02	Existing Conditions	\$ 12,295,167	\$ 46.79	\$ 14,068,793	\$ 53.54	\$ 13,591,326	\$ 51.72	\$ 1,296,159	\$ 4.93
03	Concrete	\$ 11,020,562	\$ 41.94	\$ 11,329,730	\$ 43.11	\$ 11,574,428	\$ 44.04	\$ 553,866	\$ 2.11
04	Masonry	\$ 3,754,318	\$ 14.29	\$ 5,203,389	\$ 19.80	\$ 4,086,872	\$ 15.55	\$ 332,554	\$ 1.27
05	Metals	\$ 10,405,741	\$ 39.60	\$ 11,826,882	\$ 45.01	\$ 12,615,329	\$ 48.01	\$ 2,209,588	\$ 8.41
06	Woods, Plastics, and Composites	\$ 1,852,743	\$ 7.05	\$ 2,408,373	\$ 9.16	\$ 2,928,107	\$ 11.14	\$ 1,075,364	\$ 4.09
07	Thermal and Moisture Protection	\$ 8,453,471	\$ 32.17	\$ 8,486,677	\$ 32.29	\$ 7,333,582	\$ 27.91	\$ 1,119,889	\$ 4.26
08	Openings	\$ 6,747,090	\$ 25.68	\$ 6,498,726	\$ 24.73	\$ 7,041,124	\$ 26.79	\$ 294,034	\$ 1.12
09	Finishes	\$ 11,906,519	\$ 45.31	\$ 11,750,485	\$ 44.71	\$ 10,715,767	\$ 40.78	\$ 1,190,752	\$ 4.53
10	Specialties	\$ 687,986	\$ 2.62	\$ 960,160	\$ 3.65	\$ 819,142	\$ 3.12	\$ 131,156	\$ 0.50
11	Equipment	\$ 1,063,544	\$ 4.05	\$ 1,220,032	\$ 4.64	\$ 2,388,317	\$ 9.09	\$ 1,324,773	\$ 5.04
12	Furnishings	\$ 2,621,382	\$ 9.98	\$ 1,992,108	\$ 7.58	\$ 2,263,088	\$ 8.61	\$ 358,294	\$ 1.36
13	Special Construction	\$ 50,000	\$ 0.19	\$ -	\$ -	\$ 228,000	\$ 0.87	\$ 178,000	\$ 0.68
14	Conveying Systems	\$ 645,000	\$ 2.45	\$ 633,000	\$ 2.41	\$ 737,500	\$ 2.81	\$ 92,500	\$ 0.35
21, 22, 23	Mechanical	\$ 19,912,125	\$ 75.77	\$ 19,939,450	\$ 75.88	\$ 19,428,887	\$ 73.93	\$ 483,238	\$ 1.84
26	Electrical	\$ 17,394,431	\$ 66.19	\$ 15,894,378	\$ 60.48	\$ 17,037,891	\$ 64.84	\$ 356,540	\$ 1.36
31	Earthwork	\$ 8,081,768	\$ 30.75	\$ 7,395,536	\$ 28.14	\$ 7,771,069	\$ 29.57	\$ 310,699	\$ 1.18
32	Exterior Improvements	\$ 5,232,432	\$ 19.91	\$ 5,424,576	\$ 20.64	\$ 4,406,591	\$ 16.77	\$ 825,841	\$ 3.14
33	Utilities	\$ 837,548	\$ 3.19	\$ 1,296,824	\$ 4.93	\$ 1,902,114	\$ 7.24	\$ 1,064,566	\$ 4.05
INCL.	Geothermal Under Building	\$ 4,704,573	\$ 17.90	\$ 8,458,328	\$ 32.19	\$ 7,337,922	\$ 27.92	\$ 3,753,755	\$ 14.28
NOT INCL.	Geothermal In Park/Playground	\$ 3,434,128	\$ 13.07	\$ 7,687,083	\$ 29.25	\$ 6,694,087	\$ 25.47	\$ 4,252,955	\$ 16.18
TOTAL DIRECT CONSTRUCTION COSTS		\$ 130,835,775	\$ 497.88	\$ 134,787,447	\$ 512.92	\$ 134,207,056	\$ 510.71	\$ 3,371,281	\$ 12.83
Design & Estimating Contingency		\$ 12,613,120	\$ 48.00	\$ 12,632,912	\$ 48.07	\$ 12,686,913	\$ 48.28	\$ 73,793	\$ 0.28
General Conditions		\$ 10,478,617	\$ 39.87	\$ 10,478,617	\$ 39.87	\$ 10,478,617	\$ 39.87	\$ -	\$ -
General Requirements		\$ 3,799,702	\$ 14.46	\$ 4,118,162	\$ 15.67	\$ 4,128,302	\$ 15.71	\$ 328,600	\$ 1.25
Insurances		\$ 2,763,024	\$ 10.51	\$ 2,784,070	\$ 10.59	\$ 2,906,208	\$ 11.06	\$ 143,184	\$ 0.54
Bonds		\$ 1,847,577	\$ 7.03	\$ 1,145,979	\$ 4.36	\$ 1,222,303	\$ 4.65	\$ 701,598	\$ 2.67
CM Fee (Overhead & Profit)		\$ 3,443,634	\$ 13.10	\$ 3,566,110	\$ 13.57	\$ 3,627,013	\$ 13.80	\$ 183,379	\$ 0.70
CM GMP Contingency		\$ 4,304,542	\$ 16.38	\$ 4,348,915	\$ 16.55	\$ 4,334,723	\$ 16.50	\$ 44,373	\$ 0.17
SDI / Sub Bond Pool		\$ 1,304,657	\$ 4.96	\$ 1,181,912	\$ 4.50	\$ 1,776,168	\$ 6.76	\$ 594,256	\$ 2.26
Escalation		\$ 13,243,776	\$ 50.40	\$ 15,285,823	\$ 58.17	\$ 13,321,259	\$ 50.69	\$ 2,042,047	\$ 7.77
TOTAL ESTIMATED CONSTRUCTION COSTS		\$ 184,634,424	\$ 702.60	\$ 190,329,944	\$ 724.27	\$ 188,688,562	\$ 718.03	\$ 5,695,520	\$ 21.67
Soft Costs Calculated at 25%		\$ 46,158,606	\$ 175.65	\$ 47,582,486	\$ 181.07	\$ 47,172,141	\$ 179.51	\$ 1,423,880	\$ 5.42
TOB Project Management Costs		\$ 1,500,000	\$ 5.71	\$ 1,500,000	\$ 5.71	\$ 1,500,000	\$ 5.71	\$ -	
Relocation Costs		\$ 10,000,000	\$ 38.05	\$ 10,000,000	\$ 38.05	\$ 10,000,000	\$ 38.05	\$ -	
TOTAL ESTIMATED PROJECT COSTS		\$ 242,293,030	\$ 922.01	\$ 249,412,430	\$ 949.10	\$ 247,360,703	\$ 941.30	\$ 7,119,400	\$ 27.09

**SCHEMATIC DESIGN  
ESTIMATE THAT  
PROMPTED VALUE  
ENGINEERING:  
\$247,360,703**

### Factors for Increase in Cost

- More information on site and logistics of construction raised costs
- Significantly higher than typical HAZMAT costs estimated
- Higher than expected inflation since Preferred Schematic Report estimate





### Criteria for Accepting Value Engineering (VE)

VE was only accepted if it met the following criteria:

- No Impact to the Educational Plan for the School
- No Compromise to the Fossil Fuel Free Status and Sustainability of the School
- No Decrease in Durability or Maintainability of Building Materials and Finishes
- Maintained the Function, Quality and Aesthetics of the School

# PROJECT COSTS

## PROPOSED VALUE ENGINEERING



Pierce School  
Brookline, MA

Schematic Estimate - Value Management

Item/Description	Total Amount	Grand Total Amount	Category
56 Reduce Lighting Allowance at School to \$10.00/sf	(143,099)	(190,748)	Allowance
A33 Reduce Wall Covering Allowance from \$200,000 to \$100,000	(100,000)	(133,298)	Allowance
HZ01 Reduce Asbestos Unit Cost to Subcontractor Pricing	(5,215,990)	(6,952,788)	Allowance
L04 Reduce play equipment allowance by 20%.	(337,500)	(449,879)	Allowance
AVM09 Reduce Playground Equipment Allowance to \$300k	(487,500)	(649,826)	Allowance
<b>Subtotal Allowance Reduction</b>	<b>(6,284,089)</b>	<b>(8,376,539)</b>	
03 Staging at Brick Only	(360,500)	(480,538)	Façade
A10 Changes to Stair 7 Enclosure	(32,297)	(43,051)	Façade
A24 Replace metal soffits ESA-01 and ESA-02 with exterior stucco	(129,505)	(172,627)	Façade
<b>Subtotal Façade</b>	<b>(522,302)</b>	<b>(696,216)</b>	
05 Reduce fireproofing and painting at existing garage	(139,170)	(185,510)	Garage
09 Leave Garage Walls, Columns and Ceiling Unpainted	(170,730)	(227,579)	Garage
13 Eliminate Tunnel to Historic Building	(750,090)	(999,852)	Garage
A02 Eliminate waterproofing of existing garage roof	(150,400)	(200,480)	Garage
A13 Delete concrete openings and exterior metal grilles at existing garage	(76,500)	(101,973)	Garage
AVM10A Reduce New Concrete Parking Structure by Moving Demo Line	(226,327)	(301,689)	Garage
AVM10B Eliminate Extension to Library Parking	(412,691)	(550,107)	Garage
AVM10C Eliminate Scope at Existing Library Parking	(283,014)	(377,251)	Garage
<b>Subtotal Garage</b>	<b>(2,208,922)</b>	<b>(2,944,441)</b>	
11 Eliminate Precast Benches at Courtyard	(76,750)	(102,306)	Landscape
<b>Subtotal Landscape</b>	<b>(76,750)</b>	<b>(102,306)</b>	
A05 Substitute special sprinklers at rated interior glass in lieu of 90 minute	(344,500)	(459,210)	Material
A25 Change 67% of Interior Storefront to Hollow Metal with Wood Doors	(104,175)	(138,863)	Material
A32b Reduce terrazzo flooring area by 4,525sf, replace with linoleum	(147,517)	(196,636)	Material
A40 Security Film in Lieu of Security Glass	(60,000)	(79,979)	Material
L02 Change all impermeable pavers	(197,400)	(263,129)	Material
A15 Replace intumescent paint at exposed beams with hd spray fireproofing	(46,000)	(61,317)	Material
AVM02 Double Glazed CW in Lieu of Triple	(209,300)	(278,992)	Material
AVM03 Change 52% of CW to Storefront and Panels	(377,993)	(503,855)	Material
AVM03A Change 2,623 sf of CW to Metal Panel	(82,739)	(110,289)	Material
AVM08 Change ACP-1 and ACP-2 to 2x2 ACT	(171,541)	(228,660)	Material
<b>Subtotal Material Change</b>	<b>(1,741,165)</b>	<b>(2,320,930)</b>	

Item/Description	Total Amount	Grand Total Amount	Category
A12 Changes to Service Corridor	(15,380)	(20,501)	Scope Reduction
A18 Reduce 6' snow barrier from 524sf to 344 sf	(26,780)	(35,697)	Scope Reduction
A29 Reduce wall tile in toilet rooms to 6'	(131,805)	(175,693)	Scope Reduction
E01 Change all PV panels to PPA by others or add alternate	(2,000,000)	(2,665,952)	Scope Reduction
H04 Eliminate Return/Exhaust Insulation within Building. With exception of	(244,946)	(326,507)	Scope Reduction
T0 Additional Work at School Street	1,100,685	1,467,186	Scope Reduction
A16 Delete fencing and automatic vehicle barriers at middle of upper garage.	(24,450)	(32,591)	Scope Reduction
A20 Reduce layers of GWB at walls from 3 to 2 at 50% of type 1E walls	(128,142)	(170,811)	Scope Reduction
A21 Reduce Sinks at Pre-K, 7th and 8th Grade Classrooms (16 sinks)	(49,556)	(66,057)	Scope Reduction
AVM01 Reduce Overall GSF	(2,524,574)	(3,365,196)	Scope Reduction
AVM06 Eliminate Millwork Benches at Project Spaces	(181,800)	(242,335)	Scope Reduction
AVM07 Eliminate 41 Wardrobe Units	(54,796)	(73,042)	Scope Reduction
EV01 Reduce to 30 EV spaces (15 units of dual port)	(75,424)	(100,538)	Scope Reduction
	(63,875)	(85,144)	Scope Reduction
<b>Subtotal Scope Reduction</b>	<b>(4,420,843)</b>	<b>(5,892,878)</b>	
20 Eliminate Concrete Under Play Surface	(103,528)	(138,001)	Structure
A03 Substitute ERA-01R metal deck with fireproofing, except under	(276,644)	(368,759)	Structure
<b>Subtotal Structure</b>	<b>(380,172)</b>	<b>(506,760)</b>	
58 Use WAP with Minimal Hardwired Tel-Data Outlets	(180,549)	(240,667)	Telcom/AV
59 Wireless Clock System	(117,357)	(156,434)	Telcom/AV
AV01 Delete Speech Reinforcement in Classroom	(175,000)	(233,271)	Telcom/AV
AVM14 Reduction in AV	(1,938,594)	(2,584,099)	Telcom/AV
<b>Subtotal Telcom/AV</b>	<b>(2,411,500)</b>	<b>(3,214,471)</b>	
HZ02 Remove library oil tank through other Town budget	(120,000)	(159,957)	Town
55 Lightning Preventor (single mast) vs UL Master System	(34,637)	(46,170)	Town
AVM05 Eliminate Fire Pump	(130,633)	(174,130)	Town
<b>Subtotal Town Decision</b>	<b>(285,270)</b>	<b>-380,257</b>	
<b>Total</b>	<b>(18,331,013)</b>	<b>(24,434,798)</b>	

**TOTAL APPROVED CONSTRUCTION VE:**  
**\$24,434,794**



CONSIGLI  
Est. 1905

# PROJECT COSTS

## HOW WE GOT TO BUDGET



### Schematic Design Estimate to Current Budget

#### ABBREVIATIONS

<b>VE:</b>	Value Engineering
<b>ECC:</b>	Estimated Construction Cost
<b>Hard Costs:</b>	Construction Costs
<b>Soft Costs:</b>	All costs required to facilitate a project such as management, design, furnishings, technology, testing, inspections, utility costs, moving, contingencies, etc.

Schematic Design Estimate:	\$247,360,703
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SD Construction VE Approved:	(\$ 24,434,794)
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Construction VE Added Back: <i>(Highlighted on VE List)</i>	\$ 782,847
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Feasibility Study Budget: <i>(Previously Funded Costs)</i>	(\$ 2,000,000)
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Soft Cost Reductions: <i>(Reflective of Going from a % of ECC to Actual Costs)</i>	(\$ 6,198,284)
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Relocation, Moving & Town of Brookline Costs Reductions:	(\$ 8,500,000)
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Move Geothermal to an Add Alternate:	(\$ 7,337,922)
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<b>Current Total Project Budget:</b>	<b>\$199,672,550</b>
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# PIERCE SCHOOL

## PROPOSED TOTAL PROJECT BUDGET



**Feasibility Study/Schematic Design:** \$ 0  
*(Previously Funded, Allocated and Expended Costs)*

**Administrative Costs:** \$ 7,555,000  
*(Includes OPM Costs)*

**A/E Costs:** \$ 18,289,869  
*(Includes Reimbursable A/E Consultants Costs)*

**Preconstruction Costs:** \$ 300,000

**Construction Costs:** \$157,698,691

**Miscellaneous Project Costs:** \$ 3,000,000  
*(Includes Utility Company Fee, Construction Testing & Inspections, Moving, TOB Management)*

**FFE:** \$ 1,850,000

**Technology:** \$ 1,517,069

**Project Costs Subtotal:** \$190,210,629

**Project Costs Subtotal:** \$190,210,629

**Contingencies:** \$ 9,461,921  
*(Used Only as Needed to Fund Changes)*

**Total Project Costs:** \$199,672,550

**Less MSBA Funding:** (\$ 44,816,070)

**Cost to Town:** \$154,856,480

**COST TO TOWN**

**\$ 154,856,480**

# PIERCE SCHOOL

## ADDITIONAL TOWN REQUESTS



**Current Total Project Cost:    \$199,672,550**

**Geothermal System:                \$   6,784,086**

**Escalation for May Vote:        \$   3,538,932**

**Photovoltaic System:            ~~\$ 2,665,952~~**

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**Total:                                \$209,995,568**



# PIERCE SCHOOL

## CONCLUSION



# PIERCE SCHOOL

## QUESTIONS AND ANSWERS

