### ADVISORY COMMITTEE MEETING

### John R. Pierce K-8 School

September 22, 2022





# TODAY'S AGENDA

01 PIERCE SCHOOL

Opening Remarks

02 PROJECT COSTS

- Schematic Design Estimate
- Proposed Value Engineering
- How we got to Current Budget
- Proposed Total Project Budget
- Potential Escalation
- Next Steps
- Why Pierce Now?

#### **DESIGN UPDATE**

- Revised Site Plan
- Revised Floor Plans
- Revised Renderings

04 QUESTIONS & ANSWERS

# PIERCE SCHOOL OPENING REMARKS





# PUBLIC SCHOOLS of BROOKLINE

## 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 (\$)	
Option R - Code Upgrade Garage Reno Only: 78,277sf / \$3,592,349*	226,072 sf	226,072 sf \$ 352.86 \$/sf	- sf \$ - \$/sf	\$ 6,727,467	\$ 86,498,489 \$ 382.61 \$/sf	\$ 137,696,498	
Option 1 - Add / Reno Garage Reno: 66,004sf / \$4,080,384* New Garage: 27,387sf / \$5,281,263*	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	
Option 2b - Add / Reno Garage Reno: 48,893sf / \$3,022,566*	298,825 sf	128,294 sf	170,531 sf	\$ 16,060,900	\$147,332,597	\$ 215,618,699	
New Garage: 32,378sf / \$6,243,779*		\$ 304.78 /sf	\$540.49 \$/sf		\$ 493.04 \$/sf		
Option 3b-H*** - Add / Reno Garage Reno: 24,646sf / \$1,523,622*	255,363 sf	55,122 sf	200,241 sf	\$ 18,251,936	\$150,518,572	\$ 220,000,000	
New Garage: 47,228sf / \$8,340,771*		\$ 329.39 /sf	\$ 569.86 \$/sf		\$ 589.43 \$/sf		
Option 3b - New Construction Garage Reno: 25,911sf / \$1,601,825*	203,181 sf	25,911 sf	177,270 sf	17,553,680	\$139,269,845	\$ 219,966,521	
New Garage: 46,912sf / \$9,071,778*		\$ 156.43 /sf	\$ 663.75 \$/sf		\$ 685.45 \$/sf		

### PROJECT COSTS SCHEMATIC DESIGN ESTIMATE



John R. I	Pierce School: Brookline, MA													
Schemat	tic Design Cost Estimate Comparison													6/10/2022
		GSF	262	2,787	GSF	262	2,787	GSF		262,787				
Based on Cost Estimates from 6/9/22		OPM Estimator (PM&C)				ARCH Estimator (Al	M Fogarty)	г	Consigli Co	struction		SD Estimate Var	ance (high	- low)
	334 351 551 551 551 551 551 551	Total A	Amount	Cost/SF	1	tal Amount	Cost/SF	To	otal Amount	Cost/SF		Total Amount		st/SF
02	Existing Conditions	\$ 1	2,295,167 \$	46.79	\$	14,068,793 \$	53.54	\$	13,591,326	\$ 5	1.72	\$ 1,296,159	\$	4.93
03	Concrete		1,020,562 \$	41.94	Ś	11,329,730 \$	43.11	Ś	11,574,428		4.04	\$ 553,866	1121	2.11
04	Masonry		3,754,318 \$	14.29	\$	5,203,389 \$	19.80	Ś			5.55	\$ 332,554		1.27
05	Metals	\$ 1	0,405,741 \$	39.60	\$	11,826,882 \$	45.01	\$	12,615,329	\$ 4	8.01	\$ 2,209,588	1.75	8.41
06	Woods, Plastics, and Composites	\$	1,852,743 \$	7.05	\$	2,408,373 \$	9.16	Ŝ	2,928,107	\$ 1	1.14	\$ 1,075,364	\$	4.09
07	Thermal and Moisture Protection		8,453,471 \$	32.17	\$	8,486,677 \$	32.29	\$		\$ 2	7.91	\$ 1,119,889		4.26
08	Openings	\$	6,747,090 \$	25.68	\$	6,498,726 \$	24.73	\$	7,041,124	\$ 2	6.79	\$ 294,034	\$	1.12
09	Finishes	\$ 1	1,906,519 \$	45.31	\$	11,750,485 \$	44.71	\$	10,715,767	\$ 4	0.78	\$ 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	\$	- \$	-	\$		\$	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
1, 22, 23	Mechanical	\$ 1	9,912,125 \$	75.77	\$	19,939,450 \$	75.88	\$	19,428,887	\$ 7	3.93	\$ 483,238	\$	1.84
26	Electrical	\$ 1	7,394,431 \$	66.19	\$	15,894,378 \$	60.48	Ś	17,037,891	\$ 6	4.84	\$ 356,540	\$	1.36
31	Earthwork	Ś	8,081,768 \$	30.75	\$	7,395,536 \$	28.14	Ś			9.57	\$ 310,699	\$	1.18
32	Exterior Improvements		5,232,432 \$	19.91	\$	5,424,576 \$	20.64	Ś			6.77	\$ 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
NCL.	Geothermal Under Building	\$	4,704,573 \$	17.90	\$	8,458,328 \$	32.19	Ś			7.92	\$ 3,753,755		14.28
IOT INCL.	Geothermal In Park/Playground		3,434,128 \$	13.07	\$	7,687,083 \$	29.25	Ś			5.47	\$ 4,252,955		16.18
	ECT CONSTRUCTION COSTS		0,835,775 \$	497.88	\$	134,787,447 \$	512.92	\$	134,207,056	\$ 51	0.71	\$ 3,371,281	\$	12.83
	Design & Estimating Contingency	\$ 1	2,613,120 \$	48.00	\$	12,632,912 \$	48.07	Ś	12,686,913	\$ 4	8.28	\$ 73,793	Ś	0.28
	General Conditions		0,478,617 \$	39.87	\$	10,478,617 \$	39.87	\$		•	9.87	\$ -	\$	
	General Requirements		3,799,702 \$	14.46	\$	4,118,162 \$	15.67	Ś			5.71	\$ 328,600	Ś	1.25
	Insurances	\$	2,763,024 \$	10.51	\$	2,784,070 \$	10.59	ŝ	2,906,208	\$ 1	1.06	\$ 143,184	\$	0.54
	Bonds		1,847,577 \$	7.03	\$	1,145,979 \$	4.36	\$		\$	4.65	\$ 701,598	\$	2.67
	CM Fee (Overhead & Profit)		3,443,634 \$	13.10	\$	3,566,110 \$	13.57	Ś			3.80	\$ 183,379		0.70
	CM GMP Contingency	\$	4,304,542 \$	16.38	\$	4,348,915 \$	16.55	\$	4,334,723	\$ 1	6.50	\$ 44,373	\$	0.17
	SDI / Sub Bond Pool	Ś	1,304,657 \$	4.96	\$	1,181,912 \$	4.50	Ś	1,776,168	\$	6.76	\$ 594,256	\$	2.26
	Escalation	\$ 1	3,243,776 \$	50.40	\$	15,285,823 \$	58.17	\$		\$ 5	0.69	\$ 2,042,047	\$	7.77
OTAL EST	IMATED CONSTRUCTION COSTS	\$ 18	4,634,424 \$	702.60	\$	190,329,944 \$	724.27	\$	188,688,562	\$ 71	8.03	\$ 5,695,520	\$	21.67
oft Costs	Calculated at 25%	\$ 4	6,158,606 \$	175.65	\$	47,582,486 \$	181.07	\$	47,172,141	\$ 17	9.51	\$ 1,423,880	\$	5.42
OB Projec	t Management Costs	\$	1,500,000 \$	5.71	\$	1,500,000 \$	5.71	\$	1,500,000	\$	5.71	\$ -		
Relocation	Costs	\$ 1	0,000,000 \$	38.05	\$	10,000,000 \$	38.05	\$	10,000,000	\$ 3	8.05	\$ -		
OTAL EST	IMATED PROJECT COSTS	\$ 24	2,293,030 \$	922.01	Ś	249,412,430 \$	949.10		247,360,703	\$ 94	1.30	\$ 7,119,400	Ś	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

### PROJECT COSTS PROPOSED VALUE ENGINEERING



#### **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
H201 Reduce Asbestos Unit Cost to Subcontractor Pricing	(5,215,990)	(6,952,788)	Allowance
LO4 Reduce play equipment allowance by 20%.	(337,500)	(449,879)	Allowance
AVM09 Reduce Playground Equipment Allowance to \$300k	(487,500)	(649,826)	Allowance
Subtotal Allowance Reduction	(6,284,089)	(8,376,539)	
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
Subtotal Façade	(522,302)	(696,216)	
05 Reduce fireproofing and painting at existing garage	(139,170)	(185,510)	Garage
09 Leave Garage Walls, Columns and Ceilling 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
AVM 10A Reduce New Concrete Parking Structure by Moving Demo Line	(226,327)	(301,689)	Garage
AVM 10B Himinate Extension to Library Parking	(412,691)	(550,107)	Garage
AVM 10C Himinate Scope at Existing Library Parking	(283,014)	(377,251)	Garage
Subtotal Garage	(2,208,922)	(2,944,441)	
11 Eliminate Precast Benches at Courtyard	(76,750)	(102,306)	Landscape
Subtotal Landscape	(76,750)	(102,306)	
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
LO2 Change all impermiable 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 Store front and Panels	(377 993)	(503 855)	Material
AVM03A Change 2,623 sfofCW to Metal Panel	(82,739)	(110,289)	Material
AVM08 Change ACP-1 and ACP-2 to 2x2 ACT	(171,541)	(228,660)	Material
Subtotal Material Change	(1,741,165)	(2,320,930)	
	,		

A12 Changes to Service Corridor A18 Reduce 6' snow barrier from 524sf to 344 sf A29 Reduce wall tile in toilet rooms to 6'	(15,380) (26,780)		Scope Reduction
		(25,507)	
and the first transfer of	40.00	(35,637)	Scope Reduction
A29 Reduce wall the in tollet 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
HO4 Eliminate Return/Exhaust Insulation within Building. With exception of	(244,946)	(326,507)	Scope Reduction
TO 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)	<b>Scope Reduction</b>
Subtotal Scope Reduction	(4,420,843)	(5,892,878)	
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
Subtotal Structure	(380,172)	(506,760)	
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)	(2,584,0 <del>99</del> )	Telcom/AV
Subtotal Telcom/AV	(2,411,500)	(3,214,471)	
HZD2 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
Subtotal Town Decision	(285,270)	-380,257	

Total (18,331,013) (

(24,434,798)

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



### PROJECT COSTS HOW WE GOT TO BUDGET



#### **Schematic Design Estimate to Current Budget**

**ABBREVIATIONS** 

**VE**: Value Engineering

**ECC:** Estimated Construction Cost

**Hard Costs**: Construction Costs

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

# 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, TOR Manage

Testing & Inspections, Moving, TOB Management)

FFE: \$ 1,850,000

<u>Technology:</u> \$ 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

### PROJECT COSTS POTENTIAL ESCALATION



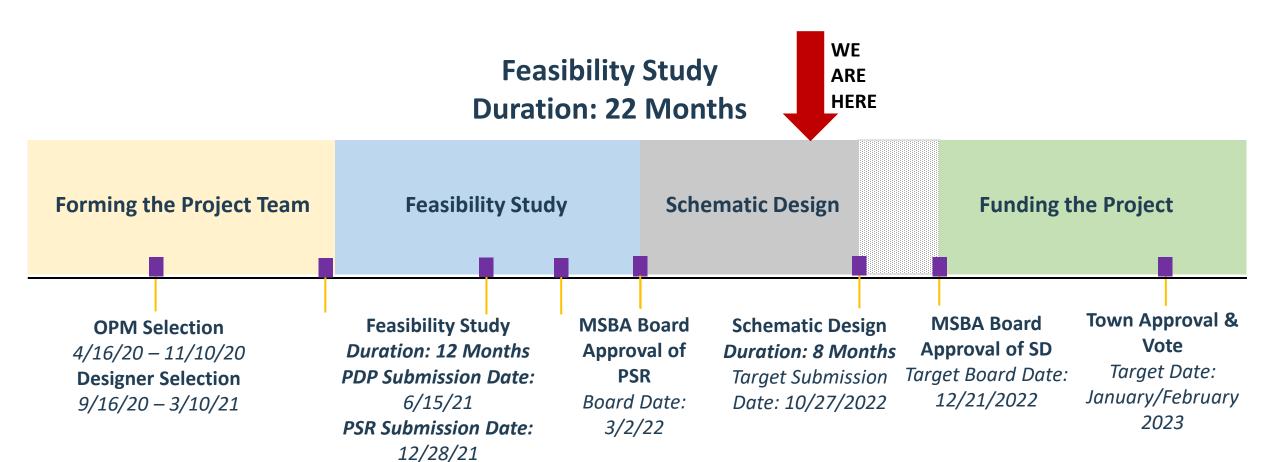
	BUILD NOW	BUILD LATER
Cost of Construction (Escalation at 4% for 5 Years)	\$157,698,691	\$191,864,570
Soft Costs	\$ 41,973,859	\$ 47,966,142
Project Costs	\$199,672,550	\$239,830,712
MSBA Funding	(\$44,622,411)	(\$ 0)
Town Costs	\$154,856,480	\$239,830,712

**COST DIFFERENCE:** \$84,974,232

If a decision is made to build beyond the current timeline, the Town could spend nearly \$85M more for the exact same scope 5 years later. Including the construction timeframe, the school would not be completed until 2032.

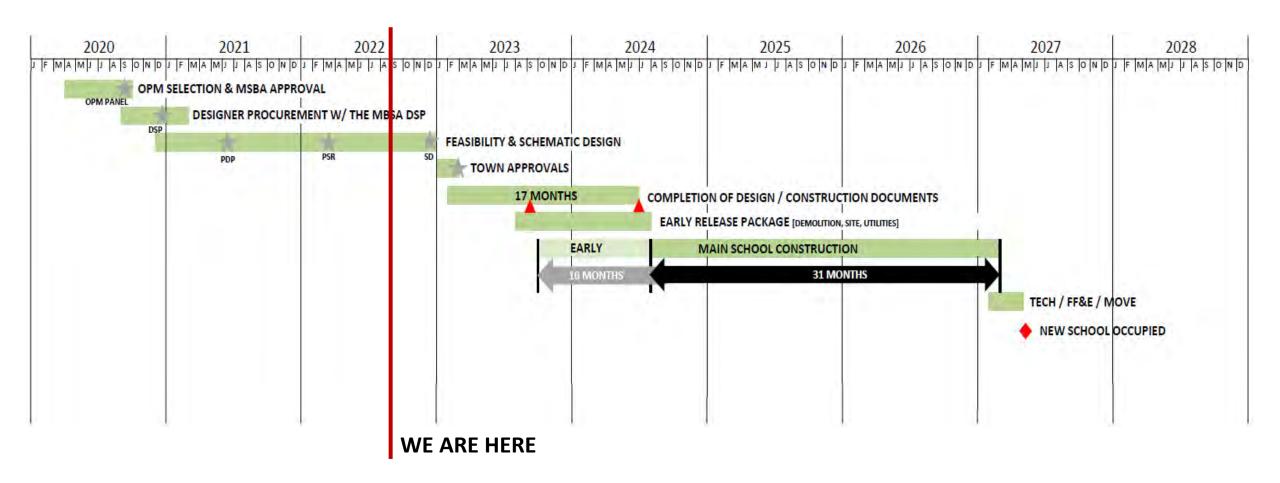
# MSBA PROCESS CURRENT SCHEDULE





# MSBA PROCESS CURRENT & PROPOSED SCHEDULE





### PIERCE SCHOOL NEXT STEPS



#### **Next Steps Timeline**

09/15/22 School Committee Presentation and Vote

9/22/22 Advisory Committee Meeting

09/27/22 Select Board Presentation and Vote on Budget and to Place Project on Ballot

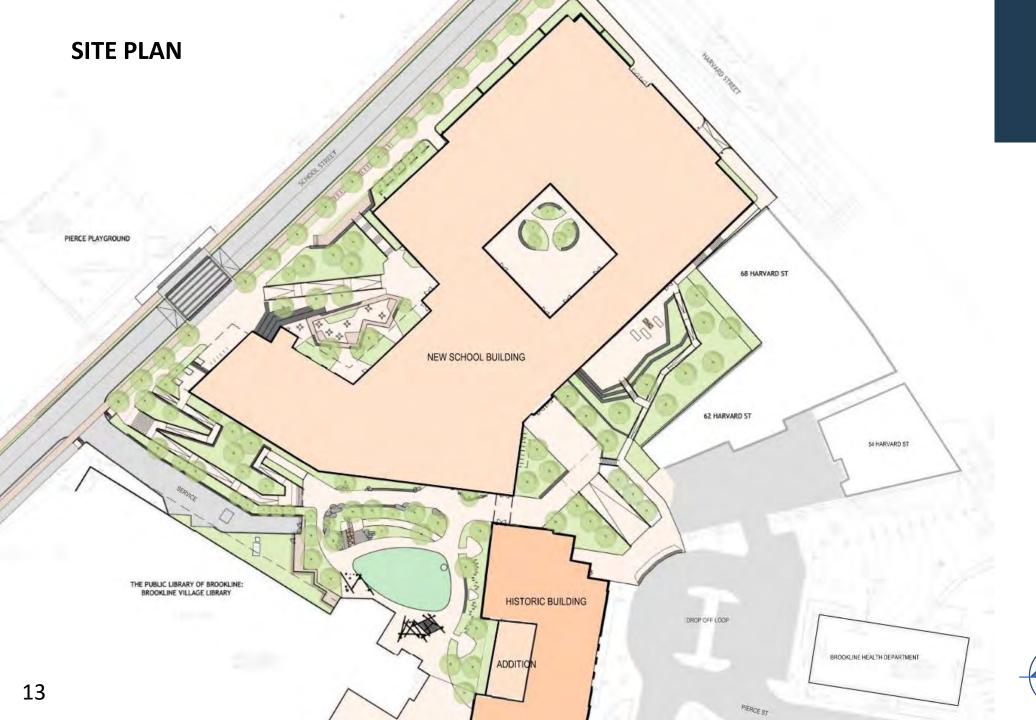
10/13/22 Deadline to Submit Budget Information to MSBA

TBD SBC Meeting to Approve Submission of Schematic Design Report to MSBA

10/27/22 Deadline to Submit Schematic Design Report to MSBA

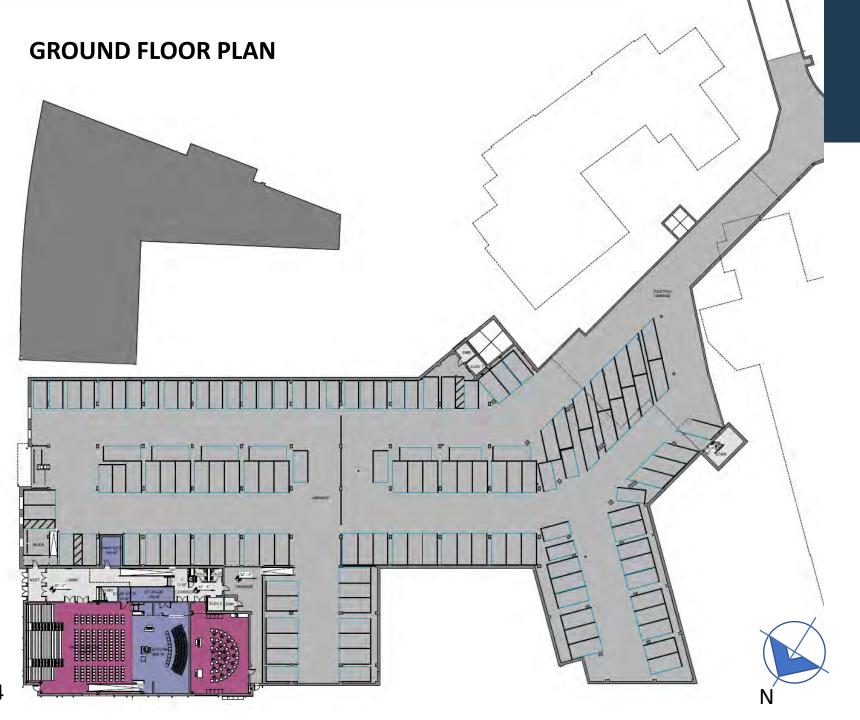
12/21/22 MSBA Board of Directors Meeting

January 2023 Debt Exclusion Vote



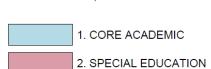






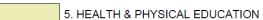


50 SCHOOL STREET BROOKLINE, MA 02445





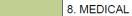






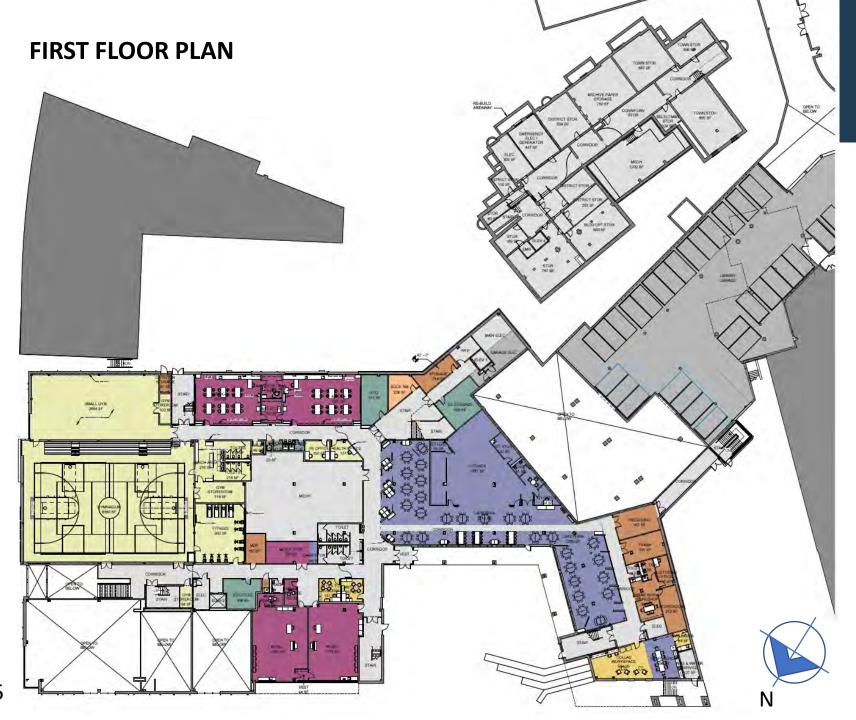




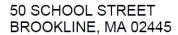


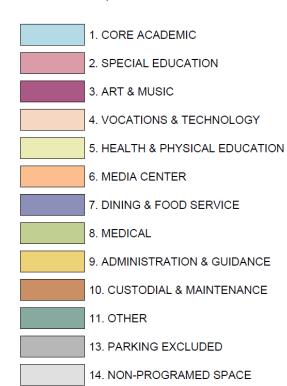


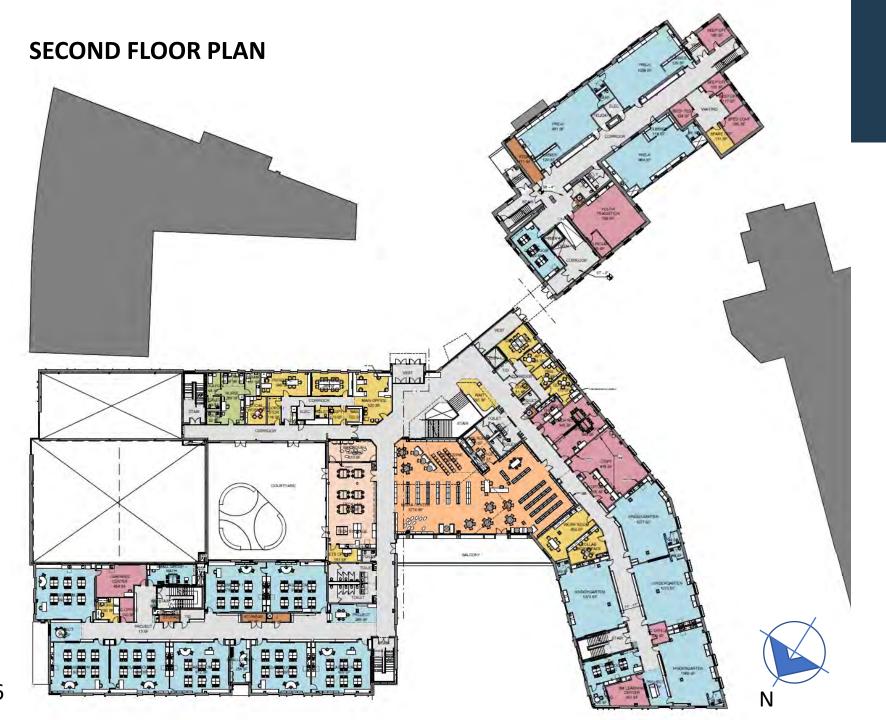
14. NON-PROGRAMED SPACE



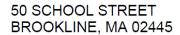














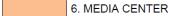




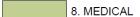








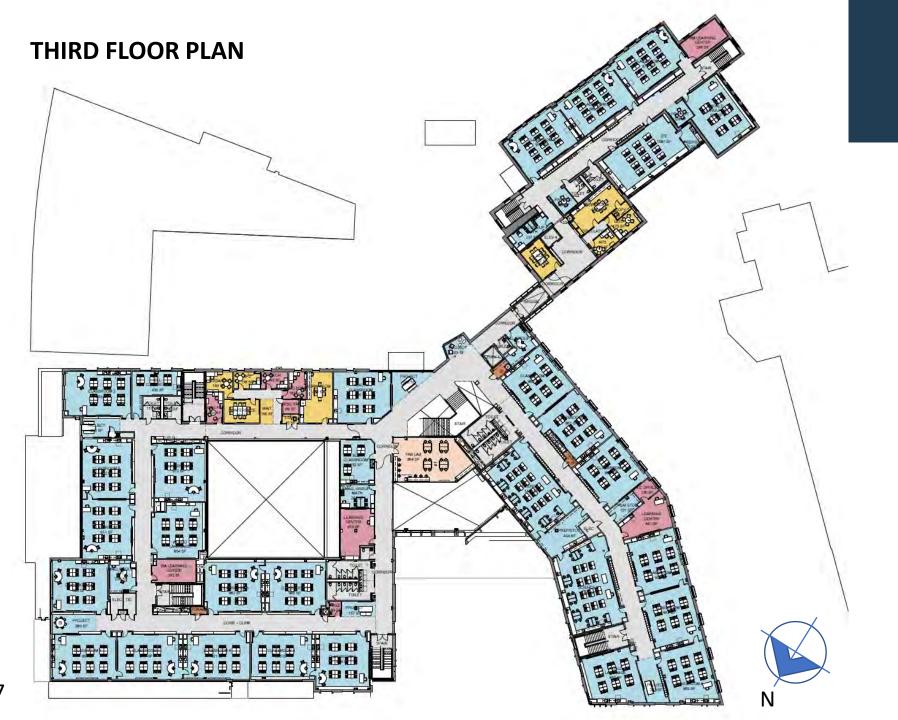








14. NON-PROGRAMED SPACE





50 SCHOOL STREET BROOKLINE, MA 02445

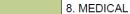


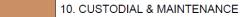




























#### **Pierce Main Entrance**







# PIERCE SCHOOL QUESTIONS & ANSWERS



