Galvin Middle School, Canton, MA

School Building Committee

January 24, 2024

ARCHITECTS

AGENDA:

1. Call to Order
2. Project Approvals
3. Budget Overview
4. Schedule Overview
5. Construction delivery method discussion & VOTE
6. Building Options review & VOTE
7. VOTE to submit PSR to the MSBA
8. Next Meeting
9. Adjourn

Project Approvals

MEETING MINUTES

SUGGESTED VOTE:

Vote to approve meeting minutes from the January 3, 2024 SBC Meeting

January 24, 2024

Project Approvals

PROJECT APPROVALS

Project Invoices - TOTAL $110,459.22

INVOICES					
Invoice Date	**Vendor**	**Invoice #**	**Budget Category**	**Description of Services**	**Invoice $**
11/30/23	LeftField, LLC	10	OPM –Feasibility Study/ Schematic Design	OPM Feasibility Study Services for: November 1 – November 30, 2023	**$17,300.00**
12/31/23	Ai3	006B	A/E - Feasibility Study/ Schematic Design	A/E - Feasibility Study Basic Services December 1 – December 31, 2023	$78,570.00
12/31/23	Ai3	005E	A/E – Feasibility Study/ Schematic Design	A/E – Extra Services (within contract) Traffic Study, Environmental Permitting, and Hydrant Flow Test	$14,589.22
	Ai3			**Total Ai3 Invoices**	**$93,159.22**
				TOTAL:	**$110,459.22**

January 24, 2024

Project Approvals

PROJECT APPROVALS

Feasibility Study Total Project Budget

William H. Galvin Middle School - Canton, MA

Total Project Budget Status Report

ProPay Code	Description	Total Project Budget	Authorized Changes	Revised Total Budget	Total Committed	% Cmtd to Date	Actual Spent to Date	% Spent to Date	Balance To Spend
	FEASIBILITY STUDY AGREEMENT								
0001-0000	OPM Feasibility Study/Schematic Design	$ 346,000	$ 9,900	$ 355,900	$ 355,900	100%	$ 173,000	49%	$ 182,900
0002-0000	A&E Feasibility Study/Schematic Design	$ 900,000	$ 187,860	$ 1,087,860	$ 1,087,860	100%	$ 562,622	52%	$ 525,238
0003-0000	Environmental & Site	$ 204,000	$ (187,860)	$ 16,140	$ -	0%	$ -	0%	$ 16,140
0004-0000	Other	$ 50,000	$ (9,900)	$ 40,100	$ -	0%	$ -	0%	$ 40,100
	SUB-TOTAL	$ 1,500,000	$ -	$ 1,500,000	$ 1,443,760	96%	$ 735,622	49%	$ 764,378
	TOTAL PROJECT BUDGET	$ 1,500,000	$ -	$ 1,500,000	$ 1,443,760	96%	$ 735,622	49%	$ 764,378

FUNDING SOURCES	Max w/ Conting.	Max w/o Conting.
Maximum State Share	$ 483,900	$ 483,900
Local Share	$ 1,016,100	$ 1,016,100
SUB-TOTAL	$ 1,500,000	$ 1,500,000

Project Budget	Scope Items Excluded	Contingencies	Basis of Total Facilities Grant	Reimbursement Rate
$ 1,500,000	$ -	$ -	$ 1,500,000	47.21%

- All Contract Amendments have been committed against the original budget to indicate the remaining funds in each Budget Category
- All Invoices have been indicated in the Budget

Committed: 96%

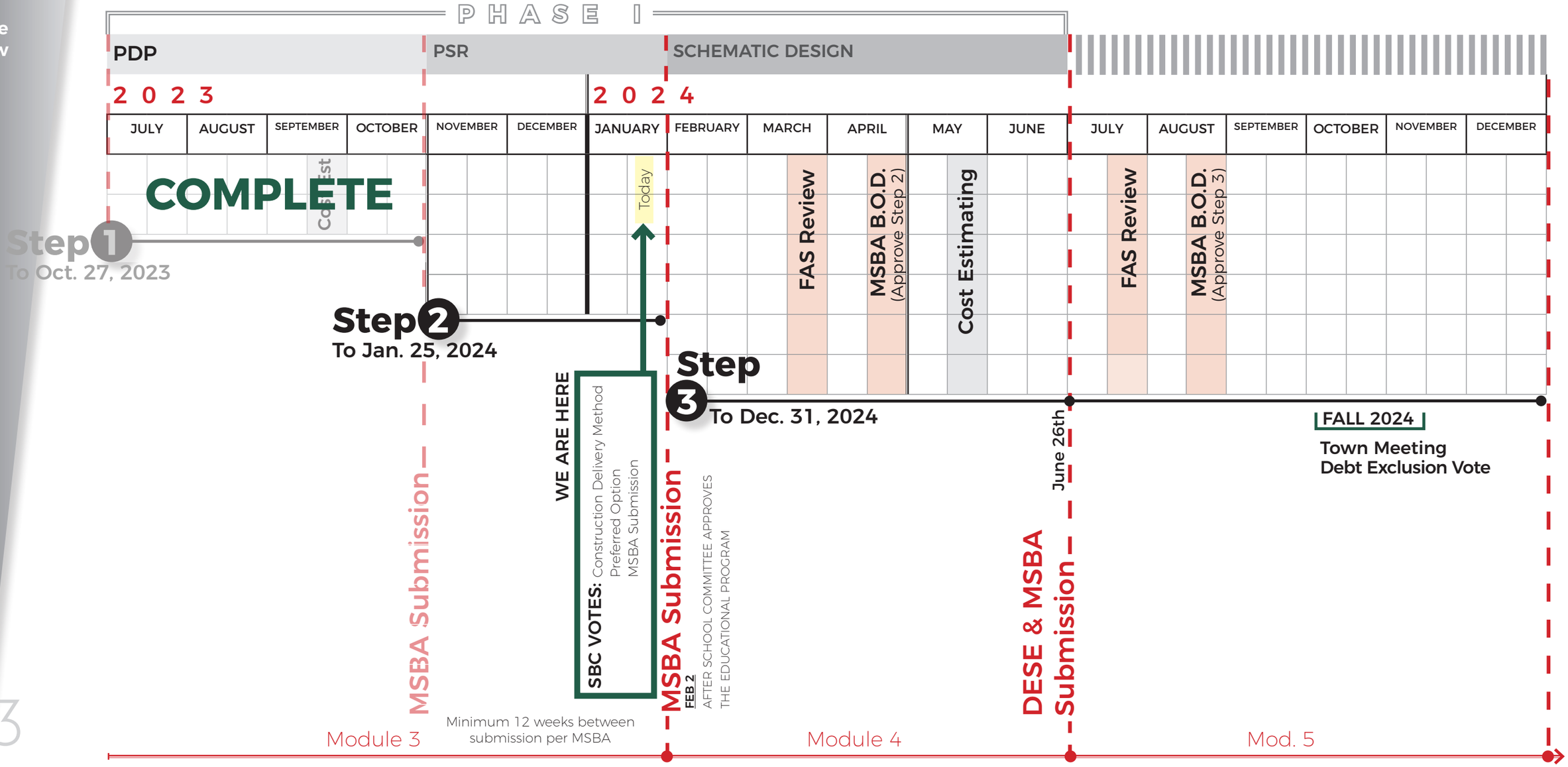
Expended: 49%

Uncommitted Funds: $56,240

January 24, 2024

Project Schedule Overview

Galvin Middle School Project Schedule Overview



Construction Delivery Method

CMR v. DBB PRESENTATION

CONSTRUCTION DELIVERY METHOD

CM at Risk
(M.G.L. Chapter 149A)

|

Design-Bid-Build
(M.G.L. Chapter 149)

January 24, 2024

Construction Delivery Method

CMR v. DBB PRESENTATION

CONSTRUCTION DELIVERY METHOD

CM AT-RISK ADVANTAGES

- Selection based on qualifications, experience & proposed team rather than lowest price/bid
- Design phase assistance with budgeting, site logistics and constructability results in ability to address challenges early
- Early cost estimates & feedback to help in the design process results in a more accurate cost model
- Trade contractors know the CMR prior to submitting bids
- Fast track schedule/early release bids possible
- Team concept with Owner, OPM, Designer

BEST SUITED FOR: Projects that are time sensitive, challenging to define or subject to potential changes; projects requiring high construction oversight due to site logistics and phasing as well as multiple stakeholders.

DESIGN-BID BUILD ADVANTAGES

- Simpler process to manage
- Fully defined project scope for construction
- Perceived as getting “best price” by awarding to lowest responsible bidder
- Owner/Designer can completely control design
- Simple accounting

BEST SUITED FOR: Less complicated projects that are budget-sensitive, but are not schedule sensitive and not subject to change

January 24, 2024

Construction Delivery Method

CMR v. DBB PRESENTATION
CONSTRUCTION DELIVERY METHOD

CM AT-RISK DISADVANTAGES

- Requires an OPM or Owner with an understanding of experience in the CMR process and GMP mechanics
- Perceived higher up-front cost, due to pre-construction services “filling holes” in scope and/or documents (with result of minimizing future change orders and avoiding delays)
- Potential oppositional relationship when design intent is challenged when “design-to-budget” or “price cutting” is pushed

DESIGN-BID-BUILD DISADVANTAGES

- Linear process may equate to a longer schedule duration
- Hard price not known until bids are received; may require re-design and re-bid if bids exceed budget = schedule delays
- Minimal GC project management
- No GC input in design, planning or budgets
- The designer may have limited ability to assess scheduling and cost ramifications as the design is developed which can lead to a more costly final product
- May foster oppositional relationships between all parties and increases probability of disputes
- Prone to changes and claims which may increase final project cost

LeftField

January 24, 2024

Construction Delivery Method

CMR v. DBB PRESENTATION
CONSTRUCTION DELIVERY METHOD

COST AND ACCOUNTING

CM at-Risk

- CM includes contingency within the GMP (Guaranteed Maximum Price) to cover work reasonably inferable from the design documents. The CM contingency is transparent and use of the contingency is owner controlled
- The Owner and project team interact with the CM to establish the GMP. Please note that once the CM is selected at the pre-construction phase, there is a level of confidence between the Owner and CM that a mutually acceptable GMP can be reached
- Profit (or fee) and general conditions are fixed. Open book accounting is performed and any unused funds in project requirements, allowances, scope holds and CM contingency are returned to the owner
- Monthly requisition process has more detailed paperwork

Design-Bid-Build

- The GC cost of the work is highly competitive and will likely yield a lower cost up front than CMR. However, please note that GC's objective is to maximize their profit margin because any savings do NOT go back to the Owner at the end of the project.
- There is no "open book" accounting. The GC's contingency is not transparent
- Monthly requisition process is simplified

January 24, 2024

Construction Delivery Method

CMR v. DBB PRESENTATION

CONSTRUCTION DELIVERY METHOD

Construction Delivery Method	PDP Estimated Total Project Budget	PSR Estimated Total Project Budget
CM at Risk	New – $223M Add/Reno – $245M	New – $223M - $237M Add/Reno – $226M - $248M
Design Bid Build	New – $212M Add/Reno – $233M	New – $213M - $225M Add/Reno – $215M - $235M

January 24, 2024

*PDP Estimate included a 600 seat auditorium
PSR Estimate includes the 800 seat auditorium

Construction Delivery Method

CMR v. DBB PRESENTATION
CONSTRUCTION DELIVERY METHOD

CM at-RISK PROCUREMENT

- 1/24/24 - GMS SBC approves CMR Method
- 1/31/24 - LeftField submits application to OIG
- February – Solicit and Review Qualifications Packages
- March – Invite qualified CMRs to submit Proposals
- April – Host Interviews
  - Select a CMR
- May – CMR on board, working with team on logistics, schedule, and reviewing documents
  - CMR prepares project estimate (along with Ai3's estimator)

AVAILABLE FEASIBILITY FUNDS

- Uncommitted Funds Sufficient
- $56,240 Feasibility Study Contingency
- Expected CMR Feasibility Pre-Con Fee range: $35,000 to $45,000

LeftField

January 24, 2024

Construction Delivery Method

CMR v. DBB PRESENTATION

CONSTRUCTION DELIVERY METHOD

SUGGESTED VOTE:

SBC would like to proceed with a Construction Manager at-Risk procurement method and approve LeftField to proceed with submitting the application to the Inspector General's Office

OR

SBC would like to proceed with Design Bid Build procurement method

January 24, 2024

Building Options

Matrix of possible configurations

PRIOR TO DECEMBER 20TH MEETING

Option 1
Base Repair
$129.2 million*

		With Auditorium		With Auditorium
Grades 6-8	**Option 2** (6-8) Add/Reno NO Auditorium	**Option 3** (6-8) Add/Reno With Auditorium	**Option 4** (6-8) New Construction NO Auditorium	**Option 5** (6-8) New Construction With Auditorium
Grades 5-8	**Option 6** (5-8) Add/Reno NO Auditorium	**Option 7** (5-8) Add/Reno With Auditorium	**Option 8** (5-8) New Construction NO Auditorium	**Option 9** (5-8) New Construction With Auditorium
	Addition / Renovation		New Construction	

Building
Options Matrix

Building Options - Matrix

Building Organization Options

AFTER DECEMBER 20TH MEETING

OPTIONS IN-PLAY

Categories	Option 1 Base Repair	Grades 6-8				Grades 5-8			
		Option 2 (6-8) Add/Reno (NO Auditorium)	Option 3 (6-8) Add/Reno (w/ Auditorium)	Option 4 (6-8) New Con. (NO Auditorium)	Option 5 (6-8) New Con. (w/ Auditorium)	Option 6 (5-8) Add/Reno (NO Auditorium)	Option 7 (5-8) Add/Reno (w/ Auditorium)	Option 8 (5-8) New Con. (NO Auditorium)	Option 9 (5-8) New Con. (w/ Auditorium)
Educational Program									
Community & Access									
Construction Phasing									
Sustainability									
Cost									

Options no longer relevant based upon School Building Committee and School Committee votes held on Dec. 20, 2023

Options still applicable to the project. (Option 7 & Option 9)

Building Options Overview

ALL OPTIONS INCLUDE:

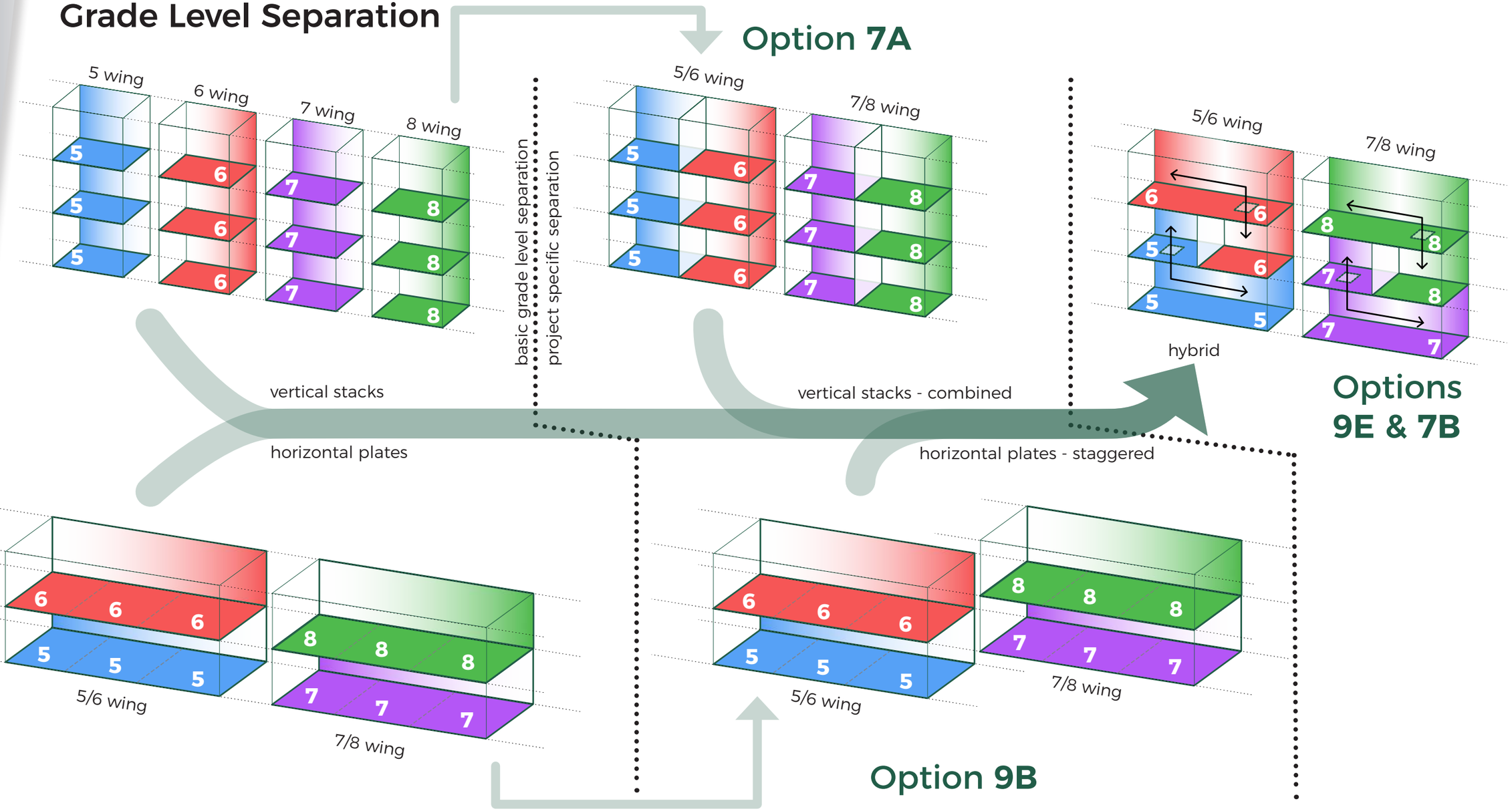
- correct QUANTITY of learning & support spaces
- inclusion of 5th grade spaces
- 800 seat AUDITORIUM
- 1.5 or 2 court GYMNASIUM

OPTIONS EVOLVED BASED UPON:

- weekly working group meetings
- building committee feedback
- school committee feedback
- community forum feedback
- additional stakeholder feedback

Building Options Overview

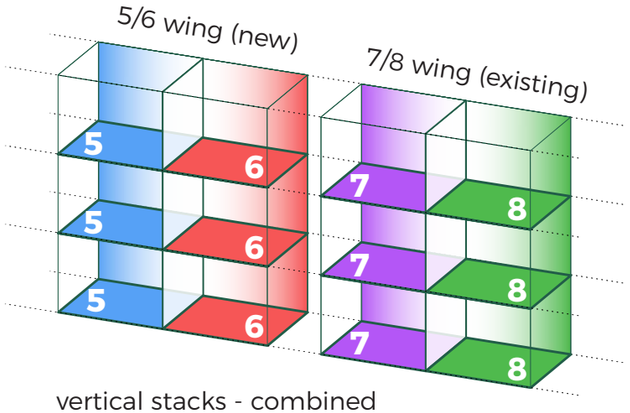
Grade Level Separation



Building
Option 7A

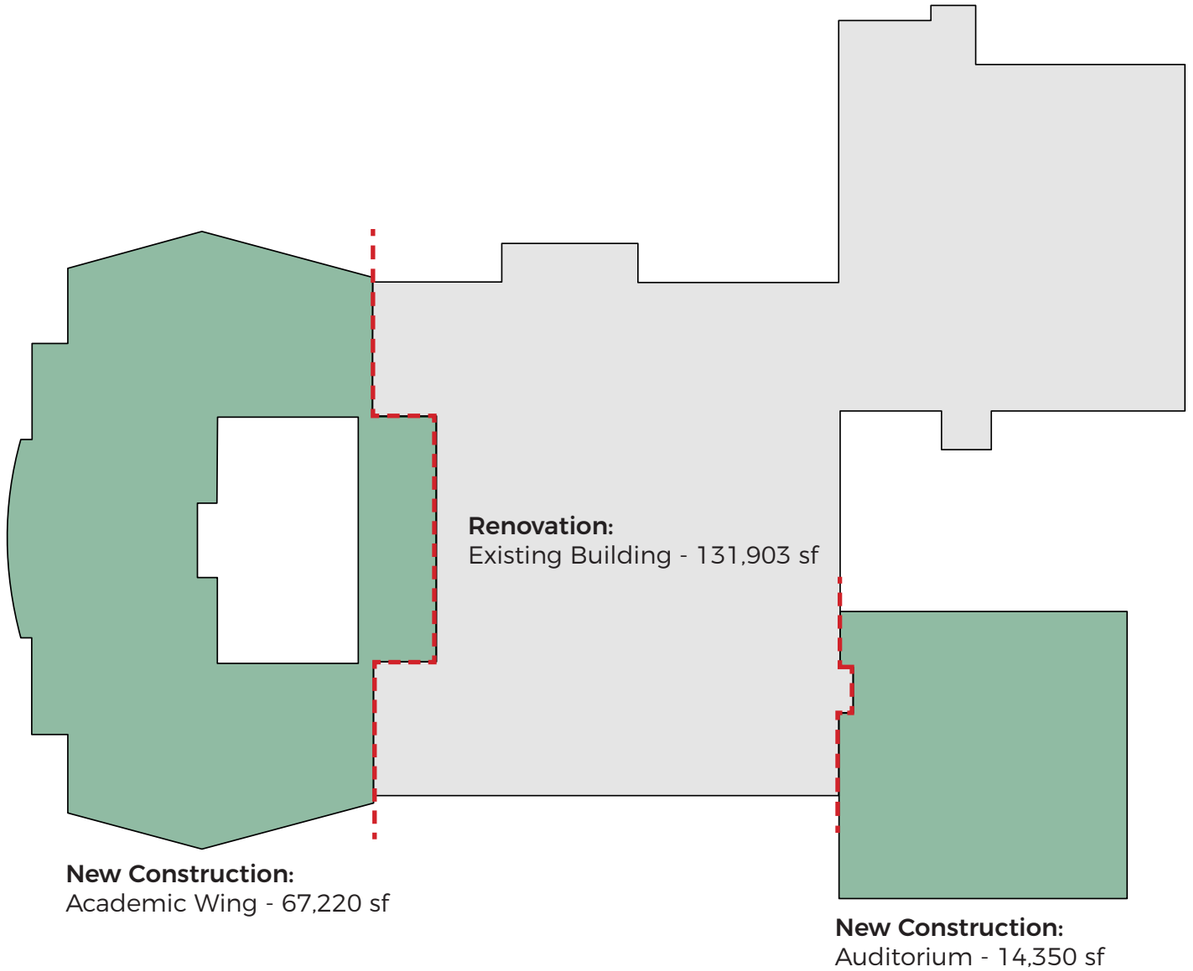
Option 7A

Minor Addition / Major Renovation



vertical stacks - combined

Grade Level Separation



Renovation:
Existing Building - 131,903 sf

New Construction:
Academic Wing - 67,220 sf

New Construction:
Auditorium - 14,350 sf

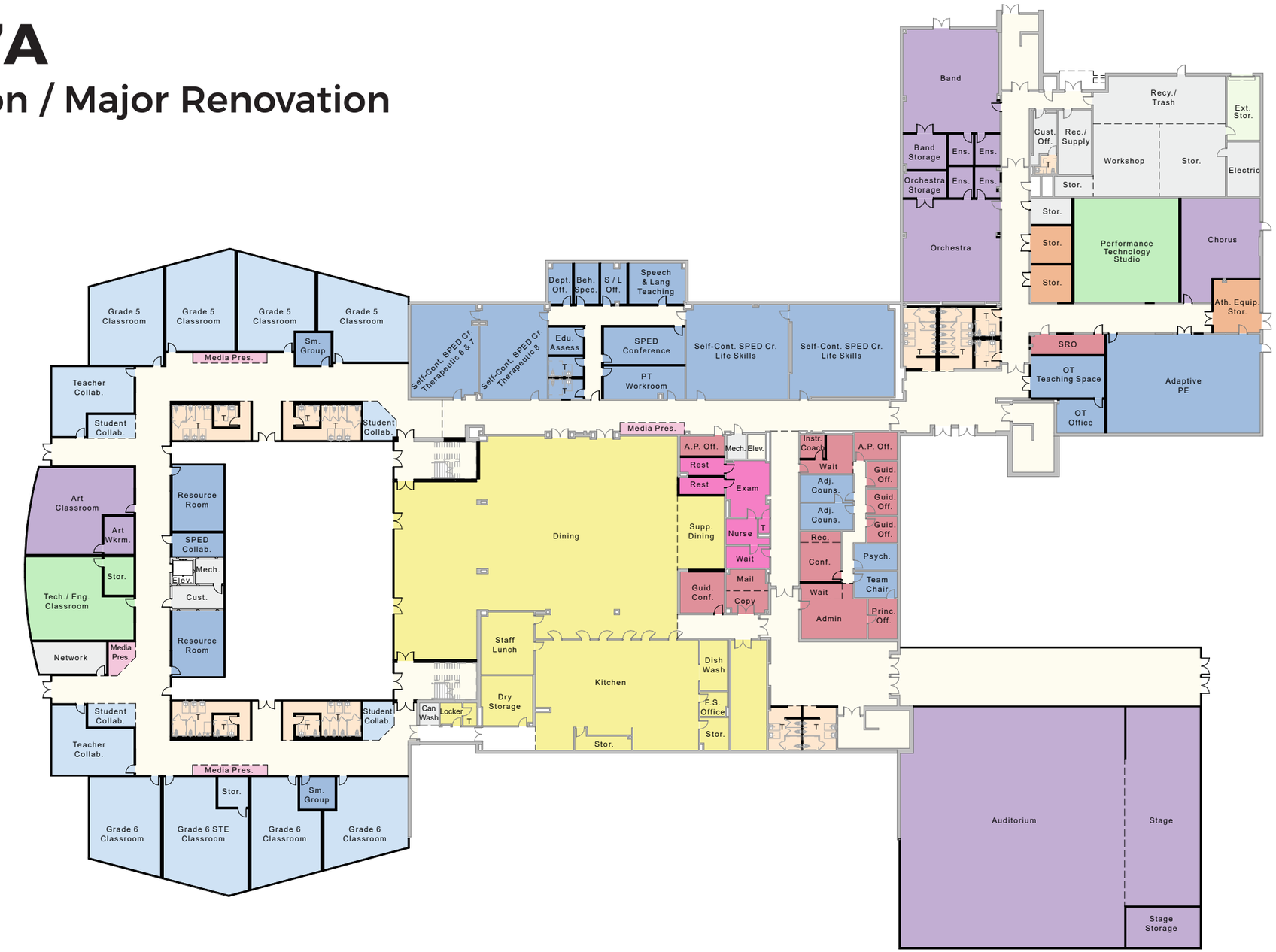
Total Project Size:
213,473 sf

Building Option 7A

Option 7A

Minor Addition / Major Renovation

Floor 1

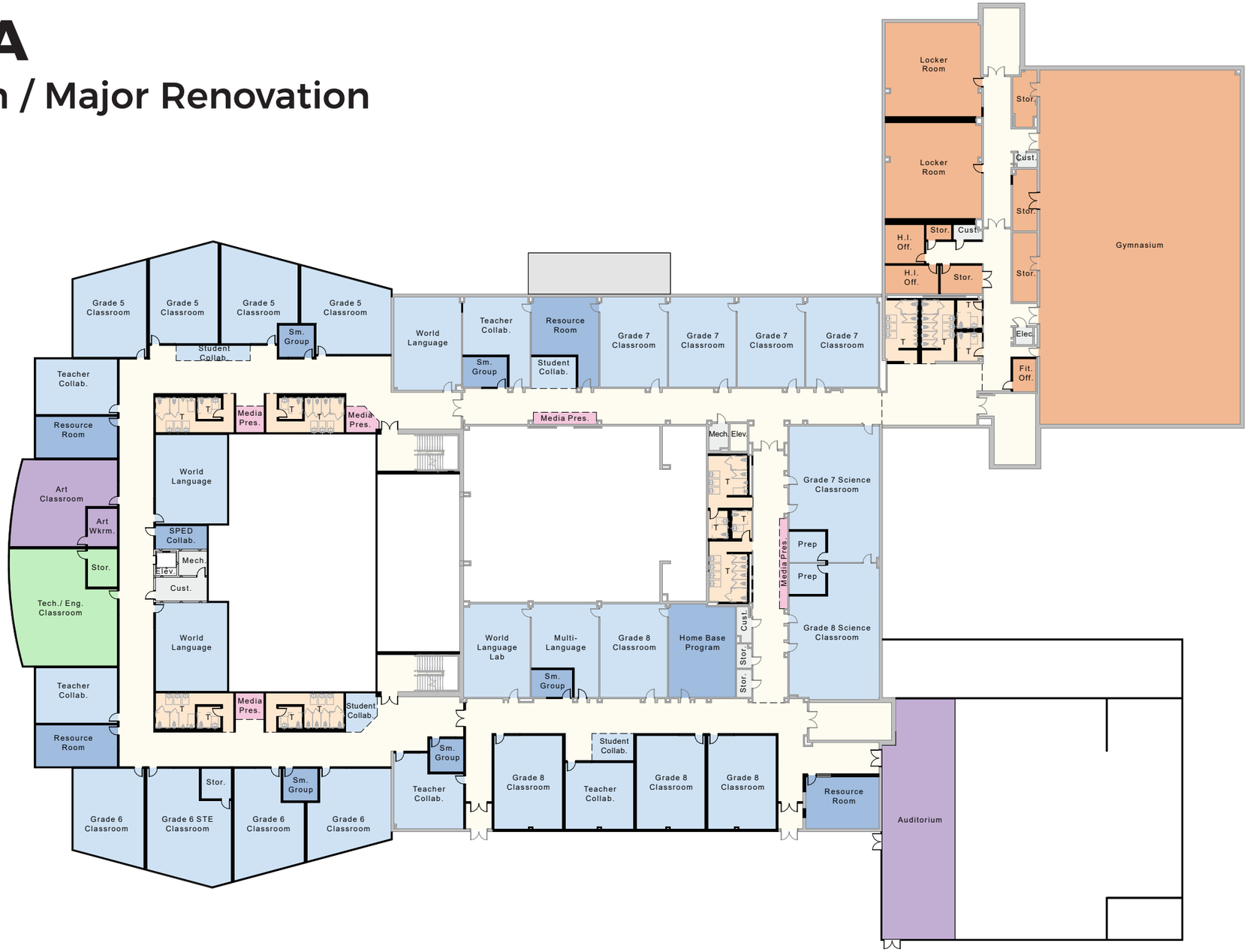


Building
Option 7A

Option 7A

Minor Addition / Major Renovation

Floor 2

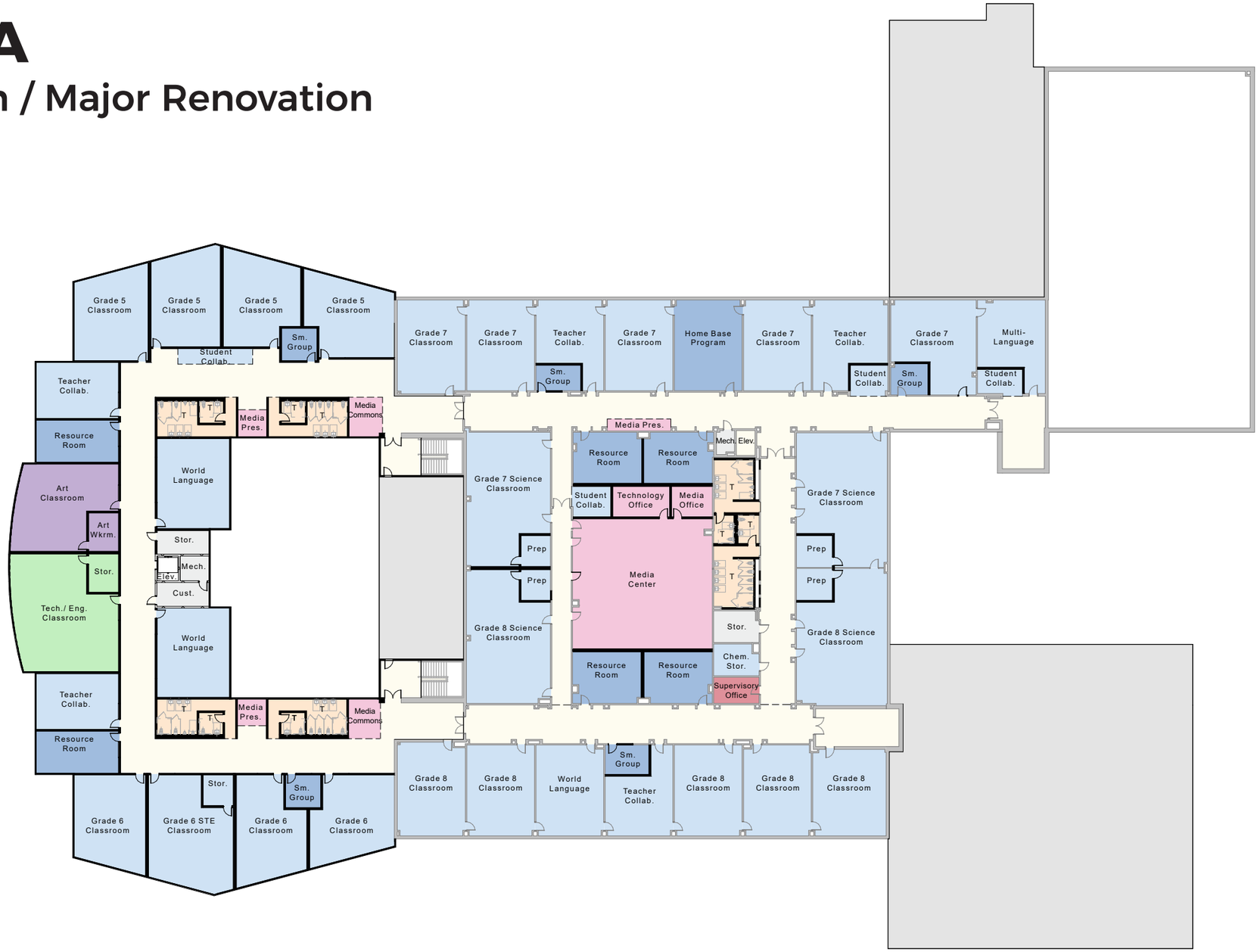


Building
Option 7A

Option 7A

Minor Addition / Major Renovation

Floor 3



Option 7A

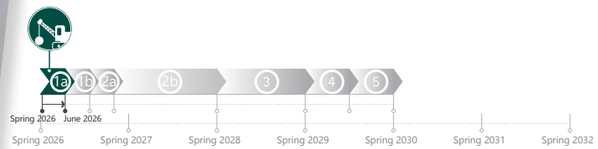
Building
Option 7A

Site Use & Fields

Preliminary Phasing Diagram - Option 7A

KEYNOTE
- Building Under Construction
- Building Construction Completed
- Parking/Circulation Under Construction
- Parking/Circulation Construction Completed
- Outdoor Activity Space Under Construction
- Outdoor Activity Space Construction Completed
- Construction Area
- Demolition Area
- Existing Building
- Athletic Field

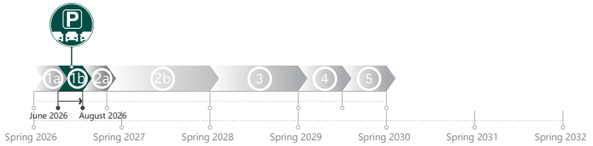
Phase 1a



Phase 1a

Spring 2026: Contractor mobilization; abate and demolish existing parking lots and accompanying circulation.

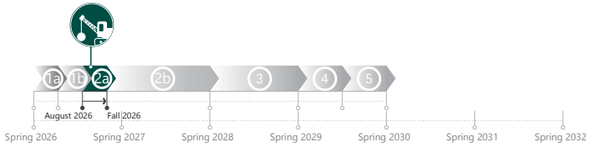
Phase 1b



Phase 1b

June 2026: Creation of new circulation and parking for existing Galvin Middle School.

Phase 2a



Phase 2a

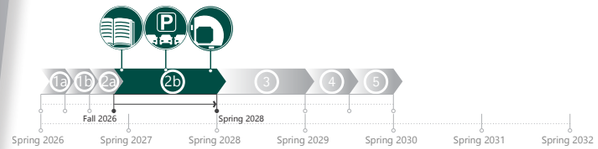
August 2026: Demolish existing preschool, basketball courts, and parking/circulation. Prepare the site for future construction.

Site Use & Fields

Preliminary Phasing Diagram - Option 7A

KEYNOTE
- Building Under Construction
- Building Construction Completed
- Parking/Circulation Under Construction
- Parking/Circulation Construction Completed
- Outdoor Activity Space Under Construction
- Outdoor Activity Space Construction Completed
- Construction Area
- Demolition Area
- Existing Building
- Athletic Field

Phase 2b

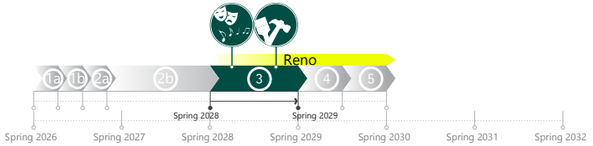


Phase 2b

Fall 2026: Begin construction of new 3 story academic wing addition, adjacent parking/circulation, and athletic field.

Spring 2028: Substantial completion of 3 story academic wing. Occupancy of new building for 2 grade levels.

Phase 3

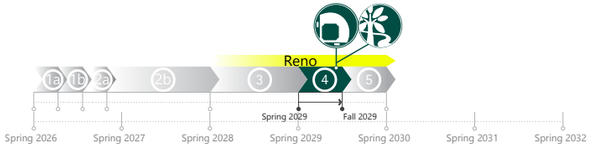


Phase 3

Spring 2028: Begin construction of new auditorium addition and new building facade. Begin renovation of existing Galvin Middle School.

Spring 2029: Substantial completion of auditorium and facade.

Phase 4



Phase 4

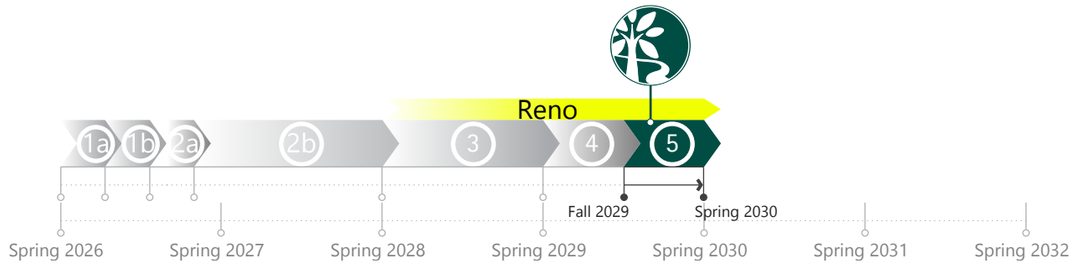
Spring 2029: Begin construction of athletic field, outdoor activity spaces and final site work.

Fall 2029: Complete work on athletic field and outdoor activity space.

Preliminary Phasing Diagram - Option 7A

Phase 5

KEYNOTE
Building Under Construction
Building Construction Completed
Parking/Circulation Under Construction
Parking/Circulation Construction Completed
Outdoor Activity Space Under Construction
Outdoor Activity Space Construction Completed
Construction Area
Demolition Area
Existing Building
Athletic Field



Phase 5

Fall 2029 Continued construction of final site work.

Spring 2030: Complete site work.

Building
Option 7A

Option 7A - SUMMARY

Minor Addition / Major Renovation

Summary:

Total Project Size: 213,473 sf
Minor Addition: 81,570 sf
Major Renovation: 131,903 sf
Construction duration: 60 months
Estimated Project Cost (DBB): $215 mil
Estimated Project Cost (CMr): $225 mil

Advantages:

Provides correct quantity of program spaces
Allows for 5th grade to move to GMS
Clearly defined grade configuration between 5/6 and 7/8
large footprint/roof area for possible photovoltaic arrays (PV Panels)

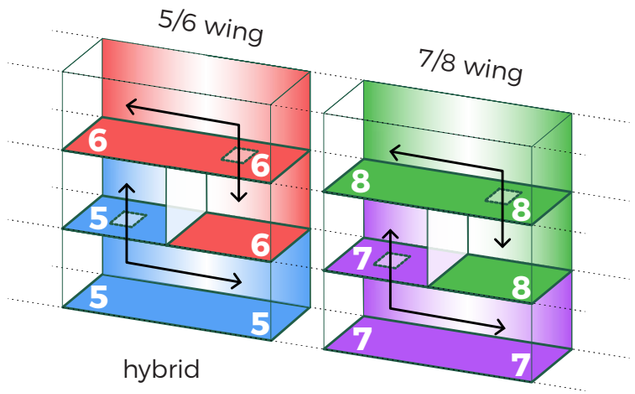
Obstacles:

Large % of program spaces are undersized
Building organization does not support grade level teaming
- primarily at the 7/8 grade level
Long construction duration with phased occupancy required
- temporary partitions required
Large building footprint restricts site usage
Some windowless classrooms remain
1.5 court gymnasium

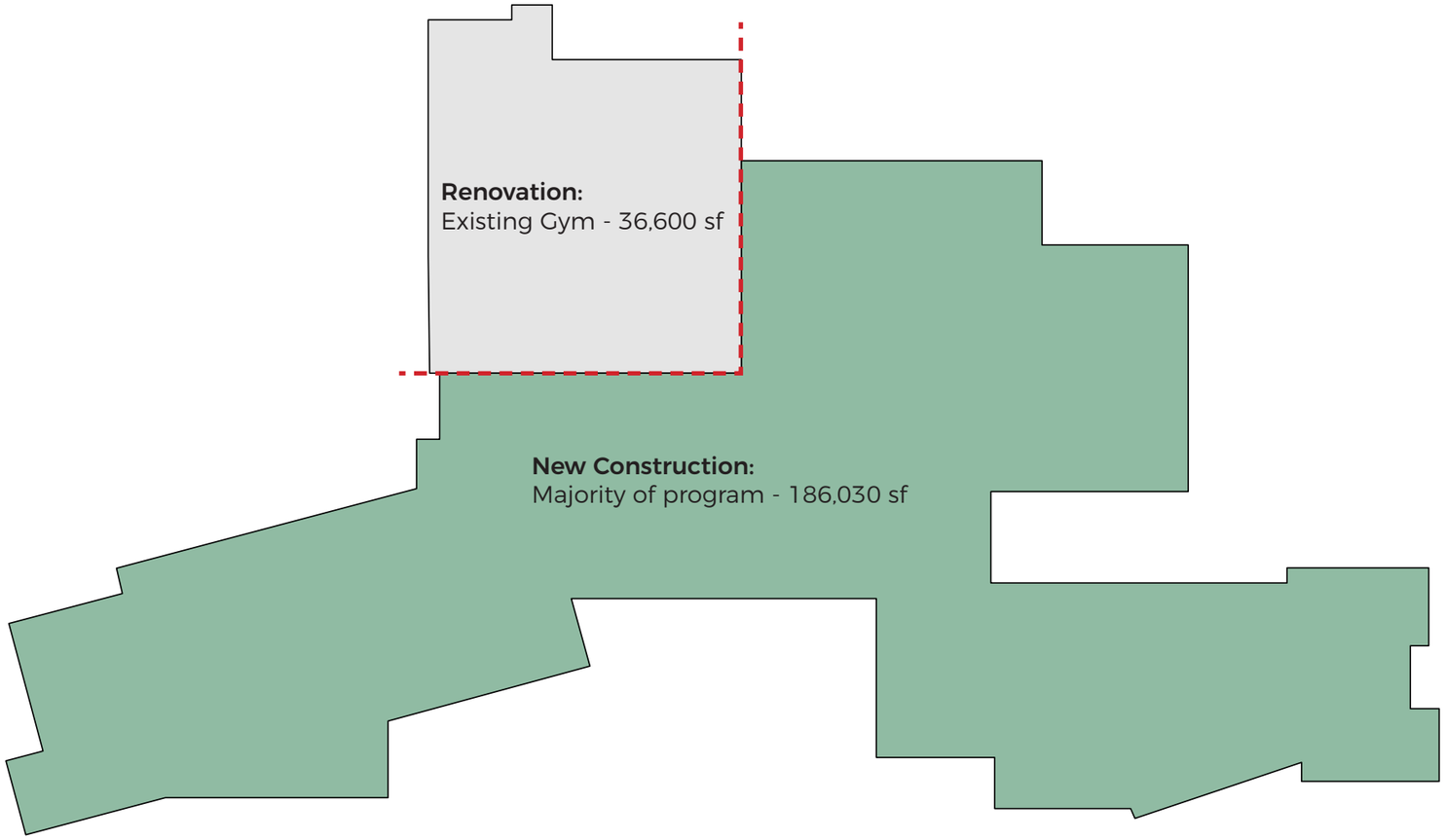
Building
Option 7B

Option 7B

Major Addition / Minor Renovation



Grade Level Separation



Total Project Size:
222,630 sf

Building
Option 7B

Option 7B

Major Addition / Minor Renovation

Floor 1

Building
Option 7B

Option 7B

Major Addition / Minor Renovation

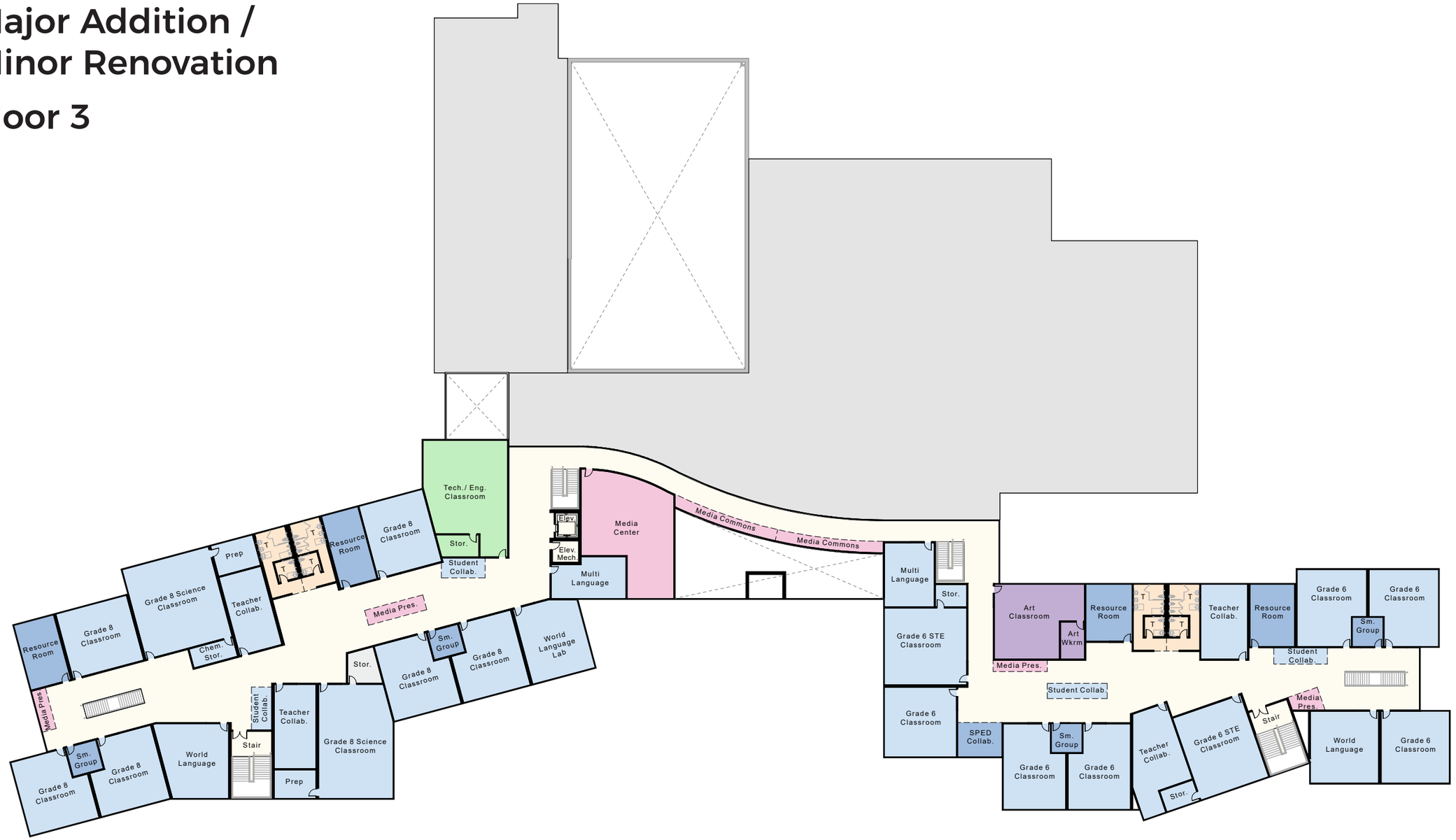
Floor 2

Building
Option 7B

Option 7B

Major Addition / Minor Renovation

Floor 3



Option 7B

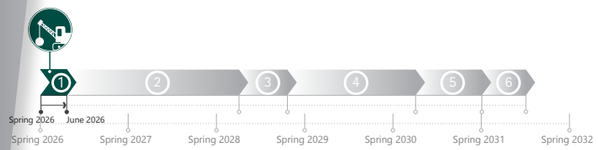
Building
Option 7B

Site Use & Fields

Preliminary Phasing Diagram - Option 7B

KEYNOTE
- Building Under Construction
- Building Construction Completed
- Parking/Circulation Under Construction
- Parking/Circulation Construction Completed
- Outdoor Activity Space Under Construction
- Outdoor Activity Space Construction Completed
- Construction Area
- Demolition Area
- Existing Building
- Athletic Field

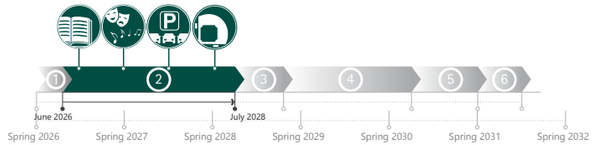
Phase 1



Phase 1

Spring 2026: Contractor mobilization; abate and demolish parking/circulation, small athletic field and associated equipment. Prepare site for new construction.

Phase 2



Phase 2

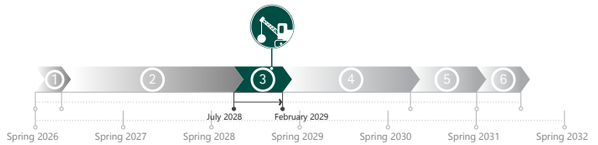
June 2026: Begin construction of new parking/circulation, 3 story academic wing with student commons and auditorium, outdoor activity space, and athletic field.

August 2026: Substantial completion of new parking/circulation, outdoor activity space, and athletic space.

June 2028: Substantial completion of 3 story school.

August 2028: Occupancy of new building for 2 grade levels.

Phase 3



Phase 3

July 2028: Demolition of portion of existing Galvin Middle School academic wing, preschool, outdoor activity space and associated parking & circulation.

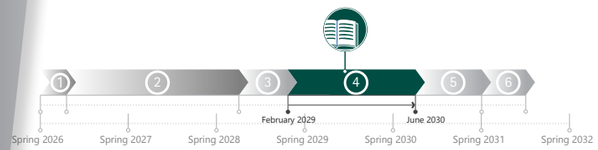
Temporary shore existing building to remain occupied - cut, cap, and make safe all utilities and install temporary exterior cladding.

Site Use & Fields

Preliminary Phasing Diagram - Option 7B

KEYNOTE
- Building Under Construction
- Building Construction Completed
- Parking/Circulation Under Construction
- Parking/Circulation Construction Completed
- Outdoor Activity Space Under Construction
- Outdoor Activity Space Construction Completed
- Construction Area
- Demolition Area
- Existing Building
- Athletic Field

Phase 4



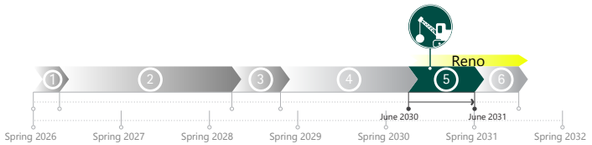
Phase 4

February 2029: Begin construction new 3 story academic wing.

June 2030: Substantial completion new academic wing.

August 2030: Occupancy of new building for 2 grade levels.

Phase 5



Phase 5

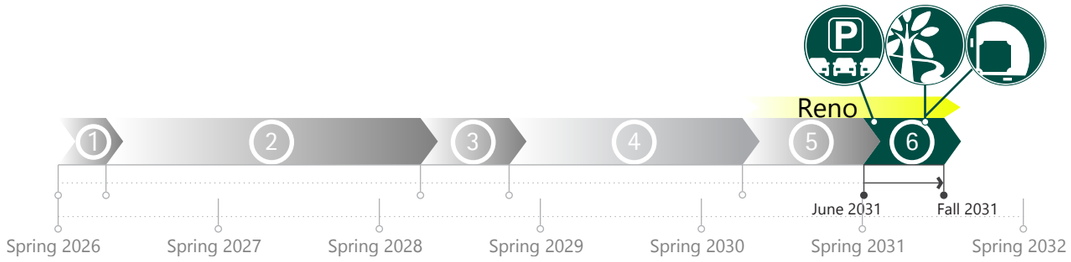
June 2030: Demolish existing academic wing. Demolish existing athletic field and begin construction on new athletic fields. Begin renovation of existing gymnasium.

June 2031: Prepare site for construction. Completion of new athletic field.

Preliminary Phasing Diagram - Option 7B

Phase 6

KEYNOTE
Building Under Construction
Building Construction Completed
Parking/Circulation Under Construction
Parking/Circulation Construction Completed
Outdoor Activity Space Under Construction
Outdoor Activity Space Construction Completed
Construction Area
Demolition Area
Existing Building
Athletic Field



Phase 6

June 2031: Construct new entry vestibule, associated parking/ circulation, and outdoor activity space. Begin work on final site improvements.

Fall 2031: Complete site work and renovation of gymnasium.

Building
Option 7B

Option 7B - SUMMARY

Major Addition / Minor Renovation

Summary:

Total Project Size: 222,630 sf
Minor Addition: 36,600 sf
Major Renovation: 186,030 sf
Construction duration: 64 months
Estimated Project Cost (DBB): $235 mil
Estimated Project Cost (CMr): $248 mil

Advantages:

Provides correct quantity and size of program spaces (minus gym)
Allows for 5th grade to move to GMS
Grade level teaming and collaboration is supported in organization
Clearly defined grade configuration between 5/6 and 7/8
Easily identifiable entry point
Academic core oriented to maximize solar benefits and reduce glare

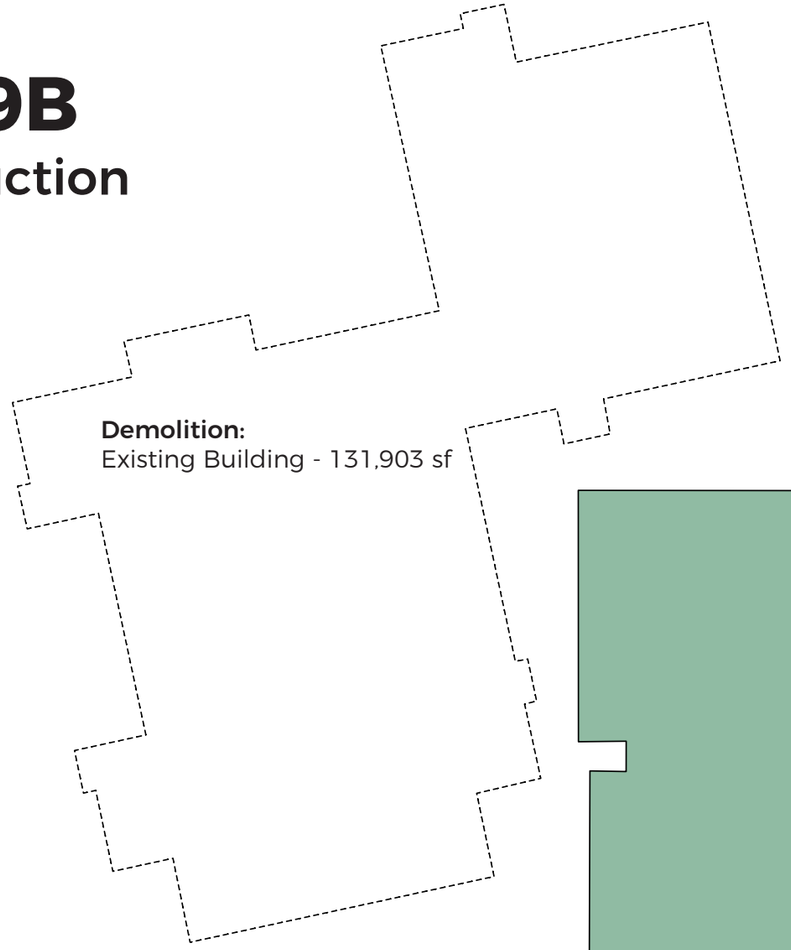
Obstacles:

Long construction duration with phased occupancy required
- temporary partitions required
Footprint location isolates site access to rear field
1.5 court gymnasium
public access to the auditorium is not ideal
small footprint/roof area for possible photovoltaic arrays (PV Panels)

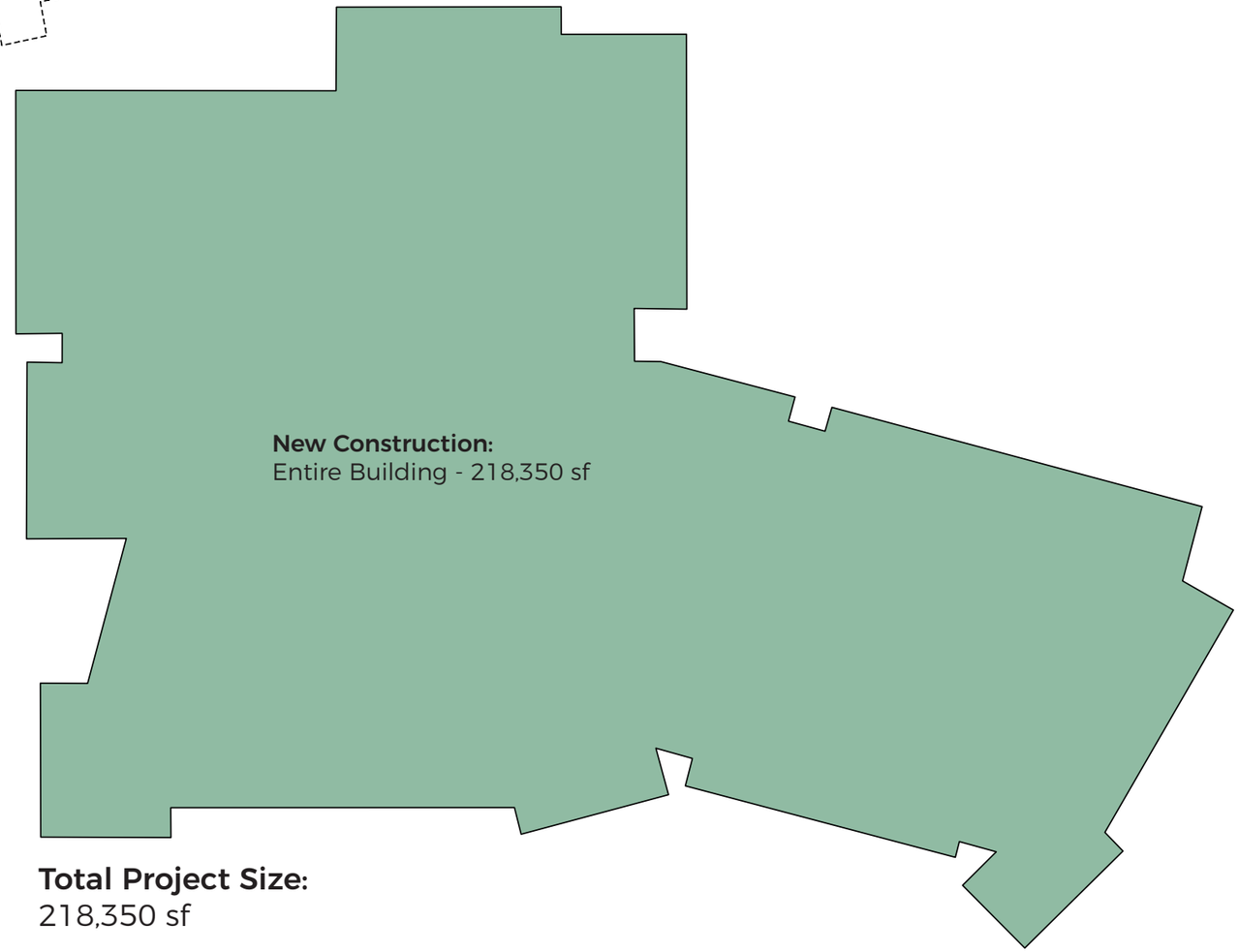
Building
Option 9B

Option 9B

New Construction

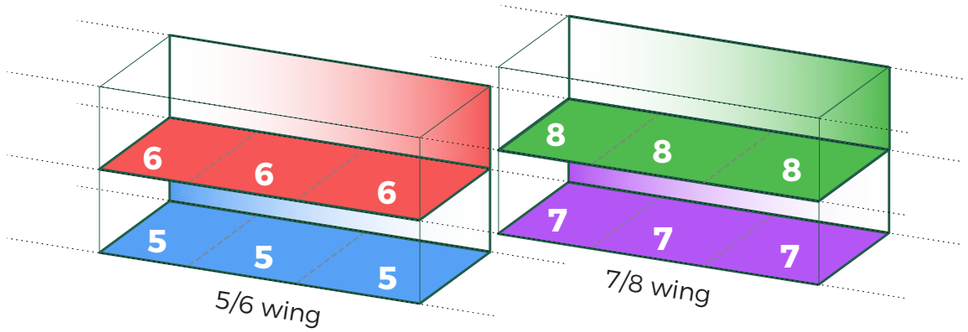


Demolition:
Existing Building - 131,903 sf



New Construction:
Entire Building - 218,350 sf

Grade Level Separation



Total Project Size:
218,350 sf

Building
Option 9B

Option 9B

New Construction
Floor 1

Option 9B

New Construction
Floor 2

Building
Option 9B

Building
Option 9B

Option 9B

New Construction
Floor 3

Option 9B

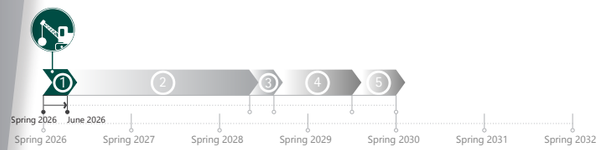
Building
Option 9B

Site Use & Fields

Preliminary Phasing Diagram - Option 9B

KEYNOTE
- Building Under Construction
- Building Construction Completed
- Parking/Circulation Under Construction
- Parking/Circulation Construction Completed
- Outdoor Activity Space Under Construction
- Outdoor Activity Space Construction Completed
- Construction Area
- Demolition Area
- Existing Building
- Athletic Field

Phase 1

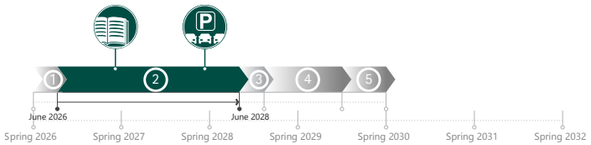


Phase 1

Spring 2026: Contractor mobilization; construct temporary parking areas for existing Galvin Middle School.

June 2026: Demolish existing parking/circulation and existing athletic field with associated equipment. Prepare site for new construction.

Phase 2



Phase 2

June 2026: Begin construction of new 3 story school.

June 2028: Substantial completion of 3 story school.

August 2028: Occupancy of new building.

Site Use & Fields

Preliminary Phasing Diagram - Option 9B

KEYNOTE
- Building Under Construction
- Building Construction Completed
- Parking/Circulation Under Construction
- Parking/Circulation Construction Completed
- Outdoor Activity Space Under Construction
- Outdoor Activity Space Construction Completed
- Construction Area
- Demolition Area
- Existing Building
- Athletic Field

Phase 3

Phase 3

July 2028: Demolition of existing Galvin Middle School, preschool, associated parking/circulation, and athletic field.

Fall 2028: Completion of demolition.

Phase 4

Phase 4

September 2028: Begin construction of new auditorium and gymnasium.

Fall 2028: Begin construction of athletic fields, outdoor activity spaces, and parking/circulation.

June 2029: Substantial completion of auditorium/gymnasium.

Fall 2029: Full occupancy of new building.

Preliminary Phasing Diagram - Option 9B

Phase 5

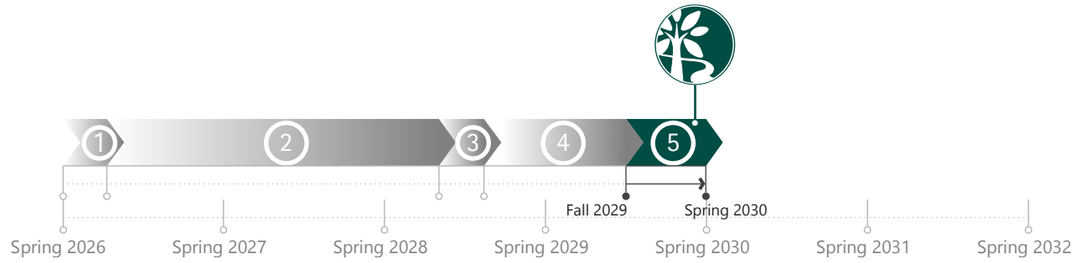
KEYNOTE

- Building Under Construction
- Building Construction Completed
- Parking/Circulation Under Construction
- Parking/Circulation Construction Completed
- Outdoor Activity Space Under Construction
- Outdoor Activity Space Construction Completed
- Construction Area
- Demolition Area
- Existing Building
- Athletic Field

Phase 5

Fall 2029: Begin final site work.

Spring 2030: Complete site work.



Building
Option 9B

Option 9B - SUMMARY

New Construction

Summary:

Total Project Size: 218,350 sf
Construction duration: 48 months
Estimated Project Cost (DBB): $225 mil
Estimated Project Cost (CMr): $237 mil

Advantages:

Provides correct quantity and size of program spaces
Allows for 5th grade to move to GMS
Clearly defined grade configuration between 5/6 and 7/8
Grade level teaming and collaboration is supported in organization
All new construction limiting existing building unknowns
large footprint/roof area for possible photovoltaic arrays (PV Panels)

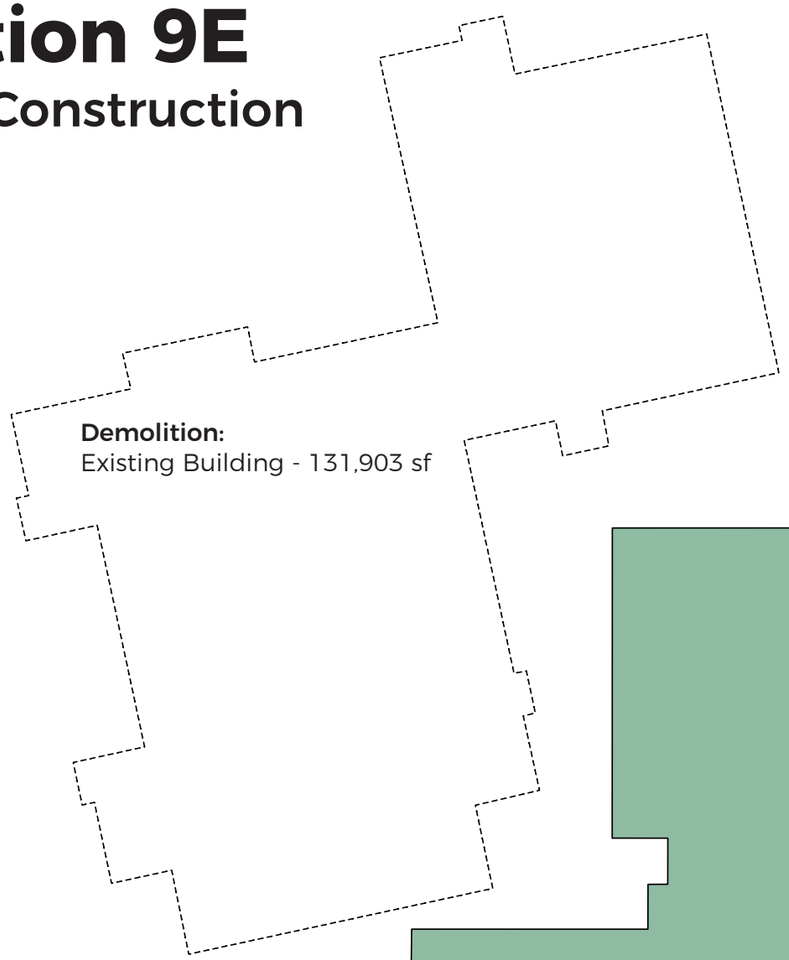
Obstacles:

large footprint limiting open space & site access opportunities
expansive footprint to support single floor grade level configuration
limits daylight opportunities to interior spaces
Phased construction with some temporary partitions
Academic core not conducive to solar orientation benefits

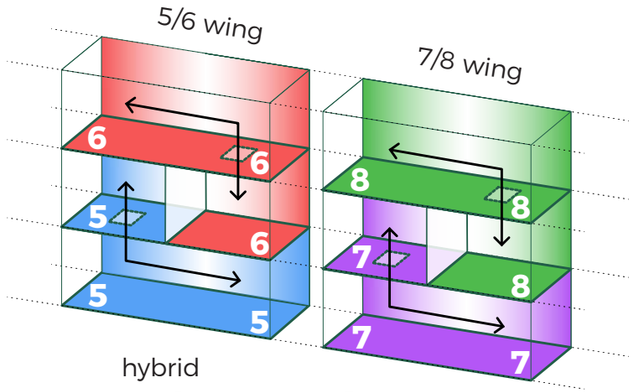
Building
Option 9E

Option 9E

New Construction



Total Project Size:
218,350 sf



Grade Level Separation

Building
Option 9E

Option 9E

New Construction
Floor 1

Building
Option 9E

Option 9E

New Construction
Floor 2

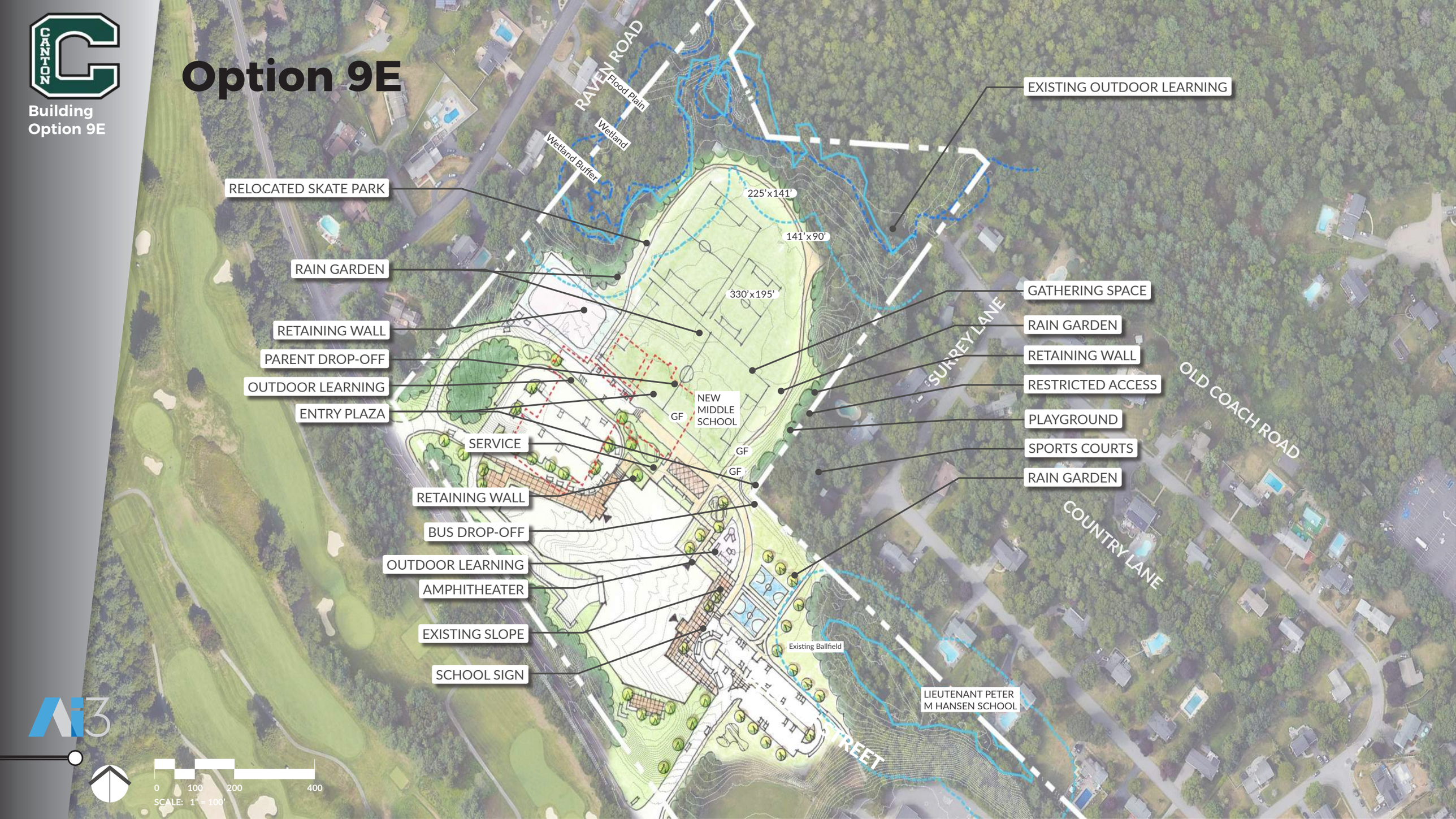
Building
Option 9E

Option 9E

New Construction
Floor 3

Option 9E

Building
Option 9E

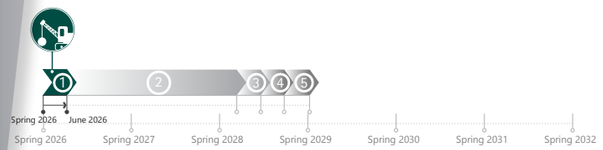


Site Use & Fields

Preliminary Phasing Diagram - Option 9E

KEYNOTE
- Building Under Construction
- Building Construction Completed
- Parking/Circulation Under Construction
- Parking/Circulation Construction Completed
- Outdoor Activity Space Under Construction
- Outdoor Activity Space Construction Completed
- Construction Area
- Demolition Area
- Existing Building
- Athletic Field

Phase 1

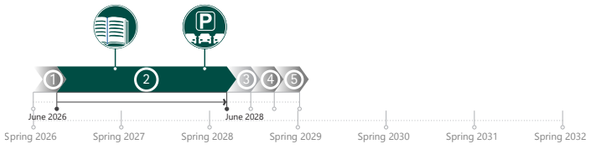


Phase 1

Spring 2026: Contractor mobilization; construct temporary parking areas for existing Galvin Middle School.

June 2026: Demolish existing parking/circulation, existing hockey rink and existing athletic field with associated equipment. Prepare site for new construction.

Phase 2



Phase 2

June 2026: Begin construction of new 3 story school.

June 2028: Substantial completion of 3 story school.

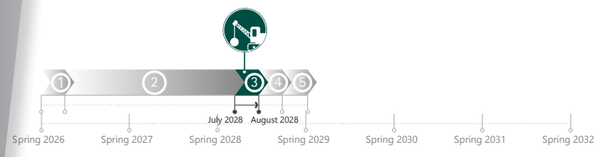
August 2028: Occupancy of new building.

Site Use & Fields

Preliminary Phasing Diagram - Option 9E

KEYNOTE
- Building Under Construction
- Building Construction Completed
- Parking/Circulation Under Construction
- Parking/Circulation Construction Completed
- Outdoor Activity Space Under Construction
- Outdoor Activity Space Construction Completed
- Construction Area
- Demolition Area
- Existing Building
- Athletic Field

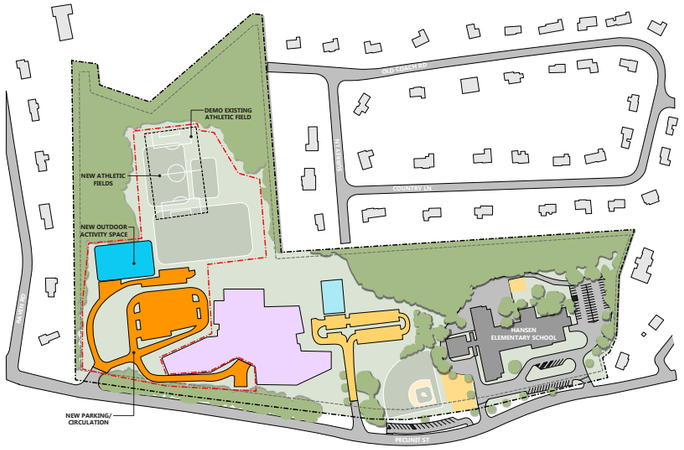
Phase 3

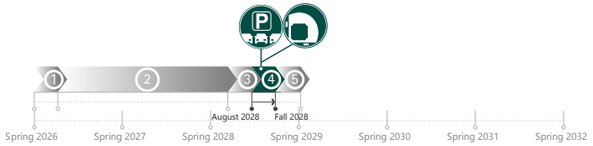


Phase 3

July 2028: Demolition of existing Galvin Middle School, preschool, and associated parking & circulation.

Phase 4





Phase 4

June 2028: Demolish existing athletic field & prepare for new athletic fields. Construct new parking/circulation & outdoor activity space.

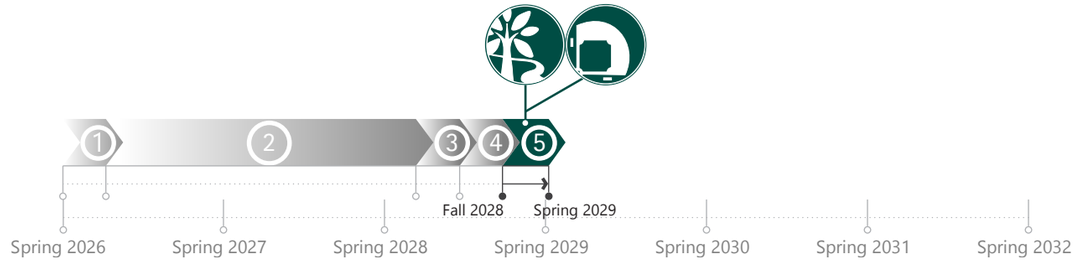
Fall 2028: Completion of new athletic fields, outdoor activity space, and parking/circulation.

Preliminary Phasing Diagram - Option 9E

Phase 5

KEYNOTE

- Building Under Construction
- Building Construction Completed
- Parking/Circulation Under Construction
- Parking/Circulation Construction Completed
- Outdoor Activity Space Under Construction
- Outdoor Activity Space Construction Completed
- Construction Area
- Demolition Area
- Existing Building
- Athletic Field



Phase 5

Fall 2028: Finish construction of new outdoor activity spaces .

Spring 2029: Complete site work.

Building
Option 9E

Option 9E - SUMMARY

New Construction

Summary:

Total Project Size: 218,350 sf
Construction duration: 36 months
Estimated Project Cost (DBB): $220 mil
Estimated Project Cost (CMr): $232 mil

Advantages:

Provides correct quantity and size of program spaces
Allows for 5th grade to move to GMS
smallest footprint maximizing site and open space
Clearly defined grade configuration between 5/6 and 7/8
Grade level teaming and collaboration is supported in organization
All new construction limiting existing building unknowns
Linear footprint to provide daylight opportunities to interior spaces
Academic core oriented to maximize solar benefits and reduce glare

Obstacles:

smallest footprint/roof area for possible roof mounted photovoltaic arrays (PV Panels)

Cost Estimates

PROJECT APPROVALS

Cost Estimate Comparison

William H. Galvin Middle School Project - Canton, MA

Preferred Schematic Report - Comparative Cost Analysis

Student Enrollment : 1,020 Students	Base Repair Option Renovation Only Gross Square Footage: 131,903 PM&C	AM Fogarty	Delta
TOTAL DIRECT COSTS	$ 52,631,749	$ 44,454,326	$ 8,177,423
TOTAL ESTIMATED CONSTRUCTION COSTS	$ 87,408,152	$ 76,700,952	$ 10,707,199
Cost/SF	$ 662.67	$ 581.50	$ 81.17
Soft Costs Calculated at 25%	$ 21,852,038	$ 19,175,238	$ 2,676,800
TOTAL ESTIMATED PROJECT COSTS	$ 109,260,190	$ 95,876,191	$ 13,383,999

ALTERNATES		For All Options		
(incl. markups)	Add for Synthetic Turf Field	$ 1,182,820	$ 1,261,265	$ (78,445)
(incl. markups)	Add for Sports Field Lighting	$ 1,450,000	$ 1,386,000	$ 64,000

*MSBA does not participate in the cost for a Base Repair Option but requires that it be studied to ensure the community understands the current needs (and associated costs) of the existing building.

The estimated construction and total project cost provided are for COMPARISON PURPOSES ONLY. The estimated costs will be updated at the Schematic Design Report (SD) phase to inform the Total Project Budget that will be submitted to the MSBA.

Cost Estimates

PROJECT APPROVALS

Cost Estimate Comparison - CMR

William H. Galvin Middle School Project - Canton, MA — January 24, 2024

Preferred Schematic Report - Comparative Cost Analysis

The estimated construction and total project cost provided are for COMPARISON PURPOSES ONLY. The estimated costs will be updated at the Schematic Design Report (SD) phase to inform the Total Project Budget that will be submitted to the MSBA.

Student Enrollment : 1,020 Students

	Option 7A Addition/Renovation			Option 7B Addition/Renovation		
Gross Square Footage:	213,473			222,630		
	PM&C	AM Fogarty	Delta	PM&C	AM Fogarty	Delta
TOTAL DIRECT COSTS	$ 115,623,895	$ 112,778,172	$ 2,845,723	$ 122,675,246	$ 123,928,591	$ (1,253,345)
TOTAL ESTIMATED CONSTRUCTION COSTS	$ 181,485,282	$ 181,082,475	$ 402,807	$ 192,609,452	$ 198,620,048	$ (6,010,596)
Cost/SF	$ 850.16	$ 848.27	$ 1.89	$ 865.15	$ 892.15	$ (27.00)
Soft Costs Calculated at 25%	$ 45,371,320	$ 45,270,619	$ 100,702	$ 48,152,363	$ 49,655,012	$ (1,502,649)
TOTAL ESTIMATED PROJECT COSTS	$ 226,856,602	$ 226,353,093	$ 503,509	$ 240,761,815	$ 248,275,061	$ (7,513,245)

Estimated MSBA Reimbursement Rates are for COMPARISON PURPOSED ONLY and are subject to change throughout the course of the Feasibility Study. The MSBA agrees to a reimbursement rate (which may be higher or lower than shown here) when they approve the Schematic Design Submission.

	Est. Rate	Est. Share
MSBA Estimated Reimbursement	33%	$74 M
Estimated Town Share	67%	$151 M

	Est. Rate	Est. Share
MSBA Estimated Reimbursement	31%	$76 M
Estimated Town Share	69%	$172 M

Cost Estimates

PROJECT APPROVALS

Cost Estimate Comparison - CMR

William H. Galvin Middle School Project - Canton, MA — January 24, 2024

Preferred Schematic Report - Comparative Cost Analysis

The estimated construction and total project cost provided are for COMPARISON PURPOSES ONLY. The estimated costs will be updated at the Schematic Design Report (SD) phase to inform the Total Project Budget that will be submitted to the MSBA.

Student Enrollment : 1,020 Students

	Option 9B New Construction			Option 9E New Construction		
Gross Square Footage:	218,350			218,350		
	PM&C	AM Fogarty	Delta	PM&C	AM Fogarty	Delta
TOTAL DIRECT COSTS	$ 117,179,605	$ 122,329,831	$ (5,150,226)	$ 121,948,379	$ 124,631,992	$ (2,683,613)
TOTAL ESTIMATED CONSTRUCTION COSTS	$ 179,075,461	$ 189,895,221	$ (10,819,759)	$ 179,611,565	$ 186,224,907	$ (6,613,342)
Cost/SF	$ 820.13	$ 869.68	$ (49.55)	$ 822.59	$ 852.87	$ (30.29)
Soft Costs Calculated at 25%	$ 44,768,865	$ 47,473,805	$ (2,704,940)	$ 44,902,891	$ 46,556,227	$ (1,653,336)
TOTAL ESTIMATED PROJECT COSTS	$ 223,844,327	$ 237,369,026	$ (13,524,699)	$ 224,514,456	$ 232,781,134	$ (8,266,678)

Estimated MSBA Reimbursement Rates are for COMPARISON PURPOSED ONLY and are subject to change throughout the course of the Feasibility Study. The MSBA agrees to a reimbursement rate (which may be higher or lower than shown here) when they approve the Schematic Design Submission.

	Est. Rate	Est. Share
MSBA Estimated Reimbursement	31%	$72 M
Estimated Town Share	69%	$165 M

	Est. Rate	Est. Share
MSBA Estimated Reimbursement	31%	$71 M
Estimated Town Share	69%	$161 M

Cost Estimates

PROJECT APPROVALS

Cost Estimate Comparison - CMR

	Option 7A Add/Reno	Option 7B Add/Reno	Option 9B New Construction	Option 9E New Construction
Estimated Construction Costs	$181 M ($848 / sf)	$198 M ($892 / sf)	$190 M ($869 / sf)	$186 M ($852 / sf)
Estimated Total Project Costs	$225 M	$248 M	$237 M	$232 M
Estimated MSBA Share	33% $74 M	31% $76 M	31% $72 M	31% $71 M
Estimated Town Share	67% $151 M	69% $172 M	69% $165 M	69% $161 M

Estimated MSBA Reimbursement Rates are **for COMPARISON PURPOSED ONLY** and are subject to change throughout the course of the Feasibility Study. The MSBA agrees to a reimbursement rate (which may be higher or lower than shown here) when they approve the Schematic Design Submission.

The estimated construction and total project cost provided are **for COMPARISON PURPOSES ONLY**. The estimated costs will be updated at the Schematic Design Report (SD) phase to inform the Total Project Budget that will be submitted to the MSBA.

Cost Estimates

PROJECT APPROVALS

Cost Estimate Comparison - DBB

January 24, 2024

The estimated construction and total project cost provided are for COMPARISON PURPOSES ONLY. The estimated costs will be updated at the Schematic Design Report (SD) phase to inform the Total Project Budget that will be submitted to the MSBA.

Student Enrollment : 1,020 Students

	Option 7A Addition/Renovation			Option 7B Addition/Renovation		
	Gross Square Footage: 213,473			Gross Square Footage: 222,630		
	PM&C	AM Fogarty	Delta	PM&C	AM Fogarty	Delta
TOTAL DIRECT COSTS	$ 115,623,895	$ 112,778,172	$ 2,845,723	$ 122,675,246	$ 123,928,591	$ (1,253,345)
TOTAL ESTIMATED CONSTRUCTION COSTS	$ 181,485,282	$ 181,082,475	$ 402,807	$ 192,609,452	$ 198,620,048	$ (6,010,596)
Cost/SF	$ 850.16	$ 848.27	$ 1.89	$ 865.15	$ 892.15	$ (27.00)
Soft Costs Calculated at 25%	$ 45,371,320	$ 45,270,619	$ 100,702	$ 48,152,363	$ 49,655,012	$ (1,502,649)
TOTAL ESTIMATED PROJECT COSTS	$ 226,856,602	$ 226,353,093	$ 503,509	$ 240,761,815	$ 248,275,061	$ (7,513,245)
(incl. markups) Deduct for DBB	$ 10,875,433	$ 11,317,655	$ (442,222)	$ 11,542,313	$ 12,413,753	$ (871,441)
TOTAL ESTIMATED PROJECT COSTS w/ DBB Delivery Method	$ 215,981,170	$ 215,035,439	$ 945,731	$ 229,219,503	$ 235,861,308	$ (6,641,805)

Estimated MSBA Reimbursement Rates are for COMPARISON PURPOSED ONLY and are subject to change throughout the course of the Feasibility Study. The MSBA agrees to a reimbursement rate (which may be higher or lower than shown here) when they approve the Schematic Design Submission.

	Est. Rate	Est. Share
MSBA Estimated Reimbursement	33%	$71 M
Estimated Town Share	67%	$144 M

	Est. Rate	Est. Share
MSBA Estimated Reimbursement	31%	$72 M
Estimated Town Share	69%	$163 M

Cost Estimates

PROJECT APPROVALS

Cost Estimate Comparison - DBB

January 24, 2024

The estimated construction and total project cost provided are for COMPARISON PURPOSES ONLY. The estimated costs will be updated at the Schematic Design Report (SD) phase to inform the Total Project Budget that will be submitted to the MSBA.

Student Enrollment : 1,020 Students	Option 9B New Construction			Option 9E New Construction		
	Gross Square Footage: 218,350			Gross Square Footage: 218,350		
	PM&C	AM Fogarty	Delta	PM&C	AM Fogarty	Delta
TOTAL DIRECT COSTS	$ 117,179,605	$ 122,329,831	$ (5,150,226)	$ 121,948,379	$ 124,631,992	$ (2,683,613)
TOTAL ESTIMATED CONSTRUCTION COSTS	$ 179,075,461	$ 189,895,221	$ (10,819,759)	$ 179,611,565	$ 186,224,907	$ (6,613,342)
Cost/SF	$ 820.13	$ 869.68	$ (49.55)	$ 822.59	$ 852.87	$ (30.29)
Soft Costs Calculated at 25%	$ 44,768,865	$ 47,473,805	$ (2,704,940)	$ 44,902,891	$ 46,556,227	$ (1,653,336)
TOTAL ESTIMATED PROJECT COSTS	$ 223,844,327	$ 237,369,026	$ (13,524,699)	$ 224,514,456	$ 232,781,134	$ (8,266,678)
(incl. markups) Deduct for DBB	$ 10,721,713	$ 11,868,451	$ (1,146,739)	$ 10,728,481	$ 11,639,057	$ (910,575)
TOTAL ESTIMATED PROJECT COSTS w/ DBB Delivery Method	$ 213,122,614	$ 225,500,575	$ (12,377,960)	$ 213,785,975	$ 221,142,077	$ (7,356,102)

Estimated MSBA Reimbursement Rates are for COMPARISON PURPOSED ONLY and are subject to change throughout the course of the Feasibility Study. The MSBA agrees to a reimbursement rate (which may be higher or lower than shown here) when they approve the Schematic Design Submission.

	Est. Rate	Est. Share
MSBA Estimated Reimbursement	31%	$69 M
Estimated Town Share	69%	$156 M

	Est. Rate	Est. Share
MSBA Estimated Reimbursement	31%	$67 M
Estimated Town Share	69%	$153 M

Cost Estimates

PROJECT APPROVALS

Cost Estimate Comparison - DBB

	Option 7A Add/Reno	Option 7B Add/Reno	Option 9B New Construction	Option 9E New Construction
Estimated Construction Costs	$181 M ($848 / sf)	$198 M ($892 / sf)	$190 M ($869 / sf)	$186 M ($852 / sf)
Estimated Total Project Costs	$215 M	$235 M	$225 M	$220 M
Estimated MSBA Share	33% $71 M	31% $72 M	31% $69 M	31% $67 M
Estimated Town Share	67% $144 M	69% $163 M	69% $156 M	69% $153 M

Estimated MSBA Reimbursement Rates are **for COMPARISON PURPOSED ONLY** and are subject to change throughout the course of the Feasibility Study. The MSBA agrees to a reimbursement rate (which may be higher or lower than shown here) when they approve the Schematic Design Submission.

The estimated construction and total project cost provided are **for COMPARISON PURPOSES ONLY**. The estimated costs will be updated at the Schematic Design Report (SD) phase to inform the Total Project Budget that will be submitted to the MSBA.

Building
Options Matrix

Building Options - Matrix

Building Organization Options

OPTIONS IN-PLAY

Categories	Option 1 Base Repair	Grades 6-8				Grades 5-8			
		Option 2 (6-8) Add/Reno (NO Auditorium)	Option 3 (6-8) Add/Reno (w/ Auditorium)	Option 4 (6-8) New Con. (NO Auditorium)	Option 5 (6-8) New Con. (w/ Auditorium)	Option 6 (5-8) Add/Reno (NO Auditorium)	Option 7 (5-8) Add/Reno (w/ Auditorium)	Option 8 (5-8) New Con. (NO Auditorium)	Option 9 (5-8) New Con. (w/ Auditorium)
Educational Program									
Community & Access									
Construction Phasing									
Sustainability									
Cost									

Options no longer relevant based upon School Building Committee and School Committee votes held on Dec. 20, 2023

Options still applicable to the project. (Option 7 & Option 9)

Building
Options Matrix

Building Options - Matrix

Ranking Criteria

Categories		*Statement -* **DOES THE OPTION...**
Educational Program	01	...provide a sufficient 21st century educational environment for middle school students?
	02	...create the necessary adjacencies, program areas, transparency, exhibit space, and other key aspects identified during visioning?
	03	...allow for grade level team teaching and collaboration?
	04	...include the necessary resources for special education and student support?
	05	...provide expanded access to school-based athletic education space and increased formal after-school use?
	06	...have connections to the outdoors and opportunities for outdoor learning?
Community & Access	07	...optimize community use around the site and improve access to the site?
	08	...optimize resources for community use within the building?
	09	...enhance safety and security on site?
	10	...improve service/delivery/custodial access & operations?
Construction Phasing	11	...require phased-occupied construction?
	12	...minimize impact to athletic fields during construction?
	13	...allow for on site parking during construction?
	14	...include adequate space for construction staging?
	15	...minimize construction duration?
Sustainability	16	...provide the most energy efficient solution, thus minimizing long-term operating costs?
	17	...provide the best opportunity for a net-zero energy building design?
	18	...orient academic wings in the most ideal orientation to capitalize on natural daylight?
Cost	19	...maximize the available MSBA grant reimbursement funding?
	20	...maximize utility rebates & incentives?
	21	...satisfy the educational program and spatial requirements cost effectively (no excess)?
	22	...avoid the need to immediately fund a future elementary school building project
	23	...provide the highest potential success at both the Town Meeting vote & ballot vote?

Building
Options Matrix

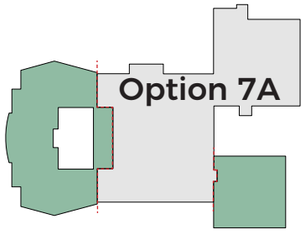
Building Options - Matrix

Building Organization Options

Grades 5-8

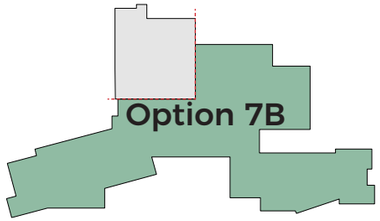
Categories	Option 1 Base Repair	Option 7A Minor Add / Major Reno	Option 7B Major Add / Minor Reno	Option 9B New Construction Horizontal	Option 9E New Construction Vertical
Educational Program					
Community & Access					
Construction Phasing		**60 months**	**64 months**	**48 months**	**36 months**
Sustainability					
Cost		**$215-225 mil**	**$235-248 mil**	**$225-237 mil**	**$220-232 mil**

BEST | GOOD | FAIR | POOR | WORST



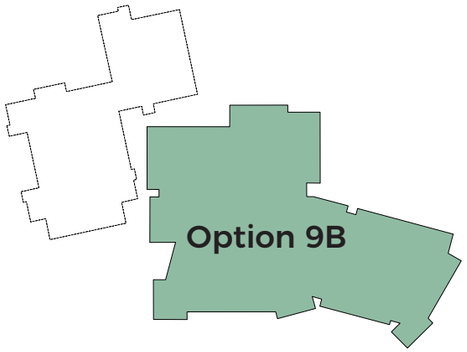
Renovation: 131,903 sf
New Construction: 81,570 sf

Total Project Size:
213,473 sf



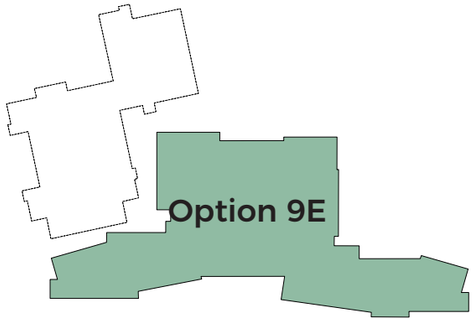
Renovation: 36,600 sf
New Construction: 186,030 sf

Total Project Size:
222,630 sf



Demolition: 131,903 sf
New Construction: 218,350 sf

Total Project Size:
218,350 sf



Demolition: 131,903 sf
New Construction: 218,350 sf

Total Project Size:
218,350 sf

Building
Options Matrix

Building Options - Matrix

Building Organization Options

Grades 5-8

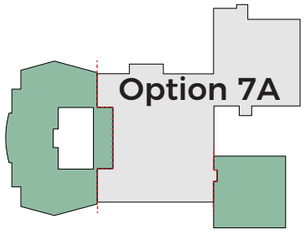
Categories	Option 1 Base Repair	Option 7A Minor Add / Major Reno	Option 7B Major Add / Minor Reno	Option 9B New Construction Horizontal	Option 9E New Construction Vertical
Educational Program					
Community & Access					
Construction Phasing		60 months	64 months	48 months	36 months
Sustainability					
Cost		$215-225 mil	$235-248 mil	$225-237 mil	$220-232 mil

BEST	GOOD	FAIR	POOR	WORST

Public Comment

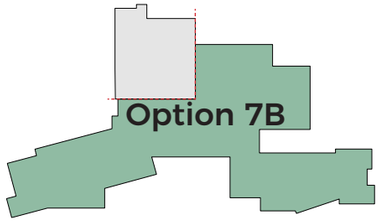
Suggested Vote:

The School Building Committee would like to proceed with Option _____ as the preferred option to be further developed during the schematic design phase.



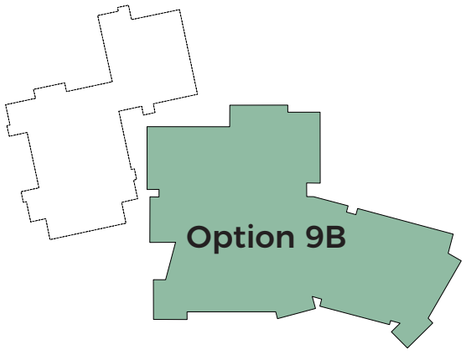
Renovation: 131,903 sf
New Construction: 81,570 sf

Total Project Size:
213,473 sf



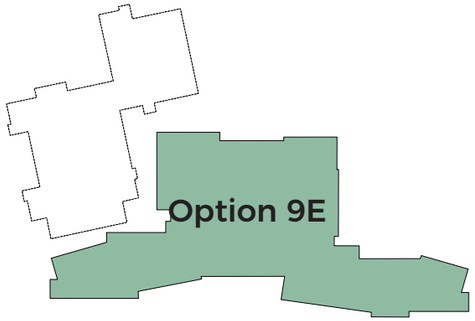
Renovation: 36,600 sf
New Construction: 186,030 sf

Total Project Size:
222,630 sf



Demolition: 131,903 sf
New Construction: 218,350 sf

Total Project Size:
218,350 sf



Demolition: 131,903 sf
New Construction: 218,350 sf

Total Project Size:
218,350 sf

PSR Overview

Preferred Schematic Report (PSR)

Table of Contents

VOTE to submit the Preferred Schematic Report (PSR) to the MSBA

Next Steps

Next SBC Meetings:

February ?

Virtual

Next SC Meeting:

February 1

Upcoming Agenda items

Through June 2024

- ☐ Project Team will further develop preferred option and convey progress to the SBC
- ☐ Project Team will gather additional feedback from all stakeholders and incorporate comments into the design process