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Project Minutes

Project:	Stoneham High School Feasibility Study	Project No.:	20033
Prepared by:	Joel Seeley	Meeting Date:	9/14/2020
Re:	School Building Committee Meeting	Time:	7:00pm
Location:	Remote Locations	Meeting No:	9
Distribution:	Attendees (MF)		

Attendees:

PRESENT	NAME	AFFILIATION	VOTING MEMBER
✓	Marie Christie	Co-Chair, School Building Committee	**Voting Member**
✓	David Bois	Co-Chair, School Building Committee; Community Member with Architecture Experience	**Voting Member**
✓	Nicole Nial	School Committee Member	**Voting Member**
✓	Raymie Parker	Chair Select Board	**Voting Member**
	Albert Talarico	Community Member with Building Commissioner Experience	**Voting Member**
✓	Douglas Gove	Community Member with Engineering Experience	**Voting Member**
✓	Stephen O'Neill	Community Member with Engineering Experience	**Voting Member**
✓	Josephine Thomson	Community Member	**Voting Member**
✓	Jeanne Craigie	Town Moderator	**Voting Member**
✓	Lisa Gallagher	Community Member, School Secretary, Past member of Middle School Building Committee	**Voting Member**
✓	Sharon Iovanni	Community Member	**Voting Member**
✓	Cory Mashburn	Community Member, Finance and Advisory Board	**Voting Member**
✓	Paul Ryder	Community Member with Construction Experience	**Voting Member**
✓	David Pignone	Athletic Director, Member knowledgeable in educational mission and function of facility	**Voting Member**
✓	Kevin Yianacopolus	Local Official responsible for Building Maintenance	**Voting Member**
✓	Dennis Sheehan	Town Administrator / MCPPO Certified	Non-Voting Member
✓	John Macero	Superintendent of Schools, Secretary of School Building Committee	Non-Voting Member
✓	Bryan Lombardi	Stoneham High School Principal	Non-Voting Member
✓	Brian McNeil	Facilities Director	Non-Voting Member
✓	Brooke Trivas	Perkins and Will	
✓	Patrick Cunningham	Perkins and Will	
✓	Leo Liu	Perkins and Will	
✓	Joel Seeley	SMMA	

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Item #	Action	Discussion
9.1	Record	Call to Order, 7:00 PM, meeting opened by roll call.
9.2	Record	In accordance with the executive order issued by the Governor on March 10, 2020, this meeting will be held via video conference and a recording of such will be posted on the Town's website.
9.3	Record	A motion was made by R. Parker and seconded by L. Gallagher to approve the 8/31/20 School Building Committee meeting minutes. No discussion, motion passed unanimous by roll call vote.
9.4	Record	J. Seeley distributed the 8/31/20 Sustainable Design meeting minutes, attached, and provided an overview of the meeting held on 9/14/20 with committee members, P&W, and SMMA to review the MassSave incentive program and Path 1 Memorandum of Understanding (MOU), attached. The attending committee members recommend approval of the MOU. A motion was made by J. Craigie and seconded by J. Thomson to approve the MassSave Path 1 Memorandum of Understanding (MOU) and recommend execution by D. Sheehan. No discussion, motion passed unanimous by roll call vote.
9.5	Record	B. Trivas distributed the 9/2/20 Traffic Commission meeting minutes, attached.
9.6	B. Trivas	B. Trivas presented and reviewed the Educational Programming and Space Summary development, attached. The Space Summary reflects a school size of 208,494 square feet, including the Pre-K Program and not including Central Office. The MSBA Guideline is 149,824 square feet, not including the Pre-K Program or Central Office. The High School Vision Committee has been meeting weekly on the Educational Program and is targeting 9/21/20 to issue a draft for review by the Educational Mission Subcommittee. Committee Discussion: 1. D. Bois asked if there was any opportunity to tighten up the square footage of the building to reduce the amount of non-reimbursable space? *B. Trivas indicated yes, this will be a focus of the next High School Vision Committee meeting*. 2. D. Bois asked if the tightening up happens in advance of submitting the PDP to MSBA? *B. Trivas indicated ideally yes, it is better to decide now in PDP.* 3. R. Parker asked if this represents all the requested space? *B. Trivas indicated no, since the 208,494 square feet version was developed, additional space has been asked for by the Pre-K and SPED Programs, and PE.*

Item #	Action	Discussion
		4. D. Bois asked will the Superintendent, Educational Mission Subcommittee and High School Vision Committee be involved in pairing down the square feet? *B. Trivas indicated yes the Superintendent, Educational Mission Subcommittee and High School Vision Committee will be involved in pairing down the square feet.*
9.7	B. Trivas P. Cunningham Committee	B. Trivas presented and reviewed preliminary Site Planning Options, Construction Phasing and Pros and Cons for each Option. Each option includes geo-thermal wells, triple glazed fiberglass windows and curtainwall, and robust envelope insulation to align with Path 1 goals, two synthetic turf soccer fields with sports lighting, new or reconstructed synthetic football field and track with sports lighting, and a reconstructed natural turf baseball, softball and soccer field. Parking space counts match existing. Additionally, each option includes new traffic signals at the Franklin Street school entry and the Franklin Street/Stevens Street intersection. The Options are as follows: 1. Code Repair Only 2. Renovation Only Option 2A 3. Renovation/Addition Option 3A 4. Renovation/Addition Option 3B 5. Renovation/Addition Option 3C 6. New Construction Option 4A 7. New Construction Option 4B 8. New Construction Option 4C 9. New Construction Option 4D 10. New Construction Option 4E Committee Discussion – Open Items from the 8/31/20 SSBC meeting: 1. D. Pignone requests a listing of the pros and cons of renovating the existing Gymnasium versus constructing a new Gymnasium be provided. *B. Trivas to develop a listing of the pros and cons for review for the next committee meeting*. 2. M. Christie asked what is the additional cost to construct a new Gymnasium the same size as the existing Gymnasium? *B. Trivas to provide direction for the next committee meeting*. 3. Additional Committee comments were received on the 8/31/20 presentation, attached.

Committee Discussion:

1. C. Mashburn asked if the construction duration can be added to each Option.
   B. Trivas will add the construction duration to each option for Committee review.
2. D. Gove asked if the 48" culvert will be reviewed to verify if the required pipe size is still valid?
   P. Cunningham indicated yes, the culvert, which has been found to be 36" by the surveyor, will be reviewed to confirm the sizing is still valid.
3. D. Bois asked if the environmental permitting impact can be reviewed if any work on the 48" culvert is included in the project, including spanning the building over it?
   P. Cunningham indicated yes, the environmental permitting impact will be reviewed.
4. D. Bois asked how long are the buildings in Renovation/Addition Options 3A, and New Construction Options 4A and 4C?
   P. Cunningham indicated he will provide direction.
5. D. Bois indicated in Renovation/Addition Options 3A and 3C, the parking is far from the Gymnasium.
   P. Cunningham agreed and indicated the location of the Cafeteria does not lend it to being used as a pre and post function space for the Gymnasium.
6. D. Bois indicated the Committee will provide edits to the Pros and Cons listed for each Option.
7. D. Gove requested 'Construction Impacts' be added to the Pros and Cons for each Option.
   P. Cunningham to add.
8. D. Gove asked if the cost to relocate the existing gas, electric, telephone, cable, water and sewer in Renovation/Addition Option 3A and 3C, and New Construction Options 4A, 4B, 4C and 4E has been included in the cost estimates?
   P. Cunningham will review and provide direction at the next Committee meeting.
9. P. Ryder asked if all the fields will be regulation size?
   B. Trivas indicated yes, for any fields that are reconstructed or new. There are some fields that currently do not meet regulation, P&W will confirm for next meeting

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Item #	Action	Discussion
		10. D. Bois asked if all the Options reflect the 208,494 square feet in the Space Summary? *B. Trivas indicated generally yes.* 11. D. Bois asked if there will be spaces below the first floor level to take advantage of the grading? *P. Cunningham indicated P&W is reviewing and will provide direction for the next Committee meeting*. 12. D. Pignone asked if the temporary construction vehicle access drive thru Benjamin Terrace will be a permanent road after construction completion? *D. Sheehan indicated most likely not, it could be an emergency only access and permanent pedestrian walkway*.
9.8	J. Seeley P. Cunningham Committee	J. Seeley reviewed the Project Cost, Construction Cost, Reimbursement and Cost to Stoneham for each Option, attached. Committee Discussion: 1. D. Bois asked if the Ineligible Building Costs can be broken down by Ineligible Costs due to the $333/SF cap and the Ineligible Costs due to Space above MSBA Guideline. *J. Seeley will provide for next Committee meeting*. 2. D. Bois asked if the cost for ZNE Path 1 can be identified? *P. Cunningham indicated yes, the costs will be provided for next Committee meeting. P&W will provide Life Cycle Cost Analyis (LCCA) in the next phase.* 3. D. Bois asked the Committee to reflect on what scope may need to be reduced in order to lower the cost of the project. 4. J. Thomson asked if the project should include just the traffic signal at the Franklin Street school entry and not the Franklin Street/Stevens Street intersection? *D. Sheehan indicated he will review, but there is no other project to connect the Franklin Street/Stevens Street intersection to and any costs would require a town vote to appropriate the funding*.
9.9	Committee	B. Trivas reviewed the draft Options Evaluation Form, attached, to be used at the 9/28/20 SSBC meeting. Committee to review and email any comments to B. Trivas prior to next Committee meeting. Committee Discussion: 1. D. Bois asked the Committee to also prioritize the Compliance Factors, as some will weigh more importantly than others.

Item #	Action	Discussion
9.10	D. Sheehan	J. Seeley reviewed the PSR Phase Meetings and Agenda Schedule, attached. Committee Discussion: 1. S. Iovanni asked if there will be a limit on attendees to the in-person Tri-Board Meeting on 10/15/20? *D. Sheehan will review*.
9.11	Record	J. Seeley reviewed the fully executed BRR No. 1, attached.
9.12	A. Palmerino	**Subcommittee Updates** **Public Relations Subcommittee** 1. A. Palmerino to forward the PSA announcement for Community Forum No. 2, to be held on 9/23/20.
9.13	Record	**Committee Questions** - none
9.14	Record	**Old or New Business** 1. M. Christie asked if the Committee had any reservations with having the 9/28/20 SSBC meeting in-person? *The Committee indicated they did not. The item will be further reviewed at the Wednesday Chairs meeting*. 2. J. Craigie asked if hardcopies of meeting materials can be provided on the Friday before the Monday meeting? *D. Bois indicated P&W and SMMA will email out draft meeting materials on the Friday before the Monday meeting going forward*.
9.15	Record	**Public Comment** - none
9.16	Record	Next **SBC Meeting: September 28, 2020 at 7:00 pm.**
9.17	Record	A Motion was made by S. Iovanni and seconded by R. Parker to adjourn the meeting. No discussion, motion passed unanimous by roll call vote.

Attachments: Agenda, 8/31/20 Sustainable Design meeting minutes, Path 1 MassSave Memorandum of Understanding (MOU), 9/2/20 Traffic Commission meeting minutes, Additional Committee comments on the 8/31/20 presentation, Project Cost, Construction Cost, Reimbursement and Cost to Stoneham for each Option, PSR Phase Meetings and Agenda Schedule, fully executed BRR No. 1, Powerpoint

The information herein reflects the understanding reached. Please contact the author if you have any questions or are not in agreement with these Project Minutes

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PROJECT MEETING SIGN-IN SHEET

Project:	Stoneham High School Feasibility Study	Project No.:	20033.00
Prepared by:	Joel Seeley	Meeting Date:	9/14/2020
Re:	School Building Committee Meeting	Time:	7:00pm
Location:	Remote Locations	Meeting No:	9
Distribution:	Attendees, (MF)		

SIGNATURE	ATTENDEES	EMAIL	AFFILIATION
Attended Remotely	Marie Christie	mariechristie@comcast.net	Co-Chair, Past Member of the School Committee/Middle School Building Committee
Attended Remotely	David Bois	bois@arrowstreet.com	Co-Chair, Community Member with Architecture Experience
Attended Remotely	Nicole Nial	nicole.nial@stonehamschools.org	School Committee Member
Attended Remotely	Raymie Parker	rparker@stoneham-ma.gov	Select Board Member
	Albert Talarico	albert.talarico@gmail.com	Community Member with Building Commissioner Experience
Attended Remotely	Douglas Gove	goved11@gmail.com	Community Member with Engineer Experience
Attended Remotely	Stephen O'Neill	soneill@hayner-swanson.com	Community Member with Engineer Experience
Attended Remotely	Josephine Thomson	Jjthomson315@yahoo.com	Community Member, Middle School Faculty
Attended Remotely	Jeanne Craigie	jcraigie@stoneham-ma.gov	Town Moderator
Attended Remotely	Lisa Gallagher	lgallagher@stonehamschools.org	Community Member, School Secretary, Past member of Middle School Building Committee
Attended Remotely	Sharon Iovanni	sharon.iovanni@stonehambank.com	Community Member
Attended Remotely	Cory Mashburn	cory.mashburn910@gmail.com	Community Member, Finance and Advisory Board
Attended Remotely	Paul Ryder	pryder52@icloud.com	Community Member with Construction Experience
Attended Remotely	David Pignone	dpignone@stonehamschools.org	Athletic Director, Member knowledgeable in educational mission and function of facility
Attended Remotely	Kevin Yianacopolus	kyianacopolus@stonehamschools.org	Local Official responsible for Building Maintenance
Attended Remotely	Dennis Sheehan	DSheehan@stoneham-ma.gov	Town Administrator / MCPPO Certified
Attended Remotely	John Macero	jmacero@stonehamschools.org	Superintendent of Schools, Secretary of School Building Committee
Attended Remotely	Bryan Lombardi	blombardi@stonehamschools.org	Stoneham High School Principal
Attended Remotely	Brian McNeil	bmcneil@stonehamschools.org	Facilities Director
Attended Remotely	Brooke Trivas	brooke.trivas@perkinswill.com	Perkins and Will
Attended Remotely	Patrick Cunningham	Patrick.cunningham@perkinswill.com	Perkins and Will
Attended Remotely	Leo Liu	xi.liu@perkinswill.com	Perkins and Will
Attended Remotely	Joel Seeley	jseeley@smma.com	SMMA

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Agenda

Project:	Stoneham High School Feasibility Study	Project No.:	20033
Re:	School Building Committee Meeting	Meeting Date:	9/14/2020
Prepared by:	Joel Seeley	Meeting Time:	7:00 PM
Location:	Remote Locations		
Distribution:	Attendees (MF)		

1. Call to Order
2. Approval of Minutes
3. Educational Programming Update
4. Design Alternatives and Phasing Update
5. Cost Estimates Review
6. Approval of Invoices and Commitments
7. Schedule and Budget Update
8. Sustainable Design Update
9. Subcommittee Updates
10. New or Old Business
11. Committee Questions
12. Public Comments
13. Next Meeting: September 28, 2020
14. Adjourn

Join GoToMeeting:
https://global.gotomeeting.com/join/134860061

Dial in: +1 (224) 501-3412

Access Code: 134-860-061

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STONEHAM HIGH SCHOOL
Building Committee Meeting

9.14.2020

AGENDA

1\ Sustainable Design Update

2\ Educational Programming Update

3\ Design Alternatives Update

4\ Committee Feedback

5\ Cost Estimate

6\ Decision Making Matrix DRAFT



→

Aerial View of
Stoneham High School

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Sustainable Design Update

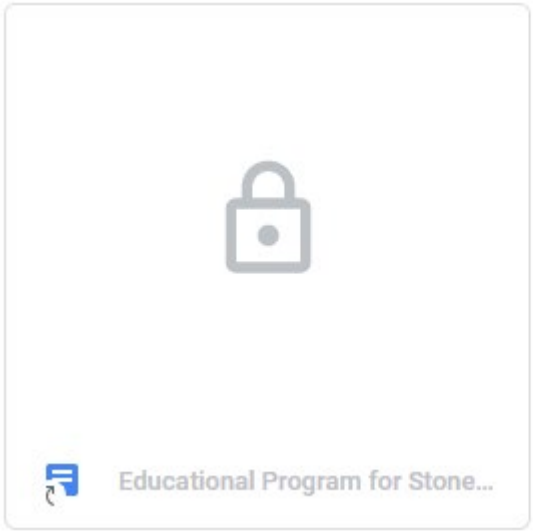
Building Committee Meeting

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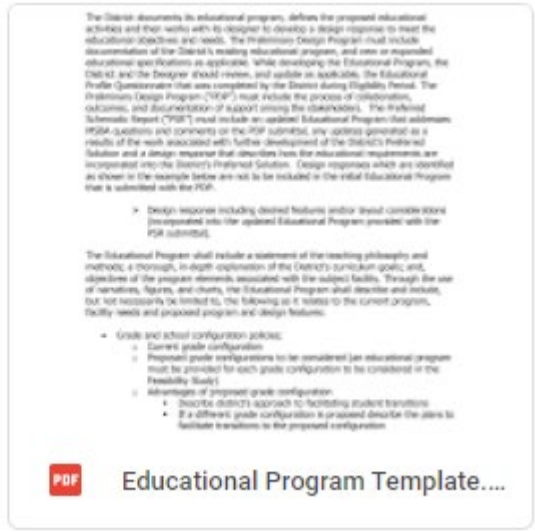
Educational Programming Update

Building Committee Meeting

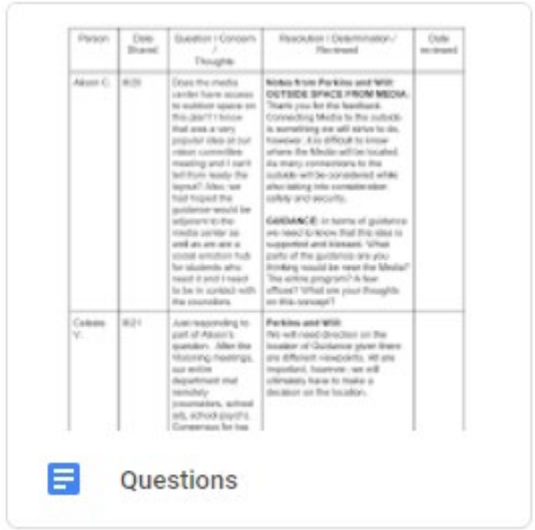
Educational Programming Shared Google documents

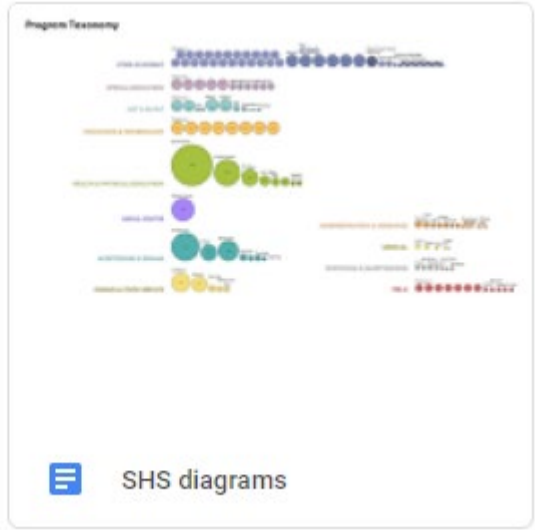

Educational Program for Stone...


Educational Program Template

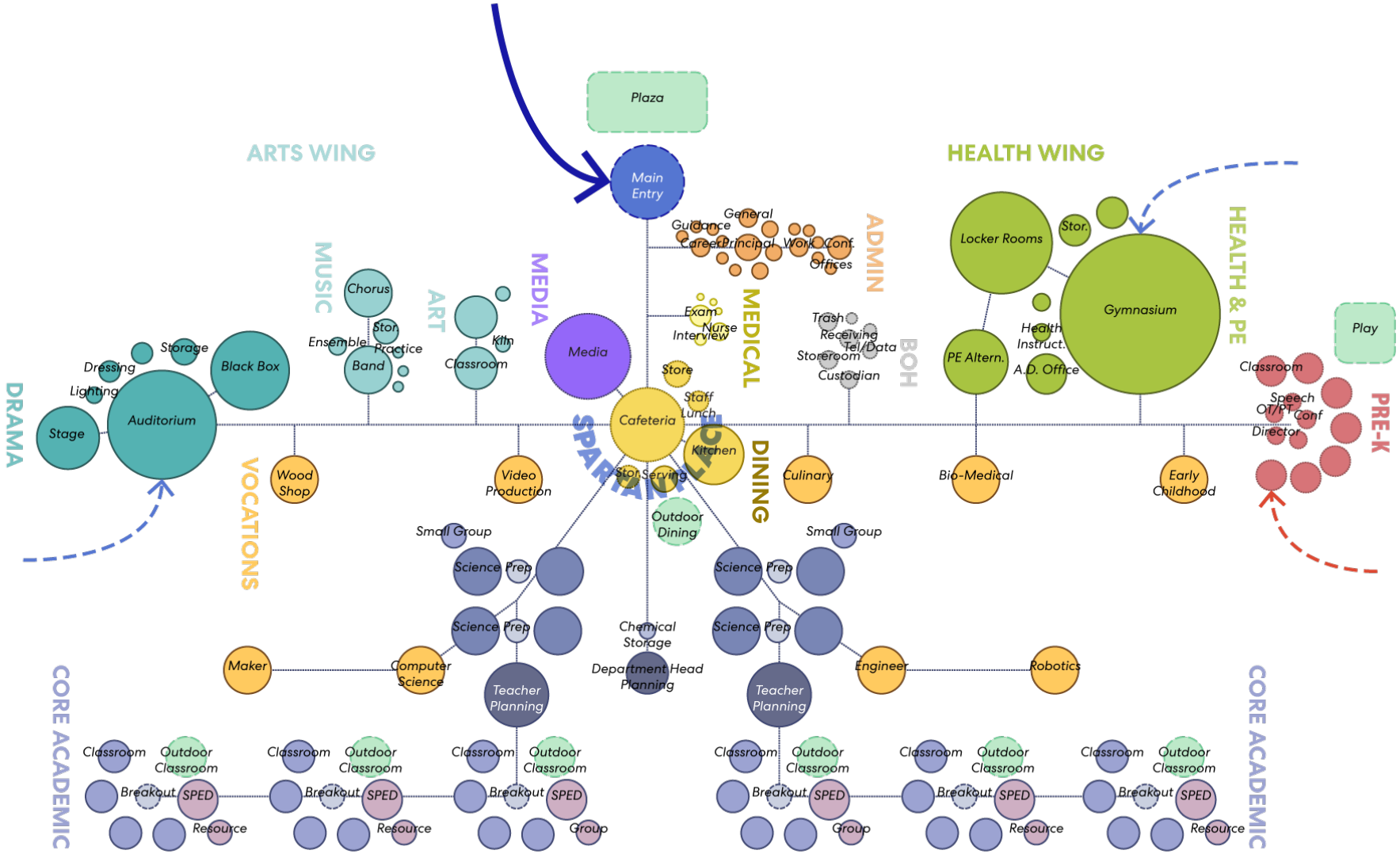

Educational Program Template....


Other considertions


Questions


SHS diagrams

Educational Programming Update



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Educational Space Summary

Stoneham High School	PROPOSED Total			MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)		
ROOM TYPE	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals
CORE ACADEMIC SPACES			**37,340**			**32,890**
(List classrooms of different sizes separately)						
Classroom - General	900	23	20,700	850	23	19,550
Classroom - General						
Classroom - General						
Teacher Planning	100	23	2,300	100	23	2,300
Small Group Seminar (20-30 seats)	500	2	1,000	500	2	1,000
Science Classroom / Lab	1,440	6	8,640	1,440	6	8,640
Prep Room	200	6	1,200	200	6	1,200
Department Office						
Department Office						
Department Office						
Central Chemical Storage Rm	200	1	200	200	1	200
Department Head Planning Area (Max 8)	900	1	900			
(ELA, Math, Science, World Lang, History, Fine Arts, Spec. Ed, technology						
Bio Medical: Project Lead the Way	1,200	1	1,200			
World Language Lab	1,200	1	1,200			
SPECIAL EDUCATION			**9,450**			**8,050**
(List classrooms of different sizes separately)						
Self-Contained SPED	950	5	4,750	950	5	4,750
Self-Contained SPED Toilet	60	5	300	60	5	300
Resource Room	500	3	1,500	500	3	1,500
Small Group Room	500	3	1,500	500	3	1,500
Life Skills	1,400	1	1,400			

ART & MUSIC			**9,425**			**6,625**
Art Classroom - 25 seats	1,200	2	2,400	1,200	2	2,400
Art Workroom w / Storage & kiln	150	2	300	150	2	300
Art Ceramics	1,000	1	1,000			
Art Dark Room	600	1	600			
Band - 50 - 100 seats	1,500	1	1,500	1,500	1	1,500
Chorus - 50 - 100 seats	1,500	1	1,500	1,500	1	1,500
Ensemble	200	1	200	200	1	200
Music Practice	75	3	225	75	3	225
Music Storage	500	1	500	500	1	500
Graphic -Digital Art/ Media Lab	1,200	1	1,200			
VOCATIONS & TECHNOLOGY			**10,385**			**7,200**
Technology/Engineering Rooms: Computer -Draft				1,440	5	7,200
Engineer Lab (exist) New combine Maker, Eng, Robotics (clea	2,800	1	2,800			
Engineering Rooms: Computer -Draft (see above for new)						
Technology Shop: Child Development	1,440	1	1,440			
Technology Shop: Fashion Lab						
Technology Shop: Culinary	1,440	1	1,440			
Wood-Scene Shop/Theater Arts	1,825	1	1,825			
Video Production (green room, edit, pod cast, studio, stor)	1,440	1	1,440			
Computer Science- Project Lead the Way	1,440	1	1,440			
HEALTH & PHYSICAL EDUCATION			**27,488**			**20,092**
Gymnasium	16,000	1	16,000	12,000	1	12,000
PE Alternatives- Weight Room	2,200	1	2,200	3,000	1	3,000
Gym Storeroom	924	1	924	300	1	300
Locker Rooms - Boys / Girls w / Toilets	6,000	1	6,000	3,892	1	3,892
Phys. Ed. Storage	864	1	864	500	1	500
Athletic Director's Office	1,000	1	1,000	150	1	150
Health Instructor's Office w / Show er & Toilet	250	2	500	250	1	250
Team Rooms						
Team Room						
Health Classroom						

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Educational Space Summary

MEDIA CENTER			**4,544**			**4,244**
Media Center / Reading Room	4,244	1	4,244	4,244	1	4,244
Computer Lab						
Storage						
History Lab in Media Area	300	1	300			
AUDITORIUM / DRAMA			**14,324**			**7,457**
Auditorium (750 seats)	7,500	1	7,500	4,633	1	4,633
Stage	2,400	1	2,400	1,600	1	1,600
Auditorium Storage	424	1	424	424	1	424
Make-up / Dressing Rooms	300	2	600	300	2	600
Controls / Lighting / Projection	200	1	200	200	1	200
Black Box (3,200 sf)	3,200	1	3,200			
DINING & FOOD SERVICE			**8,111**			**6,818**
Cafeteria / Student Lounge / Break-out	3,475	1	3,475	3,475	1	3,475
Chair / Table Storage	324	1	324	324	1	324
Scramble Serving Area	600	1	600	600	1	600
Kitchen: 394 RH/ 355 S/ 264 CP (1,013)	3,008	1	3,008	1,995	1	1,995
Staff Lunch Room	424	1	424	424	1	424
District External Freezer (28Lx10Wx9H)	280	1	280			
MEDICAL			**830**			**710**
Medical Suite Toilet	60	2	120	60	1	60
Nurses' Office / Waiting Room	250	1	250	250	1	250
Interview Room	100	1	100	100	1	100
Examination Room / Resting	100	3	300	100	3	300
Mother's Room	60	1	60			

ADMINISTRATION & GUIDANCE			**3,652**			**3,651**
General Office / Waiting Room / Toilet		1	348	348	1	348
Teachers' Mail and Time Room		1	100	100	1	100
Duplicating Room		1	200	200	1	200
Records Room		1	200	200	1	200
Principal's Office w / Conference Area		1	375	375	1	375
Principal's Secretary / Waiting		1	125	125	1	125
Assistant Principal's Office - AP1		1	150	150	1	150
Assistant Principal's Office - AP2		0	0	150	0	-
Supervisory / Spare Office		1	120	120	1	120
Conference Room		1	450	450	1	450
Guidance Office		4	600	150	4	600
Guidance Waiting Room		1	100	100	1	100
Guidance Storeroom		1	100	100	1	100
Career Center		1	324	324	1	324
Records Room		1	112	112	1	112
Teachers' Work Room		1	348	348	1	348
CUSTODIAL & MAINTENANCE			**2,647**			**2,146**
Custodian's Office		1	150	150	1	150
Custodian's Workshop		1	250	250	1	250
Custodian's Storage		1	375	375	1	375
Recycling Room / Trash		1	400	400	1	400
Receiving and General Supply		1	324	324	1	324
Storeroom		1	448	448	1	448
Netw ork / Telecom Room		1	200	200	1	200
Exterior general Storage		1	500			
OTHER			**10,800**			**0**
District Offices- Superintendent/PPS						
Pre School Classrooms (15 students)		7	8,400			
Pre School OT/PT		1	400			
Pre School Director Office		1	350			
Pre School Speech		2	700			
Pre School Conference Room		1	350			
School Store	600	1	600			
Total Building Net Floor Area (NFA)			**138,996**			**99,882**
Proposed Student Capacity / Enrollment						**695**
NON-PROGRAMMED SPACES		% of GFA	**69,498**			
Total Building Gross Floor Area (GFA)^2			**208,494**			**149,824**
Grossing factor (GFA/NFA)			**1.50**			**1.50**

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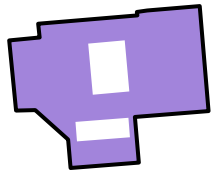
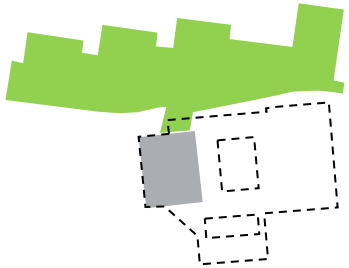
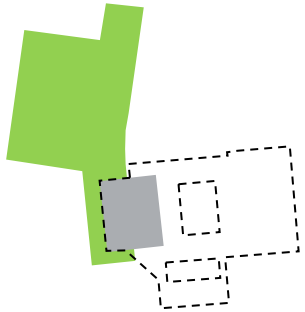
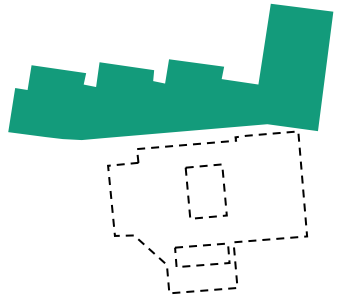
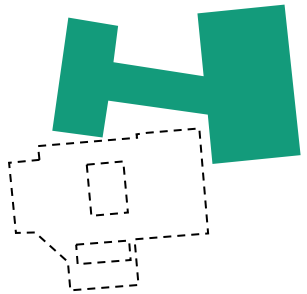
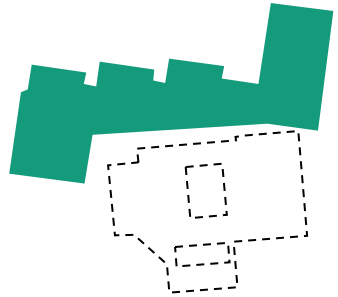
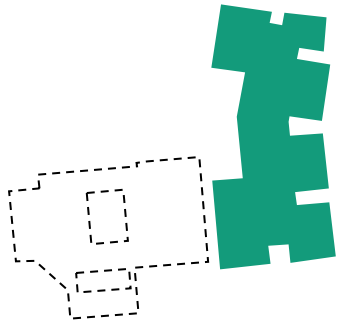
Project Management

Perkins&Will

Design Alternatives Update

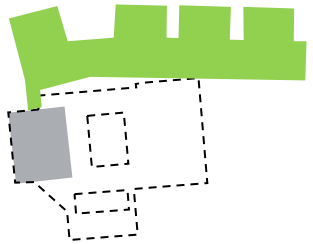
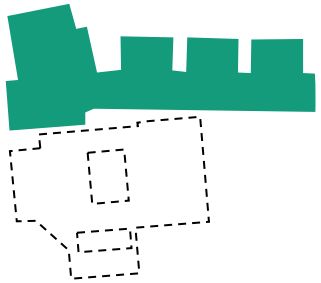
Building Committee Meeting

Design Alternatives Update / Summary

CODE UPGRADE	RENOVATION	RENOVATION ADDITION	NEW CONSTRUCTION
• *NO Educational upgrades* • *Code Upgrades* • *System Upgrades* • *Exterior Envelope Repairs* • *Interior Repairs*	 • *Option 2A*	 • *Option 3A*  • *Option 3B*	 • *Option 4A*  • *Option 4B*  • *Option 4C*  • *Option 4D*

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New Design Alternatives Based on Committee Feedback

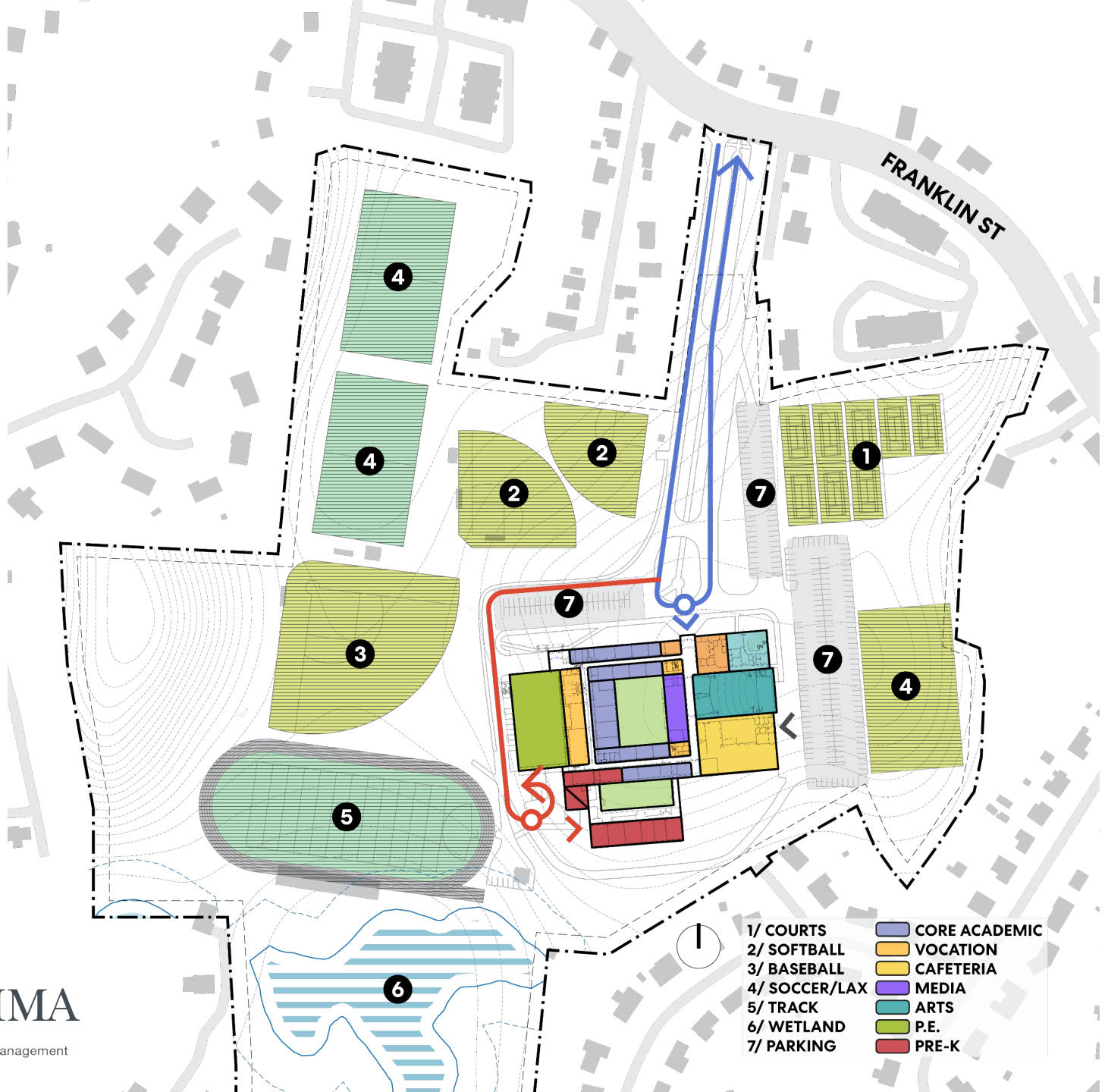
RENOVATION ADDITION	NEW CONSTRUCTION
	
• *Option 3C*	• *Option 4E*

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Renovation Option

2A



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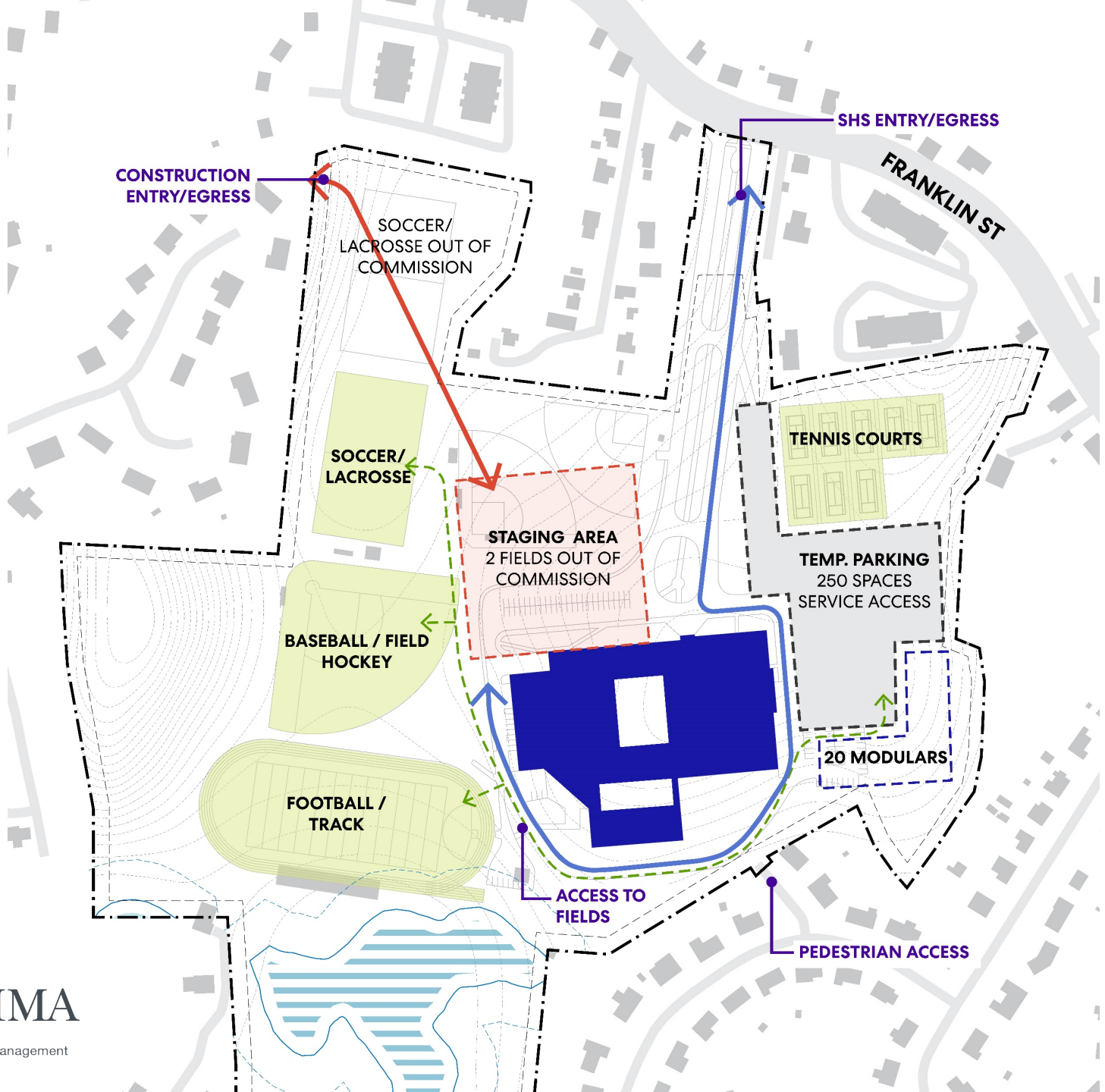
Renovation Option

2A

Construction Phasing

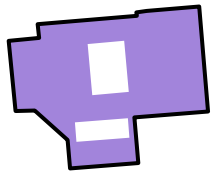
Fields out of commission:

- **(2) Softball Fields**
- **(8) Tennis Courts**
- **(2) Soccer Field**
- **(1) Baseball Field**



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Design Alternatives Review / Renovation Option 2A



Site / Access
Landscape

- **Pros:**
  - Least disruption to site (still substantial)
  - Does not require relocation of culverted stream
- **Cons:**
  - Limitations with the existing sports facilities
  - Existing fields don't meet regulations sizes

Architecture

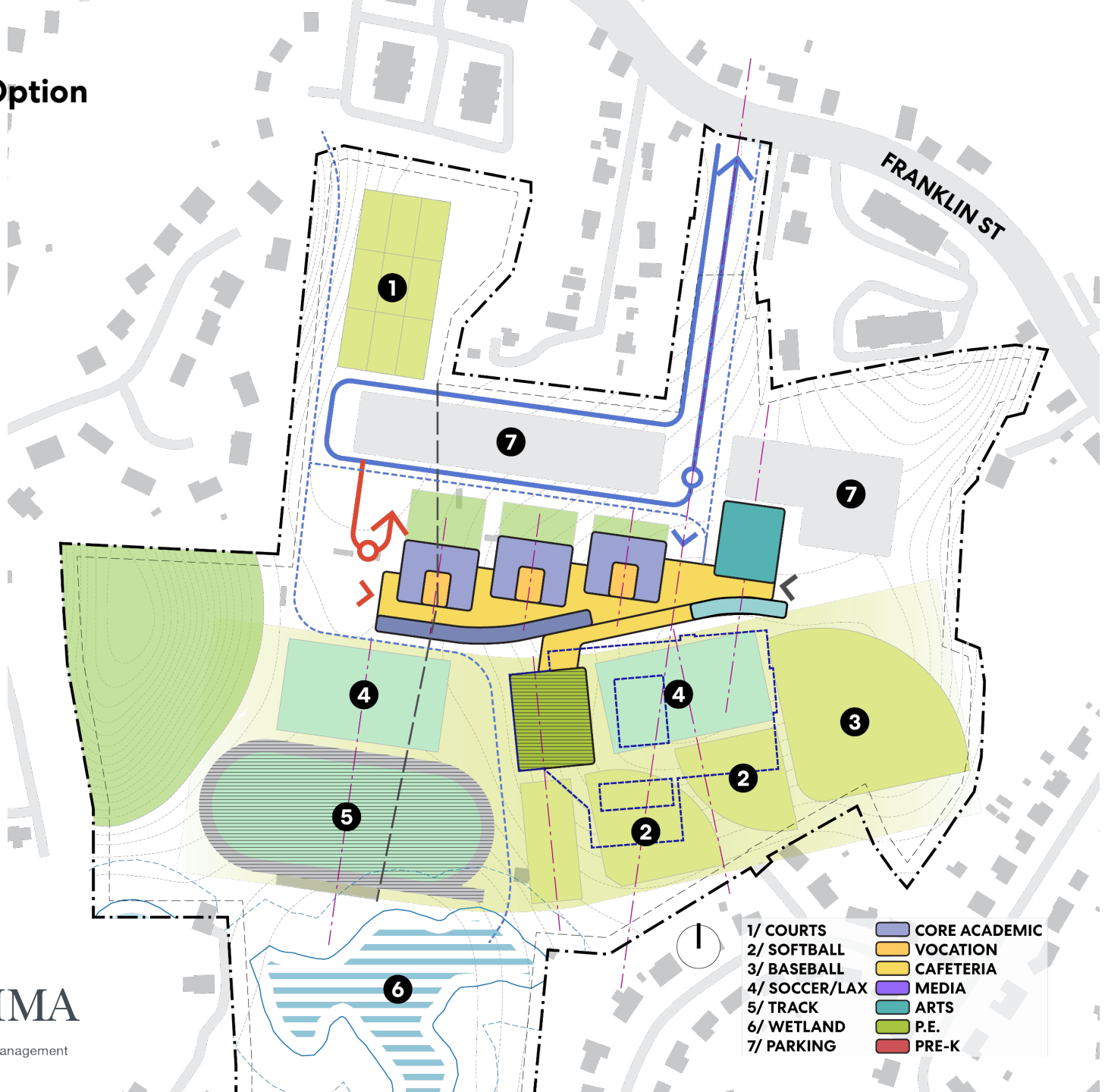
- **Pros:**
  - Adequate square footage
- **Cons:**
  - Does not meet 21c educational vision
  - Lengthy Occupied phased construction (longer construction duration)
  - Difficult to meet ZNE goal
  - Highly disruptive to building users during construction
  - Requires Modular Classrooms
  - Hazardous abatement in occupied building

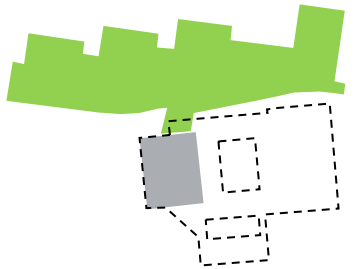
Systems
Structural / MEP

- **Pros:**
  - Re-use existing structure
  - Savings in Structural construction costs
- **Cons:**
  - Renovation on existing systems is complex
  - Phasing /other costs may outweigh the savings in structural construction costs
  - 4-5 expansion joints
  - Portions of the new sprinkler system may need to be exposed
  - Plumbing piping to remain is prone to failure
  - Grease and lab waste still not being treated

Renovation Addition Option

3A





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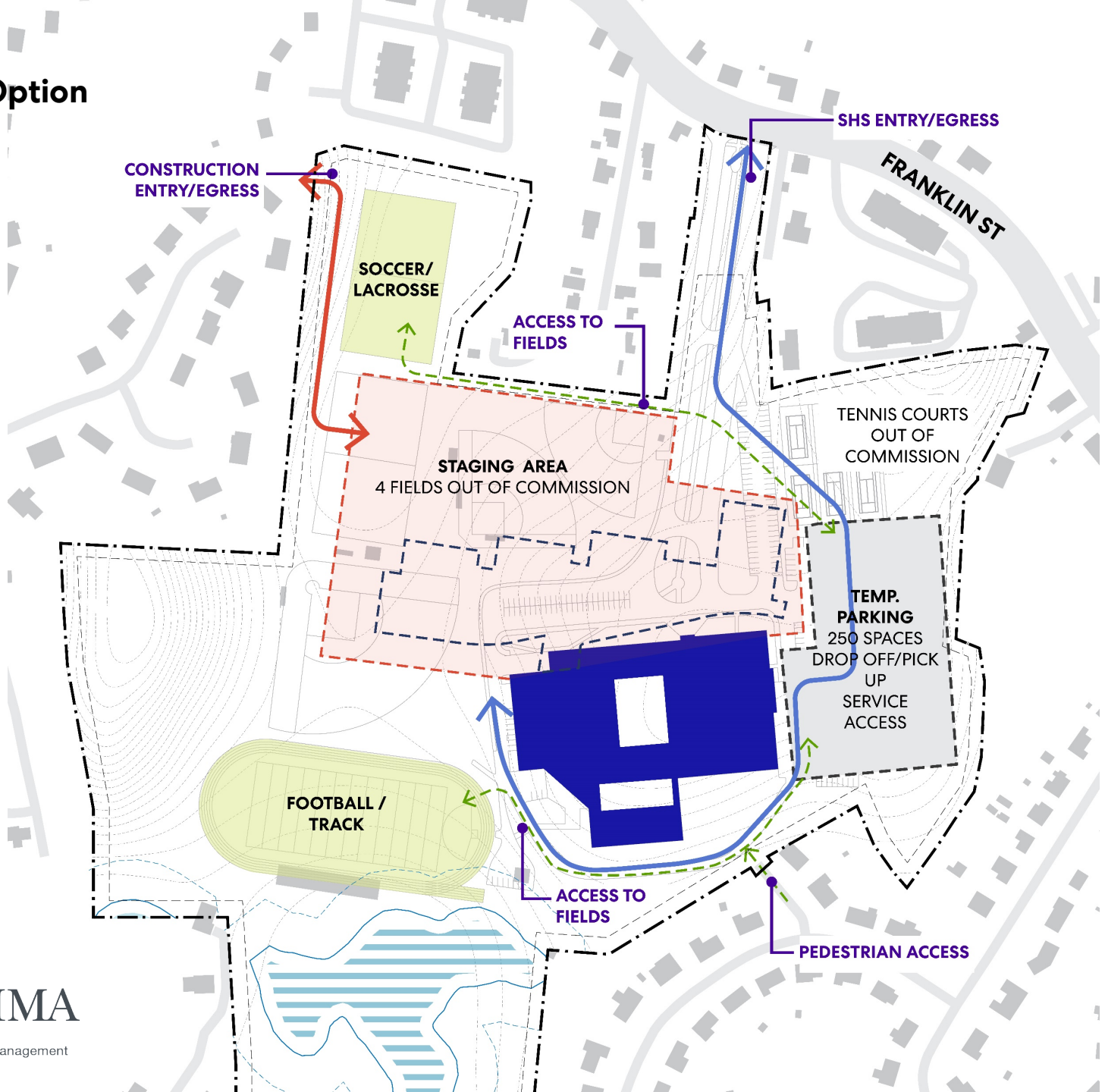
Renovation Addition Option

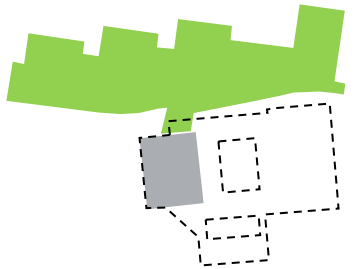
3A

Construction Phasing

Fields out of commission:

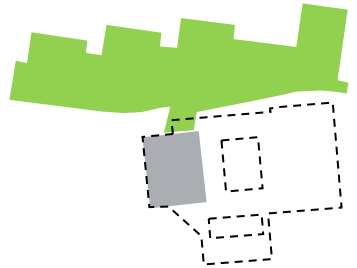
- **(2) Softball Fields**
- **(2) Soccer Field**
- **(1) Baseball Field**





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Design Alternatives Review / Renovation Addition Option 3A



Site / Access
Landscape

- **Pros:**
  - Maximized driveway length to help traffic
  - Contiguous fields for long-term athletic flexibility
  - Park-like southern landscape
- **Cons:**
  - Parking distant from stadium
  - Loss of fields during construction

Architecture

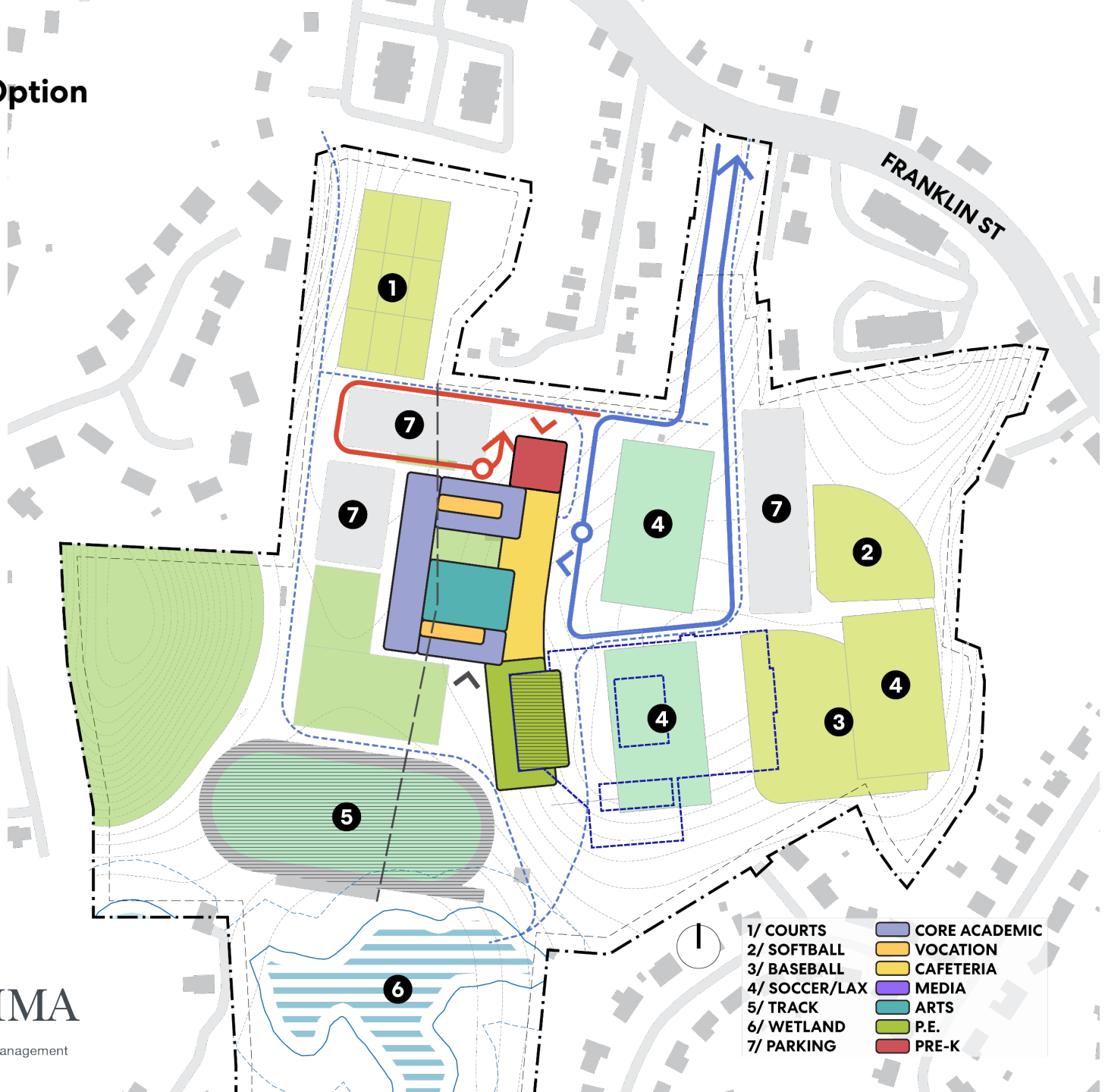
- **Pros:**
  - Realized Stoneham's 21c educational vision
  - Minimal disruption of educational spaces during construction
  - Retains existing field house size (bigger than MSBA template)
  - Maximizes visibility of new building and its entry from Franklin St
  - Separate community entries
  - Optimized building orientation for daylighting/ZNE
- **Cons:**
  - Two-phased construction
  - Tight construction area
  - Requires rerouting of culverted stream

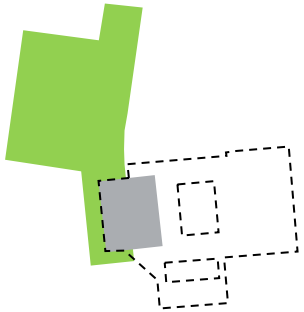
Systems
Structural / MEP

- **Pros:**
  - Less repairs compared to Renovation Only option
  - Upgrades limited to fieldhouse
  - Better control over structural systems compared to Renovation Only option
- **Cons:**
  - More structure to install
  - Upgrades and repairs required to fieldhouse
  - Stabilization structure required for locker room wing of the existing building
  - Structural Isolation of gym likely
  - Portions of the new sprinkler system in fieldhouse may need to be exposed
  - Utilities relocation required to keeping existing in operation

Renovation Addition Option

3B





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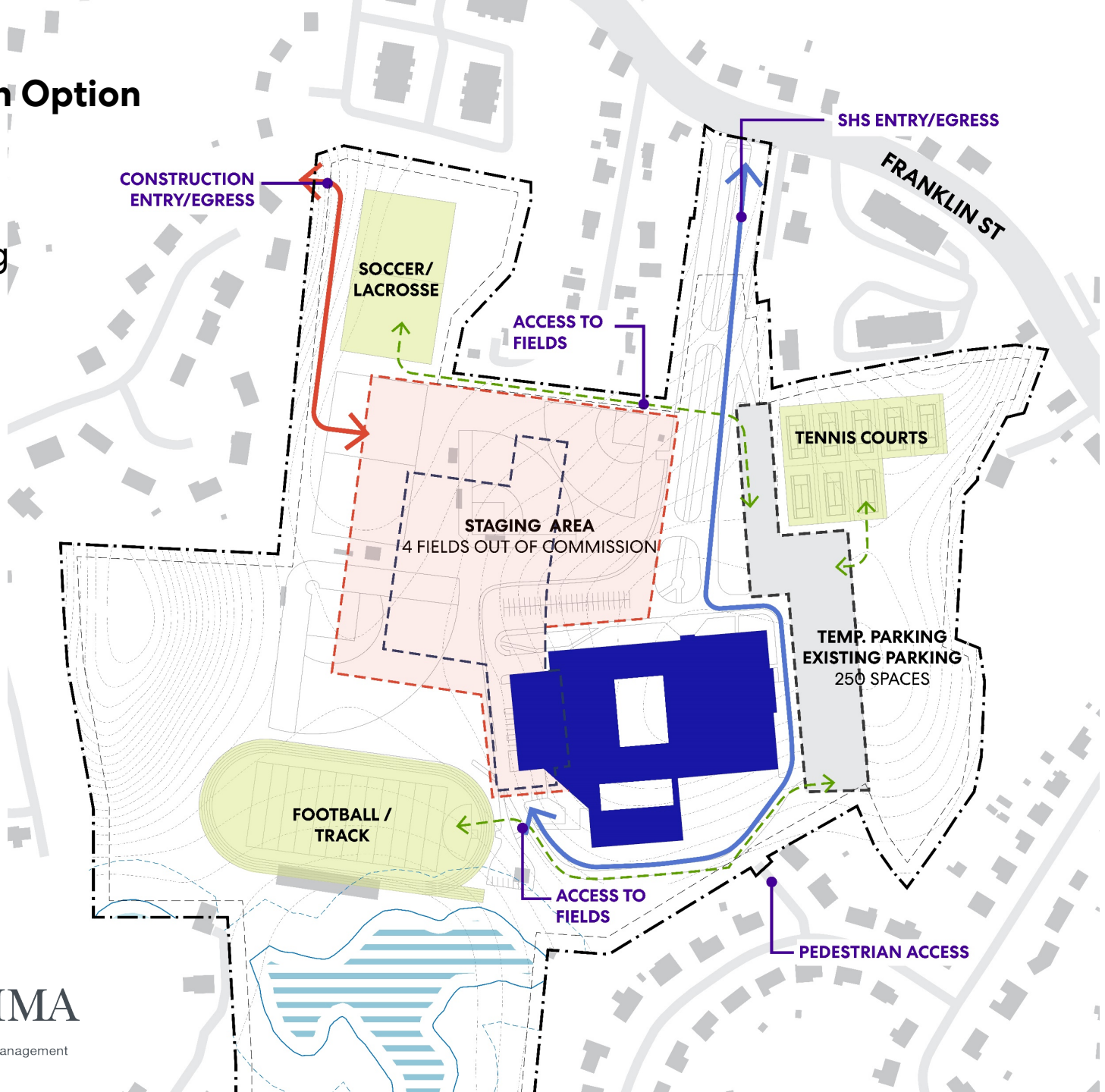
Renovation Addition Option

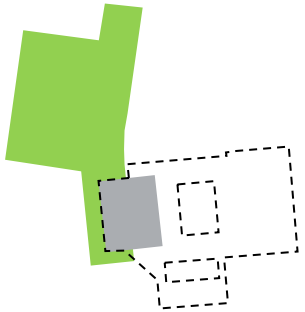
3B

Construction Phasing

Fields out of commission:

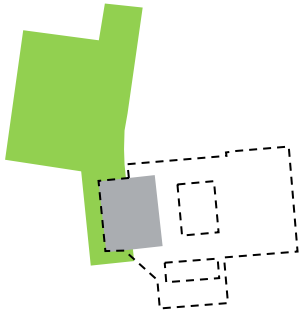
- **(2) Softball Fields**
- **(2) Soccer Field**
- **(1) Baseball Field**





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Design Alternatives Review / Renovation Addition Option 3B



Site / Access
Landscape

- **Pros:**
  - Minimal disruption to existing building during construction
  - More dedicated OC space and adjacent to natural environment
  - Strong Pedestrian connection from community to expeditionary trail
  - Ease of access to fields

- **Cons:**
  - Loss of fields during construction
  - Field surrounded by driveway
  - Parking remote from stadium

Architecture

- **Pros:**
  - Realized Stoneham's 21c educational vision
  - Minimal disruption of educational spaces during construction
  - Retains existing field house size (bigger than MSBA template)
  - Separate community entries

- **Cons:**
  - Poor visibility from Franklin St.
  - Two-phased construction
  - Tight construction area
  - Rerouting of culverted stream
  - Suboptimal building orientation for ZNE goal/Daylighting

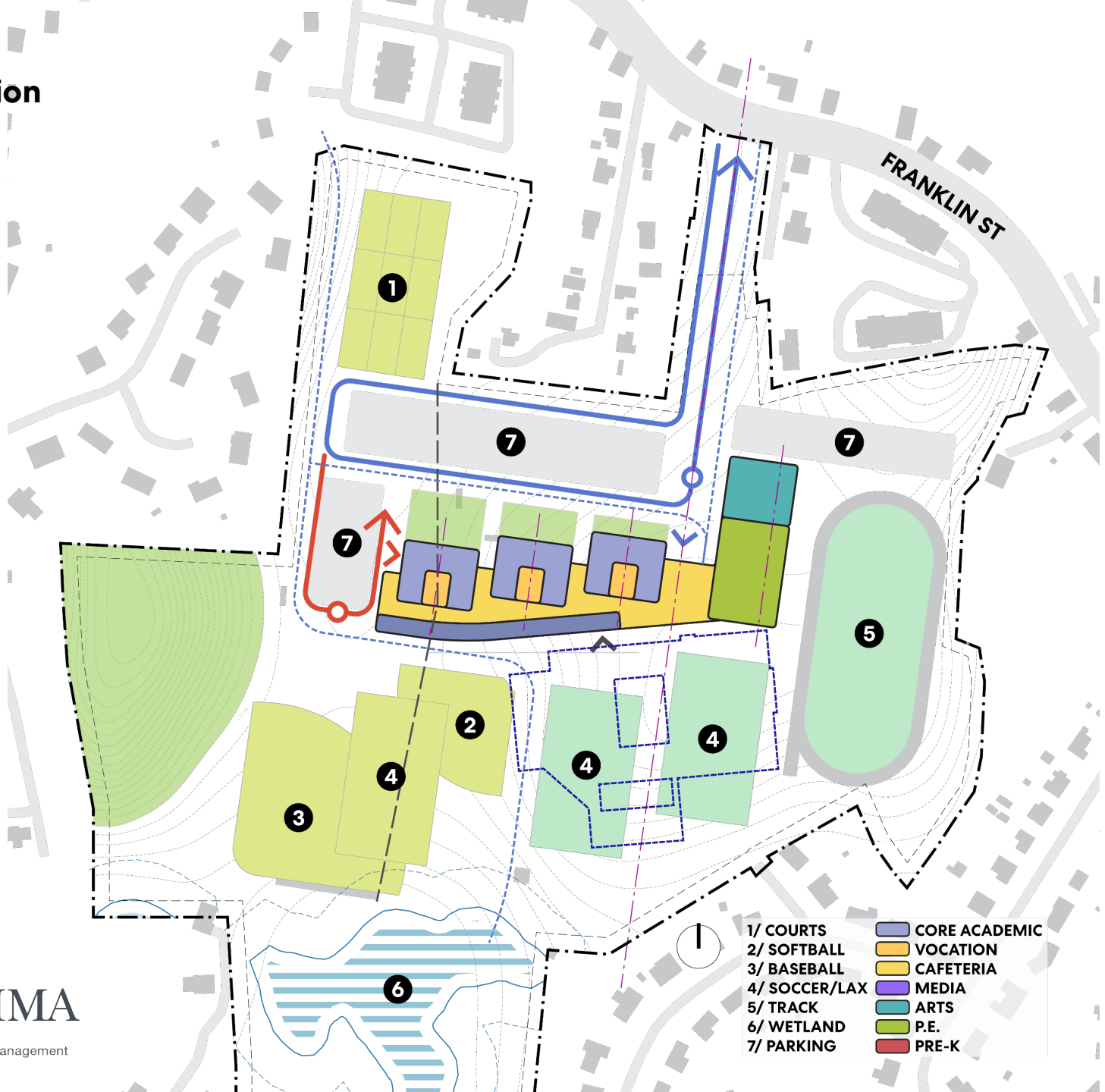
Systems
Structural / MEP

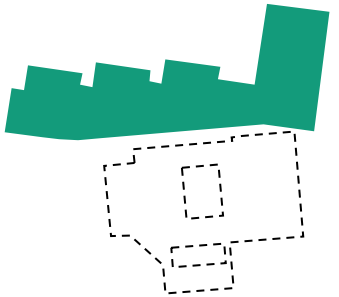
- **Pros:**
  - Less repairs
  - Upgrades limited to fieldhouse
  - Better control over structural systems

- **Cons:**
  - More structure to install
  - Upgrades and repairs required to fieldhouse
  - One expansion joint
  - Portions of the new sprinkler system in fieldhouse may need to be exposed
  - Need new plumbing utilities to addition while keeping existing in place

New Construction Option

4A





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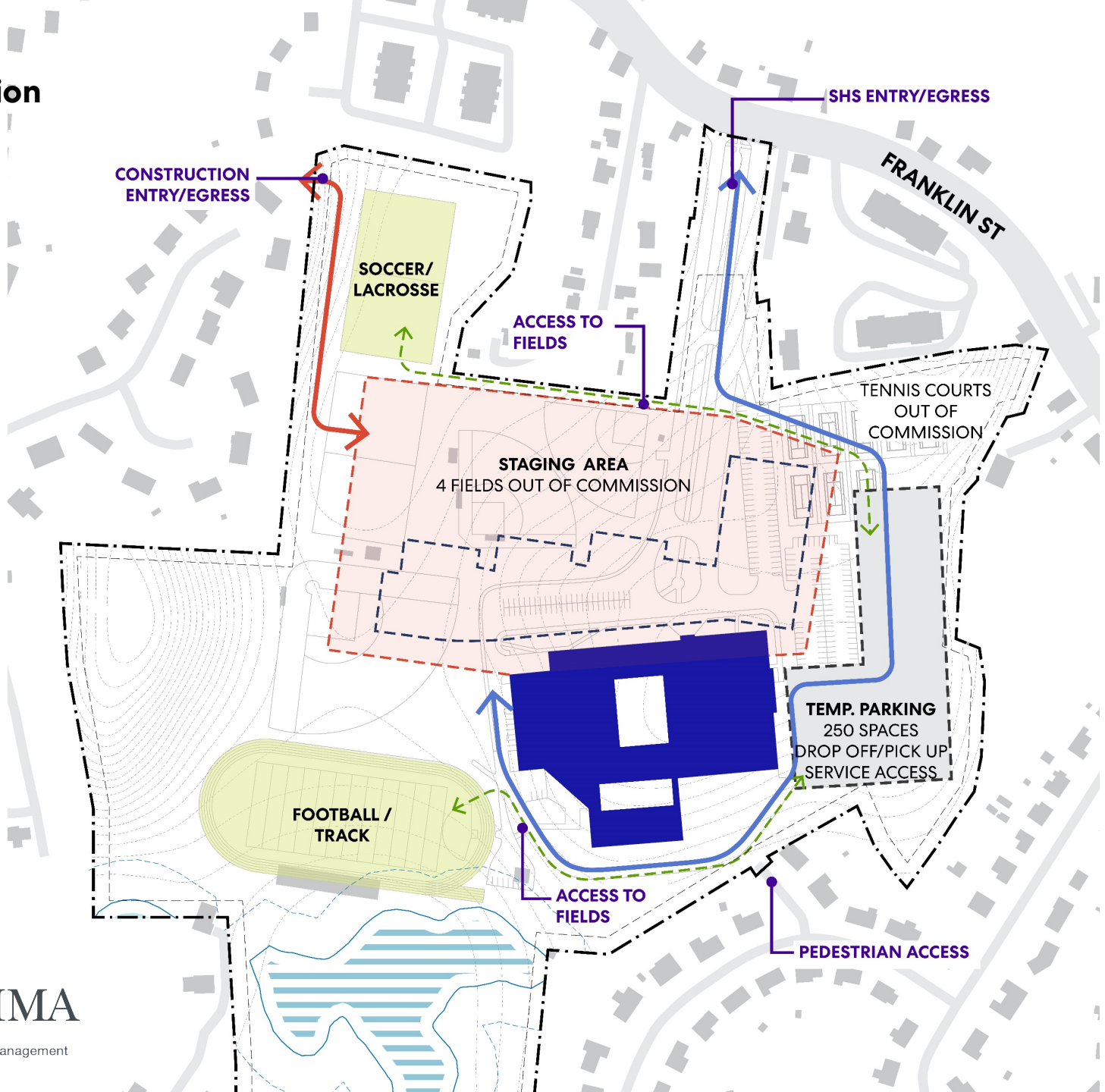
New Construction Option

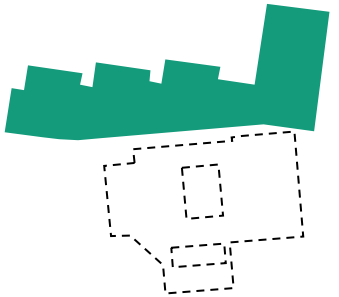
4A

Construction Phasing

Fields out of commission:

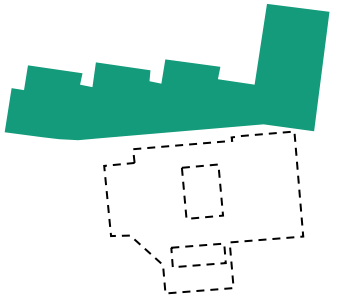
- **(2) Softball Fields**
- **(8) Tennis Courts**
- **(2) Soccer Field**
- **(1) Baseball Field**





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Design Alternatives Review / New Construction Option 4A



Site / Access
Landscape

- **Pros:**
  - Building forms strong gateway to expeditionary trail
  - Separate community entries
  - Parking near main entry and stadium
- **Cons:**
  - Loss of fields and stadium use during construction
  - Relocated stadium
  - Northeast parking needs retaining
  - Outdoor classrooms north of building
  - COST and abutter proximity of relocated stadium
  - Significant grade changes between fields

Architecture

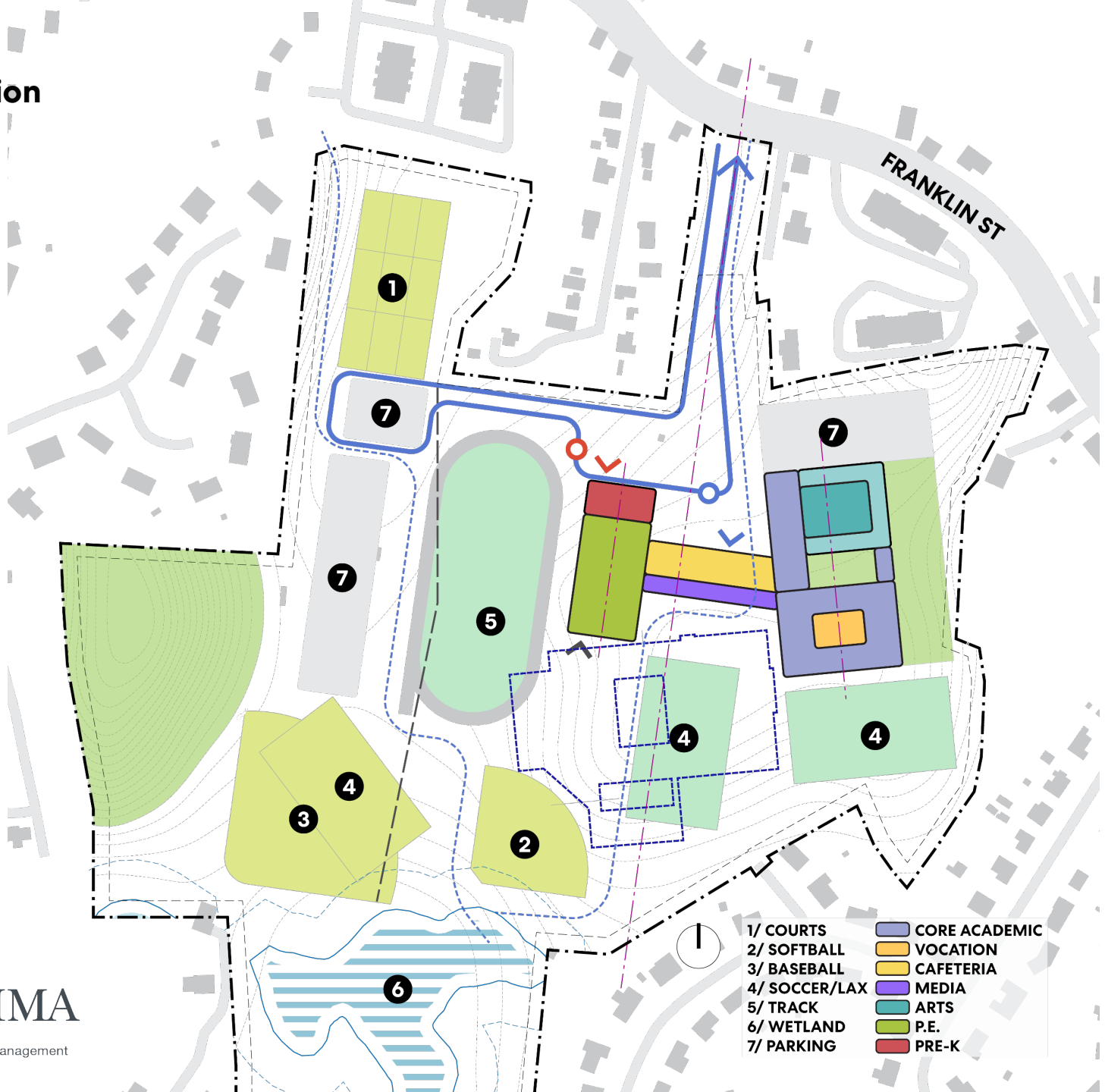
- **Pros:**
  - Realized Stoneham's 21c educational vision
  - Single-phased construction
  - Maximizes visibility of new building from Franklin St
  - Optimized orientation of stadium
  - South facing pre-function spaces (interior and exterior)
- **Cons:**
  - Tight construction area
  - Requires rerouting of culverted stream
  - West facing daylighting at entry

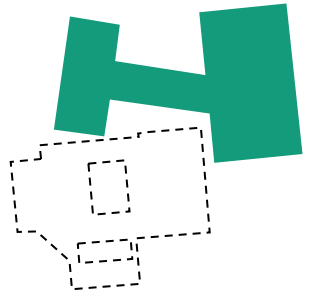
Systems
Structural / MEP

- **Pros:**
  - New structure – no repair/renovation/upgrade scope
  - More flexibility and control over overall structural systems
- **Cons:**
  - More structure to install compared to renovation and additions
  - One expansion joint
  - Utilities relocation required to keep existing building in operation

New Construction Option

4B





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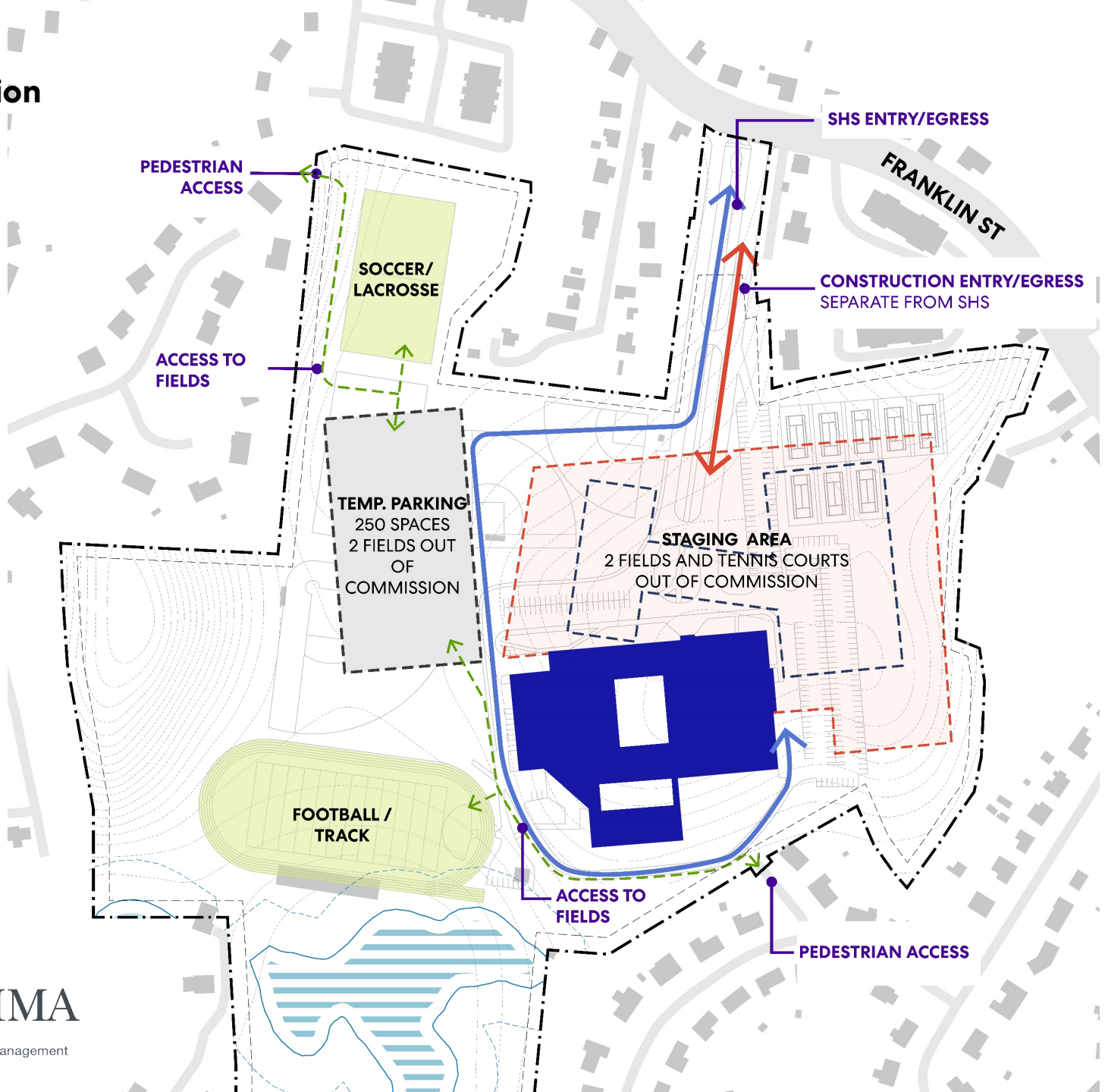
New Construction Option

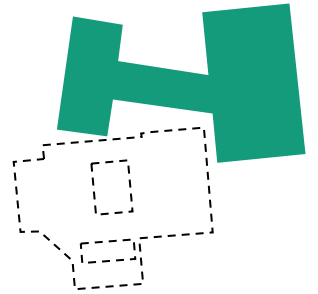
4B

Construction Phasing

Fields out of commission:

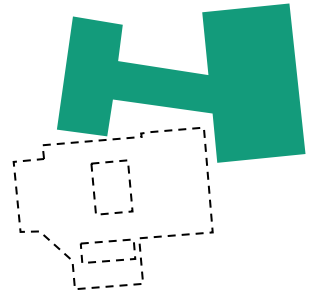
- **(2) Softball Fields**
- **(8) Tennis Courts**
- **(2) Soccer Field**
- **(1) Baseball Field**





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Design Alternatives Review / New Construction Option 4B



Site / Access
Landscape

- **Pros:**
  - Optimized orientation of ALL athletic facilities
  - Field layout fits site elevations better
  - More dedicated OC space and adjacent to natural environment
  - Contiguous fields for athletic planning
  - Parking near main entry and stadium
- **Cons:**
  - Cost of relocated stadium
  - Loss of fields & stadium use during construction
  - Northeast parking needs retaining

Architecture

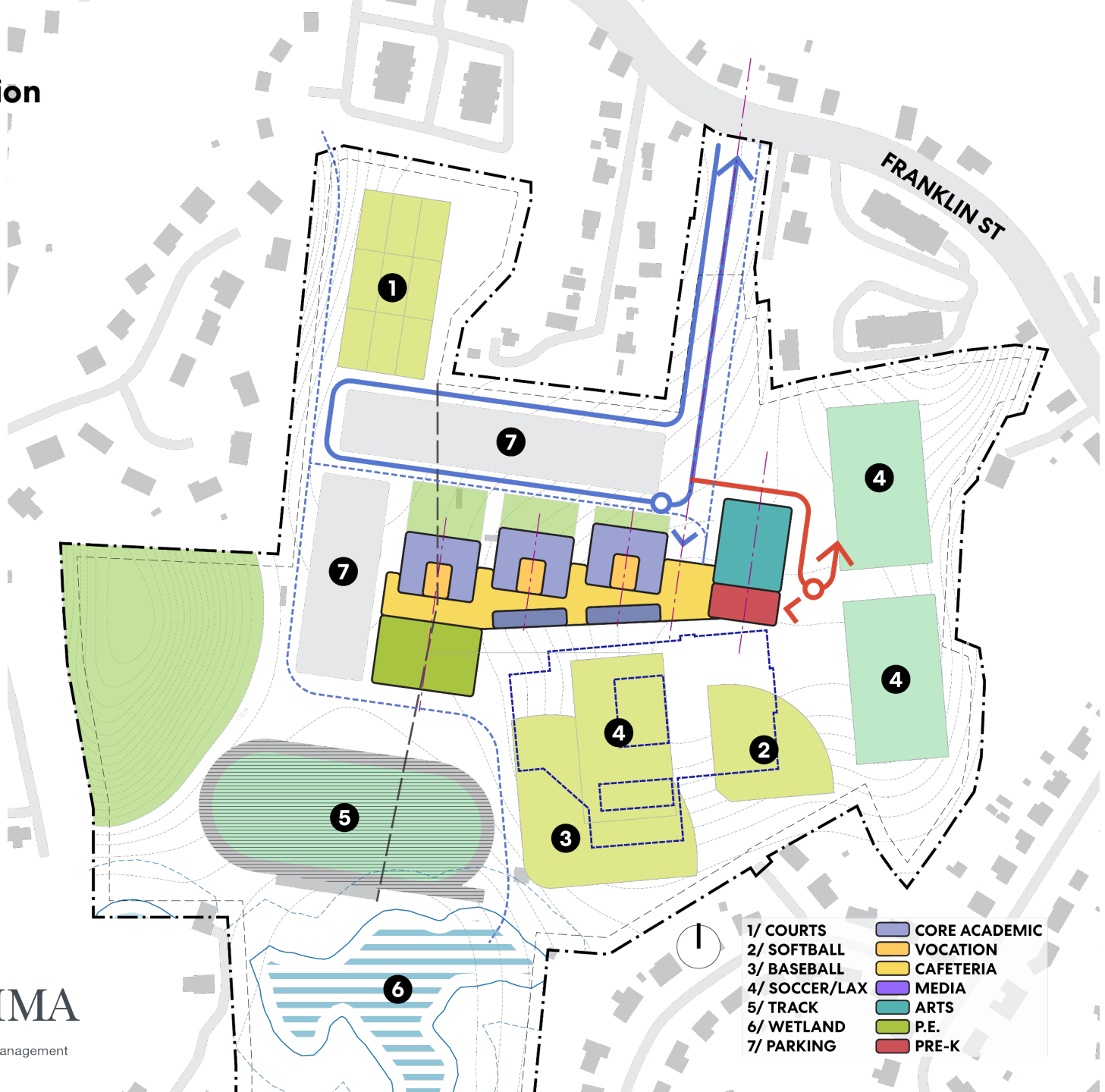
- **Pros:**
  - Realized Stoneham's 21c educational vision
  - Single-phased construction
  - High visibility of new building from Franklin St
  - Pedestrian connection from community to expeditionary trail
- **Cons:**
  - Tight construction area
  - Requires rerouting of culverted stream
  - Building encroaches on areas of know ledge
  - Sub-optimal orientation for classroom daylighting

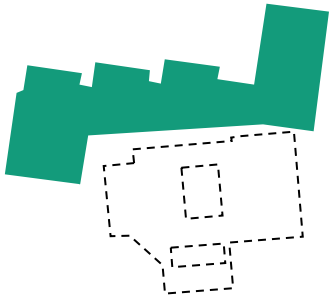
Systems
Structural / MEP

- **Pros:**
  - New structure – no repair/renovation/upgrade scope
  - More flexibility and control over overall structural systems
- **Cons:**
  - More structure to install compared to renovation and additions
  - Utilities relocation required to keep existing building in operation

New Construction Option

4C





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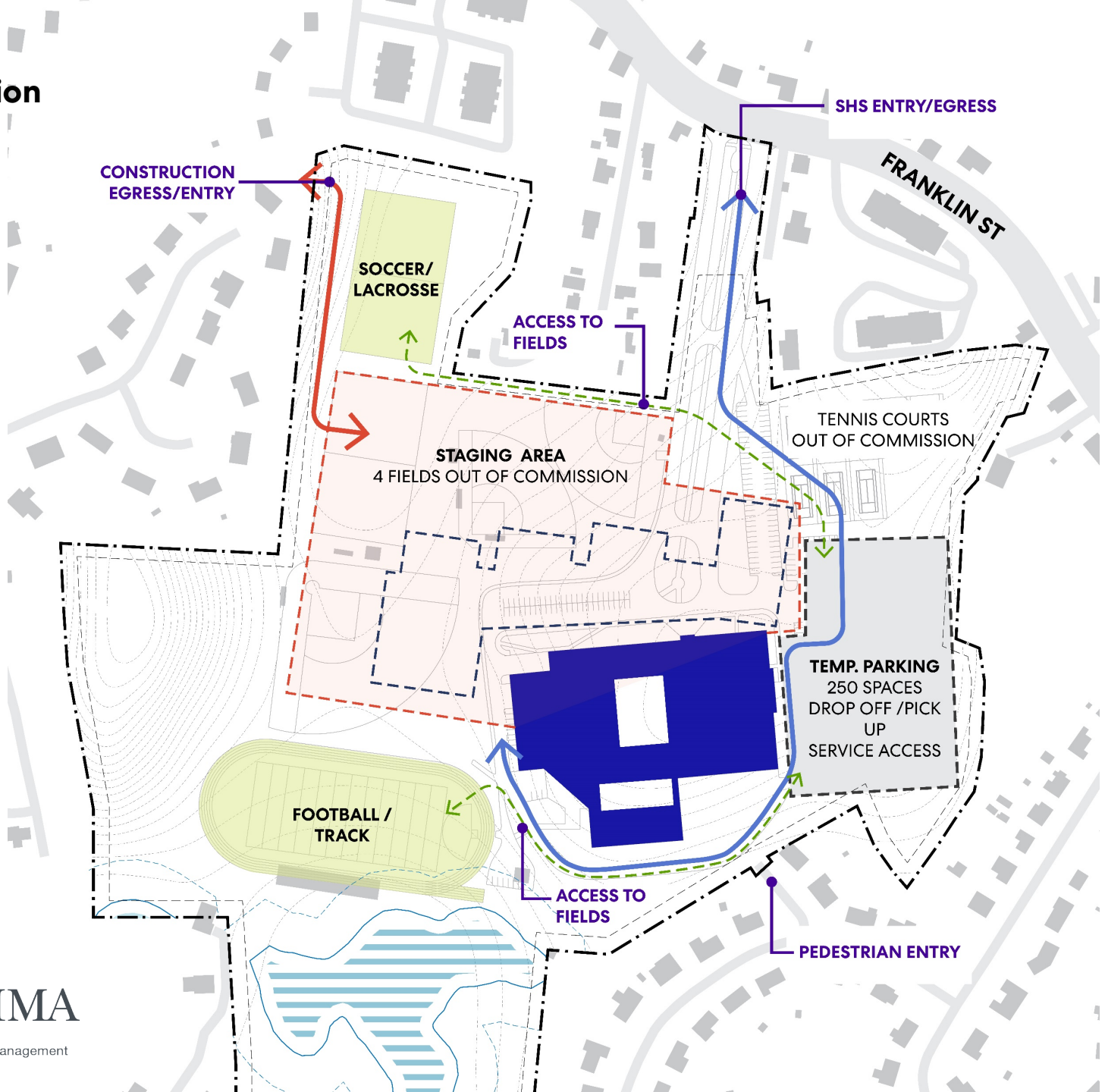
New Construction Option

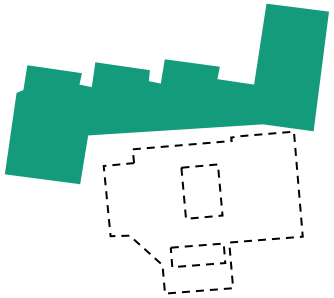
4C

Construction Phasing

Fields out of commission:

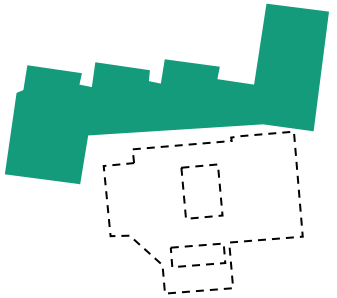
- **(2) Softball Fields**
- **(8) Tennis Courts**
- **(2) Soccer Field**
- **(1) Baseball Field**





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Design Alternatives Review / New Construction Option 4C



Site / Access
Landscape

- **Pros:**
  - Building forms strong gateway to expeditionary trail
  - Separate community entries
- **Cons:**
  - Loss of fields and stadium use during construction
  - Northeast parking needs retaining
  - Outdoor classrooms north of building
  - Significant grade changes between fields

Architecture

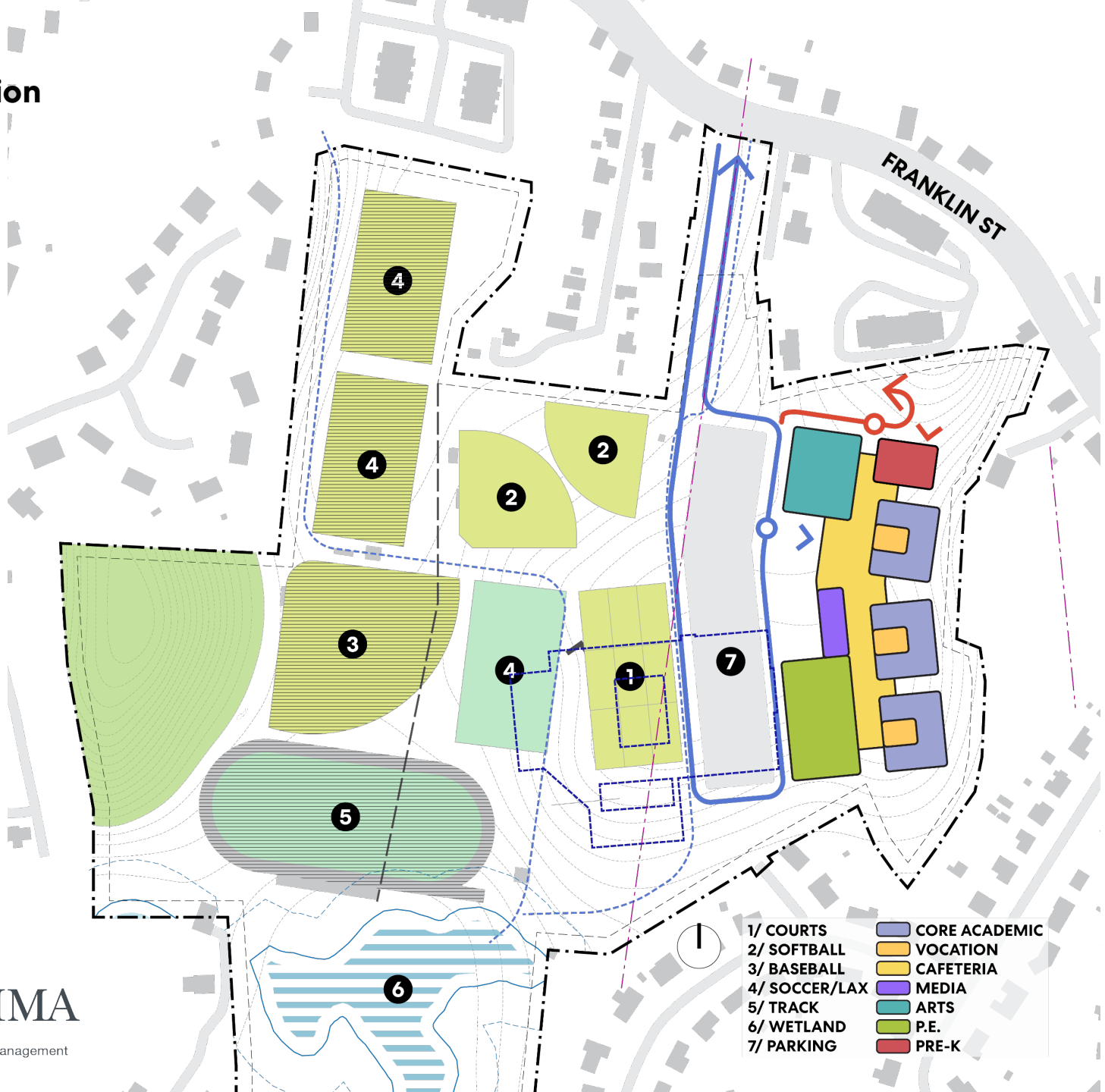
- **Pros:**
  - Realized Stoneham's 21c educational vision
  - Single-phased construction
  - Maximizes visibility of new building from Franklin St
  - South facing pre-function spaces (interior and exterior)
- **Cons:**
  - Tight construction area
  - Requires rerouting of culverted stream
  - Sub-optimal field orientation remains

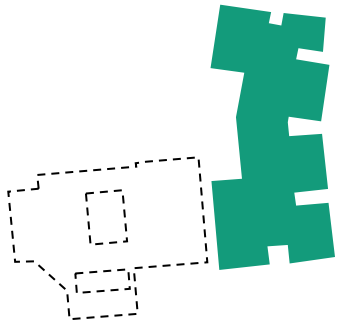
Systems
Structural / MEP

- **Pros:**
  - New structure – no repair/renovation/upgrade scope
  - More flexibility and control over overall structural systems
- **Cons:**
  - More structure to install compared to renovation and additions
  - Utilities relocation required to keep existing building in operation

New Construction Option

4D





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Project Management

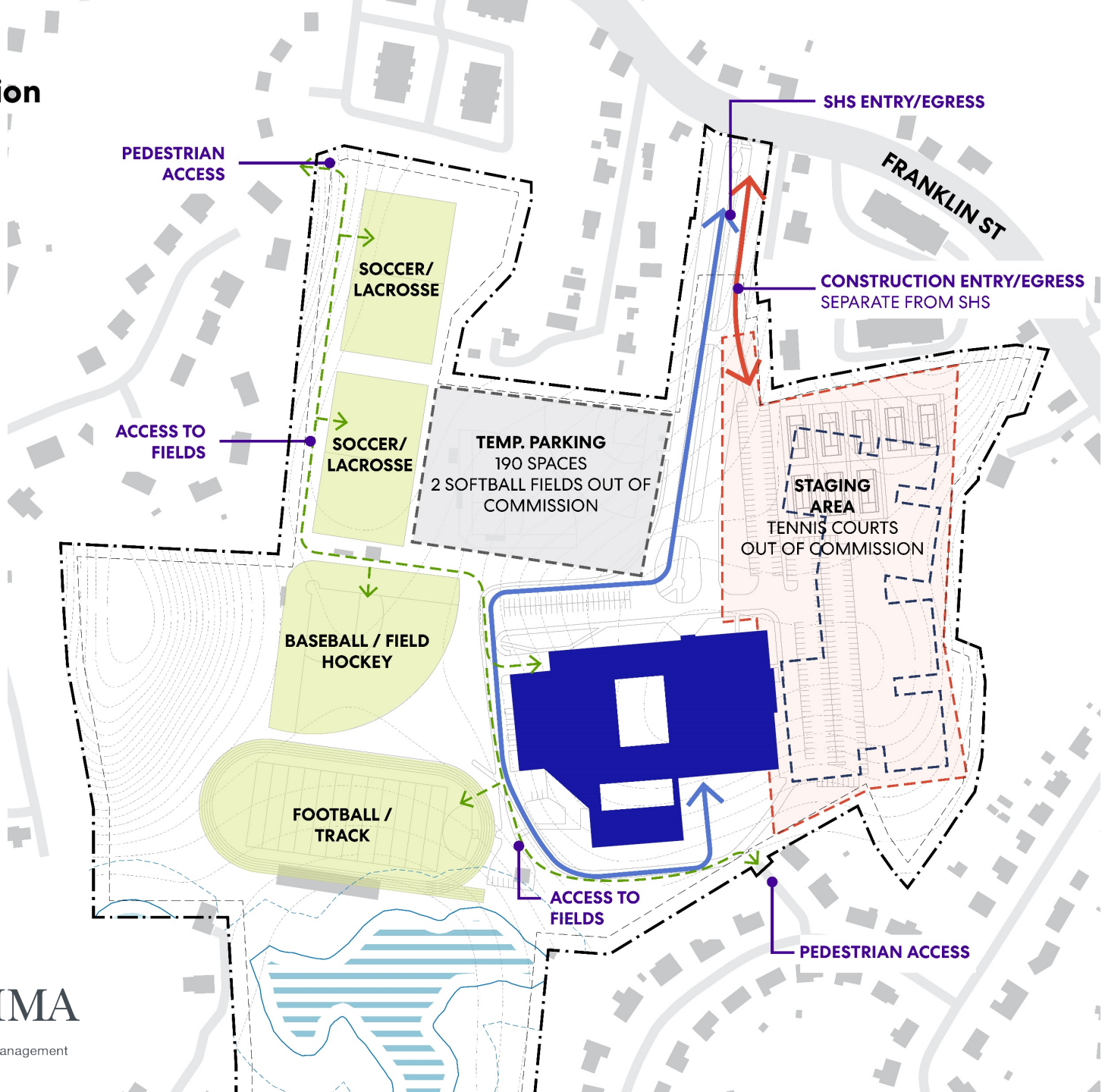
New Construction Option

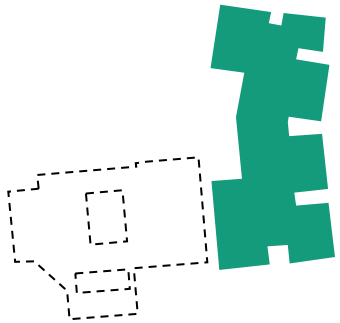
4D

Construction Phasing

Fields out of commission:

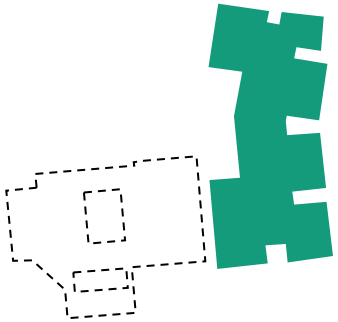
- **(2) Softball Fields**
- **(8) Tennis Courts**
- **(1) Soccer Field**





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Design Alternatives Review / New Construction Option 4D



Site / Access
Landscape

- **Pros:**
  - Long drop-off queue
  - Minimal change to existing athletic fields
    No relocation of stream

- **Cons:**
  - No building presence from Franklin Street
  - Parked cars present poor image of school
  - No outdoor classroom area
  - Exist. fields don't meet size requirements

Architecture

- **Pros:**
  - Realized Stoneham's 21c educational vision
  - Single-phased construction
  - Pedestrian connection from community to expeditionary trail
- **Cons:**
  - Tight construction area
  - Building is on top of ridge and close to adjacent homes (scale)
  - Sub-optimal orientation for classroom daylighting
  - Low visibility of new building from Franklin St
  - Building encroaches on areas of know ledge

Systems
Structural / MEP

- **Pros:**
  - New structure – no repair/renovation/upgrade scope
  - More flexibility and control over overall systems
  - May not disturb existing utilities

- **Cons:**
  - More structure to install
  - Possibility of no expansion joint

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Committee Feedback

Building Committee Meeting

Committee Feedback

What if we shifted the building to the east to maximize the number of fields to remain?

What if we paired the gymnasium and the auditorium so that they have shared pre-function space?

No.	Date	SSBC Member	Comment
1	9/8/2020	Paul Ryder	My biggest concern is the moving of the fields - especially the lighted football field. I am aware lighting can be directed to reduce spillover but the perception of the light poles will be a problem for abutters. Rather spend the money of turfed fields especially if we are looking at multi- use fields.
2	9/8/2020	Marie Christie	Just a little background for my comments. This project is my 7th SBC and 4th Debt Exclusion attempt. Although all 3 Debt Exclusions ultimately passed, it was a very difficult to get the majority vote. Stoneham has never passed a regular override. In the past, all town boards were extremely conservative. When I retired from the School Committee 2 yrs. ago, the percentage of households in town that had children in public school was about 18% The town has an extraordinarily large senior population that are the best voters in town. They may or may not to an asset to the Debt Exclusion campaign. The next largest group of voters are the empty nesters who mostly vote against all school appropriations. The passage of the Debt Exclusion will ultimately rest on the elementary and middle school parents who are in the minority of registered town voters. That being said, here are my thoughts. A few weeks ago I stated that I had two non-negotibles. 1. keep the current gym. 2. The new building must be front facing. Well, I may waiver a bit on #1. Could you get a cost estimate plus % of reimbursement for rehabbing the current gym and adding a suspended track to it. Also a cost estimate plus % of reimbursement for enlarging a new gym with and without a suspended track.
3	9/8/2020	Marie Christie	I do like Reno Add #1 (keeping the current gym). Can you move the entire building to the east toward the current parking lot and tennis courts so that the west end aligns approximately at the current gym. I really cannot tell if this is a 1,2 or 3 story building.
4	9/8/2020	Marie Christie	I also like New Cons. #1. Again, can you move the building as in the previous paragraph. Also move the Gym and Auditorium to the west end of the building.
5	9/8/2020	Marie Christie	I would like to see all playing fields remain where they currently are, if possible. In moving the building to the east, I think we could keep the baseball diamond and at least 1 softball diamond along with the soccer fields. The funds we save from not moving 6 fields could be reallocated to a larger gym with a suspended track. When the current building is demolished, we could restore the additional fields and tennis courts. This would not interrupt the sports programs which are so crucial to many students.
6	9/8/2020	Raymie Parker	I like designs 2, 3, 4. I wish there could be another alternative path built coming form the south. There are a Few streets back there that could handle a walking/bike path. It may help with traffic mitigation on Franklin, if the neighborhood behind the school had a safe route to school, that parents would be comfortable in letting HS students walk, instead of driving.
7	9/8/2020	Raymie Parker	I wonder if addressing this culvert under the school will help in mitigating some flooding issues that pose a problem from Weiss farm area.
8	9/8/2020	Raymie Parker	I like the pre-k having a separate entrance and play space.
9	9/8/2020	Raymie Parker	I wish to fix any existing issues or concerns with the site.
10	9/8/2020	Raymie Parker	I wonder about costs.

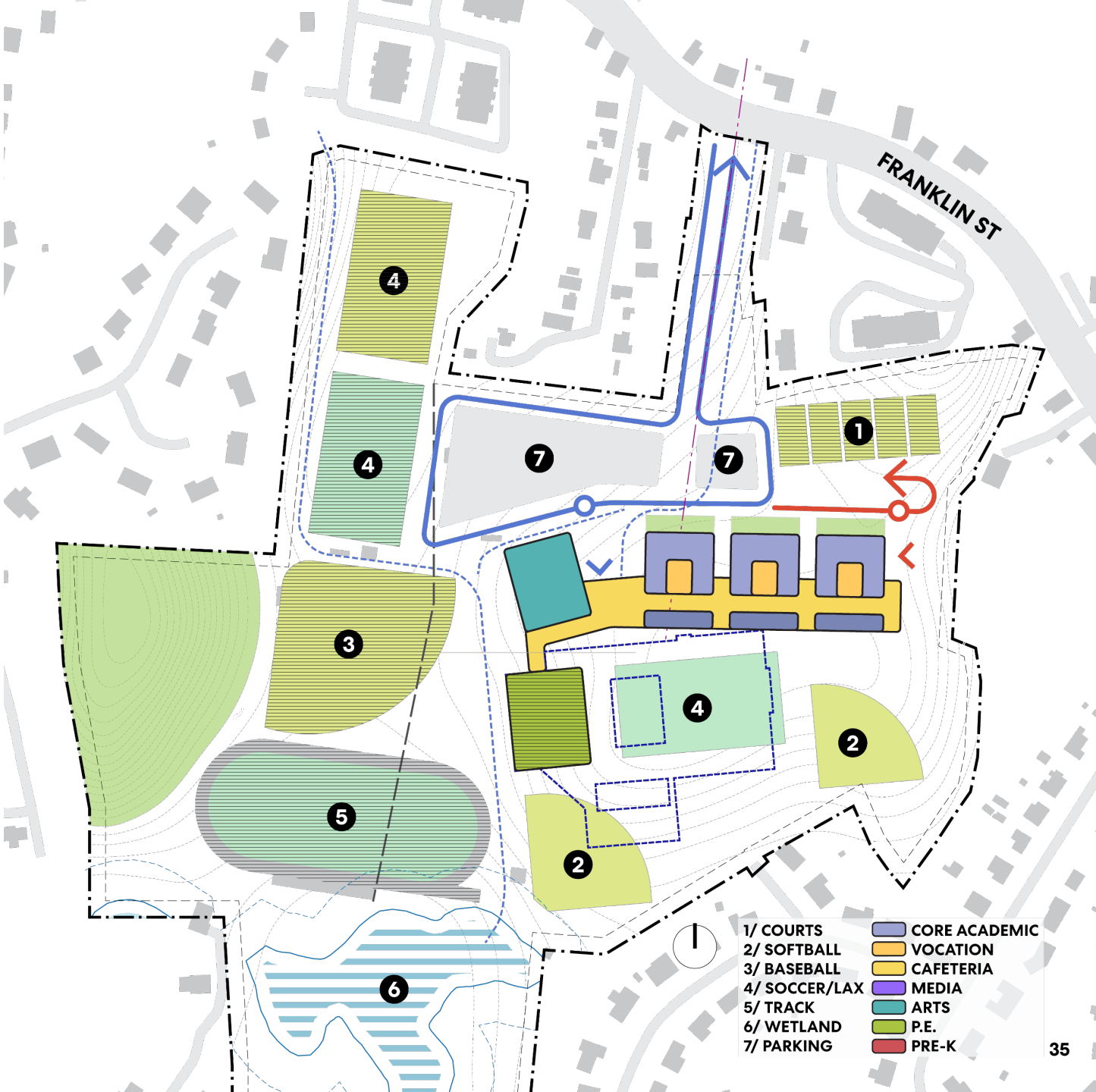
(Partial List)

Renovation Addition Option

3C

- **Pros:**
  - Building presence from Franklin Street
  - Long drop-off queue
  - Minimal change to existing athletic fields (softball fields out of commission during construction)
  - Single community entry
  - Central turf field as commons

- **Cons:**
  - Pedestrian path from Franklin Street crossing vehicular path
  - Exist. fields don't meet size requirements
  - North facing outdoor classrooms



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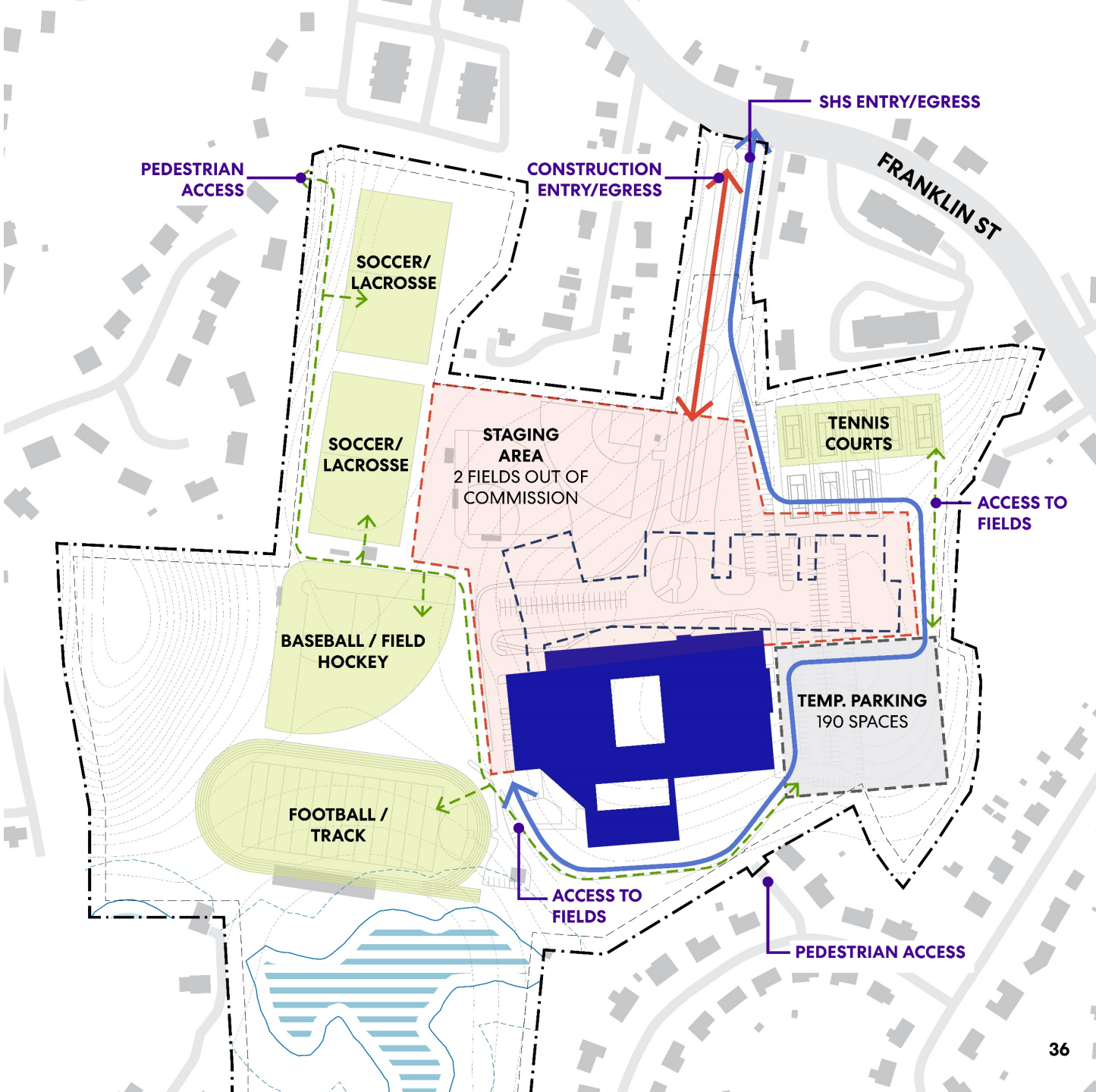
Renovation Addition Option

3C

Construction Phasing

Fields out of commission:

- **(2) Softball Fields**
- **(3) Tennis Courts**
- **(1) Soccer Field**



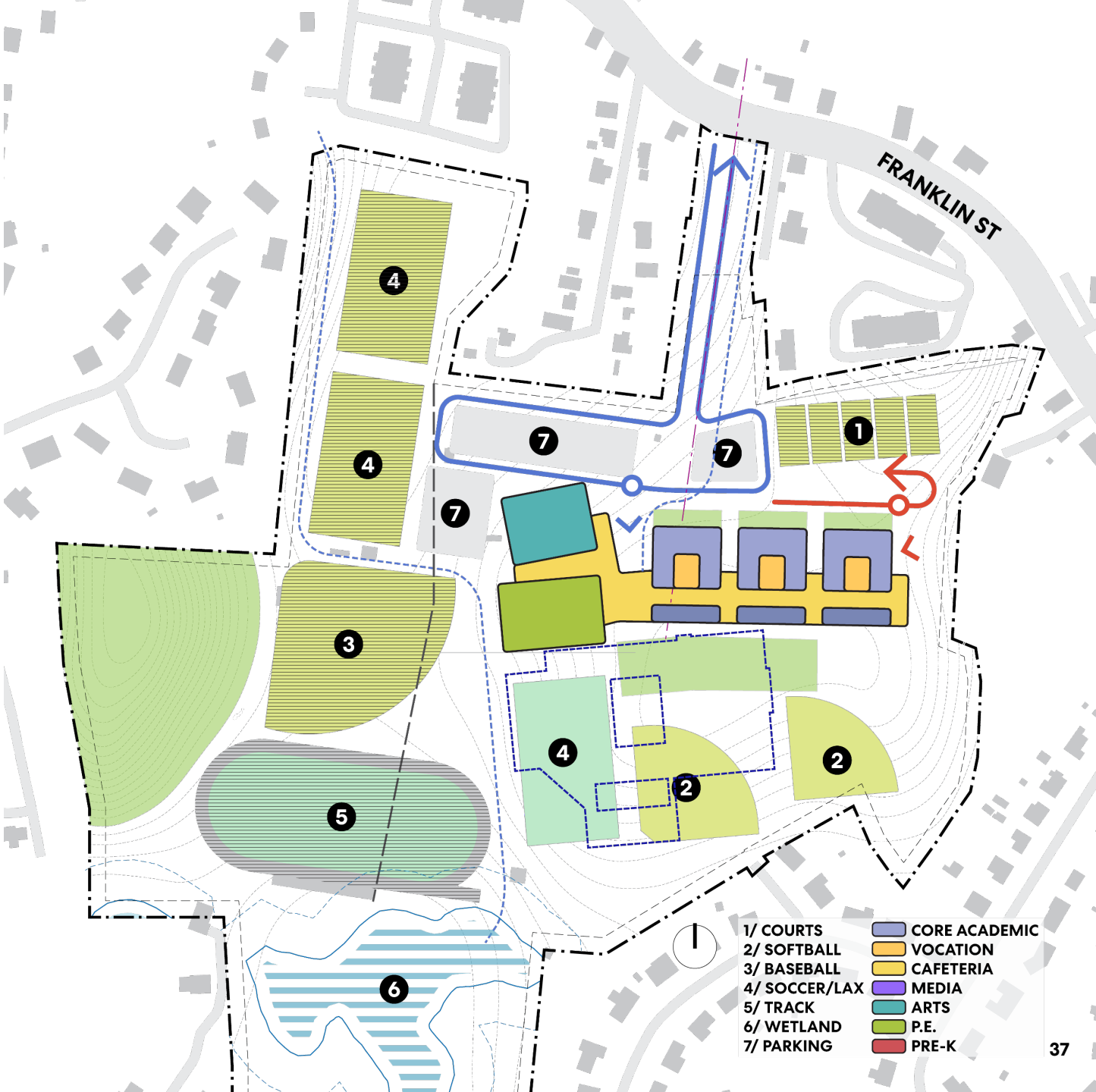
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New Construction Option

4E

- **Pros:**
  - Building presence from Franklin Street
  - Long drop-off queue
  - Minimal change to existing athletic fields (softball fields out of commission during construction)
  - Single community entry
  - Central turf field as commons

- **Cons:**
  - Pedestrian path from Franklin Street crossing vehicular path
  - Exist. fields don't meet size requirements
  - North facing outdoor classrooms
  - Constrained space for parking



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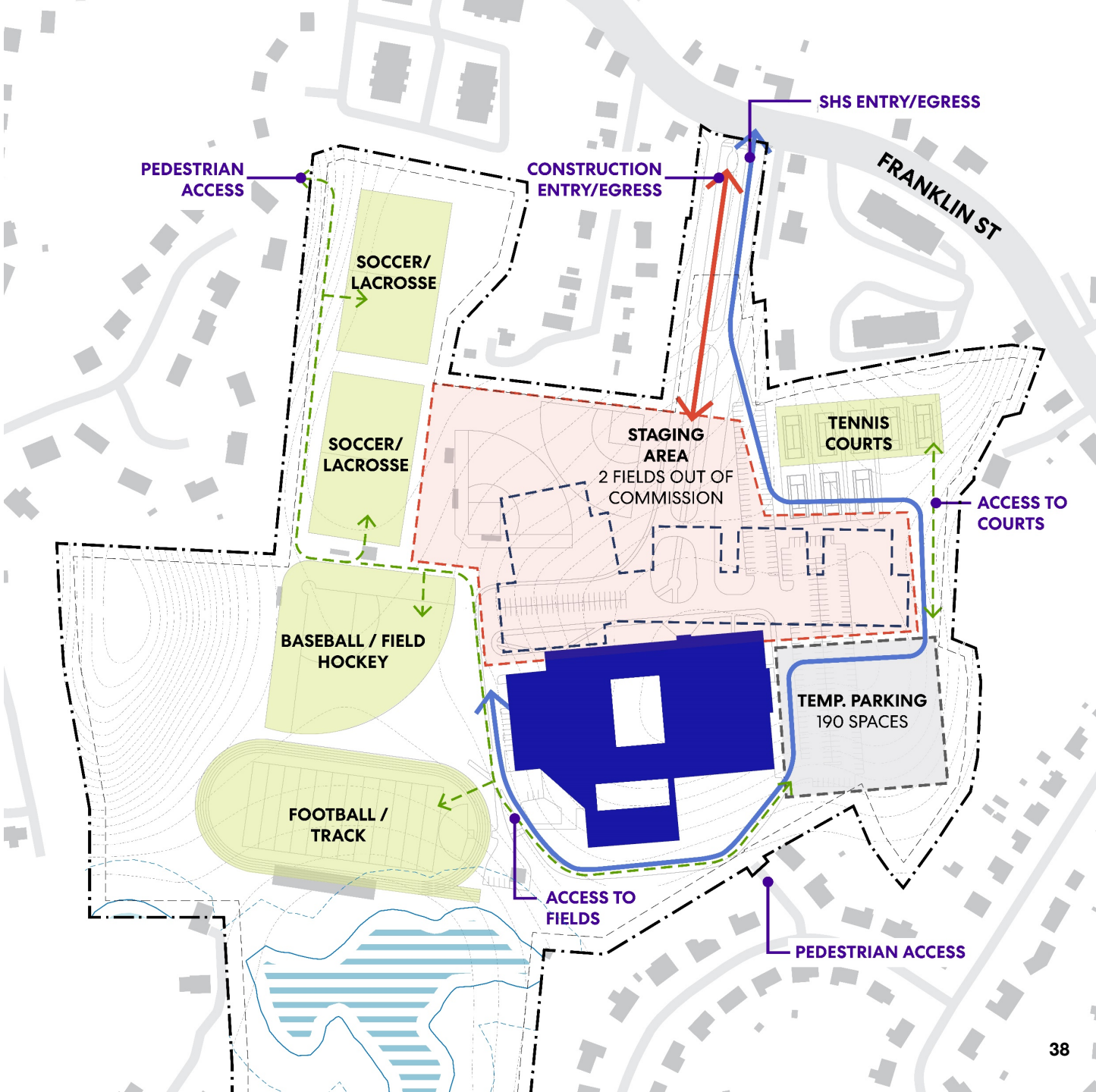
New Construction Option

4E

Construction Phasing

Fields out of commission:

- **(2) Softball Fields**
- **(3) Tennis Courts**
- **(1) Soccer Field**



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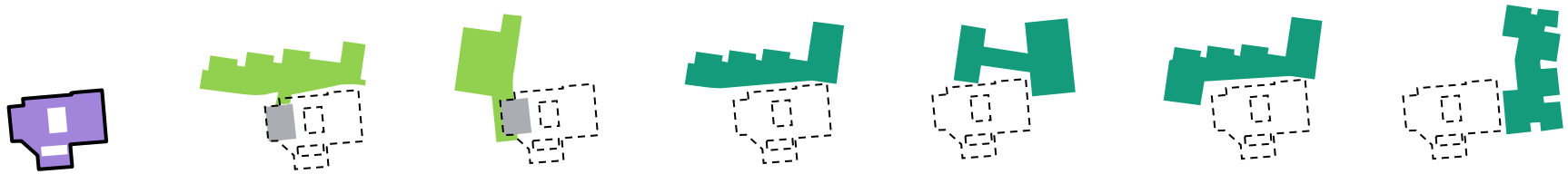
Project Management

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Cost Estimate

Building Committee Meeting

Cost Estimate



	Renovation Only Option 2A	Renovation/ Addition Option 3A	Renovation/ Addition Option 3B	New Construction Option 4A	New Construction Option 4B	New Construction Option 4C	New Construction Option 4D
Approximate Total Project Cost	$169.7M	$182.4M	$189.4M	$187.8M	$172.5M	$192.2M	$173.8M
Approximate Cost to Stoneham	$113.5M	$127.4M	$133.9M	$136.3M	$122.0M	$140.3M	$123.2M

Key Cost Drivers

- Building Size – 209,000sf
- Suspended Running Track in Gymnasium
- Geoexchange Wells for EUI 25
- Triple-Glazed Windows and Curtainwall for EUI 25
- Traffic Signal and Intersection Work at Stevens/Franklin
- Traffic Signal at Franklin/School Entry Drive
- Two Synthetic Turf Soccer Fields with Lighting
- Synthetic Turf Football Field with Lighting
- New Track and Bleachers at Football Field
- Reconstructing Natural Turf Baseball, Softball and Soccer Fields
- Reconstructing Tennis Courts
- Underground 48” Culverted Stream Work

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Decision Making Matrix

Building Committee Meeting

Rating the Options

DRAFT FOR COMMITTEE INPUT

Options	Compliance Factors											
	Ed Program Compliance	Traffic: Queuing, Site Circulation, Parking	Parking, proximity to stadium/ fields	Stadium/fields/ lights neighborhood impact	Construction access impacts	Phasing Complexity	Existing field preservation	Optimized construction schedule	ZNE achievability	Civic presence	Reuse of Gymnasium	Total
Renovation Option 2A	○	○	○	○	○	○	○	○	○	○	○	
Renovation Addition Option 3A	○	○	○	○	○	○	○	○	○	○	○	
Renovation Addition Option 3B	○	○	○	○	○	○	○	○	○	○	○	
Renovation Addition Option 3C	○	○	○	○	○	○	○	○	○	○	○	
New Construction Option 4A	○	○	○	○	○	○	○	○	○	○	○	
New Construction Option 4B	○	○	○	○	○	○	○	○	○	○	○	
New Construction Option 4C	○	○	○	○	○	○	○	○	○	○	○	
New Construction Option 4D	○	○	○	○	○	○	○	○	○	○	○	
New Construction Option 4E	○	○	○	○	○	○	○	○	○	○	○	

● Fulfills expectations/ minimal impact(3)

◒ Neutral(2)

○ Fails expectations/ significant impact(1)

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Project Management

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Q&A

Building Committee Meeting

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PM&C Estimate
Dated 9/11/20

SF	Option	Costs			Cost/SF
202,683	**Repairs Only**	Construction Cost		$0	
		Fees,Testing, Utilities, and Expenses		$0	
		FFE/Technology		$0	
		Contingencies		$0	
			total	**$0**	**$0**
202,683	**Renovation Only**	Construction Cost		$130,601,646	
		Building Cost		$99,731,454	
		Site Cost		$24,984,686	
		Demo/HazMat Cost		$5,885,506	
		Temporary Classroom Modulars		$5,600,000	
		Fees,Testing, Utilities, and Expenses		$21,871,222	
		FFE/Technology		$2,502,000	
		Contingencies		$9,142,115	
			total	**$169,716,983**	**$837**
209,000	**Renovation/Addition Option 1**	Construction Cost		$145,749,519	
		Building Cost		$110,985,732	
		Site Cost		$28,000,010	
		Demo/HazMat Cost		$6,763,777	
		Fees,Testing, Utilities, and Expenses		$23,916,185	
		FFE/Technology		$2,502,000	
		Contingencies		$10,202,466	
			total	**$182,370,170**	**$873**
209,000	**Renovation/Addition Option 2**	Construction Cost		$151,556,360	
		Building Cost		$116,853,639	
		Site Cost		$27,950,825	
		Demo/HazMat Cost		$6,751,896	
		Fees,Testing, Utilities, and Expenses		$24,700,109	
		FFE/Technology		$2,502,000	
		Contingencies		$10,608,945	
			total	**$189,367,414**	**$906**
209,000	**New Construction Option 1**	Construction Cost		$150,291,985	
		Building Cost		$115,879,469	
		Site Cost		$27,745,238	
		Demo/HazMat Cost		$6,667,278	
		Fees,Testing, Utilities, and Expenses		$24,529,418	
		FFE/Technology		$2,502,000	
		Contingencies		$10,520,439	
			total	**$187,843,842**	**$899**
209,000	**New Construction Option 2**	Construction Cost		$137,593,694	
		Building Cost		$103,419,776	
		Site Cost		$27,484,161	
		Demo/HazMat Cost		$6,689,757	
		Fees,Testing, Utilities, and Expenses		$22,815,149	
		FFE/Technology		$2,502,000	
		Contingencies		$9,631,559	
			total	**$172,542,402**	**$826**
209,000	**New Construction Option 3**	Construction Cost		$153,877,374	
		Building Cost		$119,494,028	
		Site Cost		$27,721,720	
		Demo/HazMat Cost		$6,661,626	
		Fees,Testing, Utilities, and Expenses		$25,013,445	
		FFE/Technology		$2,502,000	
		Contingencies		$10,771,416	
			total	**$192,164,235**	**$919**
209,000	**New Construction Option 4**	Construction Cost		$138,628,311	
		Building Cost		$104,110,050	
		Site Cost		$27,830,496	
		Demo/HazMat Cost		$6,687,765	
		Fees,Testing, Utilities, and Expenses		$22,954,822	
		FFE/Technology		$2,502,000	
		Contingencies		$9,703,982	
			total	**$173,789,115**	**$832**

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PM&C Estimate
Dated 9/11/20

	Repairs Only	Renovation Only	Renovation/ Addition Option 1	Renovation/ Addition Option 2	New Construction Option 1	New Construction Option 2	New Construction Option 3	New Construction Option 4
Total Project Cost	$0	$169,716,983	$182,370,170	$189,367,414	$187,843,842	$172,542,402	$192,164,235	$173,789,115
Approximate MSBA Reimbursement	$0	$56,195,951	$54,932,371	$55,483,274	$51,578,288	$50,500,330	$51,883,002	$50,588,077
Approximate Cost to the Town	**$0**	**$113,521,032**	**$127,437,799**	**$133,884,140**	**$136,265,554**	**$122,042,072**	**$140,281,233**	**$123,201,038**
Summary of Approximate Ineligible Costs								
Temporary Classroom Modulars	na	$5,600,000	$0	$0	$0	$0	$0	$0
Site Costs	na	$17,196,611	$19,296,956	$18,777,305	$18,645,337	$19,382,998	$18,332,159	$19,673,938
Building Costs	na	$47,769,971	$58,712,470	$65,049,811	$66,460,574	$53,004,106	$70,364,299	$53,749,602
OPM and Designer Fees on Ineligible SF	na	$0	$647,346	$673,138	$1,383,738	$1,266,825	$1,416,749	$1,276,351
Asbestos Flooring Abatement	na	$412,000	$412,000	$412,000	$412,000	$412,000	$412,000	$412,000
FFE/Technology over $2,400/student	na	$834,000	$834,000	$834,000	$834,000	$834,000	$834,000	$834,000
Legal Fees, Moving Expenses, Contingencies	na	$4,338,049	$4,792,486	$4,966,691	$6,431,679	$5,923,748	$6,575,095	$5,965,133
	$0	$76,150,631	$84,695,258	$90,712,945	$94,167,328	$80,823,677	$97,934,302	$81,911,024

Stoneham High School Feasibility Study
Preliminary PDP Reimbursement Rates Comparison
9/11/2020

PROJECT MANAGEMENT SMMA

DRAFT

	Repairs Only	Renovation Only	Renovation/ Addition Option 1	Renovation/ Addition Option 2	New Construction Option 1	New Construction Option 2	New Construction Option 3	New Construction Option 4
Base Reimbursement Rate	**NA**	**52.06**	**52.06**	**52.06**	**52.06**	**52.06**	**52.06**	**52.06**
Maintenance	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Renovation	0.00	5.00	1.18	1.18	0.00	0.00	0.00	0.00
Green Schools	0.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Total Reimbursement Rate	**0**	**60.06**	**56.24**	**56.24**	**55.06**	**55.06**	**55.06**	**55.06**

SMMA
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Stoneham High School Feasibility Study
8/10/2020

8/25/2021 5%

Recent MSBA High School Projects

Project		Students	SF	Total Project Budget	Cost per SF	Date MSBA PS&B Board Approval	Years to SHS MSBA PS&B Board Approval	Escalation % to SHS	Escalation Cost to SHS	Total Project Budget w/ Escalation Cost to SHS	Escalated Cost per SF
Belmont High School	Renovation/Addition	2,215	445,100	$295,159,189	**$663**	Aug-18	3.1	15.34%	$45,284,697	$340,443,886	**$765**
Arlington High School	New	1,755	408,590	$290,851,820	**$712**	Apr-19	2.4	12.01%	$34,942,061	$325,793,881	**$797**
Central Berkshire High School	New	460	122,760	$72,721,109	**$592**	Apr-19	2.4	12.01%	$8,736,495	$81,457,604	**$664**
Lowell High School	Renovation/Addition	3,520	622,777	$343,399,220	**$551**	Apr-19	2.4	12.01%	$41,254,947	$384,654,167	**$618**
Pentucket High School	New	965	211,700	$146,332,328	**$691**	Apr-19	2.4	12.01%	$17,579,925	$163,912,253	**$774**
Sharon High School	New	1,250	240,204	$163,000,000	**$679**	Oct-19	1.9	9.51%	$15,496,164	$178,496,164	**$743**
Nausett High School	Renovation/Addition	905	214,250	$131,825,665	**$615**	Feb-20	1.6	7.82%	$10,311,295	$142,136,960	**$663**
Waltham High School	New	1,830	414,854	$374,567,387	**$903**	Feb-20	1.6	7.82%	$29,298,353	$403,865,740	**$974**
Worcester Doherty High School*	New	1,670	420,000	$293,825,418	**$700**	Dec-20	0.7	3.66%	$10,746,765	$304,572,183	**$725**

*MSBA PS&B Meeting projected

September 8, 2020
Update: September 14, 2020

Stoneham High School Feasibility Study
Design Options Review
Progress PDP Comments and Responses

No.	Date	SSBC Member	Comment	P&W Response
1	9/8/2020	Paul Ryder	My biggest concern is the moving of the fields - especially the lighted football field. I am aware lighting can be directed to reduce spillover but the perception of the light poles will be a problem for abutters. Rather spend the money of turfed fields especially if we are looking at multi- use fields.	A number of schemes maintain the stadium at its current location to minimize lighting challenges. The current cost estimate carries 1 stadium and 2 soccer/lacrosse fields as turf multipurpose fields.
2	9/8/2020	Marie Christie	Just a little background for my comments. This project is my 7th SBC and 4th Debt Exclusion attempt. Although all 3 Debt Exclusions ultimately passed, it was a very difficult to get the majority vote. Stoneham has never passed a regular override. In the past, all town boards were extremely conservative. When I retired from the School Committee 2 yrs. ago, the percentage of households in town that had children in public school was about 18%. The town has an extraordinarily large senior population that are the best voters in town. They may or may not to an asset to the Debt Exclusion campaign. The next largest group of voters are the empty nesters who mostly vote against all school appropriations. The passage of the Debt Exclusion will ultimately rest on the elementary and middle school parents who are in the minority of registered town voters. That being said, here are my thoughts. A few weeks ago I stated that I had two non-negotibles. 1. keep the current gym. 2. The new building must be front facing. Well, I may waiver a bit on #1. Could you get a cost estimate plus % of reimbursement for rehabbing the current gym and adding a suspended track to it. Also a cost estimate plus % of reimbursement for enlarging a new gym with and without a suspended track.	Cost and feasibility will be provided for a suspended track in the gymnasium space. For the Renovation Only and Renovation Addition where we reuse the existing gym the suspended track will be difficult due to the inalbity of the existing structural system to support the new track loading requirements.
3	9/8/2020	Marie Christie	I do like Reno Add #1 (keeping the current gym). Can you move the entire building to the east toward the current parking lot and tennis courts so that the west end aligns approximately at the current gym. I really cannot tell if this is a 1,2 or 3 story building.	The design team is concerned about the visibility of the entry and conflict with ledge, if the building moves east. We will understand more when we receive the site survey. The building will be 2 stories and in some cases 3, when slopes are greater.
4	9/8/2020	Marie Christie	I also like New Cons. #1. Again, can you move the building as in the previous paragraph. Also move the Gym and Auditorium to the west end of the building.	To be studied. Potential reduction of drop-off loop length; lessen effectiveness of relieving traffic pressure from Franklin St.
5	9/8/2020	Marie Christie	I would like to see all playing fields remain where they currently are, if possible. In moving the building to the east, I think we could keep the baseball diamond and at least 1 softball diamond along with the soccer fields. The funds we save from not moving 6 fields could be reallocated to a larger gym with a suspended track. When the current building is demolished, we could restore the additional fields and tennis courts. This would not interrupt the sports programs which are so crucial to many students.	Construction staging area and geoexchange field may impact/disturb at a minimum 2 major fields, regardless of the building location/position. To be studied in conjunction with comment No. 4.
6	9/8/2020	Raymie Parker	I like designs 2, 3, 4. I wish there could be another alternative path built coming form the south. There are a Few streets back there that could handle a walking/bike path. It may help with traffic mitigation on Franklin, if the neighborhood behind the school had a safe route to school, that parents would be comfortable in letting HS students walk, instead of driving.	We will work to integrate pedestrian path from the south of the site, as the options are being developed.
7	9/8/2020	Raymie Parker	I wonder if addressing this culvert under the school will help in mitigating some flooding issues that pose a problem from Weiss farm area.	We will inquire with the Civil team on the culverted stream's impact on the flooding issues.
8	9/8/2020	Raymie Parker	I like the pre-k having a separate entrance and play space.	All design alternatives will work to accomplish this.
9	9/8/2020	Raymie Parker	I wish to fix any existing issues or concerns with the site.	Please provide more detail Raymie.
10	9/8/2020	Raymie Parker	I wonder about costs.	We really like your use of "I like… I wish… I wonder...", thank you. Preliminary budget options will be presented shortly.

Stoneham High School Feasibility Study
Design Options Review
Progress PDP Comments and Responses

No.	Date	SSBC Member	Comment	P&W Response
11	9/10/2020	Raymie Parker	I wish to fix any existing issues or concerns with the site. I am unaware of any existing conditions, but for example, are there any questions we need to discuss with Conservation, are there invasive species of plants or natives we would like to keep or remove. Is there any ground/landfill that we know of that may need addressing. What problems have plagued the school, that we don't see, other than the building. Macero/MacNeill/Yiana may have more insight on this.	
12	9/10/2020	Albert Talarico	I would like to know the cost before committing to any design. If the renovation cost is fairing close to new Construction, which I believe will be the case, why would we even consider renovating or code compliance?	
13	9/10/2020	Albert Talarico	I like the new Construction Schema 1 and 3. I like that the orientation of the buildings is facing Franklin Street, the pedestrian connection, and the parking area locations.	
14	9/11/2020	Jeanne Craigie	I think they were unimaginative. Personally without cost associated I don't think I could ever make an informed decision. I concur with Mrs. Christie on the history having lived through this over 30 odd years. Without proper documentation this committee is relying on what PW seems to want. I am one who feels we should have a face forward building three stories ... I think it would be cost effective and a far better use of space. I would like to see a three-story building.	
15	9/11/2020	Jeanne Craigie	I agree that any Preschool facility should be separate with separate entrance.	
16	9/11/2020	Jeanne Craigie	I think the fields should remain where they are ... but be turned ... if we are to improve them the Stadium Field should be North to South so to avoid sun glare.	
17	9/11/2020	Jeanne Craigie	I also believe there is enough land adjacent to have two side to side turf fields	
18	9/11/2020	Jeanne Craigie	Switching BB fields would allow us more space and the hill would provide us with area to watch area for both softball and baseball games.	
19	9/11/2020	Jeanne Craigie	Leave the lights where they are perhaps refurbish with new technology.	
20	9/11/2020	Jeanne Craigie	I would explore the Stevens Street egress.	
21	9/11/2020	Jeanne Craigie	The paper Street by Fieldstone as a walkway.	
22	9/11/2020	Jeanne Craigie	The land behind FB field as second entrance.	
23	9/11/2020	Jeanne Craigie	I also believe FD would want to access behind the building ... that being said ... develop new area by tennis courts as a new parking lot.	
24	9/11/2020	Jeanne Craigie	Without seeing the cost of a refurbished gym and honestly is a suspended track worth the investment??	
25	9/11/2020	Jeanne Craigie	I might be inclined to redo gym by pushing it out the back entrance. Adding on out back and refurbishing the full locker room by elevator.	
26	9/11/2020	Jeanne Craigie	The educational plan should be contiguous to disciplines and have places that are secure for staff and supplies as well as large group rooms.	

Stoneham High School Feasibility Study
Design Options Review
Progress PDP Comments and Responses

No.	Date	SSBC Member	Comment	P&W Response
27	9/11/2020	Jeanne Craigie	I think going straight down would also eliminate culvert change with sewer & water.	
28	9/14/2020	Doug Gove	Slide 6 - Educational Programming Update Diagram – Has the Committee agreed to all of the spaces shown on this diagram? a.Did we agree to provide vocations? ---- how much space does this add to the building and at what cost? b.Are the Stoneham School District Offices going to be together with the HS Principal / Guidance spaces? I thought there was discussion at one point of having a separate entrance for the District Offices.	
29	9/14/2020	Doug Gove	Slide 7 – Educational Space Summary --- WE are currently showing 60,000 SF more than is reimbursable by MSBA. When is the Committee going to discuss this? Why are the District Offices not factored into the square footage tally?	
30	9/14/2020	Doug Gove	Slide 9 & 10 – Design Alternatives Update / Summary: a.For the renovation option, is it feasible and worthwhile to reuse the exiting gym. The deficiencies discussed to date (seismic, type of construction, egress) concerns me. b.For the new construction option, why do we have 4 options with the new school in front of the existing school? I'd like to see at least two alternatives where the new school is not directly in front of the existing school. I remain concerned about logistics and impact to students / teachers.	
31	9/14/2020	Doug Gove	Slide 12 – Alt 2A Renovation Option Construction Phasing --- There is a big grade difference within the staging area and construction egress. Has this been accounted for.	
32	9/14/2020	Doug Gove	General --- each of the Alternatives should have a category for Impact to Students / Teachers with pros and cons.	
33	9/14/2020	Doug Gove	General --- has the site been programmed with respect to required parking spots and # and type of fields and whether we are going to provide lights on multiple fields? We seem to be providing what we already have. Also do we need 9 tennis courts? Why not add outdoor basketball courts. How many parking spots are needed for teachers, students, auditorium, gymnasium.	

Stoneham High School Feasibility Study
Design Options Review
Progress PDP Comments and Responses

No.	Date	SSBC Member	Comment	P&W Response
34	9/14/2020	Doug Gove	General --- consider upgrading the football field as an earl milestone task. Installing turf early will allow it to be used more frequently during construction without impacting playing surface. Could we add a second multi-use turf field also to lesson impacts of field reductions?	
35	9/14/2020	Doug Gove	Slide 13 – Don't agree with the Site / Access Pro that there is no disruption to the site. There will be a big disruption during construction. Also, this slide doesn't address the fact that a Con is that modular classrooms are required. Should also address the fact that hazardous building material abatement could significantly complicate and add to the cost.	
36	9/14/2020	Doug Gove	Slide 14 – Alt 3A - How would you get to the gymnasium? Where are the offices?	
37	9/14/2020	Doug Gove	Slide 15 – Alt 3A – a.What is the plan to relocate the sewer and water? Can you keep them active during construction? What is a plumbing utility – is this water and sewer? I wouldn't refer to it as a plumbing utility. b.Where is the existing gas line and is this impacted during construction? c.Does the temporary access account for the change in grade near the tennis courts?	
38	9/14/2020	Doug Gove	Slide 16 – Alt 3A – Doesn't address the need to relocate the water and sewer lines. What does 1 or 2 expansion joints mean --- why is this even a con?	
39	9/14/2020	Doug Gove	General --- can I get more info on the large culvert that runs through the site? What is the origin? Are plans available? Has the hydrology been reviewed?	

Stoneham High School Feasibility Study
Design Options Review
Progress PDP Comments and Responses

No.	Date	SSBC Member	Comment	P&W Response
40	9/14/2020	Doug Gove	Slide 17 – Alt 3B: a.what is the green dashed line on the plan --- is this the culvert relocation? b.Parking seems far away from the school c.Can softball and soccer fields be located where the old tennis courts were? Is there ledge there?	
41	9/14/2020	Doug Gove	Slide 19 – Alt 3B: a.Wouldn't parking remote from school be a con also? b.Why is poor visibility from Franklin Street a Con? This shouldn't be a major design consideration and I hope this isn't driving the fact that there is only one new construction option that is not right in front of the existing school. c.Again --- what is expansion joint discussion as a Con --- I don't get it. d.Relocation of the drainage conduit a Con?	
42	9/14/2020	Doug Gove	Slide 20 – Alt 4A: a.Doesn't appear to be adequate space for the stands for the football field. b.Is adequate parking provided?	
43	9/14/2020	Doug Gove	Slide 21 – Alt 4A: a.Does the temp access road account for the change in grade? b.Does the temp construction access account for the change in grade?	
44	9/14/2020	Doug Gove	Slide 22 – Alt 4A: a.Does not account for relocation of the water and sewer during construction. b.Why is re-routing a stream an architecture item. Should be a site item.	

Stoneham High School Feasibility Study
Design Options Review
Progress PDP Comments and Responses

No.	Date	SSBC Member	Comment	P&W Response
45	9/14/2020	Doug Gove	Slide 23 – Alt 4B: Where are the stands for the football field?	
46	9/14/2020	Doug Gove	Slide 24 – Alt 4B: Does the temporary access road account for the change in grade near the softball fields?	
47	9/14/2020	Doug Gove	Slide 25 – Alt 4B: a.Site Con is relocation of the water / sewer. b.Re-routing of stream is a site item not architecture. c.Expansion joints?	
48	9/14/2020	Doug Gove	Slide 28 – Alt 4C: a.Site Con is relocation of the water / sewer. b.Re-routing the stream is site item.	
49	9/14/2020	Doug Gove	Slide 30 --- Alt 4D --- this should be the preferred alternative. Less impacts to field. Less impact to students and existing utilities.	
50	9/14/2020	Doug Gove	Slide 31: Alt 4D a.Site Pro's --- don't need to relocate water / sewer. Don't need to relocate the culverted stream ---- you can't have these as negatives on 1 slide and not view as a pro on another unless you are biased against this option. b.Site Pro's minimized impact to students / teacher. c.Site Pro's minimize impact to athletic fields during construction ---- how do we know that fields are not correct size if they haven't been programmed? d.Site Con --- again I have a problem with the view from Franklin Street being a Con unless the group is biased to that option. You listed it as a con under 2 different options.	

STONEHAM HIGH SCHOOL FEASIBILITY STUDY
SCHOOL BUILDING COMMITTEE

MEETINGS SCHEDULE AND AGENDAS
June 10, 2020 Updated August 11, 2020

DATE	AGENDA
Feasibility Study Phase (PDP)	
June 22, 2020	SCHOOL BUILDING COMMITTEE MEETING
	Introduction of Architects
	Approval of Architect's Proposal
	Discussion of Project Goals
	Discussion of Detailed Schedule
July 6, 2020	SCHOOL BUILDING COMMITTEE MEETING
	Discussion of Educational Programming Process
	Discussion of Existing Conditions
	Discussion of Alternative Sites
July 20, 2020	SCHOOL BUILDING COMMITTEE MEETING
	Existing Conditions Update
	Discussion of Sustainable Design
July 20, 2020	EDUCATIONAL VISIONING WORKSHOP #1
July 21, 2020	EDUCATIONAL VISIONING WORKSHOP #2
July 23, 2020	EDUCATIONAL VISIONING WORKSHOP #3
July 24, 2020	EDUCATIONAL VISIONING WORKSHOP #4
July 27, 2020	EDUCATIONAL VISIONING WORKSHOP #5
July 28, 2020	EDUCATIONAL VISIONING WORKSHOP #6
July 30, 2020	EDUCATIONAL VISIONING WORKSHOP #7
July 31, 2020	EDUCATIONAL VISIONING WORKSHOP #8
August 3, 2020	SCHOOL BUILDING COMMITTEE MEETING
	Educational Programing Update
	Existing Conditions Update
	Sustainable Design Update
	Discussion of Design Alternatives
August 11, 2020	COMMUNITY FORUM NO. 1 - INTRODUCTIONS, STUDY SCHEDULE, EXISTING CONDITIONS & EDUCATIONAL PROGRAM
August 17, 2020	SCHOOL BUILDING COMMITTEE MEETING
	Design Alternatives and Phasing Update
	Sustainable Design Update
	Discussion of Cost Models
	Discussion of Construction Delivery Methods
August 31, 2020	SCHOOL BUILDING COMMITTEE MEETING
	Design Alternatives and Phasing Update
	Sustainable Design Update
	Cost Models Update
September 14, 2020	SCHOOL BUILDING COMMITTEE MEETING
	Design Alternatives and Phasing Update
	Sustainable Design Update
	Cost Models Update
September 23, 2020	COMMUNITY FORUM NO. 2 - DESIGN ALTERNATIVES, COST MODELS
September 28, 2020	SCHOOL BUILDING COMMITTEE MEETING
	Review Refined Design Alternatives and Phasing
	Review Cost Models
	Vote to Submit PDP and Top 3 Alternatives
October 6, 2020	*SUBMIT PDP PACKAGE TO MSBA*
	ADDITIONAL MEETINGS TO BE SCHEDULED

STONEHAM HIGH SCHOOL FEASIBILITY STUDY
SCHOOL BUILDING COMMITTEE

MEETINGS SCHEDULE AND AGENDAS
September 8, 2020

DATE	AGENDA
Feasibility Study Phase (PSR)	
October 13, 2020	SCHOOL BUILDING COMMITTEE MEETING - *TUESDAY*
	Review PSR Phase Schedule
	Review PSR Phase Goals
	Decide Construction Delivery Method
	Prepare for Tri-Board Meeting
October 15, 2020	TRI-BOARD MEETING - 7:00 PM at the High School Gymnasium
October 26, 2020	SCHOOL BUILDING COMMITTEE MEETING
	Update on Construction Alternatives and Phasing
	Structural Narrative Review
	Review MSBA Comments on PDP Submission
	Prepare for Community Forum No. 3
TBD	COMMUNITY FORUM NO. 3 - 6:30 PM
November 9, 2020	SCHOOL BUILDING COMMITTEE MEETING
	Update on Construction Alternatives
	MEP Systems Narrative Review
	Update on Sustainable Design
November 23, 2020	SCHOOL BUILDING COMMITTEE MEETING
	Update on Construction Alternatives and Phasing
	Review Cost Models
	Preliminary Options Evaluation
December 7, 2020	SCHOOL BUILDING COMMITTEE MEETING
	Update on Construction Alternatives
	Update on Sustainable Design
	Review Cost Models
	Options Evaluation
	Discuss the One Preferred Option
	Prepare for Community Forum No. 4
TBD	COMMUNITY FORUM NO. 4 - 6:30 PM
TBD	TRI-BOARD MEETING
December 21, 2020	SCHOOL BUILDING COMMITTEE MEETING
	Decide the One Preferred Construction Alternative
	Vote to Submit Preferred Schematic Report to MSBA
December 29, 2020	*SUBMIT PREFERRED SCHEMATIC REPORT PACKAGE TO MSBA*
	ADDITIONAL MEETINGS TO BE SCHEDULED

NEW CONSTRUCTION & MAJOR RENOVATIONS

Memorandum of Understanding for Path 1: Zero Net Energy / Deep Energy Savings

The Path 1, Zero Net Energy (ZNE)/Deep Energy Savings Program (the "Program") is intended for customers pursuing a ZNE or zero net ready building and who also are interested in maintaining focus on the Energy Use Intensity (EUI)[1] reduction component of ZNE. To participate, customers must commit to a very low EUI target and must pursue that target throughout design and construction as well as through post occupancy. The Mass Save Sponsors[2] offer incentives to help customers offset the incremental costs associated with designing and implementing low EUI strategies. The technical assistance and incentives offered in this pathway focus customers and project teams on post occupancy outcomes.

Project Eligibility:

1. **Project teams must commit to a goal of either zero net energy, zero net energy ready[3] or Passive House (as a path to net zero)**
2. **Customer must engage Mass Save Sponsor(s) during the project's feasibility or conceptual design phases, but before 50% Schematic Design**
3. **Projects must have a minimum of 20,000 square feet of comfort conditioned (heated and cooled) space**
4. **Projects must anticipate year-round occupancy. For K-12 schools, this requirement includes a minimum of 4 weeks of anticipated summer use in classroom areas.**
5. **Building must be separately metered (not on same utility meters as other buildings)**
6. **Projects must be new buildings or major renovations. A major renovation would qualify for this Program if the scope is such that occupancy is not possible during construction and where scope includes at least 3 of the following 5 systems: (1) HVAC, (2) DHW, (3) lighting, (4) envelope, and (5) process equipment**
7. **Core and shell and multi-family projects may not participate in Path 1 at this time**
8. **Projects where scope includes Combined Heat and Power (CHP) are not eligible for participation in Path 1**
9. **Participants must be a customer of one of the Mass Save Sponsors**

Key Customer Commitments:

1. Project teams must be willing to target a **25.0 site EUI or less**. An exception may be requested (or necessary) if 25.0 EUI is not reasonable due to building type, hours of operation or because some percentage of the building is semi-conditioned. In these situations, participants alternatively may pursue a site EUI target representing a minimum 25.0% EUI reduction (for electrically heated buildings) or 40.0% EUI reduction (for non-electrically heated buildings) from the Mass Save baseline. Mass Save Sponsors must approve any exceptions, and any EUI target shall not be greater than 75 in this pathway. [4]
2. Include ZNE or ZNE ready goal and the EUI target in the project documents, including the Owner Project Requirements (OPR)

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[1] Energy Use Intensity (EUI): A measure of a building's gross annual energy consumption (excluding parking garages) relative to its gross square footage (excluding parking garages; penthouse square footage should also not be included, as it is not conditioned space). EUI is calculated as KBtu per square foot per year.

[2] The Mass Save Sponsors are National Grid, Eversource, Unitil, Columbia Gas, Cape Light Compact, Liberty Utilities, Blackstone Gas Company, and Berkshire Gas. To determine your Mass Save Program Sponsor(s), please visit https://www.masssave.com/en/saving/business-rebates.

[3] Zero Net Energy Building: A building that produces as much clean, renewable energy as it uses when measured over a one-year period. Zero Net Energy Ready Building: Projects that are not able to add renewables on site right away but achieve the EUI Target set for the project.

[4] Electricity generating renewables, such as Photovoltaics (PV) or wind turbine technology, do not contribute towards the site EUI target.

3. Agree to cost share the services of the Mass Save ZNE expert
4. Continuously monitor the predicted EUI of the project with iterative energy modeling throughout each phase of design. Design team's energy model should meet the requirements of ASHRAE 90.1 G2.2.
5. Commission the building to levels equivalent to the LEED BD&C Version 4 Fundamental Commissioning and Verification Prerequisite and the LEED BD&C Enhanced Commissioning credit (Option 1, Path 1) and Envelope Commissioning credit (Option 2)
6. Establish a plan for determining how the building's site EUI will be calculated once the building is operational, and identify the responsible parties
7. Ensure electric vehicle charging stations are separately metered
8. Ensure any on site generation is separately metered
9. Ensure any unconditioned spaces are separately metered
10. Meet the requirements of ASHRAE 90.1-2016, para. 8.4.3 related to metering and data storage
11. Commit to continued engagement with Mass Save Sponsor(s) through a one-year post commissioning, post occupancy period

Key Mass Save Sponsor Commitments:

1. Cost share with the customer the services of a ZNE expert (50% of fee up to $10,000 cost share) to help the project team develop a roadmap to low EUI and ZNE success.
2. Offer project incentives on a dollar per square foot basis up to $2.25/sf. See Table 1 below.
3. Offer $3,000 toward zero net energy or Passive House certification.
4. Offer up to $15,000 in Design Team Incentives. See Table 2 below.
5. Offer an optional Verification Incentive to help customers achieve their predicted EUI upon operation. See Table 1 below.

This document outlines the roles and responsibilities of each party to set transparent expectations for all parties participating in the Program. Under no circumstances does this Memorandum require customers or design teams to incorporate any particular EUI reduction strategy, nor does this document bind the customer or design team to a particular EUI target. All assistance offered by Sponsors through this Program is offered in an advisory capacity only.

The Mass Save Sponsors understand that the following customer:

_____ ("The Customer")

will undertake the following (check one)

- ☐ new construction
- ☐ major renovation,
- ☐ addition

_____("Premises")

This project is being designed by the following design professionals (collectively, the "Design Team"):

_____ ("Architect")

_____ ("Electrical Engineer")

_____ ("Mechanical Engineer")

Participating Mass Save Sponsors:

_____ ("Electric Sponsor")

_____ ("Gas Sponsor")

IMPORTANT:

Customers participating in this pathway may not also participate in the Mass Save *upstream* programs where incentives for HVAC, domestic hot water, food service and lighting equipment are offered directly to distributors. To ensure participation in only one Mass Save program pathway, designers must include language in project documents informing contractors that this project is participating in a Mass Save downstream program pathway, and that they may not pursue or accept any HVAC, domestic hot water, food service or lighting upstream incentives for this project.

Detailed Process:

Step 1 – Customer Engagement with Mass Save

Customers may reach out to Mass Save Sponsors even before they select the Owner's Project Manager (OPM) and Designer. Very early engagement allows Mass Save Sponsors to provide guidance on language to include in OPM and designer services Requests for Services (RFSs) related to zero net energy and low EUI targets. Once the design team has been selected and zero net energy is a clear goal, the customer will re-engage with Mass Save Sponsors in conceptual/early feasibility or early schematic design. Initial conversations will focus on EUI target setting and confirmation that customer and design team goals align with the program requirements.

Step 2 – EUI Target Setting and Developing a Roadmap to Meet the EUI Target

The target EUI for projects participating in this pathway is a site EUI of 25.0 or less or an alternative percent reduction target in accordance with key customer commitment number 1 above.

- Projects pursuing an EUI of 25 or less – Mass Save Sponsors will engage a ZNE specialist to provide technical assistance and ZNE planning throughout design
- Projects pursuing the 25.0% or 40.0% reduction scenarios – Mass Save Sponsors will engage a ZNE specialist to help determine a 25.0% or 40.0% EUI reduction target. The specialist will also help the design team with developing strategies and a pathway for getting the design to achieve the target.

Once the Mass Save Sponsors confirm the customer is eligible for participation in this ZNE pathway, customers will be required to sign an Engineering Services Agreement (ESA) and commit to cost sharing the services of the ZNE specialist.

Step 3 – Design

Once the EUI target is established, it should be written into the project documents, including the OPR, where it will serve as a touchstone throughout the rest of design and construction. The project team will pursue the EUI target throughout design and will conduct the iterative energy modeling necessary to ensure the design remains on track to achieve the target EUI.

In addition to the feasibility and early schematic design technical support and ZNE road mapping services, the Mass Save ZNE specialist will review the project documents at the end of Schematic Design and at mid design development, and then will provide reports back to the team with any further recommendations and considerations.

Customer must make final cost share payments to the ZNE specialist once the ZNE specialist's work is complete at the end of design development.

Customer must ensure a commissioning contract is in place that meets the requirements of this Program. Provide a copy of the commissioning scope of services to Mass Save Sponsor(s).

If the customer is pursuing an EUI target through the 25.0% or 40.0% reduction from Mass Save baseline option, the EUI target will be estimated during the early feasibility and schematic design phases, but will not be locked in for purposes of incentives until the Mass Save Sponsor confirms its baseline EUI based on the 100% Design Development set. Once Mass Save Sponsors have reviewed that set, Mass Save Sponsors will lock in the target EUI. The target EUI will remain locked for purposes of incentives unless there are major design changes between 100% design development and 100% construction documents, including, but not limited to, HVAC system type changes and space type changes.

Step 4 – Planning for EUI Data Collection and Corrective Action

Customers must consider how they will determine the post occupancy EUI of the project in coordination with their Mass Save Sponsor(s) and determine who will be responsible for collecting the data. Thought should be given to corrective action if at post occupancy the project is straying from the final design EUI. The project must comply with ASHRAE 90.1-2016, para. 8.4.3 related to metering and data storage, and it is recommended that the project team consider submetering in accordance with the LEED BD&C v4 Energy and Atmosphere Advanced Energy Metering credit, which requires submetering of any individual energy end uses that represent 10% or more of the total annual consumption of the building.

An optional Verification Incentive is available to help customers identify issues that may arise related to energy savings post construction (please request the Mass Save Sponsor's scope of work for more details). The Mass Save Sponsors will reimburse 50% or up to $10,000 of the fee associated with this work. Customers must decide during design if they wish to pursue this incentive so that a contract can be put in place.

Step 5 – Mass Save Incentive Pre-Approval

At the end of design, the design team must complete a final energy model representative of the final design. If the design team's energy model affirms the design will achieve the target EUI, the Mass Save Sponsor will pre-approve an incentive of $1.25/sf. If the customer has a contract in place for the Verification Incentive scope, this incentive component will be pre-approved as well.

An additional $1.00/sf incentive will be available after the one-year post occupancy period if the project achieves the target EUI in practice (see Step 7 for details on when the post occupancy period begins). If the design team's model does not achieve the target EUI (either a 25.0 EUI or a 25.0%/40.0% reduction in EUI from the Mass Save baseline), the project will shift out of the Path 1 ZNE/Deep Energy Savings participation pathway but continue participating with Mass Save Sponsors in the Path 2 Whole Buildings EUI Reduction Pathway (contact your Mass

Save Sponsor for more details).

Mass Save Sponsors will require customers to sign:

1. Custom application, formally requesting Mass Save incentives, and
2. The Mass Save Minimum Requirements Document (MRD), which lays out the energy-using equipment and system details that will lead the project to achieve the target EUI.

Customers must commit to constructing the building as it was designed and as it was documented in the MRDs. Major deviations from the design and specific equipment included in the design could jeopardize the project's ability to achieve the target EUI and could jeopardize the customer's opportunity to obtain full incentives.

At the end of design, Mass Save Sponsors will also request pdfs of the Final Design Documents. Mass Save Sponsors will conduct further analysis at their own expense to determine more granular information regarding Mass Save program energy savings. Mass Save Sponsors will share the design documents with at least one additional vendor at their discretion at this time.

Table 1. Summary of Customer Incentives*	
Construction Incentive	$1.25/sf
Post Occupancy Incentive	$1.00/sf
ZNE or PH Certification Incentive	$3,000
Optional Verification Incentive	50% of fee up to $10,000

*Customer incentives are capped at 100% of the combined incremental cost of the EUI reduction strategies included in the project. Projects must be cost-effective to receive the full customer incentive and are subject to each Mass Save Sponsor's program budget.

Step 6 – Construction Completion and Construction Phase Incentive Payment

A few weeks before substantial completion, customers must provide a set of approved submittals, invoices and photographs corresponding with major equipment that is key in attaining the predicted EUI. Sponsor(s) may also request a copy of the project's schedule of values.

All projects participating in the Program are subject to inspection by each participating Mass Save Sponsor. Customers may be asked to arrange for these post inspections to take place once the building is ready for occupancy.

Upon Mass Save Sponsor review of submittals, invoices and photographs, and upon completion of the post inspection, Mass Save Sponsor(s) will make the $1.25/sf construction incentive payment to the customer and will make the design team incentive payment. Where equipment and systems installed deviate substantially from equipment and systems shown in the design documents, Mass Save reserves the right to adjust the customer and design team incentive amounts.

The design team is eligible for a Design Team Incentive (DTI) at construction completion if the customer's construction payment is approved. DTI rates, offered per Table 2 below, encourage the integrated design and continuous iterative energy analysis that is necessary to achieve the EUI target.[5] Mass Save Sponsors pay the DTIs to the design team lead (an invoice is required), who may disperse them to other team members as appropriate.

[5] Where the project has a contract that may restrict payments to the design team (as can happen with some municipal projects), it is the responsibility of the design team lead to work with the customer to ensure that the design team can obtain design team incentive payments per this program offering.

Table 2. Design Team Incentives
Calculated at $0.20/sf and capped at $15,000, but not less than $8,000 per project

Step 7 – Post Occupancy Incentive, Verification Incentive, and Certification Incentive

Once the building is functioning in a steady state (at anticipated occupancy and operating as intended), the customer and the Mass Save Sponsor(s) agree to begin the Mass Save Performance Period, which will last for one year. At the end of the Mass Save Performance Period, the customer is responsible for supplying the post occupancy energy usage (including utility bills, delivered fuel usage, and on-site generation), which is subject to Mass Save Sponsor review.

As described in Step 4, customers may optionally choose to pursue a Verification Incentive from Mass Save Sponsors. Regardless of whether the customer pursues the Verification Incentive, the Mass Save Performance Period as it relates to the post occupancy incentive will begin once the customer affirms:

- The metering system is set up and operating properly per ASHRAE 90.1-2016, para. 8.4.3 and as verified by the commissioning agent.
- All corrective action the customer intends to take as a result of the Verification Team's scope of work has been completed.
- The occupancy and use of the building have reached a "steady state."

If, at the end of the Mass Save Performance Period, the building achieves an operational EUI, which, when adjusted for weather by the Mass Save Sponsors, achieves the target EUI, the Mass Save Sponsors will pay the customer the additional $1.00/sf incentive for this Program. The post occupancy EUI is adjusted for weather so that customers are not unfairly penalized for particularly harsh weather and are not unfairly benefitted by particularly mild weather.

If the customer opts to certify the project as net zero in accordance with LEED Zero or the International Living Future Institute's (ILFI's) Living Building Challenge 4.0 (including Zero Carbon, Zero Energy, CORE, Petal or Living Certification), the New Buildings Institute's (NBI's) zero energy standards, or if they receive Passive House certification from either PHIUS or PHI, Mass Save Sponsors will pay a $3,000 certification incentive.

Disclaimers

Except for payment of incentives as set forth hereunder, the Mass Save Sponsors do not make any representations, warranties, promises or guarantees in connection with the Program, energy conservation measures (ECMs), EUI reduction strategies, energy savings, benefits, adequacy or safety of ECMs or other items, or any work, services or other item performed in connection with the Program including, without limitation, the warranty of merchantability or fitness for a particular purpose. Also, other than the (i) energy cost savings realized by Customer, (ii) energy or ancillary service market revenue achieved through market sensitive dispatch, (iii) alternative energy credits, and (iv) renewable energy credits (altogether, the "Customer Credits"), the Mass Save Sponsors have unilateral rights to apply for any credits or payments resulting from the Program or ECMs (the "Sponsor Credits"). Such Sponsor Credits include but are not limited to credits and payments for: (a) ISO-NE capacity, (b) forward capacity credits, (c) other electric or natural gas capacity and avoided cost payments or credits, and (d) demand response program payments. Customer waives, and agrees not to seek, any right to any Sponsor Credit. The Mass Save Sponsors are not responsible for the payment of any taxes assessed by federal, state or local governments on either benefits conferred on the customer by the Sponsor(s) or design incentives paid to the design team.

By signing below, the customer represents that he/she (1) shall be the sole and lawful customer of the Premises and (2) has read, understands, accepts and agrees to the terms and conditions for participation in the Program outlined above.

Customer Signature:_____

Customer Printed Name: _____

Date:_____

Email:_____ **Phone:**_____

Architect Signature: _____

Architect Printed Name and Company Affiliation: _____

Date:_____

Email:_____ **Phone:**_____

Process Checklist

Path 1: ZNE/Deep Energy Savings Program

Pre-Design Phase

- ☐ If possible, engage Mass Save Sponsor(s) before hiring an Owner's Project Manager (OPM) and design team. The Mass Save Sponsors can offer request for proposal or request for services (RFP/RFS) language and questions to help customers select a designer or OPM with zero net energy (ZNE) project experience.
- ☐ Incorporate zero net energy (ZNE) goals and/or low Energy Use Intensity (EUI) goals into the RFP/RFS for OPM services and designer services

Feasibility and Early Schematic Design Phases

- ☐ Once design team is hired, re-engage Mass Save Sponsor(s) to ensure this Program is a good fit
- ☐ Sign Mass Save Memorandum of Understanding (MOU)
- ☐ Sign an Engineering Services Agreement (ESA) confirming customer is willing to cost share the services of a ZNE expert that Mass Save sponsor(s) would bring to the project
- ☐ Establish EUI target and a roadmap for achieving the target
- ☐ Add ZNE goal and EUI target to Owner Project Requirement (OPR) and provide Mass Save Sponsor(s) with a copy
- ☐ Conduct iterative energy modeling throughout design to ensure the project is tracking toward the EUI target
- ☐ Establish a plan for calculating site EUI once the building is operational; identify responsible parties and consider tools that will flag unexpectedly high energy use (e.g., submetering)
- ☐ Ensure that a commissioning contract is in place that meets the program requirements and provide copy of commissioning scope to Mass Save Sponsor(s)
- ☐ If pursuing the Verification Incentive, establish a contract with the Verification Team to complete this work and provide a copy of the contract that includes the scope of work necessary to obtain the incentive to Mass Save Sponsors.

Mid Design

- ☐ Continue to conduct iterative energy modeling throughout design to ensure the project is tracking toward the EUI target
- ☐ Provide 50% or 100% Design Development set to Mass Save ZNE expert for review and team feedback/discussion
- ☐ Designers must include language in project documents informing contractors that this project is participating in a Mass Save downstream program pathway, and that they may not pursue or accept any HVAC, food service, domestic hot water or lighting upstream incentives for this project
- ☐ Finalize customer cost share payments to the ZNE specialist upon receipt of the specialists' Design Development Review Report

End of Design – Upon Completion of Design Team's Energy Modeling

- ☐ Provide the design team's energy modeling report based on 100% Construction Documents to Mass Save Sponsor(s) showing the predicted EUI of the project's final design. If the EUI target is met, move forward in Path 1 below. If the EUI target is not met, move forward with Path 2 (consult your Mass Save Sponsor).
- ☐ Sign the Custom Application in the pre-installation section, formally requesting Mass Save Sponsor incentives
- ☐ Sign the Minimum Requirements Documents (MRD) in the pre-installation section – affirming intent to build in accordance with the equipment and systems identified in the MRDs

Construction/End of Construction Phase

- Maintain focus on the project components such that the predicted EUI is maintained as a target throughout construction
- Provide submittals, invoices, photographs and possibly a contractor schedule of values at the end of construction to affirm that major equipment and systems contributing to the predicted EUI have been installed
- Schedule a post installation walk-through with Mass Save Sponsor(s)
- Sign the Custom Application in the post-installation section to confirm project is complete and ready for occupancy
- Sign the Minimum Requirements Document (MRD) in the post installation section to confirm that equipment and systems have been installed as expected to contribute to the predicted EUI.
- Mass Save Sponsor(s) will pay customer's construction incentive if equipment is installed as expected
- Design Team Lead to submit an invoice for the Design Team Incentive
- Mass Save Sponsor(s) will pay the Design Team Incentives if equipment is installed as expected

Mass Save Performance Period

- Once the project reaches a steady state of occupancy and operation, provide Mass Save Sponsor(s) with an affidavit that confirms the metering system is set up and operating properly per ASHRAE 90.1-2016, para. 8.4.3 as verified by the commissioning agent, all corrective action customer intends to take related to energy use has been taken, and the building's occupancy and operation are in a steady state.
- Customer will provide Mass Save Sponsors with one year of post occupancy usage (including utility bills, delivered fuel usage, and on-site generation) after the beginning of the Mass Save Performance Period
- Mass Save Sponsors will review the data and true up the EUI date to adjust for weather
- If weather adjusted EUI meets the target EUI, Mass Save Sponsors will make the $1.00/sf post occupancy payment
- If customer opted for the optional Verification Incentive, provide Mass Save Sponsors with copies of reports from each review interval
- Mass Save Sponsor(s) will make a $3,000 certification support payment if customers certify their projects as net zero in accordance with LEED Zero or the International Living Future Institute's (ILFI's) Living Building Challenge 4.0 (including Zero Carbon, Zero Energy, CORE, Petal or Living Certification), the New Buildings Institute's (NBI's) zero energy standards, or if they receive Passive House certification from either PHIUS or PHI

7/29/2020

Project Management | SMMA

Project Minutes

Project:	Stoneham High School Feasibility Study	Project No.:	20033
Prepared by:	Joel Seeley	Meeting Date:	8/31/2020
Re:	Sustainable Design Meeting	Time:	10:00am
Location:	Remote Locations	Meeting No:	1
Distribution:	Attendees (MF)		

Attendees:

PRESENT	NAME	AFFILIATION
✓	Marie Christie	Co-Chair, School Building Committee
✓	Raymie Parker	Chair, Select Board
✓	Dennis Sheehan	Town Administrator
✓	John Macero	Superintendent of Schools
✓	Brian McNeil	Facilities Director
✓	Erin Wortman	Director, Planning and Community Development
✓	Susan McPhee	Energy Conservation Coordinator
✓	Kimberly Cullinane	Eversource
✓	Mark Rooney	Eversource
✓	Brooke Trivas	Perkins and Will
✓	Patrick Cunningham	Perkins and Will
✓	Joel Seeley	SMMA

Item #	Action	Discussion
1.1	Record	All introduced themselves and their role in the feasibility study.
1.2	Record	J. Seeley generally described the feasibility study scope and schedule.
1.3	Record	P. Cunningham described P&W's recent experience with ZNE projects and the major design strategies undertaken. Discussion: 1. D. Sheehan asked if P&W sees any deal breakers in SHS achieving ZNE, such as renovating the existing Gymnasium or natural gas for the emergency generator? *P. Cunningham indicated no, but specific aspects will need to be studied, such as the envelope of the existing Gymnasium*.
1.4	K. Cullinane B. Trivas	K. Cullinane described the MassSave incentive program and Path 1 and Path 2 MassSave Memorandum of Understanding (MOU). MassSave will provide the

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Item #	Action	Discussion
	J. Seeley	services of a Technical Assistance (TA) vendor, a ZNE expert, to provide technical assistance and energy modeling services commencing in the feasibility study phase, thru a cost sharing agreement with the Town. Once the Town executes the MOU, a meeting will be scheduled with the TA vendor, who will then submit a fee proposal for approval. Discussion: 1. J. Seeley to review the MOU with the SSBC for approval and execution by the Town and P&W. 2. J. Seeley asked when would the Town's share for the cost of the TA vendor be due? *K. Cullinane indicated the Town's share would be due when the services were performed, the majority of which will be performed in the feasibility and schematic design phases*. 3. D. Sheehan asked if there are any communication strategies other communities undertook that can be shared? *K. Cullinane indicated Acton-Boxborough is a good example of holistically assessing the upfront capital costs related to ZNE and how the long-term reduction in operational costs can be used to off-set the debt service. Lexington is another good example*. 4. K. Cullinane will forward information on Eversource's annual meeting, that includes a presentation on ZNE. 5. K. Cullinane will forward an updated list of recent ZNE school projects. 6. B. Trivas and J. Seeley to develop a list of P&W's and the TA vendor's services in the feasibility and schematic design phases.
1.5	D. Sheehan	D. Sheehan to schedule a follow-up meeting in two weeks.

Attachments:

The information herein reflects the understanding reached. Please contact the author if you have any questions or are not in agreement with these Project Minutes

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TO: Director of Capital Planning

FROM: Mr. John Macero

Stoneham Public Schools

Stoneham High School

MSBA Project ID Number: 201802840505

MSBA
JUL 28
RECEIV

DATE: July 6, 2020

RE: Feasibility Study Agreement (FSA) Budget Revision Request, NUMBER: 1

Pursuant to the Feasibility Study Agreement between the Town of Stoneham (the "District") and the MASSACHUSETTS SCHOOL BUILDING AUTHORITY (the "Authority"), the District hereby requests a revision to the Feasibility Study Budget, Exhibit A, dated February 25, 2020, for the Stoneham High School Project. As required, the District has provided the information outlined in the table below to indicate the Feasibility Study Budget categories (line items) affected, the amounts needed and the reasons for the proposed revision.

The District acknowledges and agrees that it will not seek reimbursement from the Authority for any costs that exceed the already approved line item limits set forth in Exhibit A until after the Authority has accepted this Feasibility Study Budget Revision Request, and the Authority's ProPay system has been adjusted accordingly.

The District further acknowledges and agrees that in accordance with Section 3.3 of the Feasibility Study Agreement, any revisions to the Feasibility Study Budget will not result in an increase to the grant amount set forth in Section 2.1 of the Feasibility Study Agreement.

The District further acknowledges and agrees that the need for these revisions to the Feasibility Study Budget will be identified in the OPM monthly report as required pursuant to the Contract for Owner's Project Management Services between the District and the OPM.

The District further acknowledges and agrees that all of the information contained in this Feasibility Study Agreement Budget Revision Request has been reviewed and approved by the Town of Stoneham's School Building Committee, and it further certifies and acknowledges that the funds to pay for the costs associated with these proposed revisions are available as indicated by the signatures noted below.

The Total Budget in the Current Feasibility Study Budget, Exhibit A of the FSA dated February 25, 2020 is $750,000.00.

From Class' Code	From Classification Name	To Class' Code	To Classification Name	Budget Revision Amount	Reason for transfer (Attach all supporting documentation, e.g., executed contracts, amendments and or supporting invoices for reimbursable expenses)	Amount Remaining in Other	Ineligible/Cost/Scope Items excluded from the Total Facilities Grant
0001-0000	OPM Feasibility Study/ Schematic Design	0004-0000	Other	$2,500.00	Final Negotiated Fee	$40,000.00	
0001-0000	OPM Feasibility Study/ Schematic Design	0003-0000	Environmental & Site	$55,000.00	Final Negotiated Fee	$40,000.00	

From Class' Code	From Classification Name	To Class' Code	To Classification Name	Budget Revision Amount	Reason for transfer (Attach all supporting documentation, e.g., executed contracts, amendments and or supporting invoices for reimbursable expenses)	Amount Remaining in Other	Ineligible/Cost/Scope Items excluded from the Total Facilities Grant
0002-0000	A/E Feasibility Study/Schematic Design	0003-0000	Environmental & Site	$45,000.00	Final Negotiated Fee	$40,000.00	

By signing this Total Project Budget Revision Request, I hereby certify that I have read and understand the terms of this Request and further certify that the information supplied by the District in the tables is true, accurate and complete.

By: **Dennis Sheehan**

Title: **Chief Executive Officer**

Date: **July 6, 2020**

By signing this Total Project Budget Revision Request, I hereby certify that I have read and understand the terms of this Request and further certify that the information supplied by the District in the tables is true, accurate and complete.

By: **John Macero**

Title: **Superintendent of Schools**

Date: **July 6, 2020**

By signing this Total Project Budget Revision Request, I hereby certify that I have read and understand the terms of this Request and further certify that the information supplied by the District in the tables is true, accurate and complete.

By: **Jaime Wallace**

Title: **Chair of the School Committee**

Date: **July 6, 2020**

MASSACHUSETTS SCHOOL BUILDING AUTHORITY

By: **John F Jumpe Jr., P.E.**

Title: **Director of Project Management**

Date: **9/8/20**

Perkins&Will

Meeting Minutes

Date: 9.9.2020 **Authored by:** Brooke Trivas/ Alyson Fletcher

Meeting Details

Meeting Date:	9.2.2020	**Project Name:**	Stoneham High School
Meeting Time:	12::00 PM	**Project Number:**	-
Meeting Location:	Virtual	**Attendees:**	Dennis Sheehan, Town Administrator Brett Gonsalves, DPW Director Joe Ponzo, Traffic Safety Officer Erin Wortman, Director of Community Development and Planning Jim McIntyre, Police Chief Matt Grafton, Fire Chief John Macero, Superintendent Maria Sagarino, Town Clerk (serving in her capacity as Traffic Clerk) Brooke Trivas, Patrick Cunningham, Xi (Leo) Liu, Perkins & Will Emily Hunt, Warner Larson (Partial attendance) Alyson Fletcher, Nelson\Nygaard Joel Seeley, OPM SMMA

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Boston, Massachusetts 02110

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Please note: *The foregoing constitutes our understanding of matters discussed and conclusions reached. Other participants are requested to review these items and advise the originator in writing of any errors or omissions.*

Meeting Minutes
Stoneham High School
Meeting Date: 9.2.2020

Group Discussion

- **Discuss history of safety officer's management of Franklin Street at Franklin Place and at Stevens Street. Weakness, strengths, opportunities. Discuss site circulation and traffic needs generally.**
    a. BUDGET TO carry cost for new signal at Stevens (and engineering study) and for an upgrade or new signal at Franklin Place.
    b. Traffic at Franklin + Stevens is "a nightmare"
    c. Franklin Place at Franklin Street signal is out of date and beyond repair – can't even order and replace the parts, cabinet controls are old, and the sensors have been ripped out of the pavement; so, it doesn't even activate when you pull up. Town cannot afford to replace the signal themselves. Weiss Farm litigation may have financial contribution to improving this signal – Town to look and confirm.
    d. Huge congestion on Franklin and backing up to Stevens
    e. Dunkin Donuts addition seen as a primary cause of traffic problems – because of this, the Select Board requested they have traffic directors at both Stevens and Franklin Place
    f. Traffic Directors at Franklin + Stevens – it's a unique situation: most schools have crossing guards for pedestrians but because there is such a great need for balancing commuter flow here, crossing kids, and school access without the budget to add two signals, we needed them to be directors during school ingress and egress
    g. People figured out if they go to Stevens Street they can get to school faster (because the traffic director will help the flow out). Which is the heart of the problem. Now traffic can back up on Stevens all the way to Spring Street because of this desire.
    h. Traffic Director does the best they can regarding traffic + safety: Tries to mitigate, commuters, teachers getting there, students crossing.
    i. Second Traffic Director at Franklin Street and Franklin Place where the traffic lights are.
    j. Length of the right turn lane on Franklin Street AND the length of the driveway into the school is important! Cars stack up. We added the right turn pocket from Franklin Street to Franklin Place but it only stores about 8 cars there.
    k. Worried about New Construction Option 2- not enough queuing length. Traffic needs to go all the way into the school. Can't cut the main drive too much.
    l. Example of backups from a recent event at the school for free mask give away: backed up to the square up to Main Street and all the way to William (so beyond Montvale). Conditions like this sometimes happen at graduation or special peak times where traffic backs up.
    m. Officer Ponzo reports that usually each school year starts out with a lot of traffic back up and as the school year goes on gets better…people learn other routes, other times, etc.
    n. Because of the poor signal/layout on exit of Franklin Place, someone in the left lane might take 12-15 minutes to get out but someone turning right from Franklin Place to Franklin Street could clear out quickly.
    o. Interest expressed for the driveway into the school to have two travel lanes. 2nd lane used for parking during events like Carnival Ball.
    p. Where do people walking and biking cross Franklin Street? More at Stevens or at Franklin? Higher volume of people crossing the street at Stevens but people come on foot from all directions. To keep in mind both for origins-destinations in vehicle or on foot: School is close to the Melrose line- 80% of residents are west of here, i.e. coming from Stevens Street side (ie from west/northwest). Not much foot traffic on Franklin Street but there could be more if the Weiss Farm residences go in directly east of the site.
    q. N\N to review the Weiss Farm Traffic Mitigation issues.
    r. Preserve and expand pedestrian access on all sides of the site.

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Please note: *The foregoing constitutes our understanding of matters discussed and conclusions reached. Other participants are requested to review these items and advise the originator in writing of any errors or omissions.*

s. South bound traffic on Stevens can be backed up to Spring Street. Instead of going down Franklin east bound, drivers go down to Stevens Street. 12-15 cars are let in at a time by the traffic controller so that the balance between crosstown traffic and school access can be maintained. Drivers think it is quicker that way on Stevens.
t. MBTA busses terminate turn around at the Melrose/ Stoneham line. One that goes North-South on 28. If MBTA goes forward with technology for busses that can talk to signals, we will advocate strongly for a bus route that goes East-West on Franklin Street to replace some vehicle traffic needs.
u. Pedestrian mobility: so many pedestrian entries from the site (by track, …) pedestrian loop around the exterior of the site connecting path/ connections. Tri-Community greenway can be looked at – Stevens points towards this.
v. If 90% of pedestrian traffic at Stevens but no connecting pathway for pedestrians. But students do use this informally today – there is a goat path. May help if we create a loop on the campus – could be a great community asset while also providing a connection for residents of the site to not have to get into their vehicles to walk to town center, etc.

- **Discuss traffic counts and what other studies / sources can be reviewed or used.**
  a. Last count: 19,000 cars per day on Franklin Street
  b. Officer Ponzo checking with MWRA – they said only observations were collected during the last two studies done by the consultant. No counts available.

- **Discuss public pulse on traffic/circulation/access generally.**
  a. What will the public expect from this? Go? NoGo?
  b. People are concerned with impact on traffic.
  c. If we alter intersections what will happen?
     i. Traffic lights at the high school need to be incorporated in the design plan. Not functioning well at this time.
     ii. #1 concern of the people "TRAFFIC"!!!
     iii. That is why Weiss farm is in litigation because of TRAFFIC.
     iv. If we can alleviate it a bit will help.
     v. Projection/ growth to analysis the traffic.
  d. How have numbers been perceived in the past?
     i. Show that we will improve with traffic lights at both Stevens and at Franklin Place and show the ways to improve this.
     ii. If we tell people that the traffic lights are not "working 100% and we are improving" would help mitigate this.
     iii. Engineering confirmed: we must make sure the light meets all of the traffic warrants.
  e. "Traffic may not be the deal breaker in this project", if we say it is not going to get worse it may not hold as much weight. Concerned that Stoneham overall is "car obsessed" and we need to consider this is a 60-75 year project and transportation will evolve and that must be considered in this plan. Make sure the site is fluid for transportation mitigation.
  f. Extension of Stevens into the site, Benjamin Terrace into the site. Students make use of this today for walking already. Town owns the site.
  g. If Stevens/Benjamin Terrace developed as an official footpath and as "emerg. access" the abutters would see this as a potential access so be aware of that sensitivity.

h. Perkins & Will team to examine the condos and the relationship to the Benjamin Terrace. Examine needs and what could be a win-win.
i. Provide some land for added parking for condos- as a possible trade. 35 spaces off of Benjamin terrace. Could help reduce traffic. Could reduce vehicular access.
j. Boxwood Road…school does not maintain as pedestrian access point. Slightly confusing who is responsible here. No one clearly wants to assume responsibility for maintenance.
k. Students access any way they can on foot. They even walk over the rocks west of the stadium. If stairs were built there, we would welcome it.
l. AM Traffic vs. PM Traffic
    i. AM traffic is a "nightmare" – you have people going to Dunkins, people driving to work, people going to school all at same time.
    ii. PM (~2:45) is better because people are still at work. No where near like the AM traffic. Teachers get out later.
    iii. 15 mins after school is out, the site is cleared and the whole area is empty.
m. PRE-K may add to traffic – coming and going throughout the day. End long before the High School ends.
    i. Varying their schedule is good.
n. PRE-K- traffic light will keep people at the traffic light. If lights are fixed preschool won't be an issue. (DD coffee is not in play)
o. PRE-K- what is the time frame- dismissal before HS/ After HS
    i. PREK start after
    ii. 2.4 hours for half day session.
    iii. 5 hour full day component.
    iv. 10 minutes outside HS makes a huge difference.
    v. Drop off/pick up for PREK separate from HS

- **Review phasing negotiables and non-negotiables (car access, parking, emergency access, fields etc.)**
    a. Emergency Access via Benjamin Terrace?
    b. Construction Phase Access? Vehicles are LARGE and that may be an issue. Only 4-5 houses on the Terrace; so, not worried about convincing them. Officer Ponzo can help with community negotiation.
    c. Construction vehicle turning from Franklin to Benjamin Terrace.
        i. Looks tight- width of road, turning radius?
        ii. 35' wide. Cars are parking on both sides. Traffic Commission can control the parking during construction. Could temporarily post no parking on the road.
        iii. Look at grading…looks flat (Source: Brett from DPW)
    d. Town does own Benjamin Terrace "paper street" and willing to enforce the people parking there ad hoc to convert this for access. Reasonable alternative to explore using Benjamin Terrace as both emergency access (construction phase and long-term) and for general construction access. CM to look at multiple ways, times where they access the site.
    e. There will be concerns about safety for students in the school during construction. Temporary access FAR FROM STUDENTS works best.
    f. Where will contractor park?
    g. Times where the CM will access the site.
    h. Town recommends to be transparent about expectations during construction: times of day, length, waves of what construction access.

i. Emergency Access around the building: Fire lane code says must be 20' wide code but committee confirmed this seems overkill- 15 wide to be adequate. Check the code. Must support weight of the truck and no vertical limitations. Code determines the distance from building, as well – P&W Team to check the code.
j. May not be paved but needs to be maintained/plowed in winter. Maybe do structural pavers (i.e. grasscrete etc). as a middle ground that can carry vehicles but isn't hardscape.
k. Want to ensure Ambulance access to the stadium and possibly other fields.
l. Gate can limit normal traffic on the emergency access loop as it does today (if people abusing that is a concern)
m. What are the site NON-NEGOSHABLES regarding taking off-line with respect to fields?

- **Parking needs on site (long term/during construction): Visitors, Staff, Students, HC, busses.**
  a. Front parking lot full with faculty
  b. Wider lot parallel to cafeteria- usually 75% full (faculty/students)
  c. During Construction /Phasing
     i. Teacher/ Staff must match today's count
     ii. Student Parking on site is >300 today but there are no student passes. We could consider reducing their supply and moving to a pass program.
     iii. Temporary parking at grass area.
     iv. May have to limit site and de-program some sports fields, etc.
  d. Long Term Parking needs
     i. Teacher/ Staff must match today's count
     ii. Student Parking on site is >300 today but there are no student passes. We could consider reducing their supply and moving to a pass program.
  e. Consider parking considerations near the fields.
  f. Talk with **Safe Routes to School** (started in March before Covid). Maybe we could reduce parking needs if we have a grasp on how many students walk or bike from the SRTS survey.
  g. Anecdotally: a fair amount do walk and bike. Bike parking needs on the site: only have one rack, however they are not compliant for securely locking a high capacity of bikes and for bikes of all types. Could for sure use 2 racks minimum.
- Signals

cc. Stoneham File