

# Hardy, Hunnewell & Upham Elementary Schools School Facilities Committee



# ENROLLMENT SCENARIOS

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## Considerations:

- Peak Enrollment FY09: 2,481
- Total Capacity w/Modulars: 2,508
- Total 90% Capacity w/Modulars: 2,257

	Capacity w/Modulars	Utilization	Capacity at 90%	Projected 2018-19
Bates	418	90%	376	373
Fiske	374	90%	337	300
Schofield	396	90%	356	395
Sprague	418	90%	376	360
	1606		1,445	1,428
Hardy	308	90%	277	269
Hunnewell	330	90%	297	274
Upham	264	90%	238	288
	902		812	831
<b>Total Enrollment</b>	<b>2,508</b>		<b>2,257</b>	<b>2,259</b>

	Enrollment	B/F/S/S	H/H/U
Low	2,000	1450	550
Medium	2,250	1450	800
High	2,500	1450	1,050

Will the options be modeled out at 90% capacity?

# CHART OF OPTIONS

School	2013/14	2019/2020 (Cropper)	"Redistrict" to Capacity (Fiske and Schofield population divided equally)
Fiske (2Ks, 3 Sections)	334	278	322 (80%)
Schofield (3 Sections)	365	382	322 (80%)
Sprague (3 Sections)	399	351	382 (95%)
Bates (3 Sections)	395	370	382 (95%)
	1493	1381	1400 (max)
<b>Total District</b>	<b>2341</b>	<b>2208</b>	

Note: Utilization Factor 90% Cropper Recommendation

Sections	2	3	4
'X' Kindergarten Rooms (@20 students)	40	60	80
'X' 1-3 Rooms (@ 22 students)	132	198	264
'X' 4-5 Rooms (@ 24 students)	96	144	192
	<b>268</b>	<b>402</b>	<b>536</b>

**402 x 90% = 362**  
(less 6.5 students/grade)

**402 x 95% = 382**  
(less 3 students/grade)

# POPULATION ANALYSIS

	2013-2014 Population	Existing GSF (including Modulars)	Capacity without Modulars	2019/2020 Projected Enrollment (Cropper)	2019/2020 Projected "Low" Enrollment	2019/2020 Projected "Medium" Enrollment	2019/2020 Projected "High" Enrollment	MSBA GSF New MEDIUM	MSBA GSF New HIGH
<b>Hardy</b>	<b>306</b>	<b>45,909</b> (2K, 11 CR, 4 Mods)	<b>226</b>	<b>283</b>					
<b>Hunnewell</b>	<b>299</b>	<b>44,943</b> (1K, 12 CR, 2 Mods)	<b>260</b>	<b>281</b>					
<b>Upham</b>	<b>243</b>	<b>36,012</b> (3K, 8 CR, 2 Mods)	<b>200</b>	<b>263</b>				<b>58,000</b> (2K, <b>12 CR</b> ) <u>314 ST</u>	<b>81,720</b> (4K, <b>19 CR</b> ) <u>536 ST</u>
<b>2 Schools Combined (Hardy &amp; Upham)</b>	<b>549</b>		<b>426</b>	<b>546</b>	N/A	<b>536</b> (4 Sections)	<b>550</b> (4 Sections)	<b>81,720</b> (4K, <b>19 CR</b> ) <u>536 ST</u> <b>139,720</b>	<b>95,990</b> (5K, <b>24 CR</b> ) <u>564 ST</u> <b>177,710</b>
<b>3 Schools Combined</b>	<b>848</b>		<b>686</b>	<b>827</b>	<b>600</b>	<b>850</b> (6 Sections Total)	<b>1,100</b> (8 Sections Total)	<b>123,250</b> (7K, 30 CR) △ 5CR	<b>159,500</b> (9K, 39 CR) △ 1CR
<b>Total for District (K-5)</b>	<b>2,341</b>			<b>2,208</b>	<b>2,000</b>	<b>2,250</b>	<b>2,500</b>		
<b>Bates, Sprague, Schofield &amp; Fiske Capacity</b>	<b>1,493</b> Fiske 266 Schofield 370 Bates 395 Sprague 399			<b>1,400</b> Fiske 322 Schofield 322 Bates 382 Sprague 382				<b>△ +16,470 GSF</b>	<b>△ +18,210 GSF</b>

# CHART OF OPTIONS (850 STUDENTS COMBINED CAPACITY)

## MID RANGE

Further Study	Hardy Elementary	Hunnewell Elementary	Upham Elementary
1. No	<b>Renovation &amp; Addition</b> 283 ST 40,000 R + 10,940 A*	<b>Renovation &amp; Addition</b> 283 ST 43,000 R + 7,940 A*	<b>Renovation &amp; Addition</b> 283 ST 34,000 R + 16,940 A*
2. No	<b>New School</b> 283 ST 50, 940 N	<b>New School</b> 283 ST 50, 940 N	<b>New School</b> 283 ST 50, 940 N
3.	<b>Renovation &amp; Addition</b> 314 ST 40,000 R + 16,000 A*	<b>New School</b> 536 ST 81,722 N	<b>Close</b>
<b>4. Scenario One</b>	<b>New School</b> 536 ST 81,722 N	<b>Renovation &amp; Addition</b> 314 ST 43,000 R + 13,000 A*	<b>Close</b>
<b>4a. Scenario Four</b>	“ ”	“ ”	<b>Early Education &amp; Pre-K</b> 200 ST 34,000 R ± 10,000 A*
<b>5. Scenario Two</b>	<b>Close</b>	<b>Renovation &amp; Addition</b> 314 ST 43,000 R + 13,000 A*	<b>New School</b> 536 ST 81,722 N
6.	<b>Renovation &amp; Addition</b> 425 ST 40,000 R + 30,300 A*	<b>Close</b>	<b>Renovation &amp; Addition</b> 425 ST 34,000 R + 36,300 A*
7. No	<b>New School</b> 283 ST 50,940 N	<b>Renovation &amp; Addition</b> 283 ST 43,000 R + 7,940 A*	<b>New School</b> 283 ST 50,940 N
8. No	<b>Close</b>	<b>New School</b> 850 ST 123,250 N	<b>Close</b>
9. No	<b>Renovation &amp; Addition</b> 283 ST 40,000 R + 10,940 A*	<b>Renovation &amp; Addition</b> 283 ST 43,000 R + 7,940 A*	<b>New School</b> 283 ST 50,940 N
10.	<b>New School</b> 425 ST 70,300 N	<b>New School</b> 425 ST 70,300 N	<b>Close</b>
11. No	<b>Close</b>	<b>Close</b>	<b>Renovation &amp; Addition</b> 850 ST 34,000 R + 89,250 A*
12. No	<b>New School</b> 850 ST 123,250 N	<b>Close</b>	<b>Close</b>

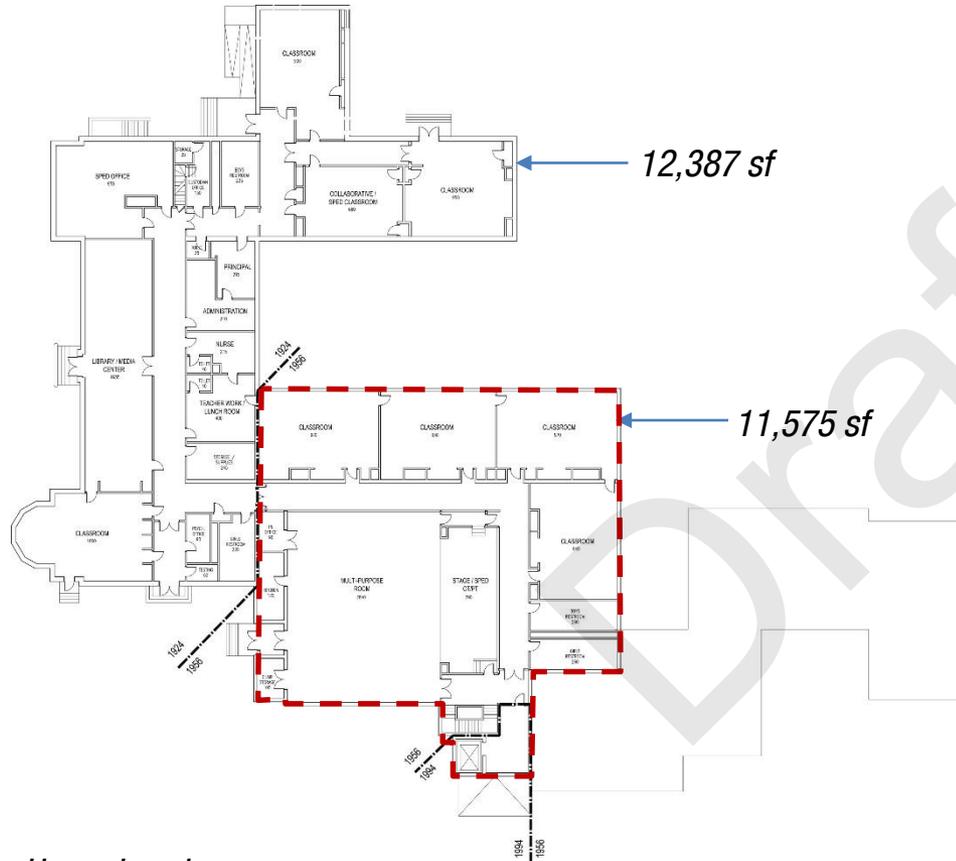
# CHART OF OPTIONS (850 STUDENTS COMBINED CAPACITY)

## MID RANGE

Further Study	Hardy Elementary	Hunnewell Elementary	Upham Elementary
13. No	<b>Close</b>	<b>Close</b>	<b>New School</b> 850 ST 123,250 N
14.	<b>Close</b>	<b>New School</b> 425 ST 70,300 N	<b>New School</b> 425 ST 70,300 N
15. No	<b>New School</b> 283 ST 50,940 N	<b>New School</b> 283 ST 50,940 N	<b>Renovation &amp; Addition</b> 283 ST 34,000 R + 16,940 A*
16.	<b>Renovation &amp; Addition</b> 283 ST 40,000 R + 10,940 A*	<b>New School</b> 283 ST 50,940 N	<b>New School</b> 283 ST 50,940 N
17.	<b>Renovation &amp; Addition</b> 536 ST 40,000 R + 41,722 A*	<b>Renovation &amp; Addition</b> 283 ST 43,000 R + 7,940 A*	<b>Close</b>
18.	<b>Renovation &amp; Addition</b> 283 ST 40,000 R + 10,940 A*	<b>Renovation &amp; Addition</b> 536 ST 43,000 R + 38,722 A*	<b>Close</b>
19.	<b>Renovation &amp; Addition</b> 283 ST 40,000 R + 10,940 A*	<b>Close</b>	<b>Renovation &amp; Addition</b> 536 ST 34,000 R + 47,722 A*
20.	<b>New School</b> 536 ST 81,722 N	<b>Close</b>	<b>Renovation &amp; Addition</b> 314 ST 34,000 R + 22,000 A*
21.	<b>Renovation &amp; Addition</b> 283 ST 40,000 R + 10,940 A*	<b>Close</b>	<b>New School</b> 563 ST 81,722 N
22.	<b>Close</b>	<b>New School</b> 425 ST 70,300 N	<b>Renovation &amp; Addition</b> 425 ST 34,000 R + 36,300 A*
23.	<b>Close</b>	<b>Renovation &amp; Addition</b> 425 ST 43,000 R(-) + 27,300 A(+)*	<b>New School</b> 425 ST 70,300 N
<b>24. Scenario Three</b>	<b>New School</b> 536 ST 81,722 N Note: 4 Sections	<b>Close</b>	<b>New School</b> 425 ST 70,300 N Note: 3 Sections

\* Additions may increase due to existing building inefficiencies, additional SPED space, or unique site conditions

# HARDY ELEMENTARY SCHOOL FLOOR PLAN



Upper Level

## Existing Classroom Areas

Kindergarten: 1100-1200 SF

Grades 1-5: 850-950 SF

## MSBA Standard

Kindergarten: 1100 SF Min. - 1300 SF Max.

Grades 1-5: 950 SF Min.

## Current Enrollment

306 Students

## Existing Building: 45,909 GSF

Including 4 modular classrooms

Demo:

Reno: 1926

Add:

## Target Enrollment:

536 Students

4 Section School 81,720 gsf (MSBA)

## Estimated Capacity

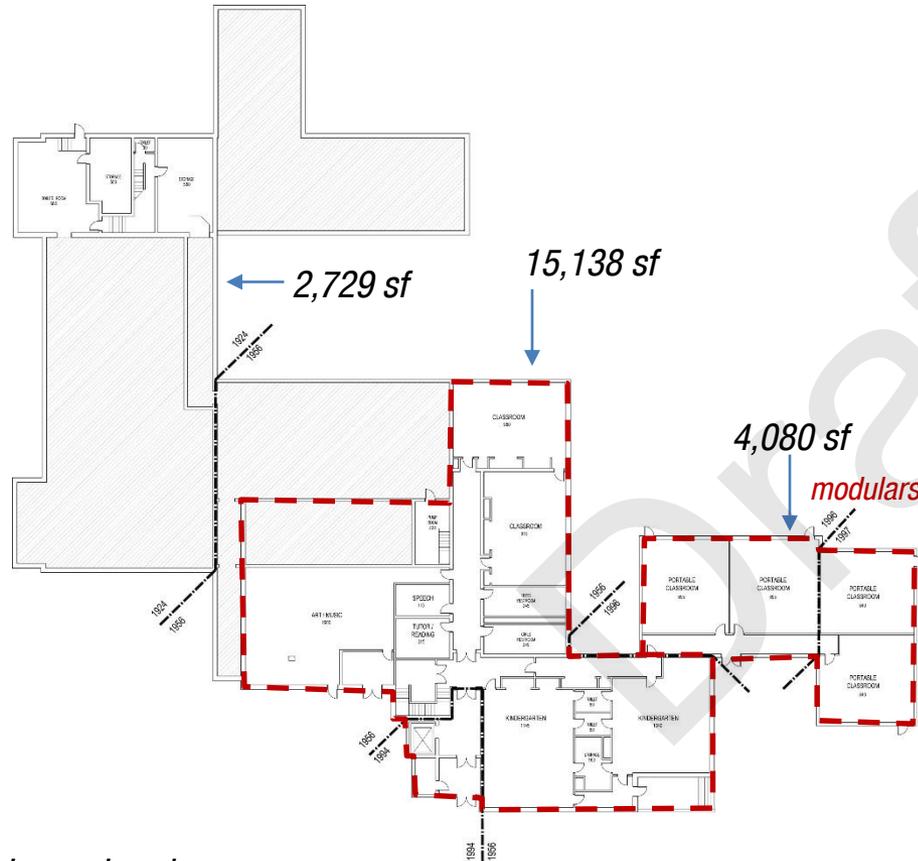
226 Students w/o Modulars

Assumes 20 Students/Class Kindergarten

Assumes 22 Students/Class Grades 1-2

Assumes 24 Students/Class Grades 3-5

# HARDY ELEMENTARY SCHOOL FLOOR PLAN



Lower Level

## Existing Classroom Areas

Kindergarten: 1100-1200 SF

Grades 1-5: 850-950 SF

## MSBA Standard

Kindergarten: 1100 SF Min. - 1300 SF Max.

Grades 1-5: 950 SF Min.

## Current Enrollment

306 Students

## Existing Building: 45,909 GSF

Including 4 modular classrooms

Demo:

Reno: 1924

Add:

## Target Enrollment:

536 Students

4 Section School 81,720 gsf (MSBA)

## Estimated Capacity

226 Students w/o Modulars

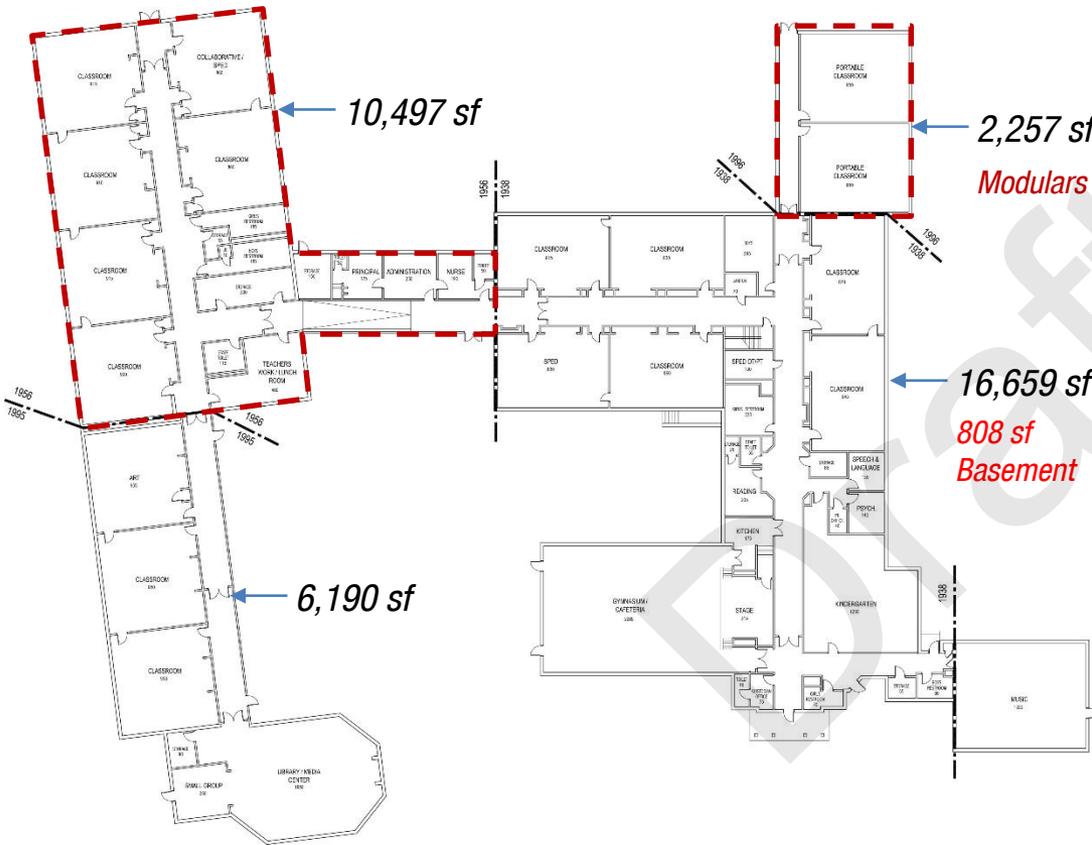
Assumes 20 Students/Class Kindergarten

Assumes 22 Students/Class Grades 1-2

Assumes 24 Students/Class Grades 3-5



# HUNNEWELL ELEMENTARY SCHOOL FLOOR PLAN



First Floor

## Existing Classroom Areas

Kindergarten: 1250 SF  
 Grades 1-5: 850-950 SF

## MSBA Standard

Kindergarten: 1100 SF Min. - 1300 SF Max.  
 Grades 1-5: 950 SF Min.

## Current Enrollment

299 Students

## Existing Building: 36,441\* GSF (to be confirmed)

Including 2 modular classrooms

Demo: 1956 Wing

Reno: 1938

Add:

## Target Enrollment(s):

402 students

3 section school 67,500 gsf (MSBA)

314 students

2+ section school 56,000 gsf (MSBA )

## Estimated Capacity

260 Students w/o Modulares

Assumes 20 Students/Class Kindergarten (2)

Assumes 22 Students/Class Grades 1-2 (3@)

Assumes 24 Students/Class Grades 3-5 (3@)

# EXISTING SITES

*Hardy School*



*Hunnewell School*



*Upham School*



# Scenario One

Hardy



Hunnewell



Upham



**New School** 536 ST 81,722 N

**Renovation & Addition**  
314 ST 43,000 R + 13,000 A\*

**Close**

# HARDY SCHOOL

536 Students  
81,722sf New

## PROS

- 4 Section Efficient School
- Easy to build new behind existing
- Possible to save old Hardy building if desired
- Larger queuing for buses and cars

## CONS

- Service is deeper in site
- Loss of fields – geometry for moving baseball/softball is challenge
- Requires full perimeter access
- Renovate original Hardy School
- Central Office, Central Storage
- Professional development space



# HARDY SCHOOL

536 Students  
81,722sf New

## PROS

- 4 Section Efficient School
- Easy to build new behind existing
- Possible to save old Hardy building if desired
- Larger queuing for buses and cars

## CONS

- Service is deeper in site
- Loss of fields – geometry for moving baseball/softball is challenge
- Requires full perimeter access
- Renovate original Hardy School
- Central Office, Central Storage
- Professional development space



# HARDY SCHOOL

536 Students  
81,722sf New

## PROS

- 4 Section Efficient School
- Easy to build new behind existing
- Possible to save old Hardy building if desired
- Larger queuing for buses and cars

## CONS

- Service is deeper in site
- Loss of fields – geometry for moving baseball/softball is challenge
- Requires full perimeter access
- Renovate original Hardy School
- Central Office, Central Storage
- Professional development space



# HARDY SCHOOL

536 Students  
81,722sf New

## PROS

- 4 Section Efficient School
- Easy to build new behind existing
- Possible to save old Hardy building if desired
- Larger queuing for buses and cars

## CONS

- Service is deeper in site
- Loss of fields – geometry for moving baseball/softball is challenge
- Requires full perimeter access
- Renovate original Hardy School
- Central Office, Central Storage
- Professional development space



# HUNNEWELL SCHOOL

314 Students  
23,687sf Reno + 32,313sf Addition  
2 Stories

402 Students  
23,687sf Reno + 43,813sf Addition  
2 Stories

536 Students  
23,687sf Reno + 58,033sf Addition  
3 Stories



Scenario 1  
Option 4



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# HUNNEWELL SCHOOL

314 Students  
23,687sf Reno + 32,313sf Addition  
2 Stories

402 Students  
23,687sf Reno + 43,813sf Addition  
2 Stories

536 Students  
23,687sf Reno + 58,033sf Addition  
3 Stories



# UPHAM SCHOOL

## Close School

- Demolish building
- Remove Modulars



# Scenario Two

Upham



Hunnewell



Hardy



**New School** 536 ST 81,722 N

**Renovation & Addition**  
314 ST 43,000 R + 13,000 A\*

**Close**

# UPHAM SCHOOL

New School 536 Students  
81,722sf New  
3 Stories



Scenario 2  
Option 5



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# UPHAM SCHOOL

New School 536 Students  
81,722sf New  
3 Stories



# HUNNEWELL SCHOOL

Renovation & Addition  
314 Students  
23,687sf Renovation  
32,313sf Addition

## PROS

- Rebuilds School in this Part of District
- Historic Character Maintained
- Maximizes “Town” Land w/ Library
- Eliminates Modulars
- Uses 1995 Addition
- Maintains Protection Plan for Fuller Brook

## CONS

- Parking Concerns
- Complex Permitting
- Complex Renovation
- 2 ½ Section School



# HUNNEWELL SCHOOL

Renovation & Addition  
314 Students  
23,687sf Renovation  
32,313sf Addition

## PROS

- Rebuilds School in this Part of District
- Historic Character Maintained
- Maximizes “Town” Land w/ Library
- Eliminates Modulars
- Uses 1995 Addition
- Maintains Protection Plan for Fuller Brook

## CONS

- Parking Concerns
- Complex Permitting
- Complex Renovation
- 2 ½ Section School



# HARDY SCHOOL

## Close School

- Renovate for District Use?
- Eliminate Modular and Poorer Building Elements
- Retain Site as Future Larger School Site
- Add Playfields?



# Scenario Three

Hardy



Upham



Hunnewell



**New School 536 ST 81,722 N**  
Note: 4 Sections

**New School 425 ST 70,300 N**  
Note: 3 Sections

**Close**

# HARDY SCHOOL

536 Students  
81,722sf New

## PROS

- 4 Section Efficient School
- Easy to Build New Behind Existing
- Possible to Save Old Hardy Building if Desired
- Larger Queuing for Buses and Cars

## CONS

- Service is Deeper in Site
- Loss of fields – Geometry for Moving Baseball/Softball is Challenge
- Requires Full Perimeter Access
- Renovate Original Hardy School
- Central Office, Central Storage
- Professional Development Space



# HARDY SCHOOL

536 Students  
81,722sf New

## PROS

- 4 Section Efficient School
- Easy to Build New Behind Existing
- Possible to Save Old Hardy Building if Desired
- Larger Queuing for Buses and Cars

## CONS

- Service is Deeper in Site
- Loss of fields – Geometry for Moving Baseball/Softball is Challenge
- Requires Full Perimeter Access
- Renovate Original Hardy School
- Central Office, Central Storage
- Professional Development Space



# UPHAM SCHOOL

New School 425 Students  
70,300sf New

## PROS

- 3 Section Efficient School
- Easy to Build New Behind Existing
- Longer Queuing for Buses and Cars

## CONS

- Blasting Required
- Service is Deeper in Site
- Some Rebuild of Fields Likely
- Requires Full Perimeter Access



# UPHAM SCHOOL

New School 425 Students  
70,300sf New

## PROS

- 3 Section Efficient School
- Easy to Build New Behind Existing
- Longer Queuing for Buses and Cars

## CONS

- Blasting Required
- Service is Deeper in Site
- Some Rebuild of Fields Likely
- Requires Full Perimeter Access



# HUNNEWELL SCHOOL

Close School



Scenario 3  
*Option 24*



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# Scenario Four

Hardy



**New School** 536 ST 81,722 N

Hunnewell



**Renovation & Addition**  
314 ST 43,000 R + 13,000 A\*

Upham



**Early Education & Pre-K**  
200 ST 34,000 R ± 10,000 A\*

# HARDY SCHOOL

536 Students  
81,722sf New School

## PROS

- 4 Section Efficient School
- Easy to Build New Behind Existing
- Possible to Save Old Hardy Building if Desired
- Larger Queuing for Buses and Cars

## CONS

- Service is Deeper in Site
- Loss of Fields – Geometry for Moving Baseball/Softball is Challenge
- Requires Full Perimeter Access
- Renovate Original Hardy School
- Central Office, Central Storage
- Professional Development Space



# HARDY SCHOOL

536 Students  
81,722sf New School

## PROS

- 4 Section Efficient School
- Easy to Build New Behind Existing
- Possible to Save Old Hardy Building if Desired
- Larger Queuing for Buses and Cars

## CONS

- Service is Deeper in Site
- Loss of Fields – Geometry for Moving Baseball/Softball is Challenge
- Requires Full Perimeter Access
- Renovate Original Hardy School
- Central Office, Central Storage
- Professional Development Space



# HUNNEWELL SCHOOL

## Renovation & Addition

314 Students

23,687sf Renovation

32,313sf Addition

## PROS

- Rebuilds School in this Part of District
- Historic Character Maintained
- Maximizes “Town” Land w/ Library
- Eliminates Modulars
- Uses 1995 Addition
- Maintains Protection Plan for Fuller Brook

## CONS

- Parking Concerns
- Complex Permitting
- Complex Renovation
- 2½ Section School



# HUNNEWELL SCHOOL

Renovation & Addition  
314 Students  
23,687sf Renovation  
32,313sf Addition

## PROS

- Rebuilds School in this Part of District
- Historic Character Maintained
- Maximizes “Town” Land w/ Library
- Eliminates Modulars
- Uses 1995 Addition
- Maintains Protection Plan for Fuller Brook

## CONS

- Parking Concerns
- Complex Permitting
- Complex Renovation
- 2½ Section School



# UPHAM SCHOOL

Early Education & Pre-K

200 Students

34,000sf Renovation

10,000sf ± Addition

1 & 2 Stories

## PROS

- Linked with Bates School
- Reuse as much of Existing Building as possible
- Remove Modulars
- Minimize Impacts to Hill and Forest
- Improves Drop-off Conditions

## CONS

- Difficult Addition
- Small School
- Split Pick-up/Drop-off for some parents



# UPHAM SCHOOL

Early Education & Pre-K

200 Students

34,000sf Renovation

10,000sf ± Addition

1 & 2 Stories

## PROS

- Linked with Bates School
- Reuse as much of Existing Building as possible
- Remove Modulars
- Minimize Impacts to Hill and Forest
- Improves Drop-off Conditions

## CONS

- Difficult Addition
- Small School
- Split Pick-up/Drop-off for some parents



# Hardy School Options



Builds at the Back of the Site



Builds New at Front of Site



New School Added to  
Renovated 1924 Hardy School

# HARDY SCHOOL

536 Students  
81,722sf New

## PROS

- 4 Section Efficient School
- Easy to Build New Behind Existing
- Possible to Save Old Hardy Building if Desired
- Larger Queuing for Buses and Cars

## CONS

- Service is Deeper in Site
- Loss of fields – Geometry for Moving Baseball/Softball is Challenge
- Requires Full Perimeter Access
- Renovate Original Hardy School
- Central Office, Central Storage
- Professional Development Space
- New Drop-off Pick-up Issues with Neighborhood



Builds at the Back of the Site



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# HARDY SCHOOL

536 Students  
81,722sf New School

## PROS

- 4 Section Efficient School
- Presence at street

## CONS

- Phasing
- Loss of Some Fields – For Parking and Drop-off – behind school
- Requires Full Perimeter Access
- Demolishes Original Hardy School
- New Drop-off Pick-up Issues with Neighborhood – tight at Route 9



Builds New at Front of Site



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# HARDY SCHOOL

536 Students  
15,116sf Renovation  
81,722sf New School

## PROS

- 4 Section Efficient School
- Easy to Build New Behind Existing
- Possible to Save Old Hardy Building if Desired
- Central Office, Central Storage, Pre-K?

## CONS

- Phasing
- Large configuration for this site
- Loss of Some Fields – Geometry for moving Baseball/Softball is Challenge
- Requires Full Perimeter Access
- Renovate Original Hardy School
- Drop-off Pick-up Issues Remain



New School Added to Renovated 1924 Hardy School



SMMA

Thank you

SMMA

SYMMES MAINI & McKEE ASSOCIATES