

Hardy, Hunnewell & Upham
Elementary Schools
School Facilities Committee:
Public Presentation

MASTERPLAN AGENDA

- Existing Conditions
 - Issues and Concerns
- Program and Educational
 - Deficiencies and Goals
- Plan & Site Constraints
- Benchmarking
 - Test Fit Plans
 - Building Plans
 - Building Tours
- Master Planning
 - Options Development
- Cost Estimating
 - Scenario Development

EDUCATIONAL GOALS

- Teaching Methodology
 - Understanding Learning Styles
 - Student-to-Student
 - Teacher as Facilitator
 - Project-based Learning (Controlled Open Plan)



EDUCATIONAL GOALS

- Influences on building size, building shape, space type, and content
 - Breakout Spaces
 - Outdoor Learning Environments
 - STEM and STEAM Environments



EDUCATIONAL GOALS

- Influences on building size, building shape, space type, and content
 - Learning Communities
 - Breakout Spaces
 - Large Group Instruction
 - Learning Outside of the Classroom
 - Appropriate and Secure Entrances



ENROLLMENT SCENARIOS

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)
Total District	2341	2208	

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
	268	402	536

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

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

ENROLLMENT SCENARIOS

Developed by: David Lussier, Judy Belliveau, Jack Morgan and K.C. Kato

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
Total Enrollment	2,508		2,257	2,259

	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?

ENROLLMENT SCENARIOS

	2013-2014 Population	Existing GSF (including Modulars)	MSBA GSF (with Current Enrollment)	Capacity without Modulars	2021-2022 Projected Enrollment	MSBA GSF New Construction	SF/Student for 2021-2022 Build-out
Hardy	308	45,909 (2 K, 11 CR, 4 Mods)	54,866	294	269	48,420 (2 K, 10 CR)	180
Hunnewell	330	44,943 (1 K, 12 CR, 2 Mods)	53,820	300	265	47,700 (2 K, 10 CR)	180
Upham	264	36,012 (3 K, 8 CR, 2 Mods)	43,740	244	242	43,560 (2 K, 9 CR)	180
2 Schools Combined (Hardy & Upham)					511	79,401 (4 K, 19 CR)	155
3 Schools Combined					776	112,520 (6 K, 28 CR)	145
Total for District	2,341				2,098		
Bates, Sprague, & Fiske Capacity	1,493 Fiske 266 Schofield 370 Bates 395 Sprague 399			1,430 Fiske 318, Schofield 318, Bates 395, Sprague 399	688	97,150 (5 K, 24 CR)	145

HARDY SCHOOL EXISTING SITE



Discussion Points

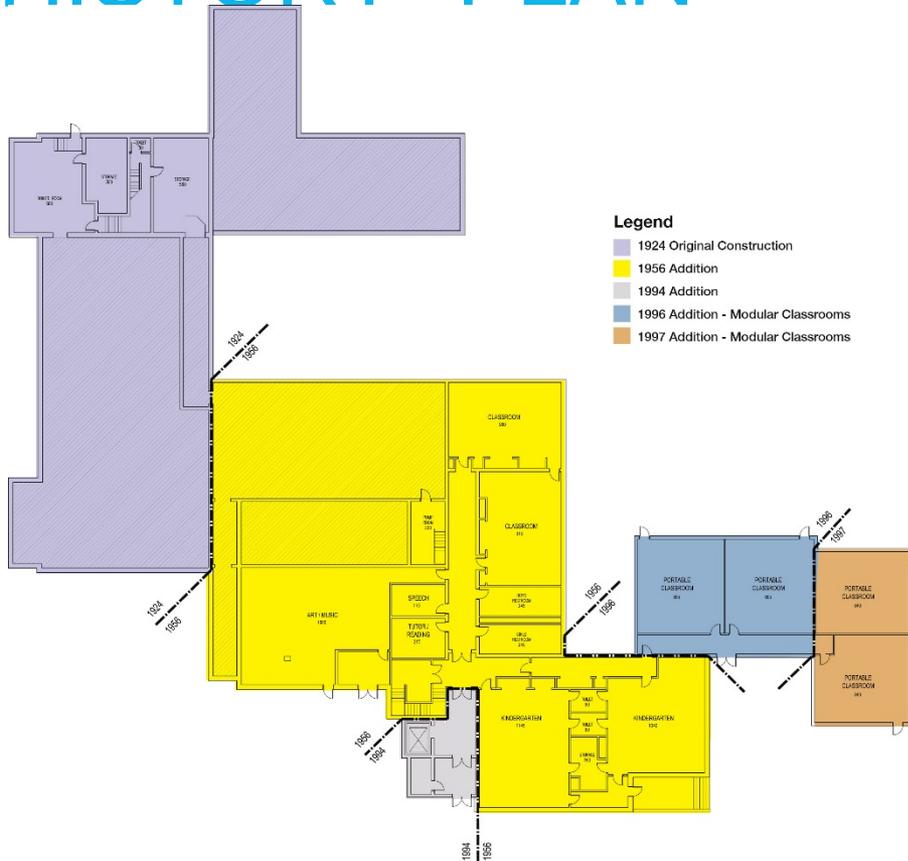
- Water Protection Zone
- Moses Pond: Water Supply
• Protection District Requiring SPGA
(Special Permit Granting Authority)
- Grade Change
- Building Layout
- Traffic Safety
- Play Space

PROGRAM DEFICIENCIES

- Shared art/music classroom
- Multi-purpose space serves as cafeteria, gymnasium, and auditorium
- Shared stage/OT/PT
- Undersized shared teacher workroom and lunch room
- Undersized media center, administration, SPED, nursing suite
- Four portable classrooms, two of which are undersized
- Lack of proper kitchen prevents the possibility of food prep in the future

HARDY ELEMENTARY SCHOOL

“HISTORY” PLAN



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 Modularity

Assumes 20 Students/Class Kindergarten

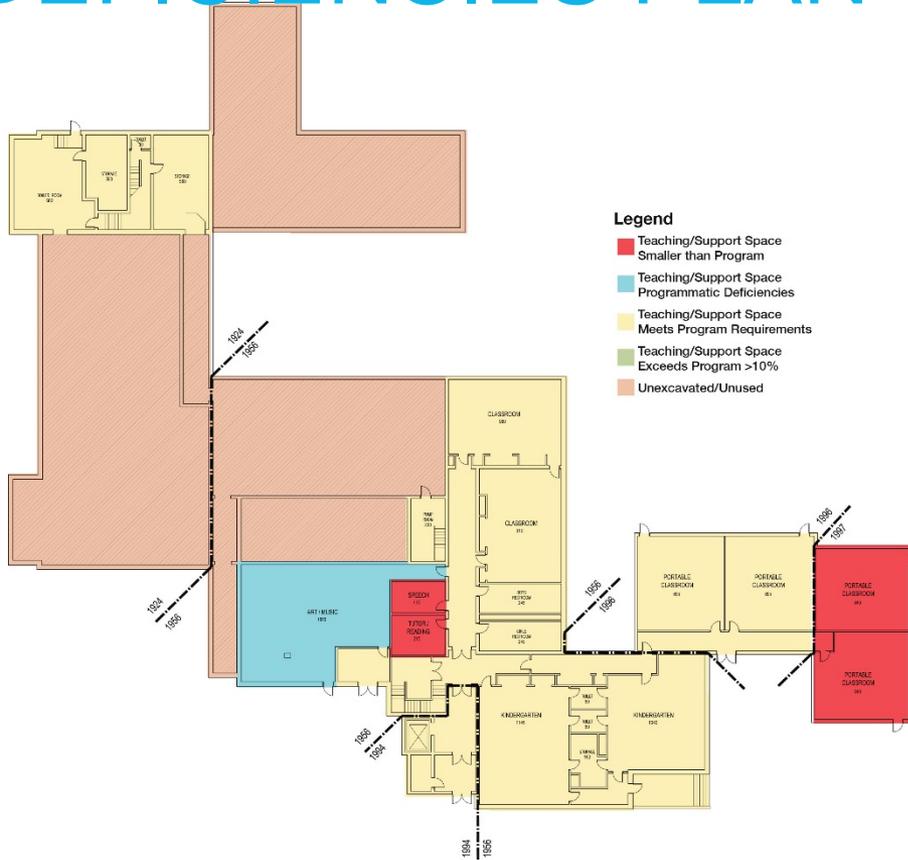
Assumes 22 Students/Class Grades 1-2

Assumes 24 Students/Class Grades 3-5

Lower Level

HARDY ELEMENTARY SCHOOL

DEFICIENCIES PLAN



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.

Existing Building: 45,909 GSF

Including 4 modular classrooms

Current Enrollment

306 Students

Estimated Capacity

390 Students w/ Modulares

294 Students w/o Modulares

Assumes 20 Students/Class Kindergarten

Assumes 22 Students/Class Grades 1-2

Assumes 24 Students/Class Grades 3-5

Lower Level

UPHAM SCHOOL EXISTING SITE



UPHAM ELEMENTARY SCHOOL

“HISTORY” PLAN

Existing Classroom Areas

Kindergarten: 850-1700 SF

Grades 1-5: 850-1000 SF

MSBA Standard

Kindergarten: 1100 SF Min. - 1300 SF Max.

Grades 1-5: 950 SF Min.

Existing Building: 36,012 GSF

Including 2 modular classrooms

Current Enrollment

243 Students

Estimated Capacity

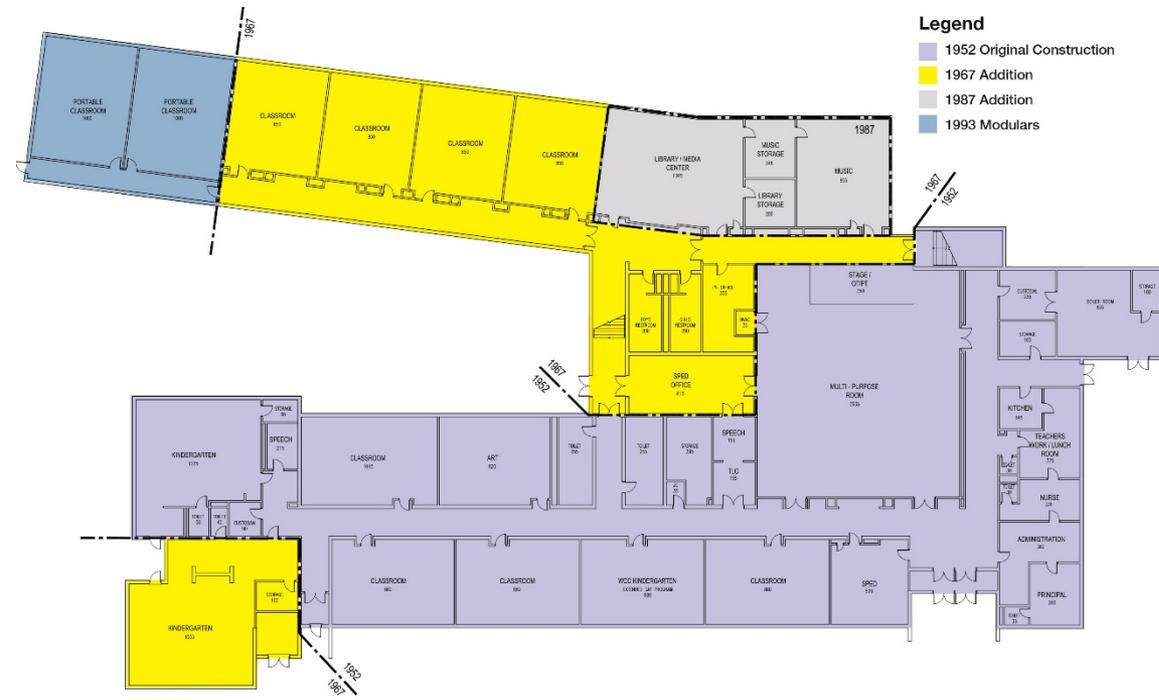
292 Students w/ Modulares

244 Students w/o Modulares

Assumes 20 Students/Class Kindergarten

Assumes 22 Students/Class Grades 1-2

Assumes 24 Students/Class Grades 3-5



First Floor

UPHAM ELEMENTARY SCHOOL

DEFICIENCIES PLAN

Existing Classroom Areas

Kindergarten: 850-1700 SF

Grades 1-5: 850-1000 SF

MSBA Standard

Kindergarten: 1100 SF Min. - 1300 SF Max.

Grades 1-5: 950 SF Min.

Existing Building: 36,012 GSF

Including 2 modular classrooms

Current Enrollment

243 Students

Estimated Capacity

292 Students w/ Modulars

244 Students w/o Modulars

Assumes 20 Students/Class Kindergarten

Assumes 22 Students/Class Grades 1-2

Assumes 24 Students/Class Grades 3-5

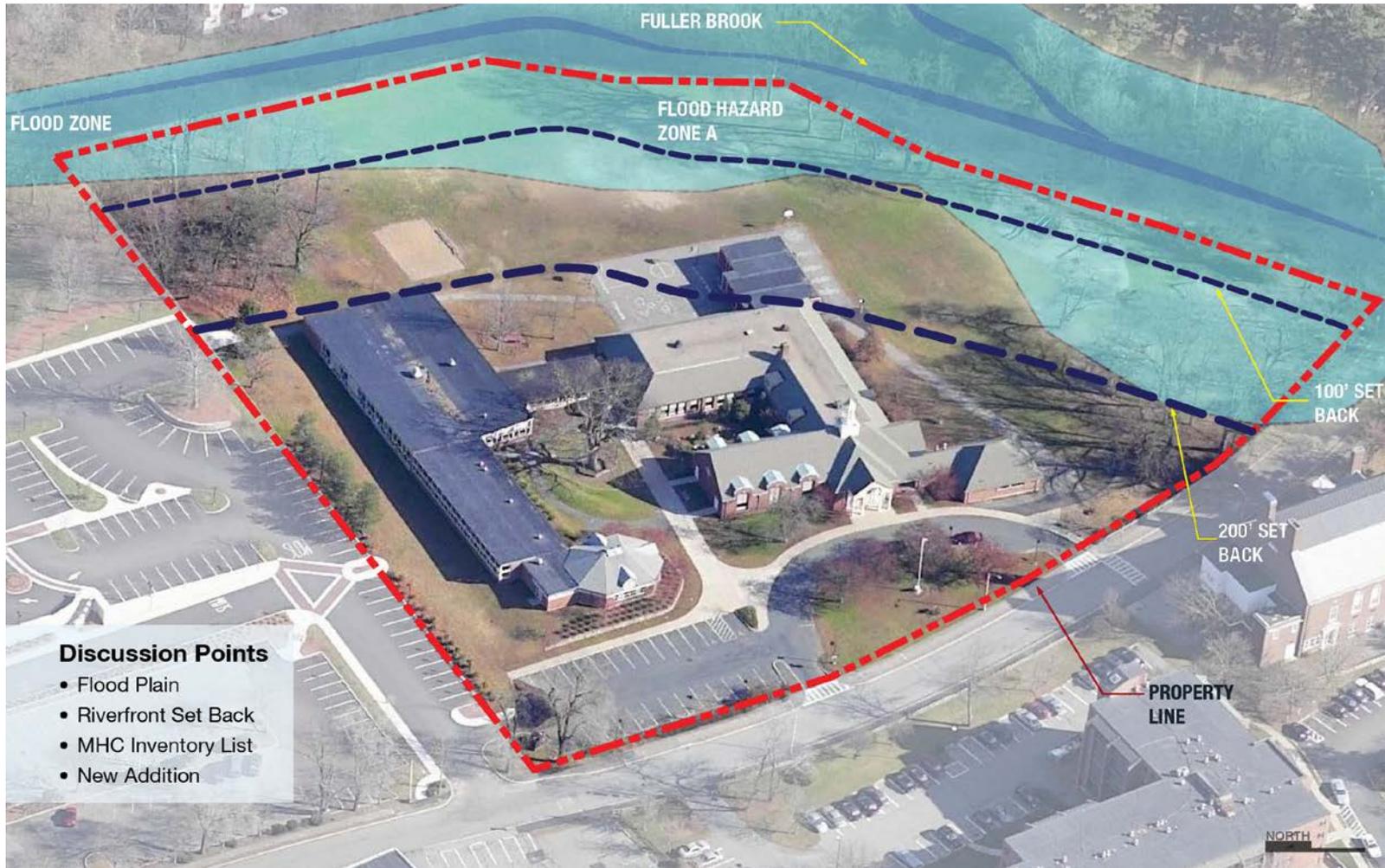
Legend

- Teaching/Support Space Smaller than Program
- Teaching/Support Space Programmatic Deficiencies
- Teaching/Support Space Meets Program Requirements
- Teaching/Support Space Exceeds Program >10%
- Unexcavated/Unused



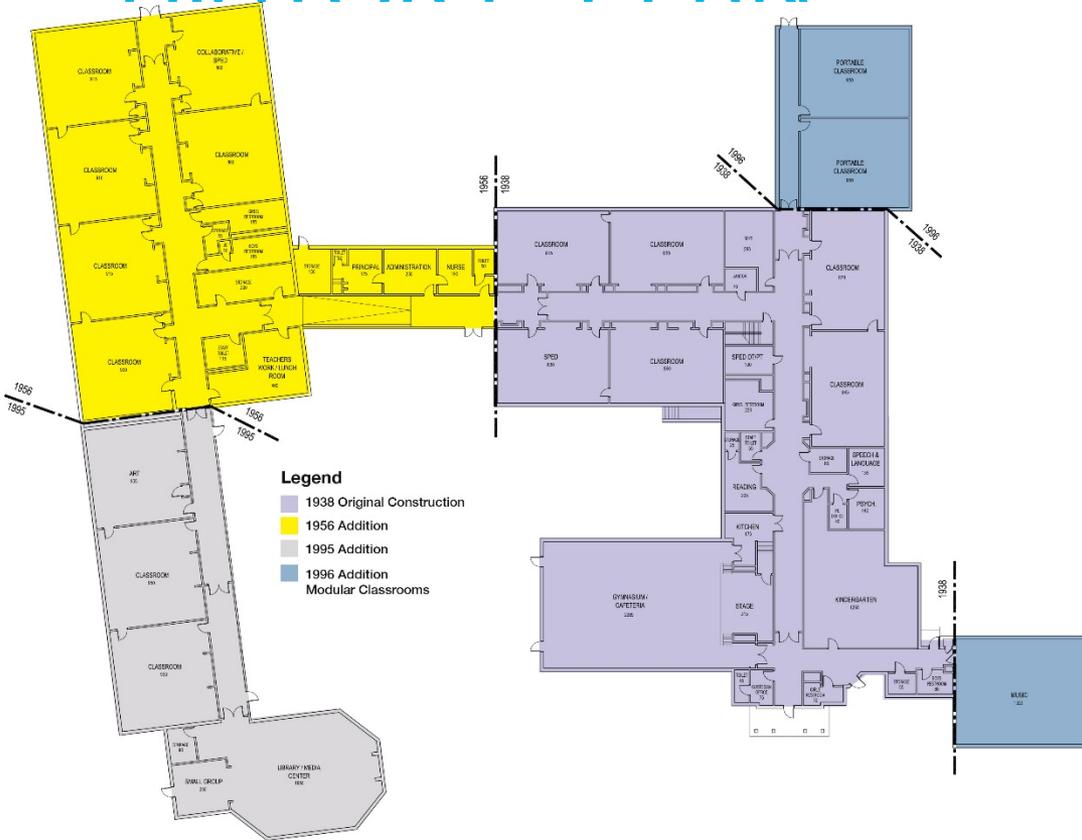
First Floor

HUNNEWELL SCHOOL EXISTING SITE



HUNNEWELL ELEMENTARY SCHOOL

"HISTORY" PLAN



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.

Existing Building: 44,943 GSF

Including 2 modular classrooms

Current Enrollment

299 Students

Estimated Capacity

348 Students w/ Modulars

300 Students w/o Modulars

Assumes 20 Students/Class Kindergarten

Assumes 22 Students/Class Grades 1-2

Assumes 24 Students/Class Grades 3-5

First Floor

HUNNEWELL ELEMENTARY SCHOOL

DEFICIENCIES PLAN



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.

Existing Building: 44,943 GSF

Including 2 modular classrooms

Current Enrollment

299 Students

Estimated Capacity

348 Students w/ Modulars
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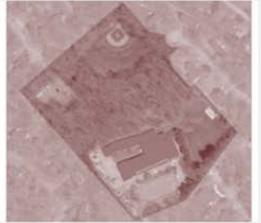
First Floor

Planning Options

PLANNING OPTIONS

	North 40		Hardy		Hunnewell		Upham	
New		660 Students 3 Stories		660 Students 3 Stories				660 Students 3 Stories
New		536 Students 2.5-3 Stories		536 Students 3 Stories		536 Students 3 Stories		536 Students 2.5-3 Stories
Add/Reno				536 Students 3 Stories		536 Students 2.5-3 Stories		536 Students 2.5 Stories
Add/Reno						425 Students 2 Stories		425 Students 2 Stories
Add/Reno				Historic Renovation Only (no students)		314 Students 2 Stories		283 Students 1.5-2 Stories
"New"				308 Students		330 Students		264 Students
Repairs Only				308 Students		330 Students		264 Students

PLANNING OPTIONS

	Hardy	Hunnewell	Upham	North 40
New	Yes 	No 	Yes 	Yes 
Renovation /Addition	Yes 	Yes 	No 	N/A

PLANNING SCENARIOS

Scenario	North 40 Site	Hardy	Hunnewell	Upham	Population	Construction Cost Total*	Construction Cost/Student
1	New School 660-Students 95,700 GSF New \$ 35,620,734	Close School Renovation (Historic Only) 15,116 GSF Renovation \$ 6,556,522	Renovation & Addition 425-Students 47,613 GSF Addition 22,687 GSF Renovation \$ 32,704,077	Close School	1,085	\$ 68,324,811 166,000 SF	\$ 62,972
2	New School 536-Students 81,722 GSF \$ 31,820,807	Close School	Close School	New School 536-Students 81,722 GSF New \$ 35,204,701	1,072	\$ 67,025,508 163,444 SF	\$ 62,524
3	N/A	New School 536-Students 81,722 GSF New \$ 31,993,171 (Historic Renovation) 15,116 GSF Renovation \$ 6,556,522**	Renovation & Addition 425-Students 47,613 GSF Addition 22,687 GSF Renovation \$ 27,012,360	Close School	961	**\$ 59,005,531 152,022 SF	\$ 61,400
4	N/A	New School 660-Students 95,700 GSF New \$ 35,900,517	Close School	New School 536-Students 81,722 GSF New \$ 35,204,701	1,196	\$ 71,105,218 177,422 SF	\$ 59,453
5	N/A	Close School	Renovation & Addition 425-Students 47,613 GSF Addition 22,687 GSF Renovation \$ 27,012,360	New School 536-Students 81,722 GSF New \$ 35,204,701	961	\$ 62,217,061 152,022 SF	\$ 64,741
6	N/A	New School 660-Students 95,700 GSF 15,116 GSF Renovation (Historic Only)** \$ 41,386,163	New School 536-Students 81,722 GSF New \$ 36,636,300	Renovation & Addition 536-Students 57,241 GSF Addition 24,481 GSF Renovation \$ 35,022,733	1,732	\$ 113,045,196 274,260 SF	\$ 65,268
7	Two Phases Summer Construction N/A	Renovation & Modular 306 Students; 45,909 GSF \$ 15,331,791	Renovation & Modular 299 Students; 36,441 GSF \$ 11,736,510	Renovation & Modular 243 Students, 36,481 GSF \$ 11,200,481	902	\$ 38,268,782 118,831 SF	\$ 42,427
7a	Single Phase Summer Construction N/A	Repairs \$ 13,937,992 30 Modulares \$ 4,717,137 \$ 18,655,129***	Repairs \$ 10,669,554 30 Modulares \$ 4,717,137 \$ 15,386,691***	Repairs \$ 10,182,256 30 Modulares \$ 4,717,137 \$ 14,899,393***	902	\$ 48,941,213 118,831 SF	\$ 54,259
8		Mostly New \$ 22,203,414	Renovation & Addition \$ 24,109,260	New School \$ 26,919,504	902	\$ 73,232,178 160,921 SF	\$ 81,189

NOTE:

*Construction cost estimated to construction start spring 2016.

**Renovation cost for Historic Hardy School for reference only – not carried in final costs.

***Modular cost will be reduced by redundant installation and phase out cost based on Final Master Plan sequence.

PLAN SCENARIO 3

Hardy ES



New School
536-Students
81,722 GSF New
(Historic Renovation)
15,116 GSF Renovation

Hunnewell ES



Renovation & Addition
425-Students
47,613 GSF Addition
22,687 GSF Renovation

Upham ES



Close School

PLAN SCENARIO 5

Hardy ES



Close School

Hunnewell ES



Renovation & Addition
425-Students
47,613 GSF Addition
22,687 GSF Renovation

Upham ES



New School
536-Students
81,722 GSF New

PLAN SCENARIO 7A

Hardy ES



Renovation & Modular
308 Students; 45,909 GSF

Hunnewell ES



Renovation & Modular
330 Students; 36,441 GSF

Upham ES



Renovation & Modular
264 Students; 36,481 GSF

PLAN SCENARIO 8

Hardy ES



Mostly New
308 Students; 55,153 GSF
40,037 GSF New
15,116 GSF Renovation

Hunnewell ES



Renovation & Addition
330 Students; 58,245 GSF
35,558 GSF New
22,687 GSF Renovation

Upham ES



New
264 Students; 47,523 GSF

Cost Estimating Scenarios

MASTERPLAN COSTS

Scenario 3 - New Hardy, Reno/Add Hunnewell, Close Upham

	Construction Cost (based on construction start Q2 2016)	Yearly Escalation	Q2 2017	Q2 2018	Q4 2018	Total Escalated Construction Cost	Total Project Cost
New Hardy ES	\$31,993,171	3.5%	\$33,112,932	\$34,271,885	\$34,957,322	\$34,957,322	
Reno/Add Hunnewell ES (w/ 20 space parking garage)	\$27,012,360 \$59,005,531	3.5%	\$27,957,793	\$28,936,315	\$29,949,086	\$30,997,304	
						\$65,954,627	\$91,017,385

Scenario 5 - New Upham, Reno/Add Hunnewell, Close Hardy

	Construction Cost (based on construction start Q2 2016)	Yearly Escalation	Q2 2017	Q2 2018	Q4 2018	Total Escalated Construction Cost	Total Project Cost
New Upham ES	\$35,204,701	3.5%	\$36,436,866	\$37,712,156	\$38,466,399	\$38,466,399	
Reno/Add Hunnewell ES (w/ 20 space parking garage)	\$27,012,360 \$62,217,061	3.5%	\$27,957,793	\$28,936,315	\$29,949,086	\$30,997,304	
						\$69,463,703	\$95,859,911

Scenario 7A - Repair Only Hardy, Hunnewell and Upham

	Construction Cost (based on construction start Q2 2016)	Yearly Escalation	Q2 2017	Q2 2018	Q2 2019	Q2 2020	Q2 2021	Total Escalated Construction Cost	Total Project Cost
Temporary Modulars*	\$6,217,137	3.5%	\$6,434,737	\$6,659,953				\$6,659,953	
Repair Hardy ES	\$13,937,992	3.5%	\$14,425,822	\$14,930,725	\$15,453,301			\$15,453,301	
Repair Hunnewell ES	\$10,669,554	3.5%	\$11,042,988	\$11,429,493	\$11,829,525	\$12,243,559		\$12,243,559	
Repair Upham ES	\$10,182,256 \$41,006,939	3.5%	\$10,538,635	\$10,907,487	\$11,289,249	\$11,684,373	\$12,093,326	\$12,093,326	
								\$46,450,138	\$64,101,191

*cost includes additional \$1,000,000 for full 3 year lease and additional \$500,000 for distributed sitework

Scenario 8 - New Upham, Mostly New Hardy, Reno/Add Hunnewell

	Construction Cost (based on construction start Q2 2016)	Yearly Escalation	Q2 2017	Q2 2018	Q4 2018	Q2 2019	Q2 2020	Q2 2021	Q4 2021	Total Escalated Construction Cost	Total Project Cost
New Upham ES (plus 3 temp CR modulars)	\$26,919,504	3.5%	\$27,861,687	\$28,836,846	\$29,413,583					\$29,413,583	
Mostly New Hardy ES (plus 1 temp CR modulars)	\$22,203,414	3.5%	\$22,980,533	\$23,784,852	\$24,617,322	\$25,478,928				\$25,478,928	
Reno/Add Hunnewell ES (w/o parking garage)	\$24,109,260 \$73,232,178	3.5%	\$24,953,084	\$25,826,442	\$26,730,368	\$27,665,930	\$28,634,238	\$29,206,923		\$29,206,923	
										\$84,099,434	\$116,057,218

COST COMPARISON

Current MSBA Elementary School Projects in Design

	Grades	Enrollment	GSF	GSF/ Student	Total Project Cost	\$/GSF
Dedham ECC	K	200	50,345	252	\$ 30,488,043	\$ 606
Granby West St. ES	PK-6	430	72,400	168	\$ 39,136,326	\$ 541
Hopkinton Center ES	PK-1	395	83,680	212	\$ 44,970,000	\$ 537
Newton Cabot ES	K-5	480	84,446	176	\$ 45,000,000	\$ 533
Brookline ES	K-8	1,010	227,187	225	\$ 120,150,000	\$ 529
New Templeton Center ES	PK-5	580	92,735	160	\$ 47,563,184	\$ 513
New Bedford Hannigan ES	K-5	400	74,056	185	\$ 36,747,197	\$ 496
Carver ES	PK-5	750	112,350	150	\$ 55,582,625	\$ 495
Woburn Wyman ES	K-5	410	70,701	172	\$ 33,705,396	\$ 477
Averages				189		\$ 525

COST COMPARISON

Brookline	K-8		New Bedford	K-5		
	1010	Students		400	Students	
	227,087	SF		74,056	SF	
	\$120,150,000	Total Project Cost		\$36,747,187	Total Project Cost	
	\$529.09	Cost/SF		\$496.21	Cost/SF	
Carver	K-5		Newton	K-5		
	750	Students		480	Students	
	112,350	SF		84,400	SF	
	\$55,582,625	Total Project Cost		\$45,000,000	Total Project Cost	
	\$494.73	Cost/SF		\$533.18	Cost/SF	
Granby	K-6		Dedham	PK-K		
	430	Students		200	Students	
	72,000	SF		50,345	SF	
	\$39,136,326	Total Project Cost		\$30,488,043	Total Project Cost	
	\$543.56	Cost/SF		\$605.58	Cost/SF	
Hoptkinton	K-1		Woburn	K-5		
	395	Students		410	Students	
	83,680	SF		70,701	SF	
	\$44,970,000	Total Project Cost		\$33,705,000	Total Project Cost	
	\$537.40	Cost/SF		\$476.73	Cost/SF	

NEWTON CABOT ELEMENTARY SCHOOL

Summary of Preliminary Design Pricing for Final Evaluation of Options

Option (Description)	Total Gross Square Feet	Square Feet of Renovated Space (cost*/sf)	Square Feet of New Construction (cost*/sf)	Site, Building Takedown, Haz Mat. Cost*	Estimated Total Construction ** (cost*/sf)	Estimated Total Project Costs
Option 1: (Repair/ Code Upgrade)	43,936	43,936 \$387.15/sf	0 \$0/sf	\$475,050	\$17,009,748 \$387.15/sf	\$21,262,185
<i>Option 2: (Addition / Renovation) ***</i>	<i>84,446</i>	<i>28,042</i> <i>\$353.94/sf</i>	<i>56,404</i> <i>\$363.09/sf</i>	<i>\$5,584,268</i>	<i>\$35,989,306</i> <i>\$426.18/sf</i>	<i>\$45,000,000</i>
Option 3: (New Construction)	81,450	0 \$0/sf	81,450 \$353.85/sf	\$5,927,677	\$34,749,478 \$426.64/sf	\$44,000,000

* Marked up construction costs

** Does not include construction contingency

*** District's preferred option

HOPKINTON ELEMENTARY SCHOOL

Summary of Preliminary Design Pricing for Final Evaluation of Options

Option (Description)	Total Gross Square Feet	Square Feet of Renovate d Space (cost*/sf)	Square Feet of New Construction (cost*/sf)	Site, Building Takedown, Haz Mat. Cost*	Estimated Total Construction ** (cost*/sf)	Estimated Total Project Costs
Option 1: (Base Repair)	50,195	50,195 \$293/sf	N/A	\$6,262,000	\$20,954,000 \$417/sf	\$28,035,000
Option 1A: (Add/Reno)	85,515	50,195 \$273/sf	35,320 \$413/sf	\$7,818,525	\$36,085,000 \$422/sf	\$46,860,000
Option 1C: (New Construction)	83,680	N/A	83,680 \$370/sf	\$7,223,000	\$38,199,000 \$456/sf	\$48,800,000
<i>Option 3A: (New Construction)* **</i>	<i>83,680</i>	<i>N/A</i>	<i>83,680 \$353/sf</i>	<i>\$5,151,000</i>	<i>\$34,676,000 \$414/sf</i>	<i>\$44,970,000</i>
Option 4A: (New Construction)	84,460	N/A	84,460 \$349/sf	\$6,156,000	\$35,655,000 \$422/sf	\$45,900,000

SCHOOL FACILITY COMMITTEE CONSENSUS POINTS

- Concern for using low 3 school enrollment figures (850 vs 1,100)
- Strongly prefer 2 school scenarios – i.e. close one building
- Phase one will be a new building not resulting in need to relocate students w/modulars
 - Saves time
 - Saves money
 - Less disruptive educationally
- Hardy school site and North 40 site are “connected”
 - Use of North 40 site would result in closure of Hardy School
- Concern for closing Hunnewell from Town geography and districting perspective
- Expansion of Upham building not possible due to site and building/educational limitations
 - New structure more rational

SOME THOUGHTS ON ELEMENTARY SCHOOLS

- The “norm” in the Northeast is a four section school (536 students)
- Four section schools are not “Large”
- Classroom, individual class sizes, and teacher to student ratio are more indicative of student outcomes at this grade level
- Too small of a school poses challenges as well
- High performing districts such as Wellesley serve schools well no matter what the size:
 - Lexington (multiple five section schools, new school in design now following recent successful project)
 - Andover (five section 650 student K-5)
- Older smaller “neighborhood” schools once housed greater populations due to differences in program and support services
- New, well programmed and designed schools do not feel crowded

Questions & Answers

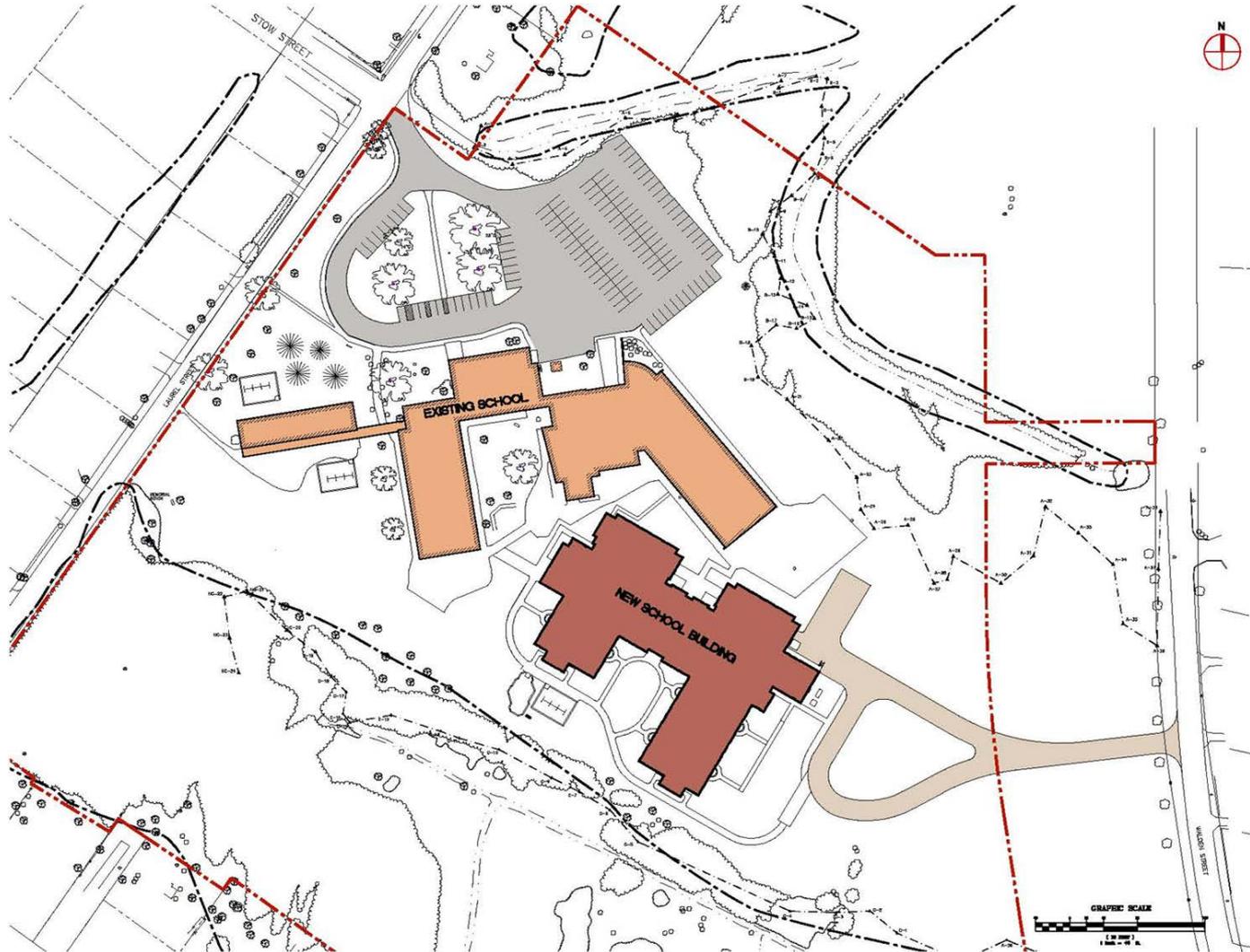
BENCHMARKING IS...

- Comparing recent elementary school buildings with Wellesley's educational program alternatives to allow the School Facilities Committee to visualize the following impacts:
 - School Size (Physical)
 - Building Gross Square Footage Area
 - Building Footprint
 - Building Height (Number of Floors)
 - School Size (Population and Grade Composition)
 - Number of Pupils
 - Grade Structure
 - School Organization
 - Sections (Classrooms) per Grade
 - Plan Layouts
 - Site Planning and Location Alternatives

CONCORD ALCOTT ELEMENTARY SCHOOL



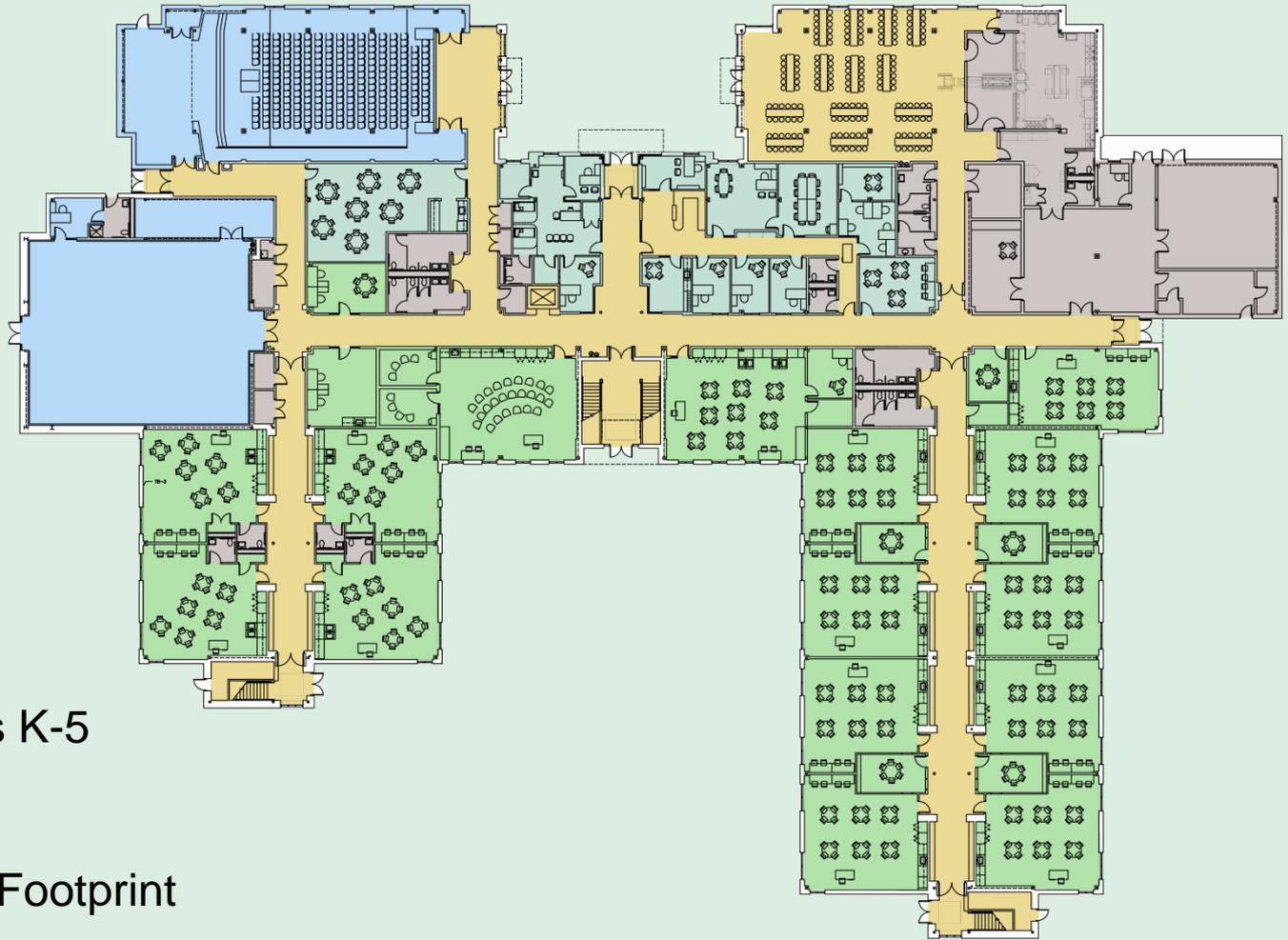
SITE PLAN



SITE PLAN

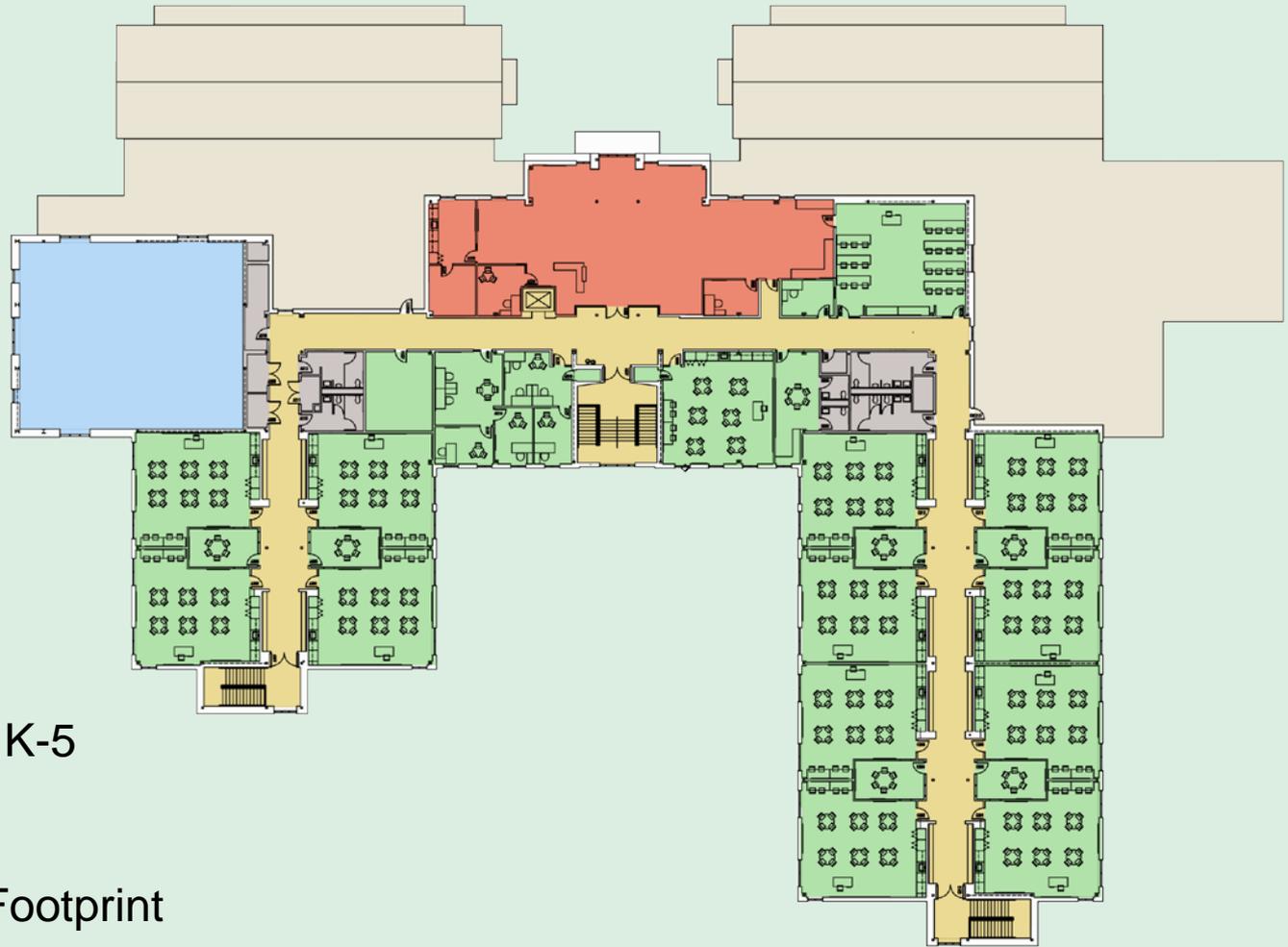


FIRST FLOOR PLAN



- 500 Students K-5
- 75,800 GSF
- 2 Floors
- 51,500 GSF Footprint

SECOND FLOOR PLAN



- 500 Students K-5
- 75,800 GSF
- 2 Floors
- 51,500 GSF Footprint

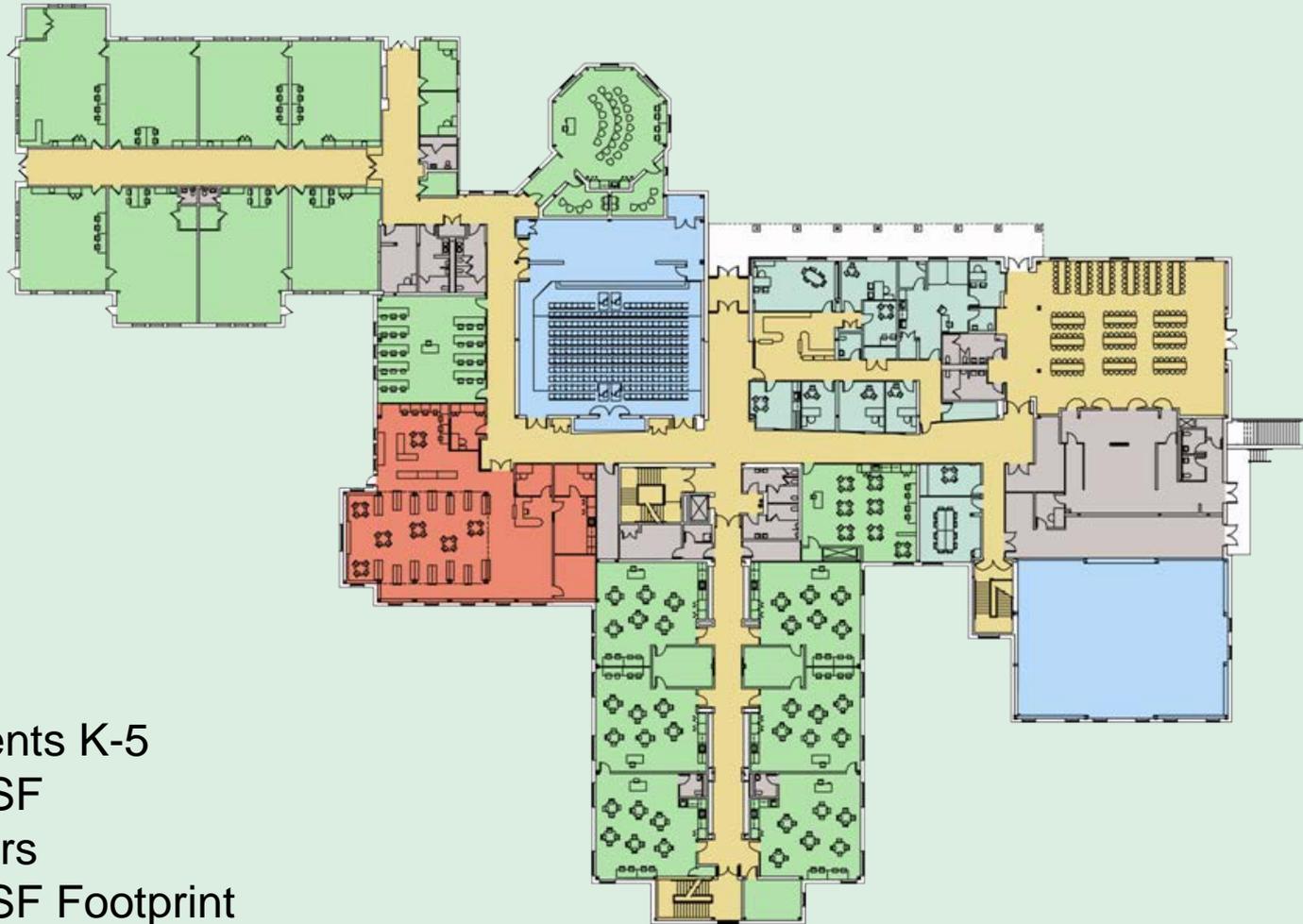
CONCORD THOREAU ELEMENTARY SCH



SITE PLAN



SECOND FLOOR PLAN



- 520 Students K-5
- 80,000 GSF
- 1/2/3 Floors
- 50,500 GSF Footprint

PROGRAM DELIVERY AND CAPACITY CONSTRAINTS

- Building plan layout/organization creates separation between most classrooms.
- Not meeting the MA-CHPS and ASHRAE guideline requirements for acoustics and air quality.
- The Special Education program is offered in small inappropriate spaces impeding supervision and collaboration.
- Limited Technology and Computer Lab space.
- Need to accommodate additional SPED district-wide program(s).

HARDY, HUNNEWELL, UPHAM

- **Summary of Deficiencies**
 - Physical Plant Deterioration
 - Accessibility Limitations
 - Capacity Constraints
 - Program Delivery Impediments

PHYSICAL PLANT DETERIORATION

- Indoor Air Handling Units are original and have long exceeded useful service lives.
- Original boilers are in good condition although exceeded their useful lives.
- Power distribution is original, in poor condition and at the end of useful life.
- Interior lighting fixtures are mostly original, in poor condition, and lighting levels are inadequate.
- Fire alarm system is original, is in need of upgrading.

ACCESSIBILITY

- Parking spaces, curb ramps and sidewalks need to be modified throughout.
- Multiple levels, housing general, music and/or art classrooms are not accessible – access required throughout.
- Staff and general toilet rooms are not accessible.
- Most doorways provide insufficient clearance.
- A lift for stage access is required.

PROGRAM DEFICIENCIES

- Shared stages
- Most SPED spaces have no access to natural light
many undersized, OT/PT spaces
- Multi-purpose spaces serves as cafeteria, gymnasium, and auditorium
- Undersized classrooms, SPED, art, music, media center, nursing suite, administration
- Lack of proper kitchen prevents the possibility of food prep in the future
- Undersized Teacher work rooms and lunch rooms

HARDY SCHOOL EXISTING SITE

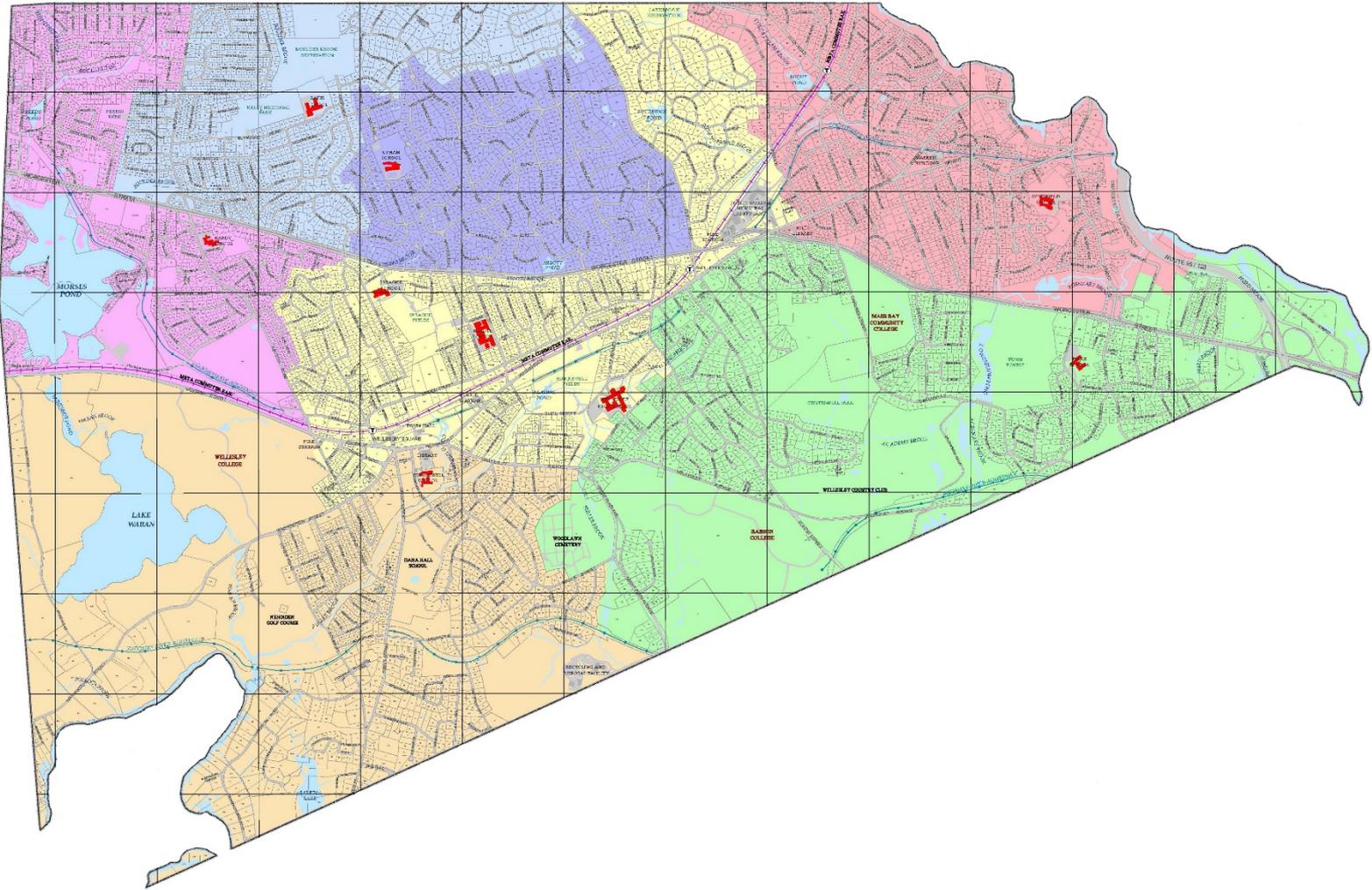


UPHAM SCHOOL EXISTING SITE



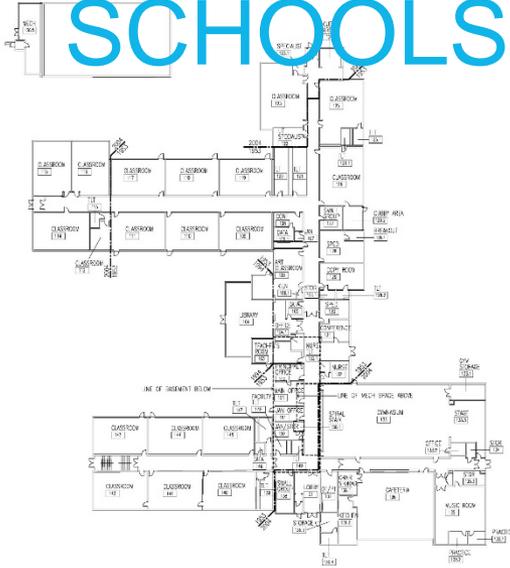
HUNNEWELL SCHOOL EXISTING SITE





District Map

BATES & SPRAGUE ELEMENTARY SCHOOLS

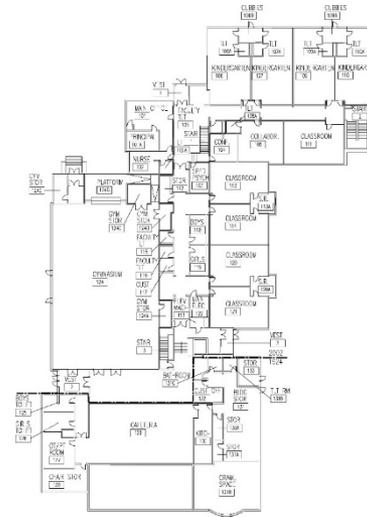


First Floor

Existing Building: 52,657

Population: 395 Students

Square foot per pupil: 133



First Floor

Existing Building: 68,188 GSF

Population: 399 Students

Square foot per pupil: 170

MSBA CONSTRUCTION COST TRENDS



New Building + Eligible Site Costs

Fiscal Year	No.	Marked Up Building + Eligible Site Cost (\$/sf)			
		Schematic Design Estimates		GC Bid or CMR GMP	
		Average	Range	Average	Range
2010	6	\$294	\$256-\$359	\$226	\$197-\$261
2011	13	\$267	\$241-\$294	\$242	\$188-\$279
2012	14	\$264	\$242-\$292	\$259	\$224-\$289
2013	11	\$286	\$243-\$317	\$274	\$213-\$343
2014	8	\$312	\$275-\$339	\$309	\$286-\$336
2015	9	\$349	\$312-\$441	-	-

Estimates are presented by GC Bid or CM-R GMP execution dates.