

ZERVAS SCHOOL BUILDING COMMITTEE (ZSBC) + DESIGN REVIEW COMMITTEE (DRC) JOINT MEETING











### Proposed Space Summary (presented to School Committee on 2/24/14)

Zervas Elementary					
ROOM TYPE					
CORE ACADEMIC SPACES					
Pre-Kindergarten w/ toilet					
Kindergarten w/ toilet					
General Classrooms - Gr. 1-6					
SPECIAL EDUCATION					
Self-Contained SPED					
Self-Contained SPED - toilet					
Resource Room					
Small Group Room / Reading					
Substantially Separate Classroom					
Learning Centers (K-2 & 3-5)					
Breakout Rooms (1 for each grade)					
ELL Program					
OT/PT					
Quiet Room (1 per academic floor)					
Speech & Language					
Reading/Literacy Classroom					
Inclusion Facilitators					
Literacy Specialist					
Math Coach					
IEP Conference Rooms					
Psychologist (office, testing, therapy & storage)					
Social Worker (office, testing & conference)					

	PROGRAM COMPARISON						
ANGIER SCHEMATC 465 STUDENTS			PRELIMINARY ZERVAS 490 STUDENTS			Difference	
NFA	QTY	TOTAL	NFA	QTY	TOTAL	TOTAL	
		21,450			23,300	1,850	
0	0	0	0	0	0	0	
1,200	4	4,800	1,200	4	4,800	0	
925	18	16,650	925	20	18,500	1,850	
		5,800			5,825	25	
		0			0	0	
		0			0	0	
		0			0	0	
		0			0	0	
925	1	925	925	1	925	0	
433	2	866	450	2	900	34	
125.3	6	752	125	6	750	-2	
240	1	240	250	1	250	10	
450	1	450	450	1	450	0	
105	2	210	100	2	200	-10	
240	1	240	250	1	250	10	
925	1	925	925	1	925	0	
207	1	207	200	1	200	-7	
140	1	140	150	1	150	10	
127	1	127	125	1	125	-2	
420	1	420	400	1	400	-20	
149	1	149	150	1	150	1	
149	1	149	150	1	150	1	

MSBA Guidelines at 490 Students refer to MSBA Educational Program & Space Standard Guidelines)								
NFA	QTY	TOTAL	Comments					
	21	20,950						
1,200		-	1,100 SF min - 1,300 SF max					
1,200	4	4,800	1,100 SF min - 1,300 SF max					
950	17	16,150	25 SF/CR shared project space in GSF					
		5,540						
950	4	3,800	8% of pop. in self-contained SPED					
60	4	240						
500	2	1,000	1/2 size Genl. Clrm.					
500	1	500	1/2 size Genl. Clrm.					
			does not exist at Zervas					
			may need to add (1) if 3-story sollution					





# **Proposed Space Summary** (cont.)

Zervas Elementary
ROOM TYPE
MEDICAL
Medical Suite Toilet
Nurses' Office / Waiting Room
Examination Room / Resting
ADMINISTRATION & GUIDANCE
General Office / Waiting Room / Toilet
Teachers' Mail and Time Room
Duplicating Room
Records Room
Principal's Office w/ Conference Area
Principal's Secretary / Waiting
Assistant Principal's Office
Supervisory/Spare Office +After School Pgm
Conference Room
Guidance Office
Guidance Storeroom
Teachers' Work Room
CUSTODIAL & MAINTENANCE
<u>OTHER</u>
Total Building Net Floor Area (NFA)
Total Building Gross Floor Area (GFA) <sup>2</sup>
Grossing factor (GFA/NFA)

	PROGRAM COMPARISON							
ANGIER SCHEMATC 465 STUDENTS			PRELIMINARY ZERVAS 490 STUDENTS		Difference			
NFA	QTY	TOTAL	NFA	TOTAL				
		510			510	0		
51	1	51	60	1	60	9		
234	1	234	250	1	250	16		
112.5	2	225	100	2	200	-25		
		2,318			2,790	472		
681	1	681	680	1	680	-1		
included in	included in General Office			included in General Office				
included in	Gene	ral Office	included in General Office					
62	1	62	60	1	60	-2		
300	1	300	300	1	300	0		
included in			included in	n Gene				
125	1	125	125	1	125	0		
450	1	450	925	1	925	475		
200	1	200	200	1	200	0		
0	0	0	0	0	0	0		
0	0	0	0	0	0	0		
250	2	500	250	2	500	0		
		1,861			1,865	4		
		0			0	0		
		49,943			53,518	3,575		
		74,960				0,070		
					80,277			
		1.50			1.50			

MSBA Guidelines at 490 Students refer to MSBA Educational Program & Space Standard Guidelines)						
NFA	QTY	TOTAL	Comments			
		510				
60	1	60				
250	1	250				
100	2	200				
		2,355				
395	1	395				
100	1	100				
150	1	150				
110	1	110				
375	1	375				
125	1	125				
120	0	-				
120	1	120	full size CR required for After School			
250	1	250				
150	2	300				
35	1	35				
395	1	395				
		2,090				
		0				
		50,246				
		77,338				
		1.54				

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# **Proposed Space Summary** (cont.)

ROOM TYPE  ART & MUSIC  Art Classroom - 25 seats  Art Workroom w/ Storage & kiln  Music Classroom / Large Group - 25-50 seats  Music Practice / Ensemble  Music Storage
Art Classroom - 25 seats Art Workroom w/ Storage & kiln Music Classroom / Large Group - 25-50 seats Music Practice / Ensemble
Art Workroom w/ Storage & kiln  Music Classroom / Large Group - 25-50 seats  Music Practice / Ensemble
Music Classroom / Large Group - 25-50 seats Music Practice / Ensemble
Music Practice / Ensemble
Music Storage
HEALTH & PHYSICAL EDUCATION
Gymnasium
Gym Storeroom
Health Instructor's Office w/ Shower & Toilet
MEDIA CENTER
Media Center / Reading Room
DINING & FOOD SERVICE
Cafeteria / Dining
Stage
Chair / Table / Equipment Storage
Kitchen
Staff Lunch Room

	PROGRAM COMPARISON						
ANGIER SCHEMATC 465 STUDENTS			PRELIMINARY ZERVAS 490 STUDENTS			Difference	
NFA	QTY	TOTAL	NFA	NFA QTY TOTAL		TOTAL	
		2,575			2,725	150	
1,000	1	1,000	1,000	1	1,000	0	
150	1	150	150	1	150	0	
1,200	1	1,200	1,200	1	1,200	0	
155	1	155	150	2	300	145	
70	1	70	75	1	75	5	
		6,300			6,300	0	
5,997	1	5,997	6,000	1	6,000	3	
198	1	198	200	1	200	2	
105	1	105	100	1	100	-5	
		2,763			2,875	112	
2,763	1	2,763	2,875	1	2,875	112	
		6,366			7,328	962	
3,025	1	3,025	3,675	1	3,675	650	
996	1	996	1,000	1	1,000	4	
355	1	355	363	1	363	8	
1,470	1	1,470	1,790	1	1,790	320	
260	2	520	250	2	500	-20	

MSBA Guidelines at 490 Students (refer to MSBA Educational Program & Space Standard Guidelines)						
NFA	QTY	TOTAL	Comments			
		2,575				
1,000	1	1,000	assumed schedule 2 times / week / stude			
150	1	150				
1,200	1	1,200	assumed schedule 2 times / week / stude			
75	3	225	additional practice room required			
		6,300				
6,000	1	6,000	6000 SF Min. Size			
150	1	150				
150	1	150				
		2,875				
2,875	1	2,875	2,020 sf for first 300 stu. plus 4.5sf/stu. ov			
		7,051				
3,675	1	3,675	2 seatings - 15SF per seat			
1,000	1	1,000				
363	1	363	200 SF for first 400 plus .333 SF/stu. Ove			
1,790	1	1,790	1600 SF for first 300 + 1 SF/stu. Add'l			
223	1	223	20 SF/Occupant			





## **Proposed Classroom and Site Program**

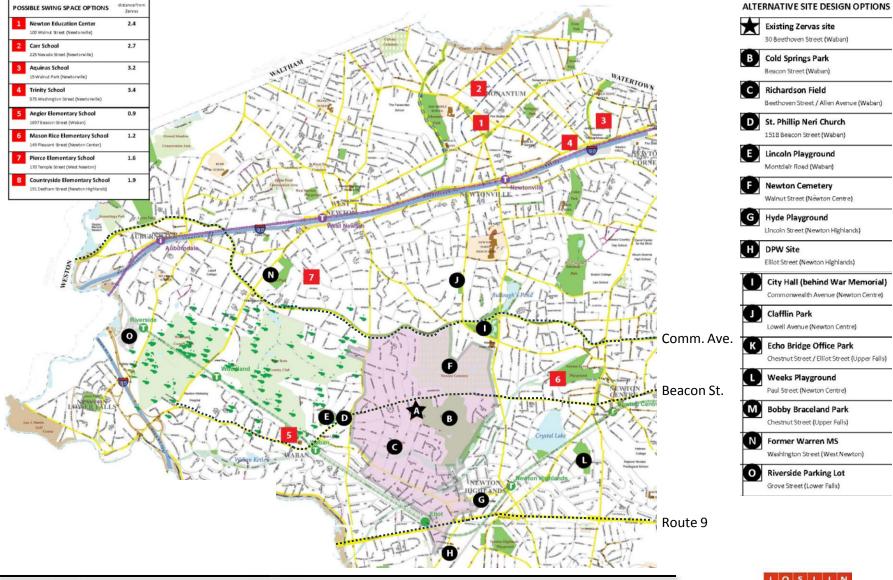
Program/Area Types	Zervas Program (490 Students)	Zervas Existing (320 Students)	New Angier (465 Students)
Classrooms	24	16	22
Parking Spaces [1]	80-95	57	66 [5]
Car Drop-Off [2]	count TBD	on street	8
Bus Drop-Off (separate)	4	2 on street	3
Entry Plaza/Gathering Area [3]	size TBD	front lawn	front plaza
Playground/Field Areas (K-2, 3-5) [4]	50-60k SF	43k SF	60k SF
Student Gardens	1,000 SF	1,000 SF	in plaza
Outdoor Classroom	1,500 SF	1,500 SF	in plaza
Bike Storage	1 per 10pkg min.	16-20 bikes	32 bikes
Service/Dumpster Areas	flat loading	flat loading 2	flat loading 2
	2 dumpster	dumpster	dumpster

- [1] 75 total staff are estimated for 490 students; parking would also include 3 handicap + 2 visitors = 80 spaces required. Zervas currently has 320 students; if prorated for 490, the count would be 88 spaces + 4 HCP + 3 visitors = 95 total.
- [2] Car drop-off currently occurs along Beethoven Ave, which functions as a one-way road during drop-off and pick-up times. The project seeks to improve circulation in and around the site. A formal traffic study is underway to fully assess conditions and determine needs, but likely requires continued use of Beethoven as a Blue Zone.
- [3] Plaza Areas are for informal gathering, including parents waiting, and may overlap other open space.
- [4] New, Existing & Program Play Areas include 20k SF playground/hard surface. Angier utilizes adjacent park land for fields
- [5] 75 Parking Spaces were Programmed for Angier, but modified for site constraints





### **Alternative Site Selection**







### **Alternative Site Selection Criteria Matrix**

ZERVAS ELEMENTARY SCHOOL - NEWTON, MA FEASIBILITY STUDY ALTERNATIVE SITE SELECTION MATRIX Relative Cost: Feasible Favorable X Not available Not feasible \* (see footnote) O Neutral Not reasonable \$ = less than \$1M O Unfavorable Not available \$\$ = \$1M-\$2M \$\$\$ = \$2.M + IN ZERVAS DISTRICT ADJACENT TO ZERVAS DISTRICT OUT OF ZERVAS DISTRICT CRITERIA В F Е 0 N cho Bridge Office Park Chestnut St & Elliot St) St Angier ES Comparison: R.J. McGrath Playground (1600 Washington S Existing Zervas site Cold Springs Park (Beacon St) Hyde Playground (Lincoln St) Current usuable site: 1.76 acres Cemeter ilip Neri Chu I Beacon St) St) Lincoln Playgrou (Montclair Rd) Braceland Park (Chestnut St) Reclaimed site area: .08 acres Total size of new site: 1.84 acres St) Riverside p (Grove St) Philip P City Hall Note: SF data does not include reclaimed area for parking and play space. SITE Newton Newton Newton Upper Newton Upper West 1 Newton village Waban Waban Waban Waban Waban Highlands Highlands Auburndale Centre Centre Centre Falls Centre Falls Newton 2 Distance from existing Zervas (miles) 0.1 0.4 0.4 0.6 1.1 1.2 2.9 1.3 1.2 1.3 1.5 1.5 1.7 1.8 3 Size of site (acres) 5.3 65.0 3.0 TBD 1.6 5.4 1.0 13.8 TBD 1.2 4.3 1.7 8.8 10.1 22.5 4 Legal restrictions, City owned land 0 0 0 0 TBD 0 0 0 0 0 0 X \_\_\_\_ ---5 Site acquisition/legal issues, privately owned land . 0 0 X 0 0 0 0 0 0 0 0 ---**TBD** Publicly owned, available for school building 0 0 X 7 Privately owned, available for school building 0 X X 0 8 Maximum buildable area 3.5 5.5 3.0 X X TBD 1.0 **TBD** \*\* TBD TBD TBD TBD **TBD** TBD Х 9 Maintains neighborhood 'walkability' . • 0 0 0 0 0 0 0 0 0 0 0 0 . 10 Minimizes busing . . 0 0 0 0 0 0 0 0 0 0 0 0 • 11 Degree of redistricting required TBD 12 Optimizes parking and play capacity 0 0 0 0 0 0 0 0 0 0 0 0 0 • • 13 Minimizes building height 0 0 0 0 0 0 0 0 0 0 0 . 0 14 Does not increase demand for on street parking 0 0 • • • . • . • • • PROJECT COST 1 Site acquisition cost \$0 TBD TBD \$\$ \$\$ \$ \$\$\$ \$\$\$ \$0 \$ \$\$ \$ \$ \$ \$\$ 2 Minimizes phasing logistics **TBD** \$\$ \$\$ \$0 \$0 \$0 \$0 \$\$\$ \$0 \$0 \$0 \$0 \$0 \$0 \$0 3 Minimizes busing \$0 \$0 \$0 \$ \$ \$ \$ \$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$\$ 4 Reduces need for swing space/busing \$ TBD • \$0 \$0 \$0 \$0 \$0 \$ \$ \$ \$ \$ \$ RECREATIONAL IMPACT 1 Minimizes recreational impact 0 0 0 0 0 0 0 0 • within current Zervas district

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<sup>\*</sup> There would be considerable legal and financial issues to acquire this particular site.

<sup>\*\*</sup> Maximum builable area at the Elliot Street DPW site is TBD based on an ongoing site analysis.

### **Existing Zervas Site**



Total Site = 5.3 acres\*
Usable = 3.5 acres\*\*

Neighborhood School Minimizes Busing Maintains Walk-ability

\*acreage obtained from the City Tax Assessor's web-site

\*\*includes usable areas within wetland buffers. The amount of paving allowed within the buffers is at the discretion of the Conservation Commission





### **Cold Spring Site**

В

Total Site = 65 acres\*
Usable = 5.5 acres\*\*

Not Available for Use per Article 97 Lands

Neighborhood School Minimizes Busing Maintains Walk-ability

\*acreage obtained from the City Tax Assessor's web-site

\*\*includes usable areas within wetland buffers. The amount of paving allowed within the buffers is at the discretion of the Conservation Commission







#### **Elliot Street Site**



Total Sites =13.8 acres\*

DPW Program -9.9 acres (includes Public Buildings) Fire Station -1.5 acres

Net Usable = 2.4 acres\*\*

**Net Acreage Does Not Meet Zervas Program** 

Parks/Rec to Relocate **Industrial Adjacency Increases Busing Traffic Issues** 

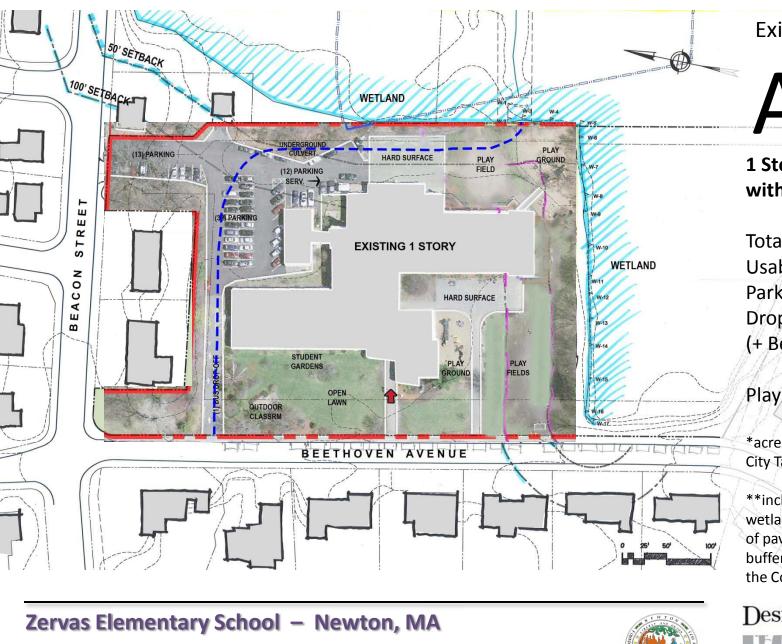
\*acreage obtained from the City Tax Assessor's web-site

\*\*includes usable areas within wetland buffers. The amount of paving allowed within the buffers is at the discretion of the Conservation Commission









**Existing Zervas ES** 

A1.0

1 Story Pinwheel Plan with Parking Behind

Total Site = 5.3 acres\* Usable = 3.5 acres\*\* Parking = 57 spaces Drop-Off = 1 bus/0 car (+ Beethoven Ave)

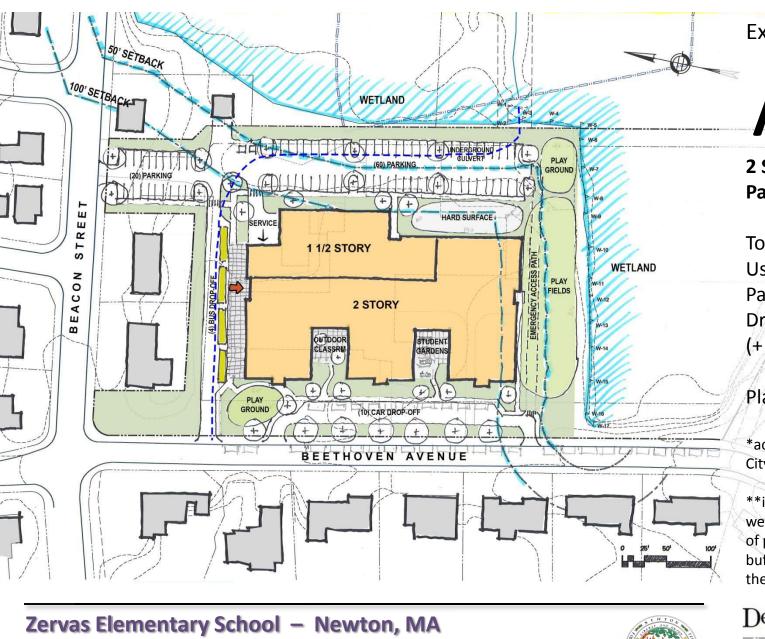
Play Areas = 43k SF

\*acreage obtained from the City Tax Assessor's web-site

\*\*includes usable areas within wetland buffers. The amount of paving allowed within the buffers is at the discretion of the Conservation Commission

Design*partnership* 





2 Story Box Plan with **Parking Behind** 

Total Site = 5.3 acres\* Usable = 3.5 acres\*\* Parking = 80 spaces Drop-Off = 4 bus/10 car (+ Beethoven Ave)

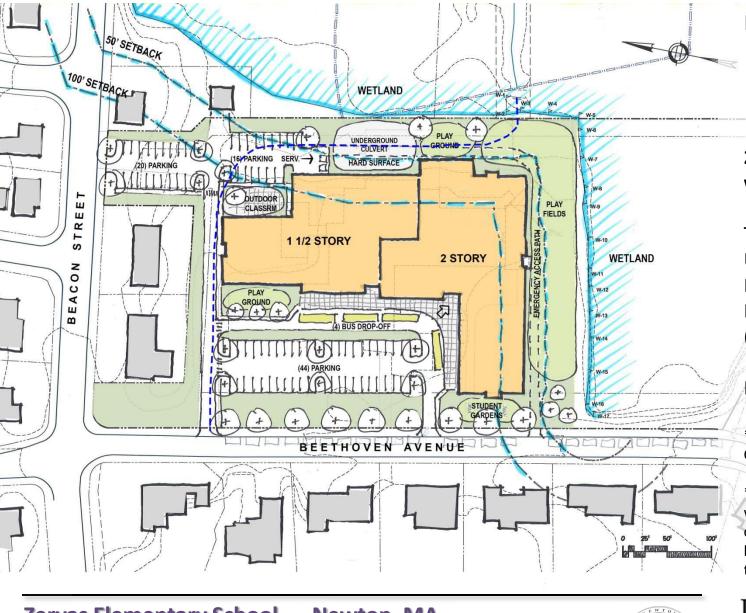
Play Areas = 25k SF

\*acreage obtained from the City Tax Assessor's web-site

\*\*includes usable areas within wetland buffers. The amount of paving allowed within the buffers is at the discretion of the Conservation Commission

Design*partnership* 





A1.2

2 Story Elbow Plan with Split Parking

Total Site = 5.3 acres\*
Usable = 3.5 acres\*\*
Parking = 80 spaces
Drop-Off = 4 bus/**0 car**(+ Beethoven Ave)

Play Areas = 29.5k SF

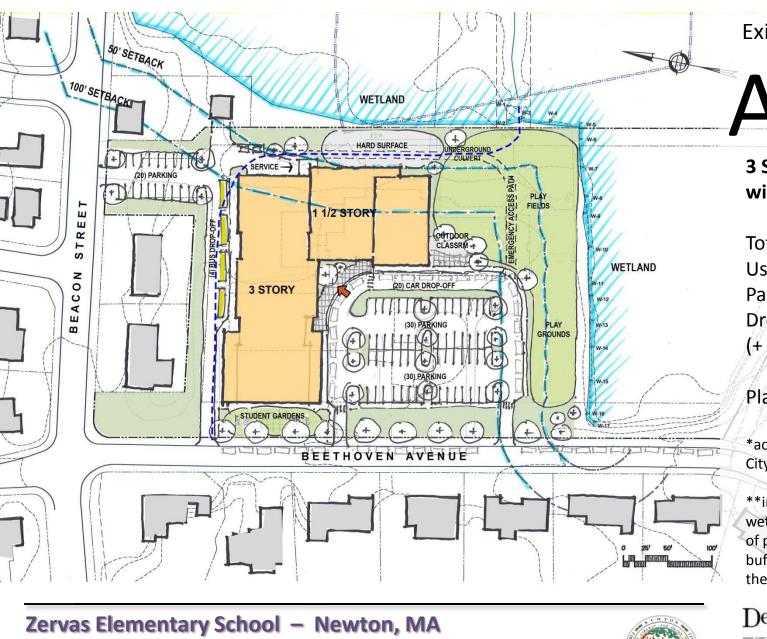
\*acreage obtained from the City Tax Assessor's web-site

\*\*includes usable areas within wetland buffers. The amount of paving allowed within the buffers is at the discretion of the Conservation Commission

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Zervas Elementary School – Newton, MA



A1.2c

3 Story Elbow Plan with Parking in Front

Total Site = 5.3 acres\* Usable = 3.5 acres\*\* Parking = 80 spaces Drop-Off = 4 bus/20 car (+ Beethoven Ave)

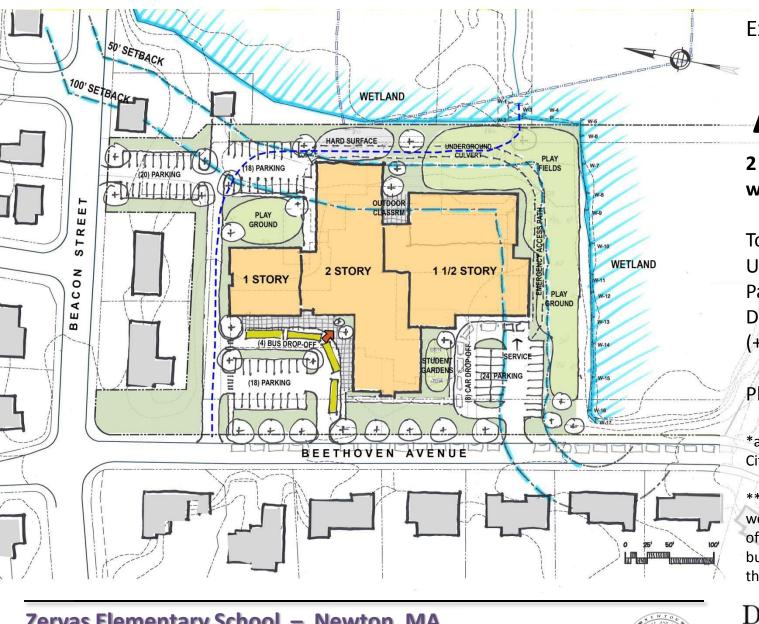
Play Areas = 37k SF

\*acreage obtained from the City Tax Assessor's web-site

\*\*includes usable areas within wetland buffers. The amount of paving allowed within the buffers is at the discretion of the Conservation Commission

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2 Story Pinwheel Plan with Split Parking

Total Site = 5.3 acres\* Usable = 3.5 acres\*\* Parking = 80 spaces Drop-Off = 4 bus/6 car (+ Beethoven Ave)

Play Areas = 28.5k SF

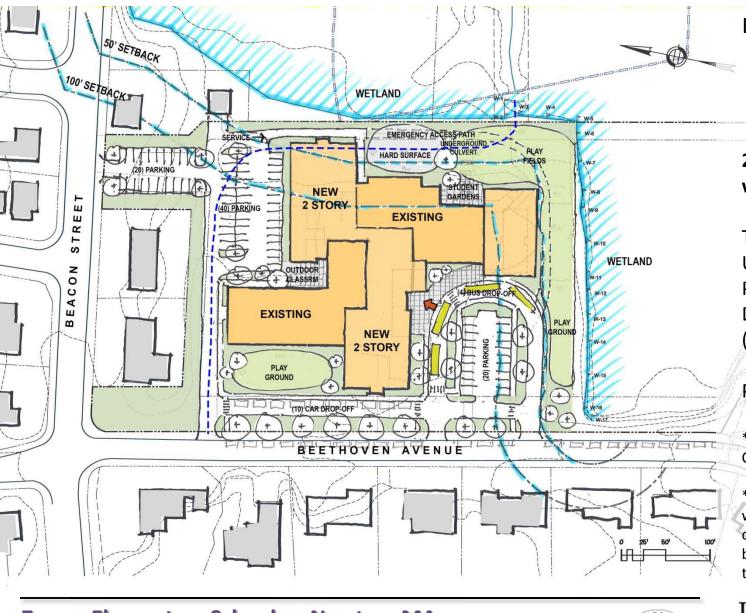
\*acreage obtained from the City Tax Assessor's web-site

\*\*includes usable areas within wetland buffers. The amount of paving allowed within the buffers is at the discretion of the Conservation Commission

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Zervas Elementary School – Newton, MA



A1.4

2 Story Add/Reno Plan with Split Parking

Total Site = 5.3 acres\*
Usable = 3.5 acres\*\*
Parking = 68 spaces
Drop-Off = 4 bus/10 car
(+ Beethoven Ave)

Play Areas = 25k SF

\*acreage obtained from the City Tax Assessor's web-site

\*\*includes usable areas within wetland buffers. The amount of paving allowed within the buffers is at the discretion of the Conservation Commission

Design*partnership* 



Zervas Elementary School – Newton, MA