



BOARD OF ALDERMEN 5-58 Site Plan Approval Hearing

Zervas Elementary School – Newton, MA

November 12, 2014











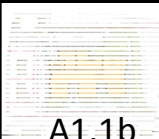


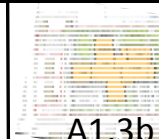











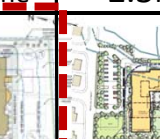


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Overview of Design Studies

Existing Site Studies					Expanded Site Studies				
Multi-Wing	Elbow 2-Story	Elbow 3-Story	Pinwheel	Add/Reno	Multi-Wing	Elbow 2-Story	Elbow 3-Story South	Elbow 3-Story North	Box
 A1.1	 A1.2	 A1.2b	 A1.3	 A1.4	 A2.1	 A2.2	 A2.2b	 A2.3b	
 A1.1b	 A1.2b	 A1.2c	 A1.3b	 A1.4b	 A2.1b	 A2.3	 A2.2c-drive	 A2.3b-1	
						 A2.3c	 A2.2c-loop	 2.3b-2	
							 A2.2c-lane	 2.3b-3	
							 Refined Plan	 2.3b-4	



Preferred Schematic Option



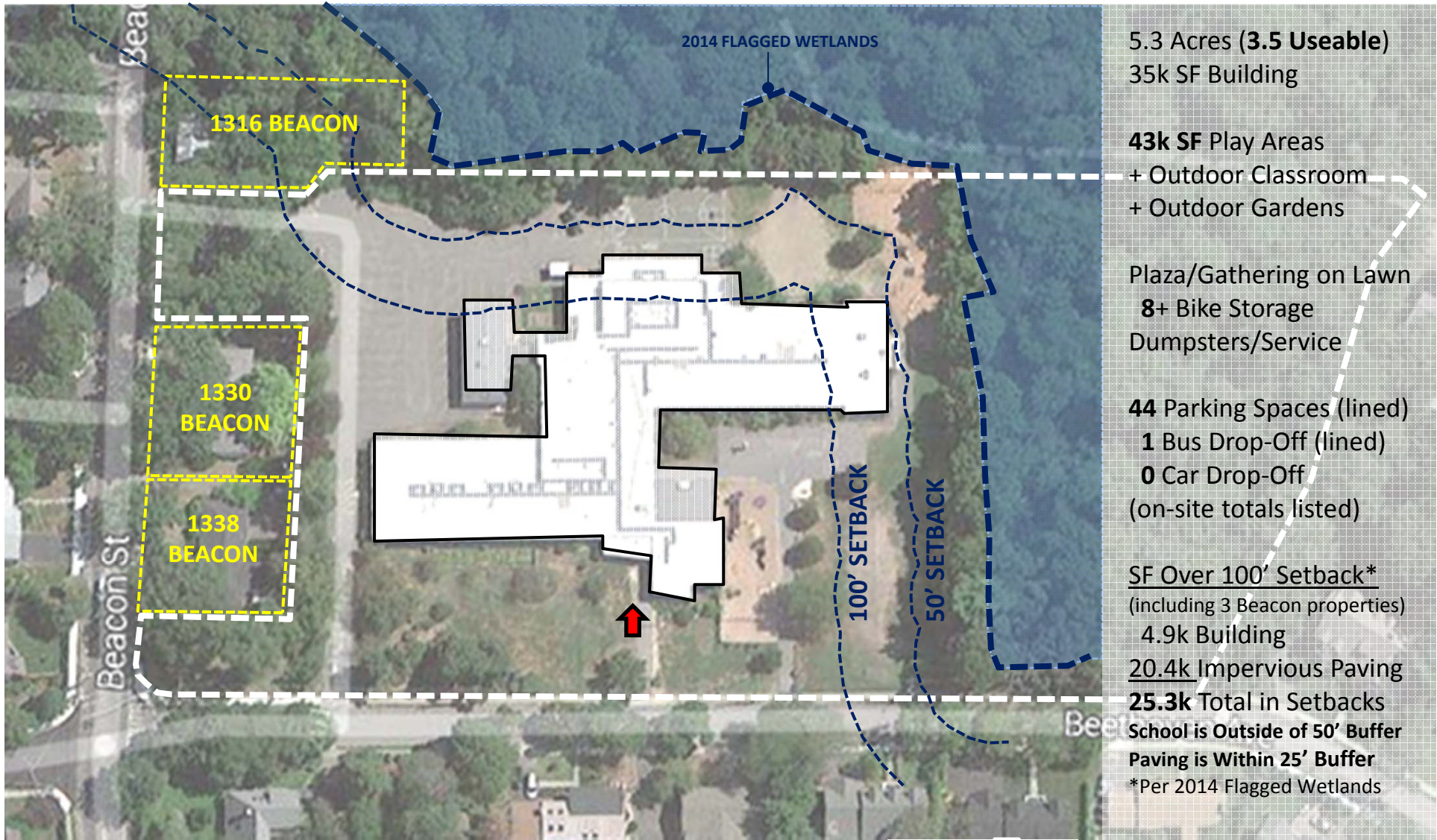
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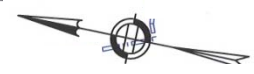


- 5.3 Acres (**3.5 Useable**)
- 35k SF Building
- 43k SF Play Areas**
- + Outdoor Classroom
- + Outdoor Gardens
- Plaza/Gathering on Lawn
- 8+ Bike Storage**
- Dumpsters/Service
- 44 Parking Spaces (lined)**
- 1 Bus Drop-Off (lined)**
- 0 Car Drop-Off**
- (on-site totals listed)
- SF Over 100' Setback*
- (including 3 Beacon properties)
- 4.9k Building**
- 20.4k Impervious Paving**
- 25.3k Total in Setbacks**
- School is Outside of 50' Buffer
- Paving is Within 25' Buffer
- *Per 2014 Flagged Wetlands

EXISTING SITE + EXPANSION PROPERTIES

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1316 BEACON STREET



1330 BEACON STREET



1338 BEACON STREET

HISTORICAL COMMISSION:

30 Beethoven (listed 1954)
Preferably Preserved, Delay of Demolition Expires 11/26/14

1338 Beacon (listed 1953)
Not Preferably Preserved

1130 Beacon (listed 1952)
Not Preferably Preserved

1316 Beacon (listed 1780)
Preferably Preserved

Records Indicate it was Built in 1840, relocated on site in 1897



30 BEETHOVEN AVENUE

EXISTING SITE + EXPANSION PROPERTIES

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SCHEMATIC DESIGN – SITE PLAN

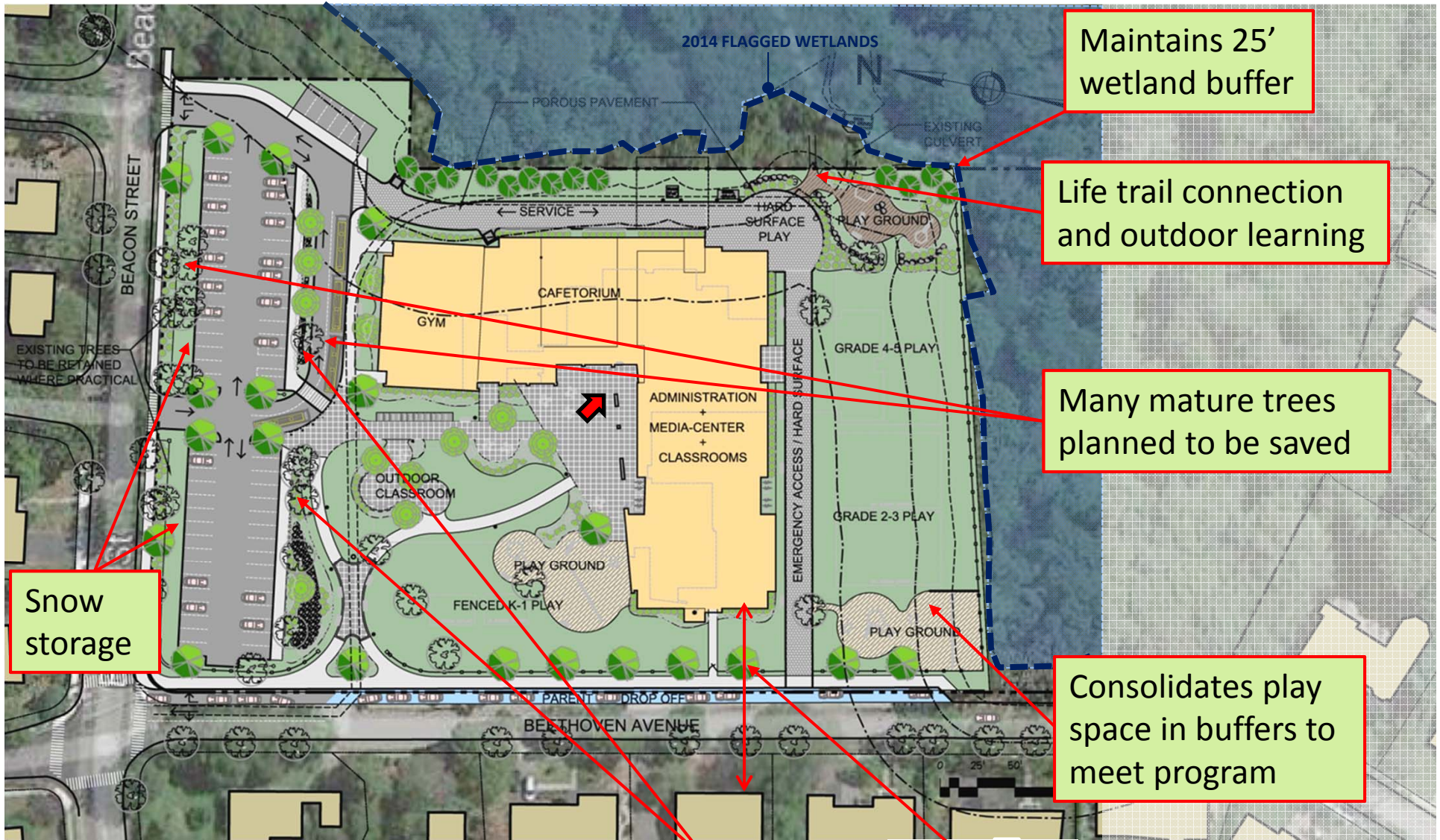
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Maintains 25' wetland buffer

Life trail connection and outdoor learning

Many mature trees planned to be saved

Snow storage

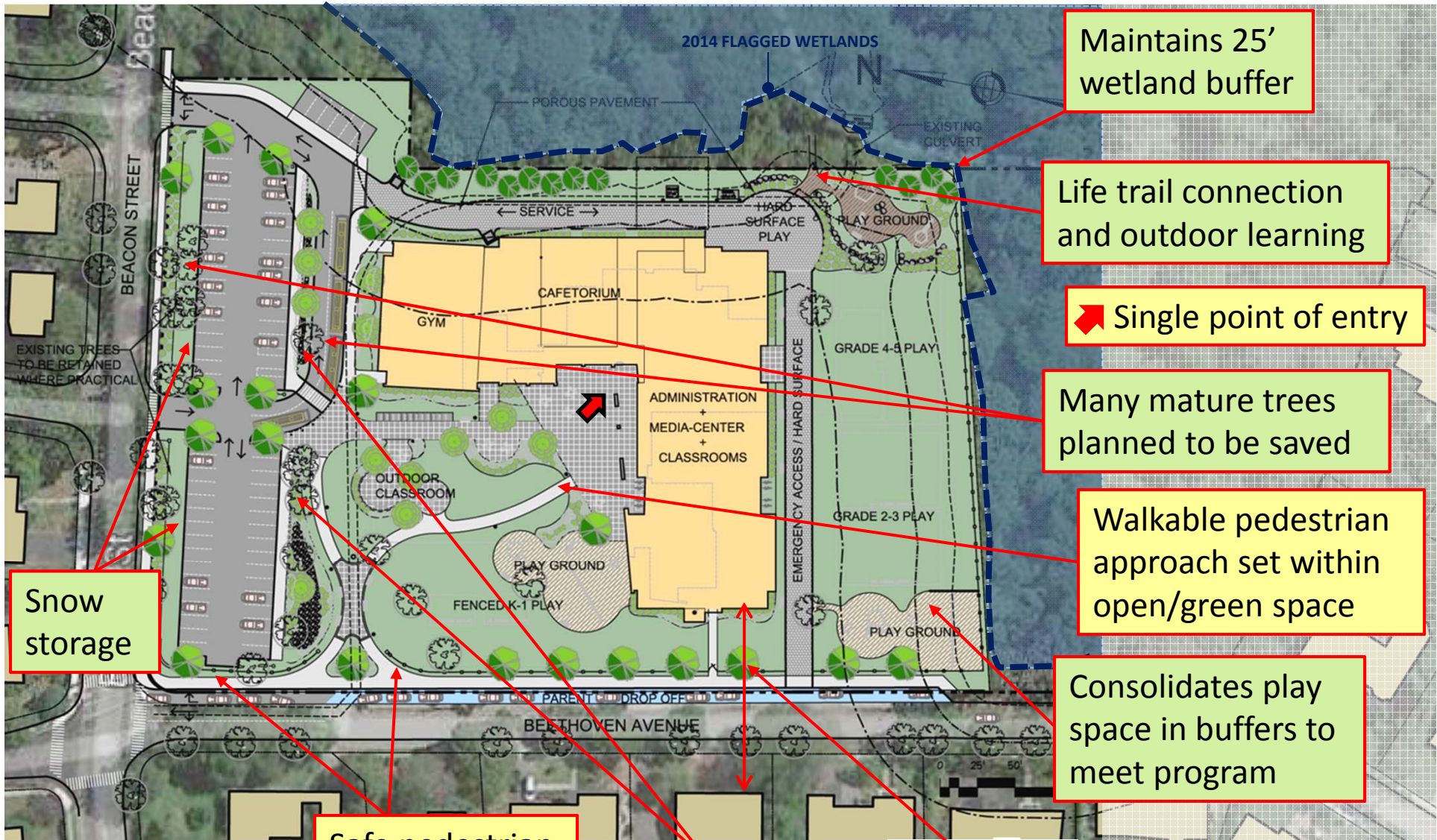
Consolidates play space in buffers to meet program

SCHEMATIC DESIGN – SITE PLAN

**Zervas Elementary School – Newton,
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Bioswales/
rain garden
drainage

Main façade
is 120' from
homes



Maintains 25' wetland buffer

Life trail connection and outdoor learning

➔ Single point of entry

Many mature trees planned to be saved

Walkable pedestrian approach set within open/green space

Consolidates play space in buffers to meet program

Snow storage

Safe pedestrian approaches with no traffic crossings

Bioswales/ rain garden drainage

Main façade is 120' from homes

SCHEMATIC DESIGN
Zervas Elementary
5-58 Site Plan App



Roads aligned for safety

Consolidates parking; reduces site circulation

Bus traffic separate from cars w/access to/from Beacon

Maintains 25' wetland buffer

Life trail connection and outdoor learning

➔ Single point of entry

Many mature trees planned to be saved

Walkable pedestrian approach set within open/green space

Consolidates play space in buffers to meet program

Snow storage

Study traffic flow

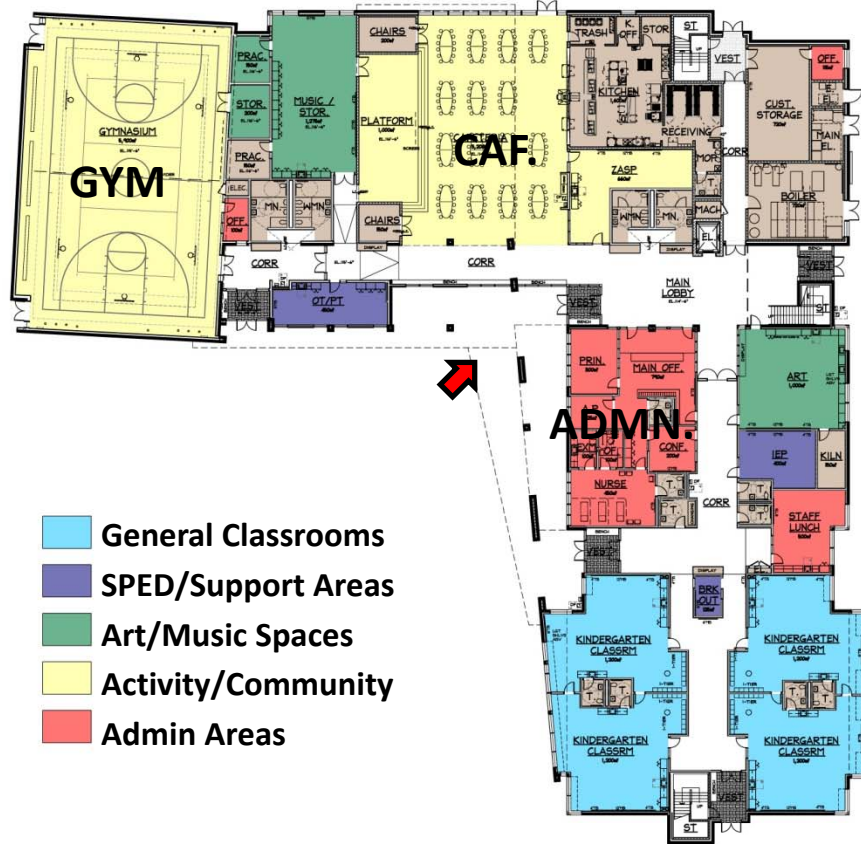
Safe pedestrian approaches with no traffic crossings

Bioswales/ rain garden drainage

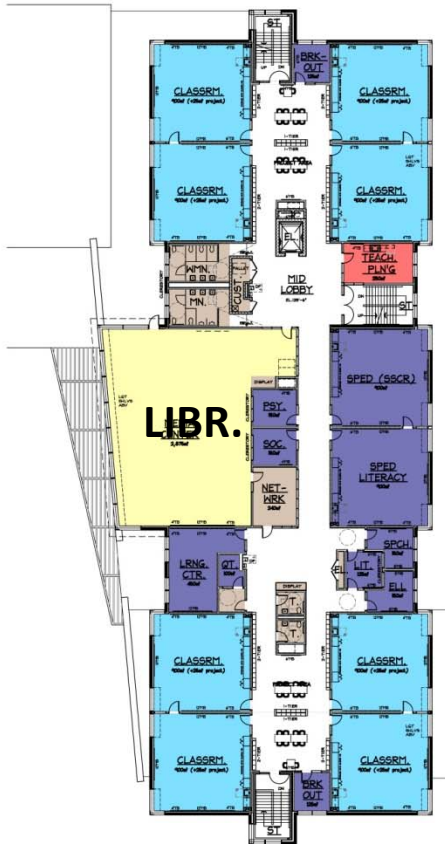
Main façade is 120' from homes

Study Beethoven for Blue Zone

SCHEMATIC DESIGN
Zervas Elementary
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- General Classrooms
- SPED/Support Areas
- Art/Music Spaces
- Activity/Community
- Admin Areas



SCHEMATIC DESIGN – FLOOR PLANS

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PERSPECTIVES and ELEVATION STUDIES



SCHEMATIC DESIGN – AERIAL VIEW

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SCHEMATIC DESIGN – VIEW FROM BEACON/BEETHOVEN CORNER

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SCHEMATIC DESIGN – VIEW FROM BEACON EXIT (EAST)

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SCHEMATIC DESIGN – VIEW FROM BEETHOVEN TOWARD BEACON

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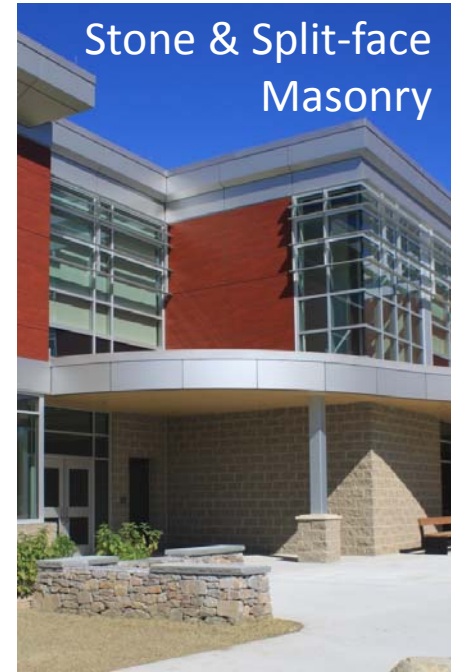
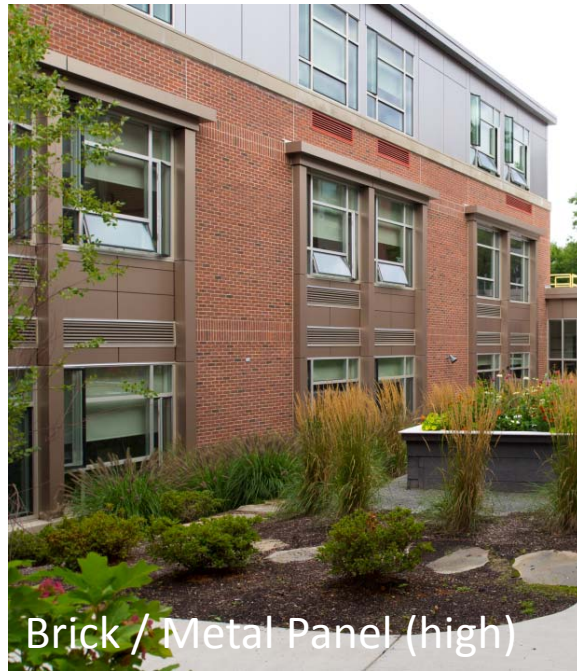
Lower Veneer + Colonnade

SCHEMATIC DESIGN – END ELEVATION STUDY

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SCHEMATIC DESIGN – MATERIALS/PRECEDENT

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Budget: Construction Cost Estimate Update

Construction costs for the Zervas ES project are on budget per current estimates

- Two full independent cost estimates were developed based on the detailed Schematic Design documents: one by the Designer's Cost Consultant and one by the Construction Manager
- The Construction Manager, WT Rich, is also working on the Angier project so their cost and scope data is informed by the most current relevant precedent
- The two estimates were reconciled to a variance of less than 0.25% (\$74 K) indicating a consistent understanding of design intent and scope
- The higher of the two estimates was within 0.6% (\$170 K) of the \$29 M construction budget, which is negligible at this phase because the estimates include \$2.75 M in contingencies

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Budget: Construction Cost Estimate Update (cont.)

The estimates include the full scope of work on the expanded Zervas site

- The estimates include all work on the three adjacent residential properties (which will be incorporated into the Zervas site)
- The potential work to develop and improve the Blue Zone (or any related Traffic work) will be covered in the \$3 M Off-Site Improvements line item within the \$40 M Total Project Budget
- No Value Engineering adjustments were required at this phase to align the project design with the construction budget, all program elements are included

Additional Cost Estimates will be developed at 3 key future project milestones

- Two sets of estimates will be reconciled to budget at the end of the Design Development, 60% Construction Documents and 90% Construction Documents phases
- The project team will deliver the Zervas school on schedule and on budget

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Budget & Categories of Expenses for the New Zervas School Project

CATEGORIES OF THE BUDGET	BUDGET	CURRENT EXPENDITURES	TOTAL EXPENDITURES	TOTAL ENCUMBRANCES	UNOBLIGATED BUDGET
FEASIBILITY STUDY (Includes A/E, OPM & CM PreCon)	\$ 800,000	\$ 98,498	\$ 705,218	\$ 787,194	\$ 12,806
PROJECT ADMINISTRATION (Includes OPM)	\$ 1,025,000	\$ -	\$ -	\$ -	\$ 1,025,000
CONSTRUCTION CLERK OF THE WORKS	INCLUDED IN OPM SERVICES UNDER PROJECT ADMINISTRATION				
BUILDING SYSTEM COMMISSIONING	\$ 100,000	\$ -	\$ -	\$ -	\$ 100,000
ARCHITECTURE & ENGINEERING	\$ 2,800,000	\$ -	\$ -	\$ -	\$ 2,800,000
PRE CONSTRUCTION SERVICES	\$ 140,000	\$ -	\$ -	\$ -	\$ 140,000
CONSTRUCTION	\$ 29,000,000	\$ -	\$ -	\$ -	\$ 29,000,000
OFF SITE IMPROVEMENTS (Acquisition/Blue Zone)	\$ 3,000,000	\$ -	\$ -	\$ 522,000	\$ 2,478,000
FURNITURE/FIXTURES/COMPUTER EQUIPMENT	\$ 1,200,000	\$ -	\$ -	\$ -	\$ 1,200,000
OTHER PROJECT COSTS	\$ 270,000	\$ -	\$ -	\$ -	\$ 270,000
CONSTRUCTION CONTINGENCY	\$ 1,365,000	\$ -	\$ -	\$ -	\$ 1,365,000
OWNER'S CONTINGENCY (SOFT COSTS)	\$ 300,000	\$ -	\$ -	\$ -	\$ 300,000
TOTAL PROJECT EXPENDITURE BUDGET	\$ 40,000,000	\$ 98,498	\$ 705,218	\$ 1,309,194	\$ 38,690,806

Total Value of CM Change Orders Submitted to Date	\$ -
Total Number of CM Change Orders Submitted to Date	0

Construction Completion Rate (%)	NA
Projected Construction Start Date	January 2016
Substantial Completion Date	July 2017
Final Project Completion Date	Fall 2017

NOTES:

Current approved project funding is \$1 M for FSSD plus \$2.7 M for Property Acquisition

Expenditures are listed "as submitted" to the City, some expenditures may not yet be processed by the City of Newton

Expenditures and Encumbrances are rounded to the nearest whole dollar

The potential cost of concrete slab moisture mitigation will be covered under Construction Contingency

Construction budget include demolition of 3 existing adjacent residences and development of those sites

Off Site improvements include potential acquisition of adjacent residential properties and reconstruction of the Blue Zone on Beethoven Street

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Project Milestone Schedule

Start	Finish	Activity
August-13	October-13	OPM Selection
October-13	January-14	Designer Selection
January-14	June-14	Feasibility Study/Options Analysis
July-14	September-14	Schematic Design
	September-14	SD Cost Estimates and Reconciliation
October-14	November-14	Site Plan Approval and 5-58 Funding Approval
November-14	March-15	Design Development
February-15	March-15	DD Cost Estimates & Reconciliation
	March-15	DD Local Approval
March-15	September-15	Construction Documents
	July-15	60% CD Cost Estimates and Local Review
	September-15	90% CD Cost Estimates and Local Review
	October-15	Bidding
	November-15	Develop Guaranteed Maximum Price Construction Contract
November-15	December-15	Construction Mobilization and Procurement
	December-15	Zervas Faculty and Students relocate to Carr Facility
January-16	July-17	Construction of new Zervas School
July-17	August-17	Fit out, furnishing, and NPS occupancy of New Zervas School
	September-17	New Zervas School opens for students

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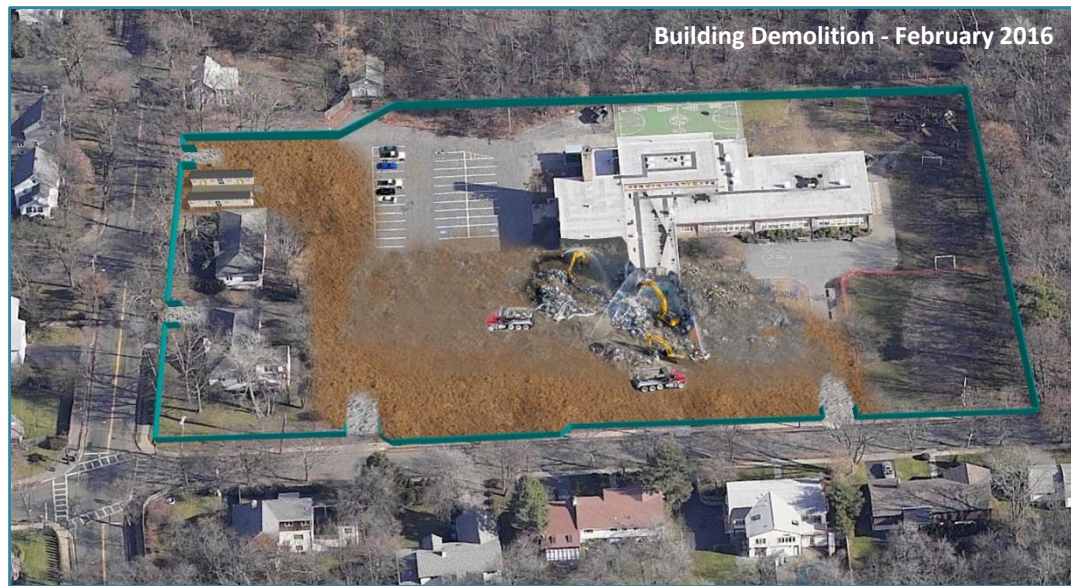


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Community, Safety and Logisitcs

OUR COMMITMENT

To assure the health and safety of the general public while minimizing disruption to the local community and enabling cost-effective progression of the work



- ✓ Site-specific safety plan
- ✓ Erosion control plan / order of conditions
- ✓ SWPPP plan
- ✓ Dewatering plan
- ✓ Worksite egress and access
- ✓ Barricades and signage
- ✓ Dust control
- ✓ Noise control
- ✓ Delivery blackout periods
- ✓ Parking and traffic management
- ✓ Neighborhood Management plan

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