#### **GREENWICH PUBLIC SCHOOLS**

#### **Greenwich, Connecticut**

Date of Meeting:	March 20, 2014	<u>!</u>	
Title of Item:	New Lebanon S	School Pre-Feasibility Study	
Policy Reference:	<u>E - 051</u>		
REQUEST F	FOR BOARD AC	TION OR PRESENTATION O	F INFORMATIONAL ITEM
XAo	ction Requested		_Informational Only
Subm	nitted By:	William S. Mckersie, PhD	
Positi	on: <u>\$</u>	Superintendent	
l will b	oe present at Boa	ard meeting to explain if called	upon:
	<u>X</u> Yes	— No	<u></u>

#### **Overview**

At the October 10, 2013 Board of Education Work Session, the Board of Education authorized \$25,000 from the current operating budget to perform a limited focus study on New Lebanon Elementary School.

The Pre-Feasibility Study provides a "jump start" for the full Feasibility Study, which will be paid for by capital funds of \$100,000 (requested for FY 2014-2015). If capital funds are available, a Request for Proposals (RFP) will be released in the spring 2014 to begin July 1, 2014.

Attached is the Pre-Feasibility Study of expansion options at New Lebanon Elementary School. In preparing the document, KSQ (District's architect) met numerous times with the Superintendent, Managing Director of Operations, Director of Facilities, and New Lebanon School Principal.

#### **Highlights**

- The benchmark analysis shows New Lebanon School is below average as compared to all District elementary schools in numerous site features, classroom inventory and all core common areas.
- Preliminary Planning & Zoning review suggests that there is sufficient floor area ratio to expand on present location. However, other site characteristics, such as steep slopes, place constraints on construction.

- The maximum square feet calculation, potential state reimbursement, and draft education specification is based on the <u>current</u> grade configuration (e.g. no PreK). Any modifications to grade configuration will adjust calculations, etc.
- Five options were reviewed. Only Options C and D meet education/program needs. Options A-C requires swing space during construction.
- Independent cost analysis estimates construction costs between \$29.9M to \$34.7M. Estimates do not include architect/design fees. Cost estimates will change as design progresses.
- Construction schedule anticipates start date of July 2016 with 18-24 month construction window, depending on option. Estimated completion date is January/June 2018.

#### **Next Steps**

There are major next steps indentified at the close of the study. Some steps of note are:

- Create master project schedule.
- To be eligible for the 80% Diversity Grant reimbursement, the Board of Education will need to include additional magnet seats at New Lebanon in Greenwich's plan to address identified racial imbalances submitted to the State of CT.
- Release RFP for Full Feasibility Study.
- Exploring timing of creation of Building Committee.

#### **Recommend Action**

None at this time.





New Lebanon School (K-5) 25 Mead Avenue, Greenwich, CT

20 March 2014





#### Report Contents:

Preliminary Benchmark Analysis [3-10	)]
Planning & Zoning Overview [11-16	3]
CT State School Construction Grants [17-20	)]
Proposed Space Allocation [21-24	1]
Alternative School Expansion Diagrams [25-45	5]
Concept Comparisons [46-50	)]
Next Steps [51-52	2]





#### **Preliminary Benchmarking Analysis**





#### **DEFINITION OF TERMS**

BUILDING ENTRANCE



#### Site Features

Outdoor athletic and play facilities at each school will be sufficient to support its student population and its programmatic needs, and will be equitable across the District.

#### Classroom Inventory

All school facilities will contain sufficient classroom space to accommodate class size guidelines and the curriculum, as well as the programmatic needs and policies approved by the Board of Education.

#### **Core Common Areas**

Each school building will contain core facilities space sufficient for that school's student population. Core facilities include but are not limited to gymnasiums, auditoriums, cafeterias, media centers, computer labs, teacher work areas, music rooms, art rooms and storage areas.

Floor Area Comparisons

- Gymnasium
- Cafeteria
- Media Center

#### District / CT State Elementary Benchmark

This report recognizes the Glenville Elementary School as a district wide benchmark for the Town of Greenwich, for educational program and floor area space standards.





#### SITE FEATURES

	School	Access to Playgrounds	Open Field Space	Parking	Spaces	# per staff	Courtyards	Kindergarten Playspace	Community Walkability
	Cos Cob	•	•		± 75	1.3		•	
	Glenville				± 100	1.9			0
(m)	Hamilton Ave				± 50	0.6			
(m)	ISD				± 50	1.0	0	•	0
(m)	Julian Curtiss				± 75	1.2			
	North Mianus				± 90	1.4			
	North Street				± 50	0.9	0	•	0
	Old Greenwich				± 75	1.3		•	
	Parkway				± 75	1.9			
	Riverside				± 50	0.8	0		
(m)	New Lebanon		•	•	± 30	0.5	0	•	
	Meets or excee average	ds Meets average	Below average	O Not	licable		District E.S. Benchmark	(m) Magnet School	Basis for Study



#### **CLASSROOM INVENTORY**

	School	Instructional Classrooms	Class Size (8yr High)	Class Size (Current)	Average Class Size	K- Classroom	1 <sup>st</sup> Grade	2 <sup>nd</sup> Grade	3 <sup>rd</sup> Grade	4 <sup>th</sup> Grade	5 <sup>th</sup> Grade
	Cos Cob	23	490	445	21.3	960 sf	980 sf	750 sf	715 sf	715 sf	775 sf
	Glenville	22	433	406	19.7	1,000 sf	900 sf	850 sf	850 sf	850 sf	850 sf
(m)	Hamilton Ave	20	339	335	16.9	880 sf	800 sf	800 sf	800 sf	800 sf	775 sf
(m)	ISD	18	378	378	21	730 sf	930 sf	750 sf	730 sf	745 sf	740 sf
(m)	Julian Curtiss	18	345	345	19.2	835 sf	745 sf	740 sf	765 sf	750 sf	740 sf
	North Mianus	23	464	448	20.2	1,000 sf	850 sf	750 sf	815 sf	675 sf	700 sf
	North Street	23	368	368	16	980 sf	825 sf	830 sf	840 sf	860 sf	800 sf
	Old Greenwich	23	397	397	17.3	950 sf	860 sf	705 sf	705 sf	705 sf	860 sf
	Parkway	16	225	225	14.1	820 sf	765 sf	765 sf	800 sf	825 sf	750 sf
	Riverside	24	495	495	20.6	1,045 sf	875 sf	710 sf	715 sf	715 sf	715 sf
(m)	New Lebanon	14	293	263	21	*1,000 sf	720 sf	720 sf	670 sf	670 sf	675 sf

<sup>\* 1995</sup> Addition - Two (2) 1,000 sf K-Classrooms

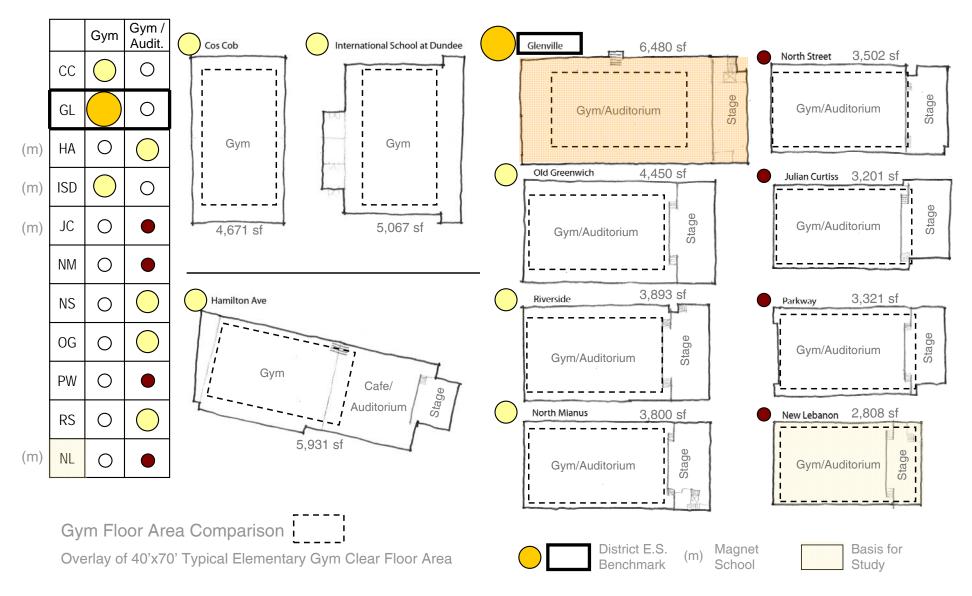
District E.S. (m) Magnet
Benchmark School

Basis for

Study

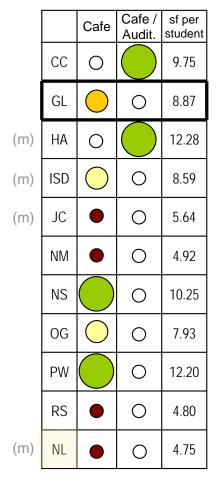


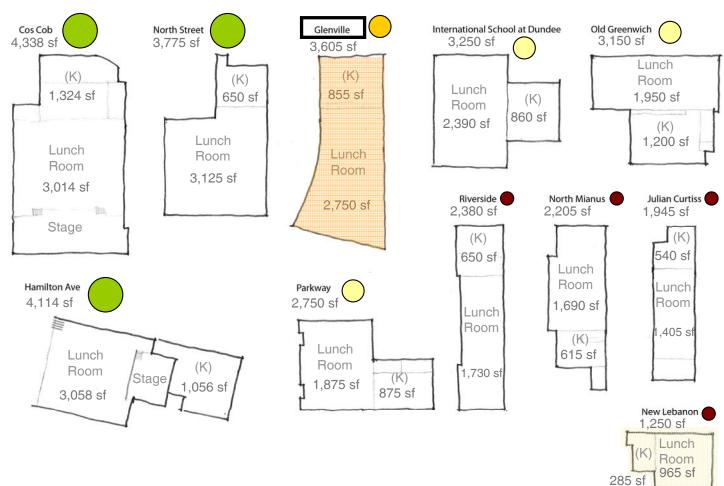
#### **CORE COMMON AREAS - GYM/AUDITORIUM**





#### **CORE COMMON AREAS - CAFETERIA & KITCHEN**





#### Cafeteria Floor Area Comparison:

Lunch Room & Kitchen

(K) Kitchen

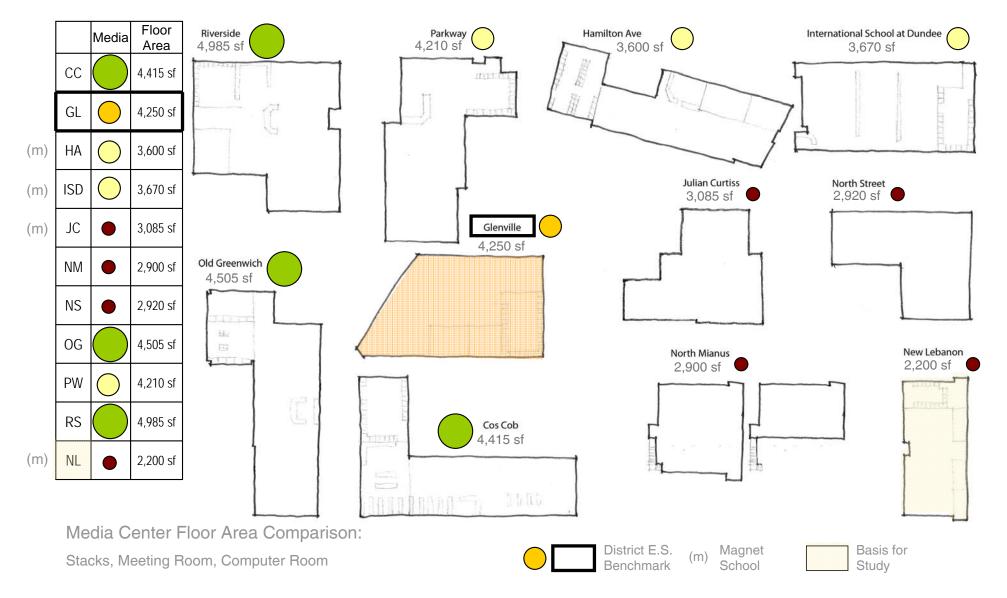


(m) Magnet School





#### **CORE COMMON AREAS - MEDIA CENTER**





#### **SUMMARY - CORE COMMON AREAS**

School

	School	Cafeteria	Gymnasium	Gym/Audit.	Cafetorium	Media Center	Music	Art	Community / PTA Room
	Cos Cob	0		0					0
	Glenville			0	0	<u> </u>			
(m)	Hamilton Ave	0	0						
(m)	ISD			0	0				0
(m)	Julian Curtiss		0	•	0	•			0
	North Mianus		0	•	0	•			0
	North Street		0		0				0
	Old Greenwich		0		0				0
	Parkway		0	•	0				0
	Riverside		0	•	0				0
(m)	New Lebanon		0		0	•			0
	Meets or excee	eds Me	ets Below	Not		District E.S.	m) Magnet		Basis for

Applicable

average

average

average

Study





**Town of Greenwich Planning & Zoning Overview** 





#### **DEFINITION OF TERMS**

#### 25 Mead Avenue

KSQ Architects has completed an overview of the Town of Greenwich Planning & Zoning regulations as these regulations apply to the New Lebanon School Campus.

KSQ Architects also met with Town of Greenwich Planner Marek Kosikowski on 26 November 2013 in order to confirm basic assumptions.

#### Site Characteristics

The campus at 25 Mead Avenue is a dynamic site that presents various features such as steep slopes, rock outcropping, dense forest and proximity to I-95.

#### **Greenwich Zoning Approvals**

An example of the Town of Greenwich Planning & Zoning approval process with a benchmarking timeline.





#### 25 MEAD AVENUE



NORTH

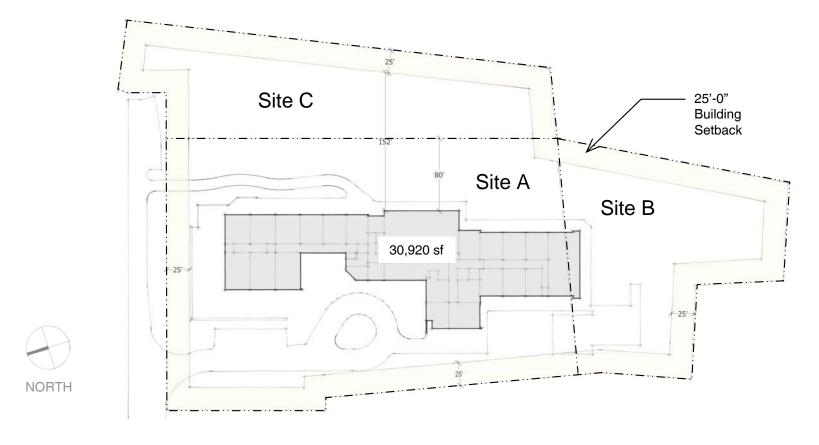
Campus is assembled from 3 parcels and totals approximately 5 Acres.



#### 25 MEAD AVENUE

#### Schedule of Zoning Criteria

	Lot Area (sf/ac)	F.A.R. Permitted	Max Achievable Floor Area	Total Existing Floor Area	Front Yard (ft.)	Side Yard (ft)	Rear Yard (ft.)	Building Height (ft. / stories)
Existing Site (A+B)	172,188 sf / 3.9	.55	94,703 sf	30,920 sf (.18)	25 ft	25 ft	25 ft	35 ft / 3
Full Site (A+B+C)	219,185 sf / 5.0	.55	120,551 sf	30,920 sf (.14)	25 ft	25 ft	25 ft	35 ft / 3





## PLANNING & ZONING OVERVIEW SITE CHARACTERISTICS



F

NORTH

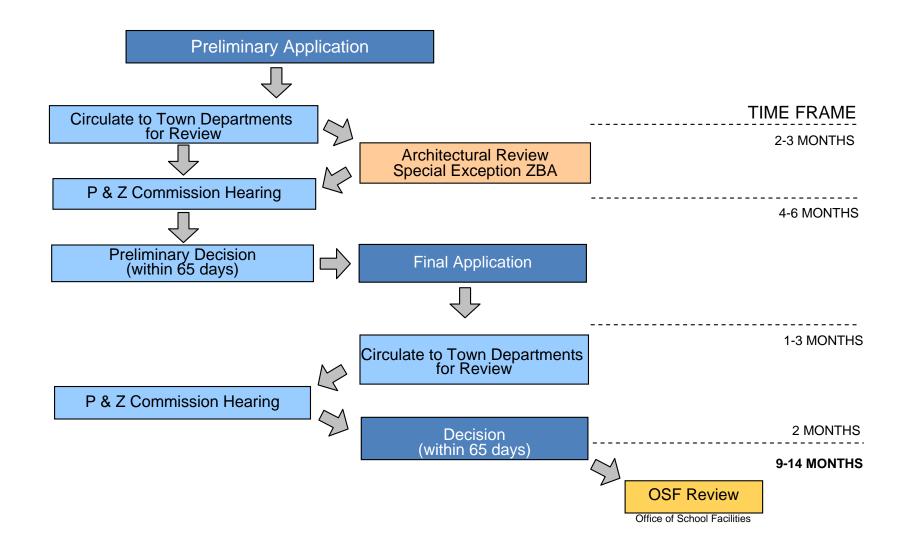
Proximity to I-95

Dense forested area / ravine

(with steep slopes)



#### **GREENWICH ZONING APPROVALS**







**CT State School Construction Grants** 



## State Reimbursement by Connecticut State Statue C.G.S. 10-286h Diversity Schools = 80%

Proportion of pupils of racial minorities in all grades of the school is greater than twenty-five percent (25%) of the proportion of pupils of racial minorities in the public schools in all of the same grades of the school district.

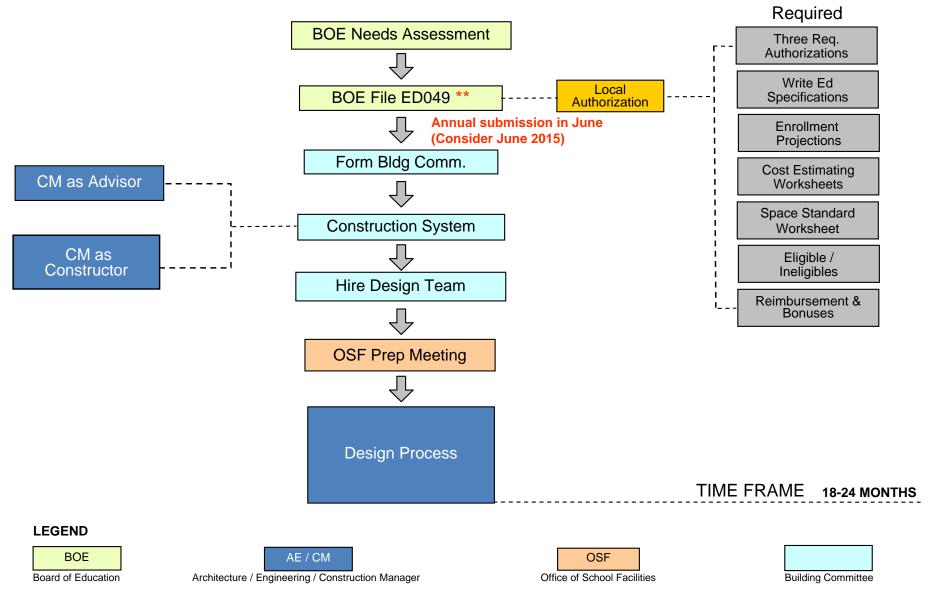
School Board must demonstrate evidence of a good-faith effort to correct the existing disparity in the proportion of pupils of racial minorities in the District, as determined by the Commissioner of Education.

Eligible local or regional boards of education, for purposes of a diversity school, shall be eligible for reimbursement of eighty percent (80%) of the reasonable cost of any capital expenditure for the purchase, construction, extension, replacement, leasing or major alteration of diversity school facilities, including any expenditure for the purchase of equipment, in accordance with this section. To be eligible for reimbursement under this section, a diversity school construction project shall meet the requirements for a school building project established in this chapter, except that the Commissioner of Construction Services may waive any requirement in this chapter for good cause.



#### CT SCHOOL BUILDING PROCESS

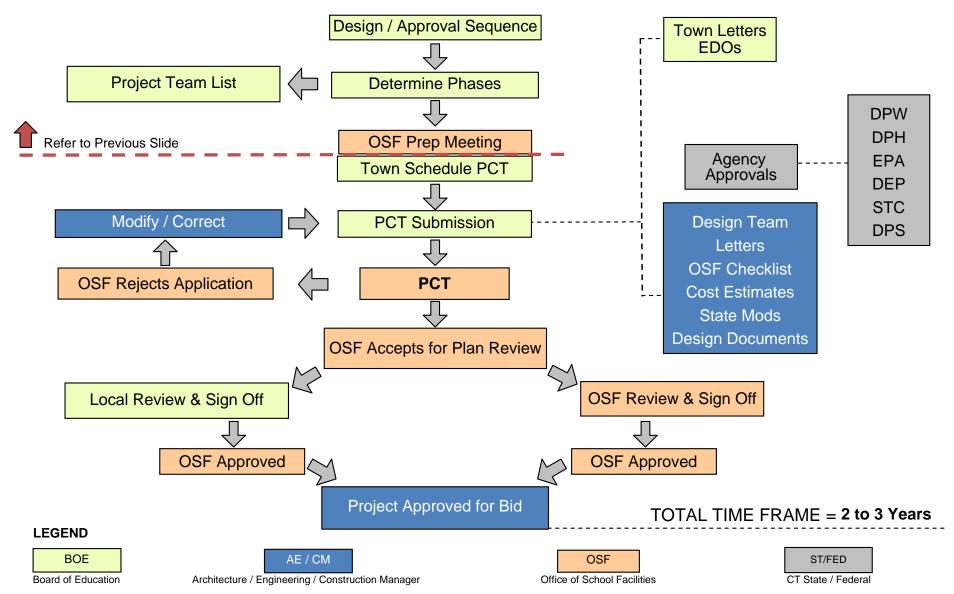
#### LOCAL REQUIREMENTS





#### CT OFFICE OF SCHOOL FACILITES

#### APPROVALS OVERVIEW







**Proposed Space Allocation** 





#### PROPOSED SPACE ALLOCATION

### DERIVE MAX. GROSS AREA per CT STATE SPACE SPECIFICATIONS

State Standard Space Specifications							
Grades							
Projected Enrollment         Pre-K / K         1         2         3         4         5							
Allowable Square Footage per Pupil							
0-350	124	124	124	124	124	156	
350-750	120	120	120	120	120	152	

- 1. Under the column headed "Projected Enrollment", find the range within which your school's highest projected 8 year enrollment falls.
- 2. Using the figures on that line, complete the grid below for only those grades housed within the school.

Pre-K	0	6	
K	124	7	
1	124	8	
2	124	9	
3	124		
4	124		
5	156	<u> </u>	
	a)	Total (grades Pre-K-12)	776
	b)	Number of grades housed	6
** Based on 10/10/13	c)	Average [a / b]	129.33
Annual Enrollment Report	d)	Highest projected 8-year	293 **
	e)	Maximum square feet [c x d]	37,894.7 sf



Instructional Spaces

Core Common Areas

Facilities / Service



Proposed

#### PROPOSED SPACE ALLOCATION

Existing

#### **DRAFT** EDUCATIONAL SPECIFICATION

Proposed

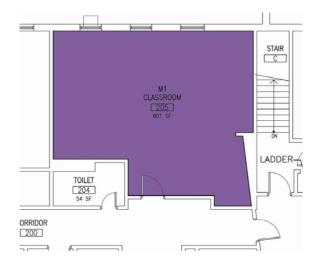
	LAISTING		i ioposeu	
	Area	#	Area	Total
K-Class w/ Toilets	1,000 sf	3	1,000 sf	3,000 sf
1st Grade Class w/ Toilets	720 sf	3	850 sf	2,550 sf
2 <sup>nd</sup> Grade Class	670 sf	3	850 sf	2,550 sf
3 <sup>rd</sup> Grade Class	670 sf	2	800 sf	1,600 sf
4 <sup>th</sup> Grade Class	670 sf	2	800 sf	1,600 sf
5 <sup>th</sup> Grade Class	675 sf	2	800 sf	1,600 sf
Total		15		12,900 sf
Art Room w/ Kiln	686 sf	1	900 sf	900 sf
Music w/ Instrumental Rm	503 sf	1	1,000 sf	1,000 sf
Multi-Media Center	1,996 sf	1	3,000 sf	3,000 sf
Cafeteria w/ Kitchen	1,250 sf	1	2,000 sf	2,000 sf
Gymnasium/Auditorium	2,808 sf	1	3,500 sf	3,500 sf
Stage	697 sf	1	1,000 sf	1,000 sf
Total		7		11,400 sf
Custodial Office	118 sf	1	150 sf	150 sf
Receiving / Storage	130 sf	1	300 sf	300 sf
Boiler Room	607 sf	1	745 sf	745 sf
Toilet Rooms (Girls/Boys)	280 sf	2	300 sf	600 sf
Total				1,795 sf

Existing

	Area	#	Area	Total
Main Office w/ Conference	232 sf	1	600 sf	600 sf
Principal's Office	180 sf	1	200 sf	200 sf
Assistant Principal's Office		1	150 sf	150 sf
Health Suite	165 sf	1	300 sf	300 sf
Faculty Room w/ Toilet	255 sf	1	300 sf	300 sf
Work Room / Mail Room	118 sf	1	200 sf	200 sf
Speech Office	66 sf	1	150 sf	150 sf
Social Work Office	56 sf	1	150 sf	150 sf
Reading Rooms	183 sf	2	400 sf	800 sf
Teachers Planning		1	200 sf	200 sf
Total				3,050 sf
Special Ed. Resource Room	368 sf	1	600 sf	600 sf
World Language Office		1	200 sf	200 sf
ESL Classroom		1	600 sf	600 sf
OT/PT		1	400 sf	400 sf
ALP Classroom		1	750 sf	750 sf
Total				2,550 sf
Total Net Building Area				31,695 sf



### Net Area: Clear floor area within each classroom or other program space



#### PROPOSED SPACE ALLOCATION

<u>Gross Area:</u> Entire building area including exterior walls / bathrooms / stairs / etc.



#### Summary of Proposed Building Area for Improved New Lebanon Elementary School

Total Proposed NET Program Area = 31,695 nsf

Industry Standard Grossing Factor of 40% = (+/-) 44,500 gsf

Total Permitted Gross Building Area Per / CT Diversity Guideline = 37,894 gsf

Difference = (+/-) 6,500 sf (would NOT be eligible for CT State reimbursement)

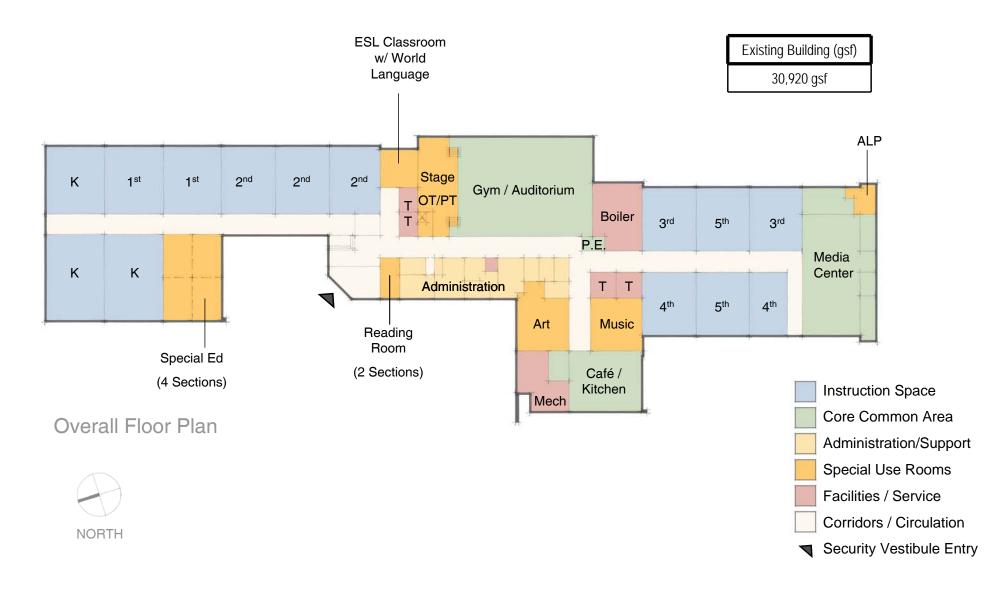




**School Expansion Options** 



#### **EXISTING FLOOR PLAN LAYOUT**

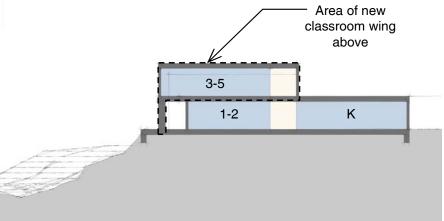




## SCHOOL EXPANSION OPTIONS OPTION A



Build new classroom wing over existing North classroom wing.





**OPTION A** 

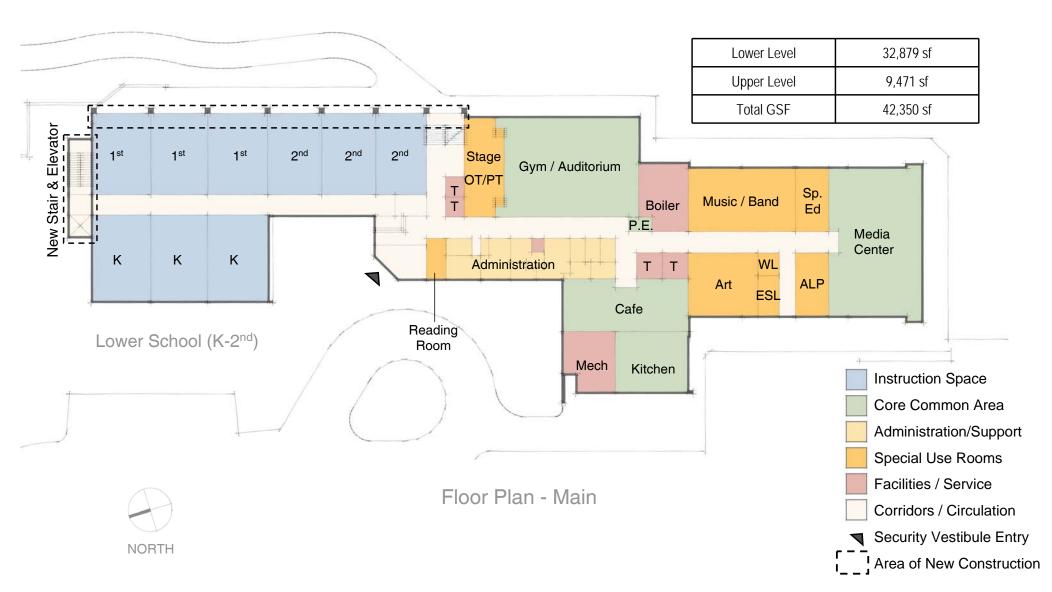




Site Plan

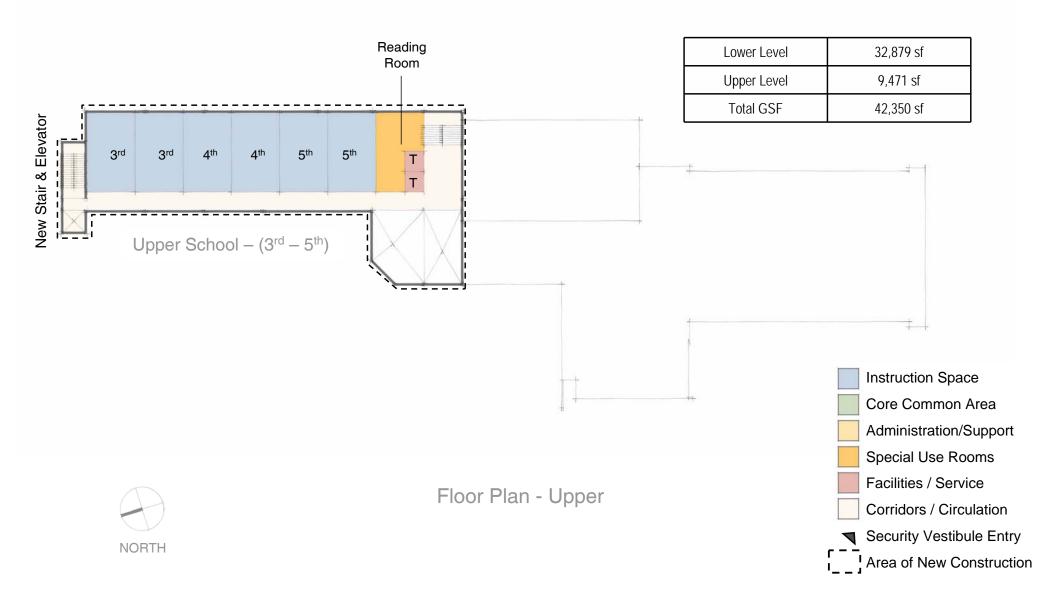


#### **OPTION A**



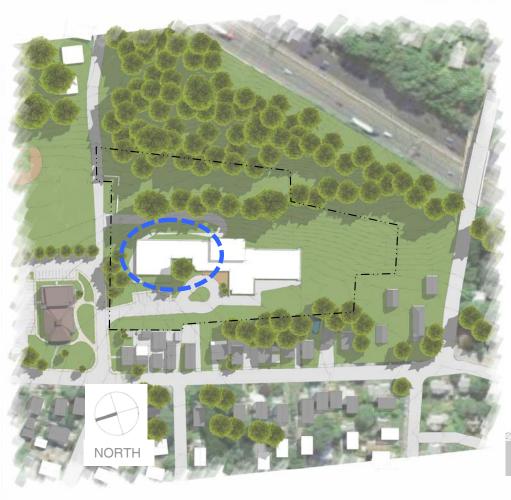


#### **OPTION A**

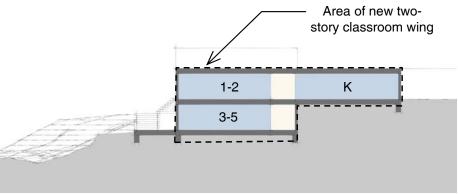




## SCHOOL EXPANSION OPTIONS OPTION B



Demolish existing North classroom wing and build new two-story wing with new level BELOW.





**OPTION B** 

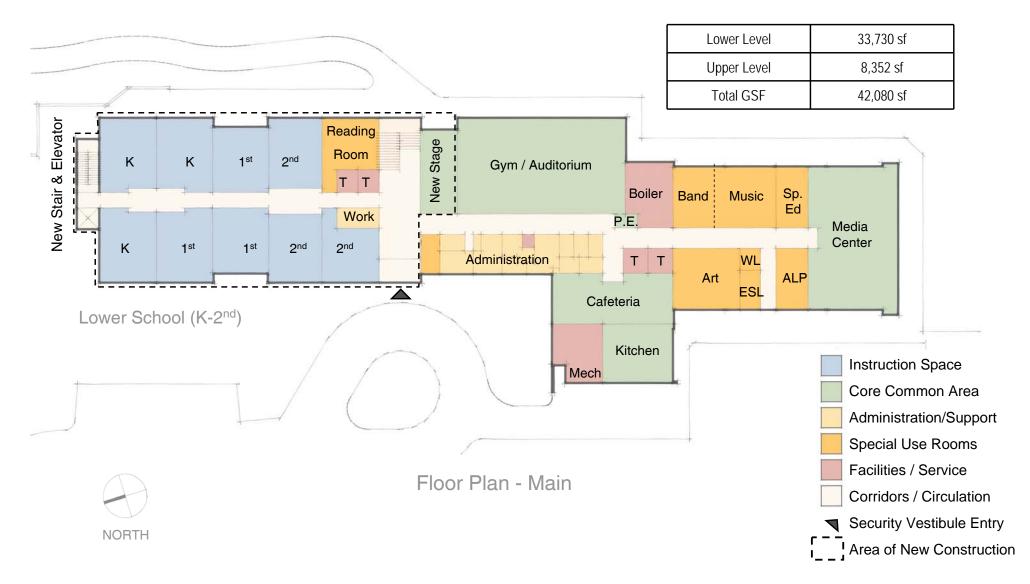




Site Plan

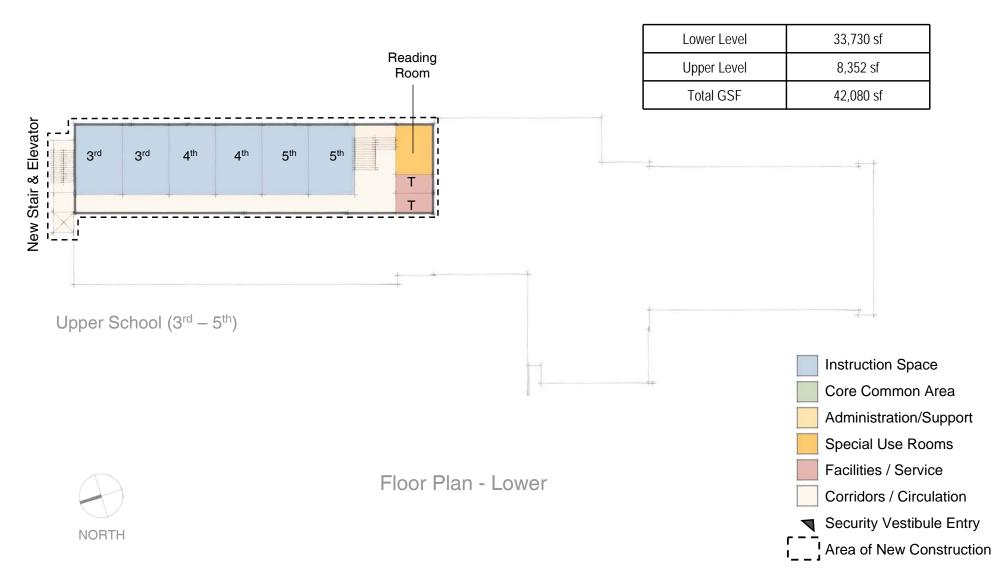


#### **OPTION B**





#### **OPTION B**

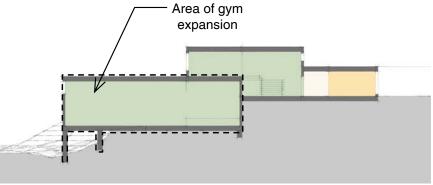




# SCHOOL EXPANSION OPTIONS OPTION B-ALTERNATIVE



Demolish existing North classroom wing and build new two-story wing with level BELOW + Expand Core Common Area over the steep slope.





## **OPTION B-ALTERNATIVE**

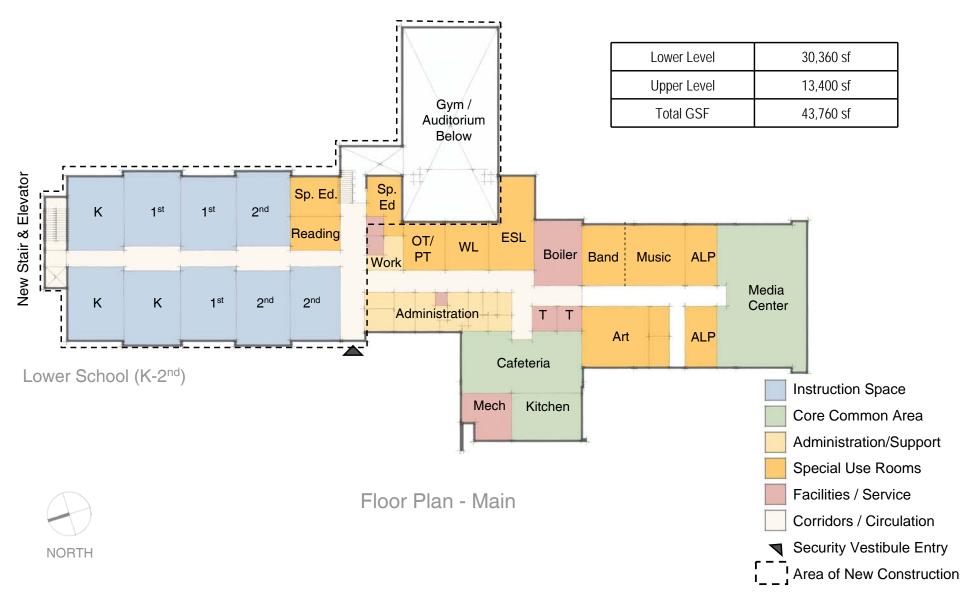




Site Plan

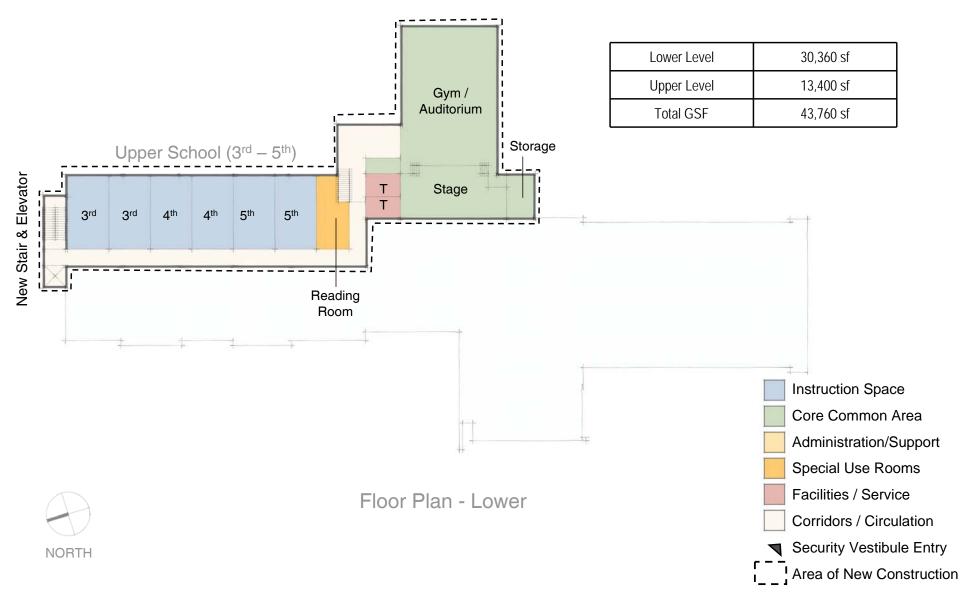


#### **OPTION B-ALTERNATIVE**





## **OPTION B-ALTERNATIVE**



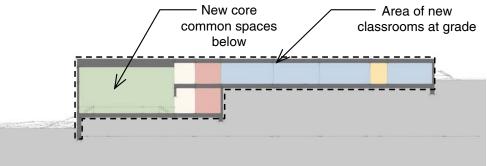


# SCHOOL EXPANSION OPTIONS OPTION C



Demolish the entire existing New Lebanon School. Activate the eastern edge of the campus for parking and core common spaces...

Academic wings on the upper elevations of the campus.





**OPTION C** 

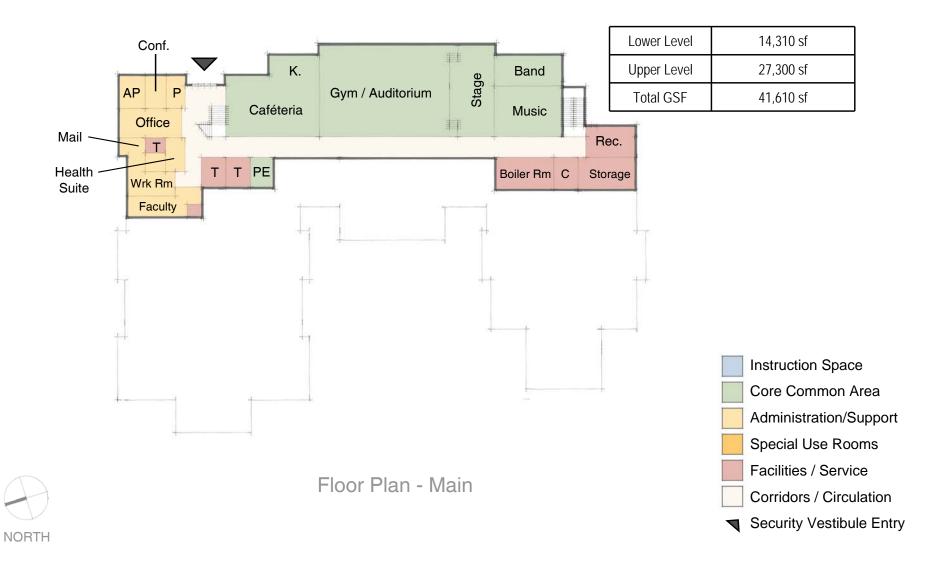




Site Plan

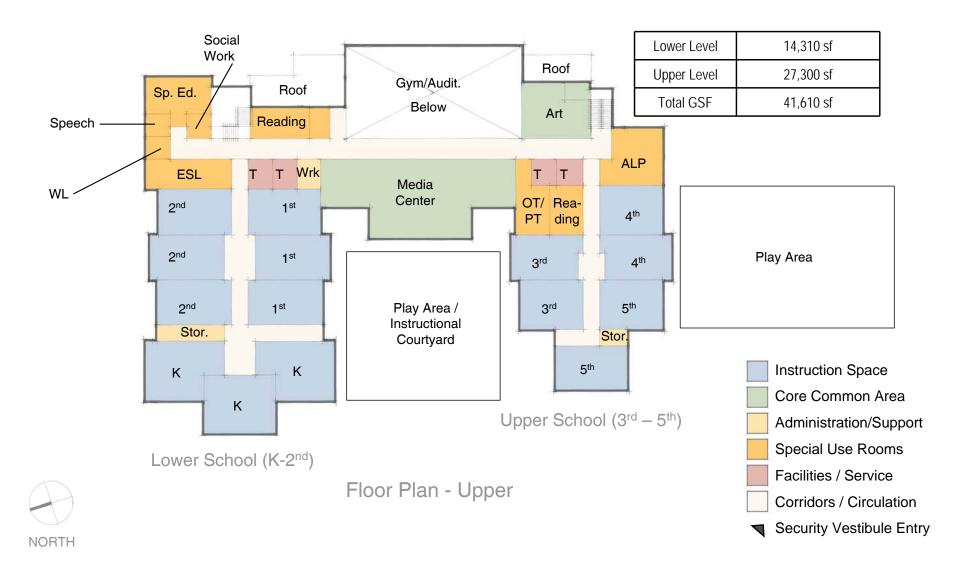


# **OPTION C**



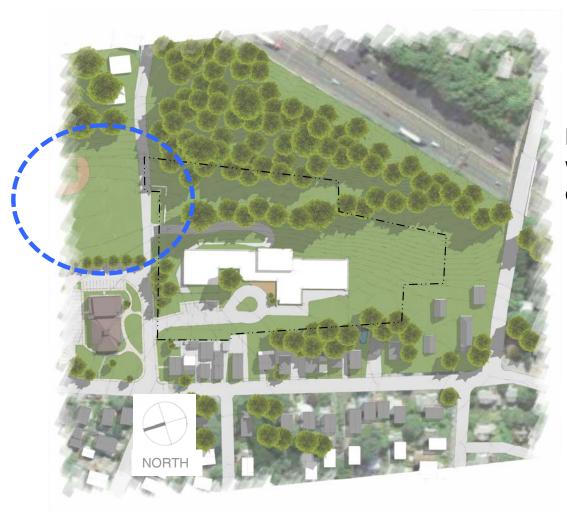


## **OPTION C**





# SCHOOL EXPANSION OPTIONS OPTION D



Build on the adjacent ball field for while maintaining the existing school during construction.



OPTION D

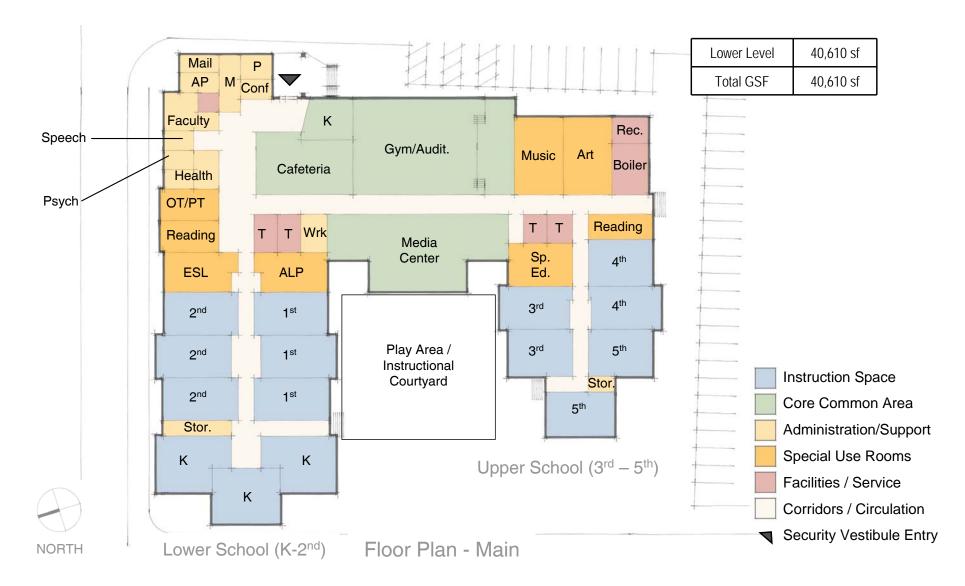




Site Plan



## **OPTION D**





# SCHOOL EXPANSION OPTIONS COMPARISONS



Compare and Contrast Options A, B, C & D:



# PROPOSED OPTION COMPARISONS

#### **SWING SPACE**

Swing Space

Meets Program

Impact to Neighbors

Cost

#### Option A

Need to vacate existing north classroom in order to build over.

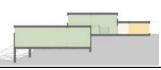
Allow for 12 Temporary Classrooms for 2 school years.



#### Option B / B-Alt

Need to vacate existing north classroom wing in order to demolish and re-build.

> Allow for 12 Temporary Classrooms for 2 school years.



#### Option C

Need to explore options to relocate the entire school population during 2-Year construction period.

#### Option D

No need for swing space.



Swing Space

Meets Program

Impact to Neighbors



# PROPOSED OPTION COMPARISONS

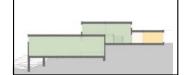
#### **MEETS PROGRAM**

Option A

While this option meets all classrooms area requirements, certain special instruction spaces and core common areas will remain deficient.

Option B / B-Alt

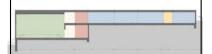
While this option meets all classrooms area requirements, certain special instruction spaces and core common areas will remain deficient.



Option C

This option would meet the programmatic requirements recommended by the proposed District standard. The proposed layout maximizes the space needed to include specialized classroom space and core common areas.

MEETS PROGRAM 🗸



Option D

This option would meet the programmatic requirements recommended by the proposed District standard. The proposed layout maximizes the space needed to include specialized classroom space and core common areas.

MEETS PROGRAM 🗸



Swing Space

Meets Program

Impact to Neighbors

Cost



# PROPOSED OPTION COMPARISONS

## **IMPACT TO NEIGHBORS**

Option A

This option would not change the current conditions.

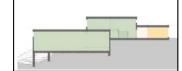
All existing driveways, drop-offs, parking, access to play space, etc. would all remain the same.

...

Option B / B-Alt

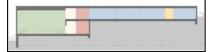
This option would not change the current conditions.

All existing driveways, drop-offs, parking, access to play space, etc. would all remain the same.



Option C

This option would dramatically improve circulation patterns within the campus. Quiet / courtyard spaces would be oriented to the neighbors, while vehicle access and traffic generation would be adjacent to the interstate.



Option D

This option would change the current circulation within the site and neighborhood. A new student drop-off area at the east side of the new building would reduce traffic / noise impacts with the adjacent residential neighbors.

New Baseball field in place of the existing school – also adjacent to residential neighbors.



# PROPOSED OPTION COMPARISONS

#### INDEPENDENT COST ANALYSIS



(\*) Budget Costs developed by an independent construction cost specialist.

	Subtotals	А	В	B-Alt	С	D
42	(1) Materials/Sitework	\$11,885,550	\$13,346,680	\$13,763,960	\$14,385,220	\$14,855,420
	+ Sustainability					
	+ Escalation/Phasing					
	+ General Conditions/Insur.					
	+ Design Contingency					
	(2) Construction Cost	\$19,308,110	\$21,681,720	\$22,711,404	\$22,256,030	\$23,345,126
	+ Construction Contingency					
	+ Construction & Project Manager					
	+ Soft Costs / AE Fees					
	+ Swing Space	\$2,000,000	\$2,000,000	\$2,000,000	T.B.D.	None
	(3) Estimated Project Cost	\$29,900,000	\$33,200,000	\$34,700,000	\$31,700,000	\$33,200,000

#### **Included Construction Costs**

All "bricks and mortar" / 'Hard' construction cost 5% allowance for sustainable initiatives
Allowance for construction phasing
Escalation (9% per year)

#### **Included Project Costs**

15% construction contingency
Temporary classrooms (swing space) for Options A & B
20% soft cost budget
2.5% Project Manager / Construction Manager Fee





# GREENWICH PUBLIC SCHOOLS New Lebanon ES Feasibility Expansion Study

**Next Steps / Areas of Inquiry...** 

KSQ Architects PC



## NEXT STEPS / AREAS TO FOLLOW UP

- To be eligible for the Diversity Grant, additional magnet seats at New Lebanon needs to be included in the Greenwich BOE's plan to address identified racial imbalance submitted to State.
- Conduct Phase I: Environmental Site Assessment (ESA)
- Confirm campus title / deed history for Parcels A, B & C.
- Release RFP (Request For Proposals) for Full Feasibility Study. (Spring 2014)
- Begin Feasibility Study July 1, 2014 (\$100,000 requested in FY 14-15)
- Exploring timing of creation of Building Committee
- Study application of C.G.S. 10-286h Diversity Schools (80% reimbursement) for school expansion options.
- For Option C (new school at existing location): Confirm viability of finding a temporary school building for 2 years.
- For Option D (new school on existing ball field): Confirm Greenwich Planning & Zoning implications.