

Lincoln-Eliot Elementary School and Newton Early Childhood Program

School Committee Presentation | November 28, 2018



ARROWSTREET



Agenda

- » NECP Educational Programming
 - Program space summary

- » Lincoln-Eliot Educational Programming
 - Space summary review

- » Site Selection Criteria

Newton Early Childhood Program/ Historic Program Enrollment

- » Capacity = 305 students maximum/ Pre - Kindergarten (as of March 1, 2018)
 - 104 students with special needs
 - 90 students who are typically developing
 - 111 students receiving related services

NECP Enrollment Trend by school year (as of March 1st)

Service Type	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18
Special Needs	134	119	125	100	123	127	113	107	95	111	104
Typically Developing	62	74	89	83	88	89	81	66	75	67	90
Related Services	42	42	44	60	40	32	43	41	101	107	111
Total	238	235	258	243	251	248	237	214	271	285	305

Newton Early Childhood Program/ Current Program Enrollment

	Morning Integrated Classroom 9am - 12pm	Extended Day Integrated Classroom with ABA* 8:30am - 1:30pm	STRIDE* Classroom 8:30am - 12pm/2pm/ 2:30	Related Services 1-hour sessions	Total as of Nov. 1, 2018
Students currently enrolled	161 students (75 special needs + 86 typically developing)			69	230
Maximum number of students per classroom	16	16	9	4 - 8	
Number of classrooms	9	2	2		13

*STRIDE = Structured Teaching through Research and Intensive Developmental Experiences/ Substantially Separate
 ABA = Applied Behavior Analysis

Newton Early Childhood Program/ Proposed Future Program

	Morning Integrated Classroom and Extended Day Integrated Classroom with ABA*	STRIDE* Classroom	Related Services	Program Expansion Total
Student capacity	192 - 224	18 - 27	100 - 125	310 - 376
Maximum number of students per classroom	16	9	4 - 8	
Number of classrooms	12 - 14	2 - 3		14 - 17

*STRIDE = Structured Teaching through Research and Intensive Developmental Experiences/ Substantially Separate
 ABA = Applied Behavior Analysis

Newton Early Childhood Program/ Program Summary

Program Needs:

(based on NECP Ed Program August 2018):

- Maintain classroom student to teacher ratios
- Small group OT/PT and Speech spaces
- Dedicated spaces for screening and testing
- Workspace for OT/PT and Speech Therapists
- Administration and Guidance with several multi-sized conference rooms and specialist spaces
- Gross motor space

Program Improvements:

- Toilet rooms directly adjacent to classrooms
- Dedicated PE space
- All school/ large group gathering multi-purpose space/ indoor play area

Newton Early Childhood Program/ State Regulations

Approximate existing conditions at 687 Watertown Street
(*actual SF to be verified)



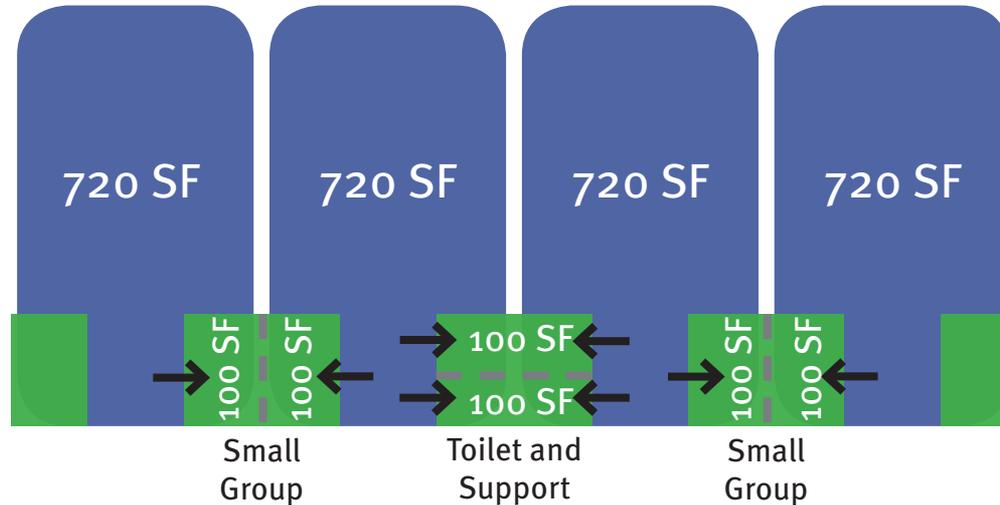
Newton Early Childhood Program/ State Regulations

606 CMR 7.00: Standards for the Licensure or Approval of Small Group and School Age and Large Group and School Age Child Care Programs

7.07 Physical Facility Requirements

Space: The licensee must provide a minimum of 35 square feet (sf) of **activity space** per child.

16 students x 45 square feet (conservative) = 720 SF per classroom



Newton Early Childhood Program/ State Regulations

Flexibility of shared spaces for afternoon use



Newton Early Childhood Program/ Program Space Summary

11/28/18: UPDATED

11/16/18: TEAM WORKING SESSION

NECP	Existing (11/1/2018) Conditions for NECP at Jackson Road		
	ROOM NFA ¹	# OF RMS	area totals
ROOM TYPE			
CORE ACADEMIC SPACES			0
<i>(List classrooms of different sizes separately)</i>			
Integrated Pre-Kindergarten w/ toilet		9	
Integrated Pre-Kindergarten w/ toilet		2	
STRIDE Pre-Kindergarten w/ toilet		2	
SPECIAL EDUCATION			0
<i>(List rooms of different sizes separately)</i>			
Applied Behavior Analysis (ABA) Classrooms		2	
Safe Space/ Quiet/ Mindful Room		2	
Small Group/ 1:1 support/ pull out spaces (per 2 CR)		7	
PT Room		1	
OT Room/ Motor Skills Room		1	
Team Specialists		1	
Therapist Office (OT/ PT/ Speech)		1.5 CR	
Speech and Language Testing			
OT Testing Room			
Psychologist (office + testing +1 student)		1	
Social Worker		1	

PROPOSED			
NECP (Target Program) 17 Classrooms			104 students with special needs 90 students who are typically developing 111 students receiving related services
ROOM NFA ¹	# OF RMS	area totals	Comments
	17	12,760	
720	13	9,360	Room SF for 16 students at 45 SF per student (720 SF). Toilets adjacent to and shared by classroom pairs, accounted in Grossing factor (100SF per classroom pair)
850	2	1,700	Medically fragile
850	2	1,700	STRIDE
		6,450	
425	2	850	Used throughout the day. Adjacent to each other, near safe space
100	2	200	One per classroom floor
200	9	1,800	For morning use; dedicated classroom pull out spaces adjacent to classroom pairs. For afternoon use; small group support space in afternoon. Also located on ground level for morning use.
1,000	1	1,000	
1,000	1	1,000	
200	1	200	Individual office with separate conference table for 6, adjacent to director
50	16	800	16 therapists in one large space at 50 SF per person
100	3	300	
100	1	100	
150	1	150	
50	1	50	

Newton Early Childhood Program/ Program Space Summary

11/28/18: UPDATED

11/16/18: TEAM WORKING SESSION

NECP	Existing (11/1/2018) Conditions for NECP at Jackson Road		
	ROOM NFA ¹	# OF RMS	area totals
HEALTH & PHYSICAL EDUCATION			0
Storeroom			
PE Space/Indoor/ Multipurpose		1	
DINING & FOOD SERVICE			0
Staff lunch room		1	
MEDICAL			0
Medical Suite Toilet			
Nurses' Office / Waiting Room		1	
Examination Room / Resting			
Lactation Room			
ADMINISTRATION & GUIDANCE			0
Director's Office		1	
Reception / Waiting Room			
Front Office (for parent walk-in)		1	
Conference rooms		2	
Duplicating Room/ Storage			
Records Room / Teachers' Mail and Time Room		1	
IEP Conference Room (up to 15 people)		1	

PROPOSED			
NECP (Target Program) 17 Classrooms			104 students with special needs 90 students who are typically developing 111 students receiving related services
ROOM NFA ¹	# OF RMS	area totals	Comments
		1,950	
250	1	250	
1,700	1	1,700	Dedicated PE Space
		400	
400	1	400	
		610	
60	1	60	
250	1	250	
100	2	200	
100	1	100	For staff use
		2,400	
200	1	200	
150	1	150	Toilet with changing table, Lactation Room for community use
500	1	500	
250	1	250	
100	2	200	One per floor, separate from the records, but adjacent
200	1	200	Needs to be separate from the main office. Table for layout space
450	2	900	

Newton Early Childhood Program/ Program Space Summary

11/28/18: UPDATED

11/16/18: TEAM WORKING SESSION

NECP	Existing (11/1/2018) Conditions for NECP at Jackson Road		
ROOM TYPE	ROOM NFA ¹	# OF RMS	area totals
CUSTODIAL & MAINTENANCE			0
Custodian's Office		1	
Custodian's Workshop/ Storeroom for materials		1	
Custodian's Storage			
Recycling Room / Trash			
Network / Telecom Room			
Total Building Net Floor Area (NFA)			
Proposed Student Capacity / Enrollment			
Total Building Gross Floor Area (GFA)			
Grossing factor (GFA/NFA)			
Extended Day/ After School			0
Dedicated Extended Day classrooms			
Potential Extended Day Capacity			
Other (specify)			

PROPOSED			
NECP (Target Program) 17 Classrooms			
ROOM NFA ¹	# OF RMS	area totals	Comments
		1,150	
150	1	150	
500	1	500	
100	2	200	slop sink and storage per floor for machine
100	1	100	Not currently in existing program; may not be needed
200	1	200	
		25,720	
		310 - 375	Enrollment increases throughout the year
		38,580	
		1.50	
		4,000	
1,000	4	4,000	Potentially 3 - 4 Extended Day Classrooms
		60 - 80	

104 students with special needs
90 students who are typically developing
111 students receiving related services

Lincoln-Eliot / Programming and Enrollment

- » Enrollment = 465 Students / Grades K - 5
- » 20 - 23 Students per classroom
- » 24 Classrooms (22 Typical + 2 Special Education)

	K	1	2	3	4	5	Total
Number of Students	80	77	77	77	77	77	465
Average Number of students/CR	20	21	21	21	21	21	
Number of Classrooms per Grade	4	3 - 4	3 - 4	3 - 4	3 - 4	3 - 4	22

DATE: 11/14/18

Yellow highlight indicates L-E specific program

Blue highlight indicates difference than other Newton Schools

DRAFT REVIEWED BY D. MORRISSEY 11/13/18

Lincoln-Eliot Preliminary Design Program

ROOM TYPE
CORE ACADEMIC SPACES
<i>(List classrooms of different sizes separately)</i>
Pre-Kindergarten w/ toilet
Kindergarten w/ toilet
General Classrooms - Grade 1-5
ELL Program
SPECIAL EDUCATION
<i>(List rooms of different sizes separately)</i>
Self-Contained SPED
Self-Contained SPED - toilet
Resource Room
Substantially Separate Classroom
Learning Centers (K-2; 3-5)
Breakout Rooms (small group/ individual instruction) 1/grade average. Extended Learning Areas
OT/PT
Sensory Room/ additional OT/PT
Safe Room/ Mindful Room 1/ academic floor
Speech + Language
Reading Program/ Literacy Room
Inclusion Facilitators (office for 6 adults; 150SF per person)
Literacy Specialist (Office + teaching area for 6 students)
Math Coach
Team Specialist + IEP Conf Room (12 adults)
Psychologist (Office, testing, therapy, storage)
Social Worker (Office, testing, conferences)
ART & MUSIC
Art Classroom - 25 seats
Art Workroom w/ Storage & kiln
Music Classroom / Large Group - 25-50 seats
Music Practice / Ensemble (Groups 4-10 students)
Music Practice / Ensemble (Groups 4-10 students)
HEALTH & PHYSICAL EDUCATION
Gymnasium
Gym Storeroom
Health Instructor's Office w/ Shower & Toilet

* Where discrepancy between Angier, Zervas, and Cabot, Lincoln-Eliot Target Program used Cabot

Lincoln-Eliot (Target Program) 465 Students			
ROOM NFA ¹	# OF RMS	area totals	Comments
	22 + 2 (SpEd)	20,700	
1,200	4	4,800	
850	18	15,300	18 CRs in existing L-E school. Smaller SF classroom size due to potential existing conditions.
300	2	600	Due to larger ELL population
		10,775	
850	2	1,700	Difference due to higher needs and Title 1 school. Potential for District wide SpEd program
		0	
		0	
450	2	900	Currently 1 Learning Center in existing L-E
125	8	1,000	Currently 1 Small Group Instruction in existing L-E. Difference due to high needs, assume 1 shared breakout space per 2 classrooms
475	1	475	
450	1	450	
100	3	300	
150	2	300	
850	3	2,550	Currently 1 Reading Program in existing L-E. Difference due to higher needs and Title 1 school
450	2	900	Difference due to higher needs and Title 1 school
250	3	750	Difference due to higher needs and Title 1 school
250	3	750	Difference due to higher needs and Title 1 school
400	1	400	
150	1	150	
150	1	150	
		2,650	
1,000	1	1,000	1 Art Classroom currently in existing L-E
150	1	150	
1,200	1	1,200	1 Music Classroom currently in existing L-E
150	2	300	
		6,300	
6,000	1	6,000	
175	1	175	
125	1	125	

EXISTING NEWTON PUBLIC SCHOOLS								
Angier 465 Students			Zervas 490 Students			Cabot 480 Students		
ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals
		21,472			23,450			22,690
1,131	4	4,524	1,200	4	4,800	1,170	4	4,680
925	18	16,650	925	20	18,500	888	20	17,760
		0			0	General CR Room NFA is average		
298	1	298	150	1	150	250	1	250
		5,965			5,500			6,900
925	1	925	900	1	900	925	2	1,850
470	2	940	450	2	900	475	2	950
121	7	845	125	6	750	125	6	750
511	1	511	450	1	450	475	1	475
							1	
106	2	212	100	2	200	100	3	300
298	1	298	150	2	300	250	1	250
925	1	925	900	1	900	925	1	925
238	1	238	150	1	150	300	1	300
176	1	176	125	1	125	250	1	250
161	1	161	125	1	125	150	1	150
428	1	428	400	1	400	400	1	400
155	1	155	150	1	150	150	1	150
151	1	151	150	1	150	150	1	150
		2,608			2,725			2,575
1,000	1	1,000	1,000	1	1,000	1,000	1	1,000
178	1	178	150	1	150	150	1	150
1,168	1	1,168	1,200	1	1,200	1,200	1	1,200
162	1	162	150	2	300	150	1	150
100	1	100	75	1	75	75	1	75
		6,105			6,300			6,300
5,809	1	5,809	6,000	1	6,000	6,000	1	6,000
176	1	176	200	1	200	175	1	175
120	1	120	100	1	100	125	1	125

DATE: 11/14/18

Yellow highlight indicates L-E specific program

Blue highlight indicates difference than other Newton Schools

DRAFT REVIEWED BY D. MORRISSEY 11/13/18

Lincoln-Eliot Preliminary Design Program

ROOM TYPE	ROOM NFA ¹	# OF RMS	area totals	Comments
MEDIA CENTER			2,800	
Media Center / Reading Room	2,800	1	2,800	
DINING & FOOD SERVICE			6,960	
Cafeteria / Dining	3,400	1	3,400	
Stage	1,000	1	1,000	
Chair / Table / Equipment Storage	360	1	360	
Kitchen	1,700	1	1,700	
Staff Lunch Room (1/3 of staff = 60 staff/3)	250	2	500	
MEDICAL			510	
Medical Suite Toilet	60	1	60	
Nurses' Office / Waiting Room	250	1	250	
Examination Room / Resting	100	2	200	
ADMINISTRATION & GUIDANCE			3,225	
General Office / Waiting Room / Toilet	700	1	700	
Teachers' Mail and Time Room	Included in General Office			
Duplicating Room	Included in General Office			
Records Room	100	1	100	
Principal's Office w/ Conference Area	300	1	300	
Principal's Secretary / Waiting	Included in General Office			
Assistant Principal's Office	125	1	125	
Supervisory/ Intinerant teachers/ Extended Program	750	1	750	
Conference Room	250	1	250	
Guidance Office/ Storeroom				
SPED/ Specialist Work Room	400	1	400	Difference due to higher needs and Title 1 school
Teachers' Work Room	250	2	500	
Lactation Room	100	1	100	Difference due to needs of the population
CUSTODIAL & MAINTENANCE			2,080	
Custodian's Office	150	1	150	
Custodian's Workshop	375	1	375	
Custodian's Storage	375	1	375	
Recycling Room / Trash	400	1	400	
Receiving and General Supply	260	1	260	
Storeroom	320	1	320	
Network / Telecom Room	200	1	200	
Total Building Net Floor Area (NFA)			56,000	
Proposed Student Capacity / Enrollment			465	
Total Building Gross Floor Area (GFA) ²			84,225	
Grossing factor (GFA/NFA)			1.50	

Multi-Grade Gathering Space

* Where discrepancy between Angier, Zervas, and Cabot, Lincoln-Eliot Target Program used Cabot

Lincoln-Eliot (Target Program) 465 Students				
ROOM NFA ¹	# OF RMS	area totals	Comments	
		2,800		
2,800	1	2,800		
		6,960		
3,400	1	3,400		
1,000	1	1,000		
360	1	360		
1,700	1	1,700		
250	2	500		
		510		
60	1	60		
250	1	250		
100	2	200		
		3,225		
700	1	700		
Included in General Office				
Included in General Office				
100	1	100		
300	1	300		
Included in General Office				
125	1	125		
750	1	750		
250	1	250		
400	1	400		Difference due to higher needs and Title 1 school
250	2	500		
100	1	100		Difference due to needs of the population
		2,080		
150	1	150		
375	1	375		
375	1	375		
400	1	400		
260	1	260		
320	1	320		
200	1	200		
		56,000		
		465		
		84,225		
		1.50		
1,500	1	1,500	100 students at 15 SF per student	

EXISTING NEWTON PUBLIC SCHOOLS								
Angier 465 Students			Zervas 490 Students			Cabot 480 Students		
ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals
		2,770			2,875			2,830
2,770	1	2,770	2,875	1	2,875	2,830	1	2,830
		6,321			6,663			6,960
3,035	1	3,035	3,200	1	3,200	3,400	1	3,400
950	1	950	1,000	1	1,000	1,000	1	1,000
408	1	408	363	1	363	360	1	360
1,460	1	1,460	1,600	1	1,600	1,700	1	1,700
234	2	468	250	2	500	250	2	500
		569			510			510
73	1	73	60	1	60	60	1	60
306	1	306	250	1	250	250	1	250
95	2	190	100	2	200	100	2	200
		2,305			2,515			2,595
750	1	750	680	1	680	650	1	650
Included in General Office			Included in General Office			Included in General Office		
Included in General Office			Included in General Office			Included in General Office		
79	1	79	60	1	60	100	1	100
301	1	301	300	1	300	300	1	300
Included in General Office			Included in General Office			Included in General Office		
117	1	117	125	1	125	125	1	125
428	1	428	650	1	650	750	1	750
218	1	218	200	1	200	250	1	250
		1,785			1,865			2,080
102	1	102	125	1	125	150	1	150
0	0	0	0	0	0	375	1	375
583	1	583	147	3	440	375	1	375
712	1	712	650	1	650	400	1	400
Included above			Included above			260	1	260
78	2	156	200	2	400	320	1	320
232	1	232	250	1	250	200	1	200
		49,900			52,403			53,440
		465			490			480
		74,960			78,800			80,160
		1.50			1.50			1.50

Site Criteria Evaluation Matrix / Potential Site Alternatives

» Lincoln - Eliot Program

Potential Alternatives		
1	2	3
Existing program to remain at 191 Pearl Street	Relocate program to 150 Jackson Rd	Relocate program to alternate unidentified site

» NECP Program

Potential Alternatives		
1	2	3
Existing program to remain at 150 Jackson Rd	Relocate program to 687 Watertown Street (existing Horace Mann Elementary School)	Relocate program to alternate unidentified site

» Co-located Lincoln - Eliot Program and NECP Program

Potential Alternatives		
1	2	3
Existing programs to remain at 150 Jackson Rd (NECP) and 191 Pearl St (L-E)	Co-locate programs to 150 Jackson Rd	Relocate program to alternate unidentified site

*Multiple sites are anticipated to be evaluated, similar to previous school projects

Site Criteria Matrix / Evaluation

● Favorable

⊙ Neutral

○ Unfavorable

Costs: 0, \$, \$\$, \$\$\$

		1	2	3
General, Building and Site Facts				
1	Student enrollment population in K- 5 (465 Students/ 24 Classrooms)			
2	Student enrollment population in NECP/ Pre-K (310-375 Students/ 14-17 CRs)			
3	Estimated Gross Square Feet			
4	Size of site (acres)			
5	Disruptions to school and neighbors during construction			
6				
Cost and Schedule				
1	Relative capital cost			
2	Requires phased construction			
3	Impact to project schedule			
4	Requires swing space / modular classrooms			
5	Maintains project approvals schedule			
6				

*Criteria may be added or revised as needed based on the actual sites analyzed

Site Criteria Matrix / Evaluation

● Favorable

⊙ Neutral

○ Unfavorable

Costs: 0, \$, \$\$, \$\$\$

		1	2	3
Educational				
1	Meets educational program for all students + design enrollment			
2	Provides flexibility for future growth			
3	Optimizes configuration and adjacency of teaching spaces			
4				
Community				
1	Provides accessibility to community used space			
2	Accommodates community program needs			
3	Accommodates after school program			
4	Minimize long term impacts to the community			
5				
Building				
1	Allows efficient attainment of Newton Sustainability Guidelines			
2	Optimizes use of natural light and daylighting			
3	Optimizes connection of interior & exterior spaces; integration w/ site			
4	Provides operable windows and indoor air quality for teaching/learning			
5	Meets ADA requirements efficiently			

Site Criteria Matrix / Evaluation

● Favorable

⊙ Neutral

○ Unfavorable

Costs: 0, \$, \$\$, \$\$\$

		1	2	3
Site				
1	Maximizes efficient use of site			
2	Provides safe pedestrian circulation and access, promotes walk-ability			
3	Optimizes outdoor program space and green space/ Playground			
4	Optimizes safety and efficiency of on site drop-off/pick up			
5	Separates bus, van, and automobile circulation			
6	Provides sufficient parking for teachers, staff + visitors			
7	Minimizes off-site traffic impact			
8	Potential wetlands			
9	Environmental conditions			
10	Tree removal			
Additional Criteria				
1				
2				
3				
4				
5				

Lincoln-Eliot Elementary School and Newton Early Childhood Program

School Committee Presentation | November 28, 2018

- » Discussion
- » For further information:

www.newtonma.gov/gov/building/capital_projects

www.lincolneliot-necp-projects.com



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