East Rochester SchoolConstruction Options

June 2012



East Rochester School

LAVALLEE I BRENSINGER ARCHITECTS

Existing Assessment

Existing Building Condition

The East Rochester school is a 1968 open concept School with additions erected in 2000. The exterior envelope is in good condition. The interior layout, being an open concept design, does not work well and should be completely renovated. Comfort issues reported are the result of a single zone heating system, which should be fully replaced as part of a major renovation and interior fit-up at this school. Light fixtures should be replaced completely during this renovation (along with ceilings and all other interior finishes. There are two portable structures on site, housing 3 preschool classrooms and 1 special education area. To help resolve space issues at East Rochester School, the preschool program should be annexed from this building and built either on-site here or at another site. Note that the Special Education study encouraged the School District to consider collocating the Preschool and the ASD Programs with the Head Start program.

Existing Site

Parking is short and very condensed and should be increased by approximately 25 spaces for daytime use. Queuing for parent drop off and Busses was reported to be very problematic, creating traffic issues on Portland street. Outdoor athletics and play space are adequate and appropriately located This should be completely reorganized on site. The playground was noted to need new surfacing that would allow disabled students better access. It should also be noted that Pre-school students in the portables are a significant distance from the Pre-school playground.

Safety, Security and Code Compliance

The front entrance is easily supervisable and lacks a secure vestibule at the main entrance. This should be resolved as part for renovations at the East Rochester school. To further improve a secure environment during the school day, consideration should be given to removing the exterior doors directly from classrooms. Accessibility issues include no access to the stage and lack of accessible rest rooms for both staff and students. Code compliance for fire safety including separation of egress components will also be remedies as part of interior layout modifications. Air handling systems may also be brought up to current code at this time in terms of ventilation needs

Acoustics and Daylighting

Classroom acoustics are totally inadequate and fail to meet current standards (including the ANSI code) due to the open design. With very few windows in the existing building, daylighting is also poor at East Rochester school. A renovation of this building should include re-construction of portions of the exterior wall to allow operable windows in each classroom improving both daylighting and air quality.



Programming / Space Needs

Overview of Space Needs

The East Rochester school is lacking specialty education areas as well as some select professional areas. The Pre-school is severely undersized, as is evident by the use of portable structures. In general, the following spaces should be added:

- New pre-school structure (including 12 education areas and support spaces)
- New ASD are
- (1) appropriately sized Kindergarten room (potentially re-purposed from the pre-school area)
- Appropriately sized Music Classroom
- Appropriately sized Art Classroom
- Computer Lab (to allow for appropriately sized Media Center)
- Conference room
- Storage Space
- Staff Break Room
- Professional Development Space



Classrooms are essentially open to one-another, separated by only partial height partitions or storage units as shown here. No acoustic separation and little natural light make for poor interior learning environments.

East Rochester School

LAVALLEE I BRENSINGER ARCHITECTS

Programming / Space Needs Calculations

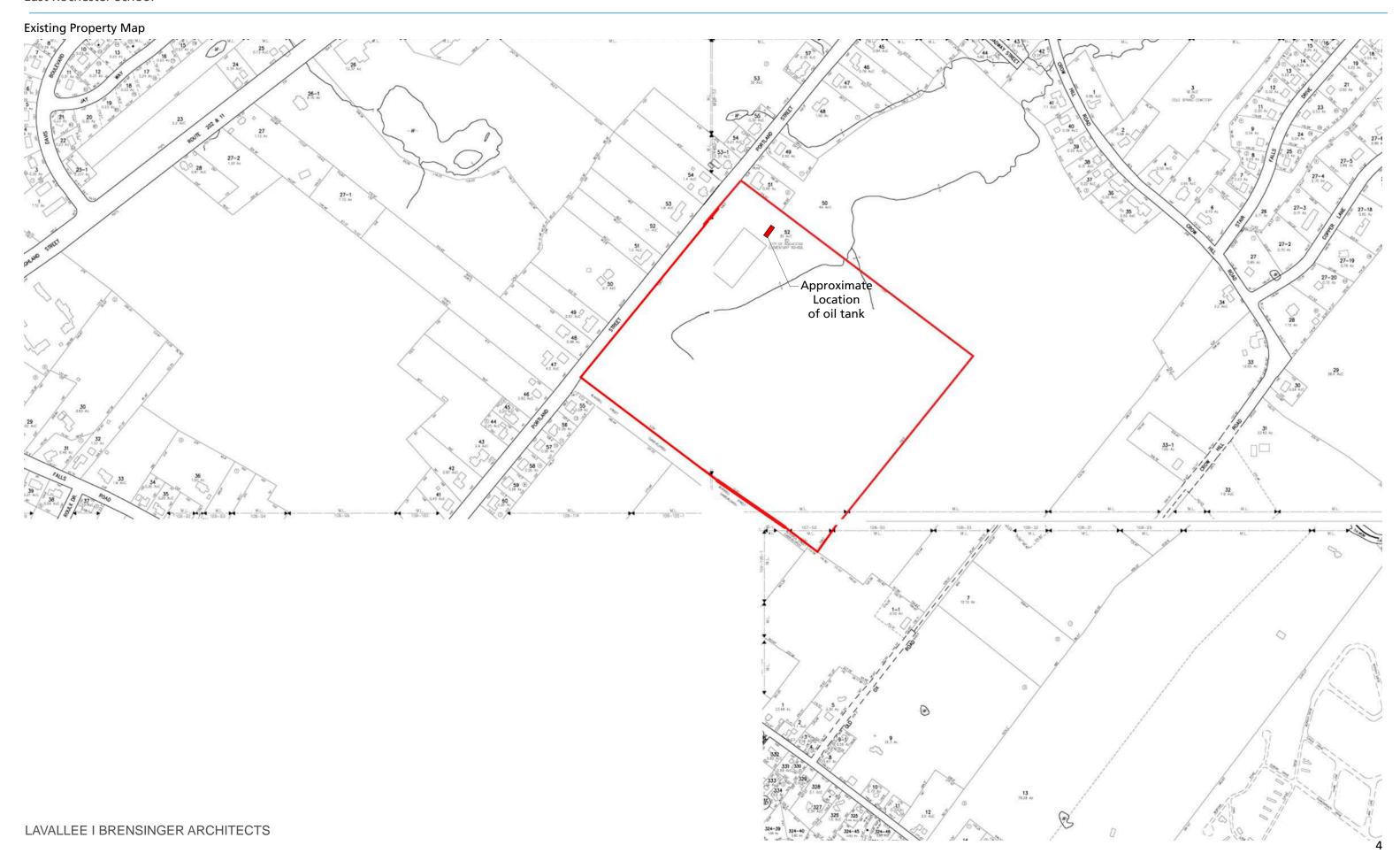
East Rochester School Program Based on Enrollment									
Education Program Areas									
Education Frogram Areas		Max Students/				1	Number of Appropriately		
Course/Subject	# Students	Teaching Space	Utilization (90%)	# of Sections	Offered	Required Teaching Spaces (adjusted)	sized spaces in existing building	Required additional	Notes
Course/Subject	# Students	reacting Space	Otilization (9078)	# Of Occitoris	Students attend		building	spaces	
Preschool	190	12	0.90	17.59	2.5 days/week	8	1	7	95 students are in Pre-school now- plus population increase achieve 50% integration. NOTE: See pre-school program on page 98.
ASD Program	12	12	0.90	1.11	Full Day	1	1	0	integration. Note: eco pro concorprogram on page co.
Kindergarten	41	18	0.90	2.53	Full Day	3	1	2	One Classroom undersized
1st Grade	33	20	0.90	1.83	Full Day	2	2	0	
2nd Grade	44	22	0.90	2.22	Full Day	2	2	0	Very close to needing a 3rd classroom (44 kids max capacity)
3rd Grade	49	22	0.90	2.47	Full Day	3	2	1	Note: Should Nancy Loud get a 5th grade, 2 classrooms would be adequate
4th Grade	60	25	0.90	2.67	Full Day	3	3	0	Note: Should Nancy Loud get a 4th grade, 2 classrooms would be adequate
5th Grade	51	25	0.90	2.27	Full Day	3	3	0	
Total Enrollment	480					25			
							Number of Appropriately		
Core Program Areas				Calculated SF of			sized spaces in existing		
	Student Access Per	# -f Ot - d - n t - O - n d		Space (Per	Periods per week		building (or size of existing	Required additional	
Space	week (periods)	# of Students Served	# of Classes/wk	Standards)	Offered***	# Spaces Required	space)	spaces	Notes
Computer Lab	1	278	25		30	1	1	0	Could be relocated to allow for adequate sized Media Center
Art	1	237	25		30	1	0	1	
Music	1	237	13		30	1	0	1	Stage not counted since it is not acoustically sealed for Instruction
Physical Education	1	237	25		15	2	2952	0	Could be satisfied through dividing curtain
Media Center	1	278	25	1112	30	1	750	362	Net Square Feet - could be restored to adequate size if CPU lab is relocated
Cafeteria	5	278	20	1043	15	2	2952	0	Net Square Feet
Special Education Student Areas*	5	64	160		30	6	6	0	Calculations assume 2 students/area
Intervention / Small Group Areas**	5	70	116		30	4	4	0	Calculations assume 3 students/area
Professional Areas								4	(1) Conference Room for 12 , (1) staff break room, (1) Professional Development /
									Staff room, (1) building sotrage area

 $^{^{\}star}$ 23% of students identified to receive special services by District Special Education .

^{***} Standard 8 period day, allowing for no specials during first and last periods.

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Dept of Ed allowable:		Age Group	Enrollment	SF/Pupil	Utilization	Total Building (NSF)	
For New Construction		Grade 1-5	237	120	0.90	31,600	
Does not include Preschool and ASD programs	K	(indergarten - Trans	41	150	0.90	6,833	
						38,433 Tota	al Allowable by NH DOE standards for new construction
Existing Analysis / Capacity							
Current Enrollment						373	
Current Building Size (gsf)						34,412 Exc	luding Portables
		Pacad on Avarage NH	School Construction of	f 120cf/ctudent for Grade	s 1-5 and 150sf/student in		
Estimated Building Capacity Based solely on size of building		K @ 90% Utilization	Scribbi Construction of	120si/student for Grade	s 1-5 and 150s/student in	248	
			Max Seats/			Theoretical Student	
		# Classrooms*	Classroom **	Utilization (90%)	Utilized Seats	Capacity	
Education Areas Capacity		12	22	0.9	237.6	238	
Specialty Classrooms (Art.Music, Cpu, Etc)		3	20	0.9	54	See	notes below
		_					
Current Utilization / Capacity						156.99%	
*Currently, there are 15 Homerooms. Deduct one each for the following: Art, Music, Media Center							
** Averaging K-2 Class Sizes (16 for Kindergarten, 24 for Grades 1 and 2)							
*** Standard 8 period day, allowing for no specials during first and last periods.							
					Periods per week	Theoretical Student	
Core Capacity	Size of Area (sf)	Appropriately Sized?	Seats/persons	Utilization (90%)	Offered***	Capacity	
<u>Art</u>	390	N	22	0.9	30		rerly undersized room to fit 22 students
Music	366	N	22	0.9	30		verly undersized room to fit 22 students
Media Center	750		ed @ Students x .			188	
Gymnasium	2952	Υ	44	0.9	15		ym allows 2 classes/period
CPU Lab	750	Y	22	0.9	30	594	
Cafeteria	2952	Υ	164	0.9	15	442.8 Sha	red Café-Gym

^{** 25%} of students identified to receive Tier 2 or Tier 3 Intervention (Title 1) instruction



Existing Assessment



East Rochester School

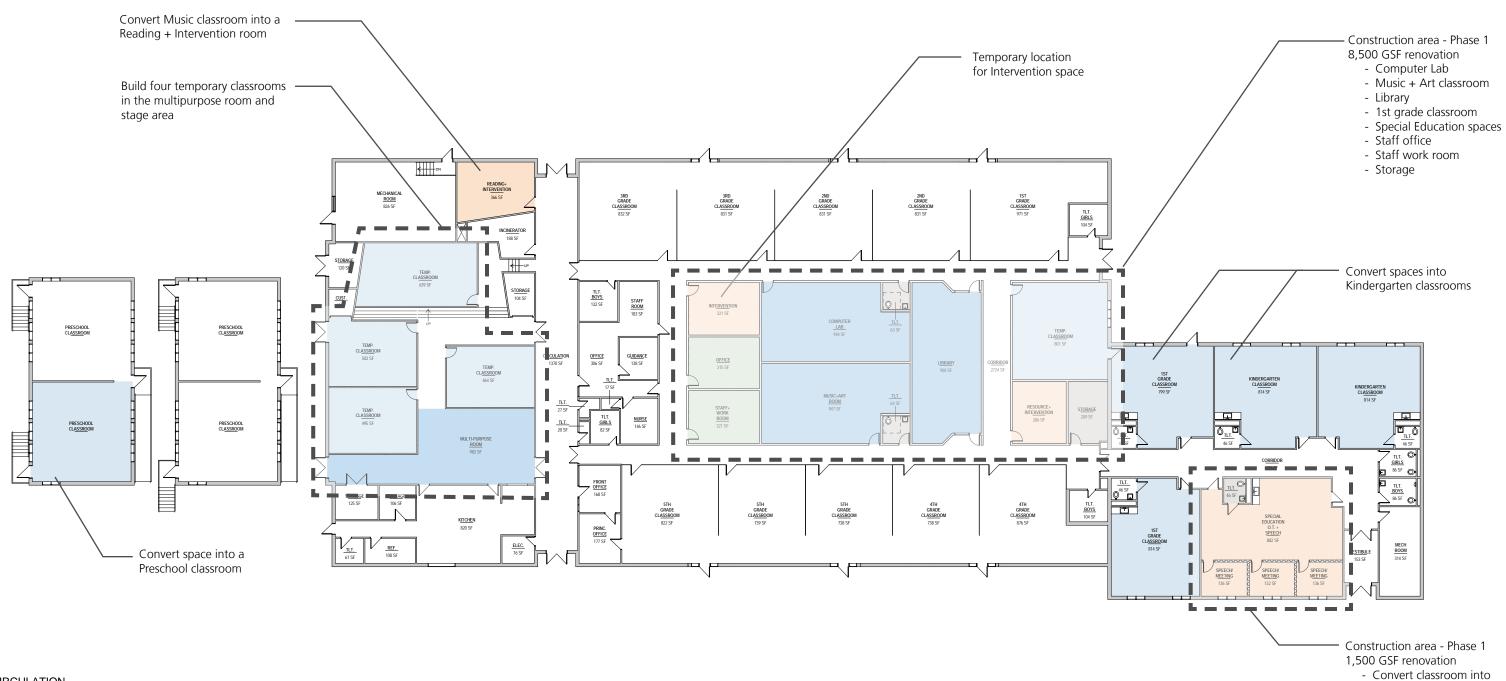
LAVALLEE I BRENSINGER ARCHITECTS

Recommended Improvements



Aerial Site - Courtesy of Bing Maps





CIRCULATION

CLASSROOMS

SPECIAL EDUCATION / INTERVENTION

SPECIALTY CLASSROOMS

STAFF / FACILITY

SUPPORT

LAVALLEE I BRENSINGER ARCHITECTS

- Special Education, O.T.

- and Speech classrooms



CIRCULATION

CLASSROOMS

SPECIAL EDUCATION / INTERVENTION

SPECIALTY CLASSROOMS

STAFF / FACILITY

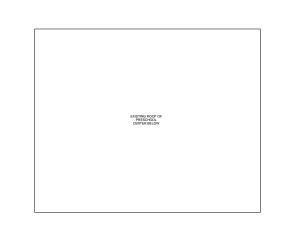
SUPPORT

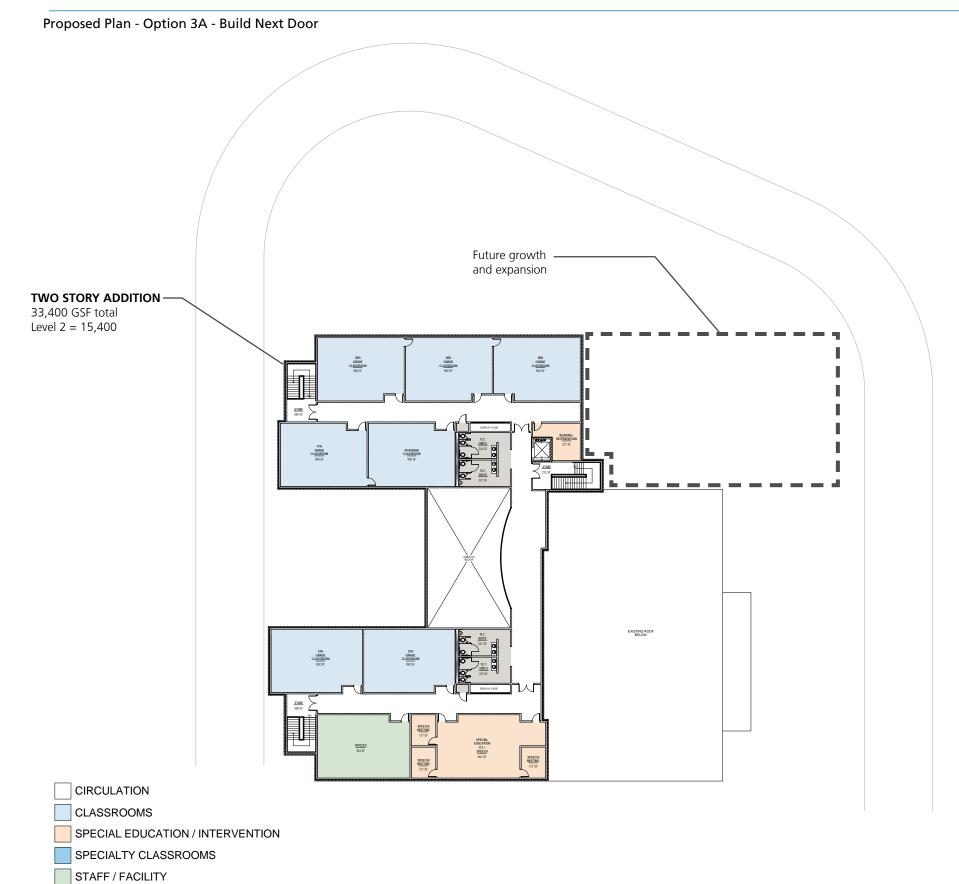
LAVALLEE I BRENSINGER ARCHITECTS



LAVALLEE I BRENSINGER ARCHITECTS







LAVALLEE I BRENSINGER ARCHITECTS

SUPPORT

LAVALLEE I BRENSINGER ARCHITECTS

Bus circulation

APPENDIX

Rochester Pre-school

Programming / Space Needs Calculations

Classrooms	Room Type	Max Persons/	Min NSF/ Person	NSF/ Area	Adjusted	# Req'd	Total Area	Comments
Student Restroom 1 85 4 340 Entry / Check-in 12 15 180 180 1 180 Staff Restroom 1 60 1 60 1 60 Pre-School Coordinator Office 3 150 1 150 1 150 Staff Offices 3 120 7 840	e School							
Entry / Check-in 12 15 180 180 1 180 Staff Restroom 1 60 1 60 Pre-School Coordinator Office 3 150 1 150 Staff Offices 3 120 7 840 Staff Break / Work Room 12 180 1 180 Occupational / Physical Therapy 2 400 1 400 Speech Therapy / Testing Area 2 100 2 200 Observation Area 1 80 1 80 Conference Room 12 450 1 450 Storage 800 1 800	Classrooms	12	36	432	650	8	5,200	
Staff Restroom 1 60 1 60 Pre-School Coordinator Office 3 150 1 150 Staff Offices 3 120 7 840 Staff Break / Work Room 12 180 1 180 w/ Kitchenette Occupational / Physical Therapy 2 400 1 400 400 Speech Therapy / Testing Area 2 100 2 200	Student Restroom	1			85	4	340	Shared between classrooms Accessible w/ Changing Area
Pre-School Coordinator Office 3 150 1 150 1 Staff w/ space to meet w/ 2 Staff Offices 3 120 7 840 Staff Break / Work Room 12 180 1 180 Occupational / Physical Therapy 2 400 1 400 Speech Therapy / Testing Area 2 100 2 200 Observation Area 1 80 1 80 Conference Room 12 450 1 450 Storage 800 1 800	Entry / Check-in	12	15	180	180	1	180	
Staff Offices 3 120 7 840 Staff Break / Work Room 12 180 1 180 w/ Kitchenette Occupational / Physical Therapy 2 400 1 400 Speech Therapy / Testing Area 2 100 2 200 Observation Area 1 80 1 80 Conference Room 12 450 1 450 Storage 800 1 800	Staff Restroom	1			60	1	60	
Staff Break / Work Room 12 180 1 180 1 180 W/ Kitchenette Occupational / Physical Therapy 2 400 1 400 Speech Therapy / Testing Area 2 100 2 200 Observation Area 1 80 1 80 Conference Room 12 450 1 450 Storage 800 1 800	Pre-School Coordinator Office	3			150	1	150	1 Staff w/ space to meet w/ 2
Occupational / Physical Therapy 2 400 1 400 Speech Therapy / Testing Area 2 100 2 200 Observation Area 1 80 1 80 Conference Room 12 450 1 450 Storage 800 1 800	Staff Offices	3			120	7	840	
Speech Therapy / Testing Area 2 100 2 200 Observation Area 1 80 1 80 Conference Room 12 450 1 450 Storage 800 1 800	Staff Break / Work Room	12			180	1	180	w/ Kitchenette
Observation Area 1 80 1 80 Conference Room 12 450 1 450 Storage 800 1 800	Occupational / Physical Therapy	2			400	1	400	
Conference Room 12 450 1 450 Storage 800 1 800	Speech Therapy / Testing Area	2			100	2	200	
Storage 800 1 800	Observation Area	1			80	1	80	
	Conference Room	12			450	1	450	
	Storage				800	1	800	
		96	75	7,200	7,200	1	7,200	National Standard of 75sf/child Outdoor Fenced play space for 96 kids onsite any

Total Pre-School

8,880 Net Square Feet of Building Space
11,840 Gross Square feet (at 75% efficient). 75% net-gross accounts for corridors,
Mechanical and Electrical spaces, and wall/structure thicknesses.

Rochester School District

East Rochester Construction Options

June 2012 Comprehensive Report