



Groton School Facilities Initiative

February 12th
2015
SFITF
Meeting





Introduction

- Task Force Housekeeping items – Communication Plan
- Middle School Concept D – Cost Estimates
- Cutler & West Side – Test Fit & Cost Estimate
- Discussion
- Next Steps

Status Quo – Deferred Costs

GPS Estimate of Building, MEP, and Portable Classroom Replacement Costs, 2013

Summary of Deferred Costs by Building	
Facility	Total
Kolnaski	\$137,500
Barnum	\$7,333,750
Chester	\$9,500,000
Morrisson	\$6,773,141
Northeast	\$123,685
Pleasant Valley	\$7,174,597
S.B. Butler	\$10,488,117
Cutler	\$12,795,936
West Side	\$15,145,721
TOTAL:	\$69,472,447

**Priority
Elementary
Schools Total:
\$27,162,714**

**Middle Schools
Total:
\$27,941,657**



Status Quo Considerations

- Costs to Address Critical Items & Bring Buildings Up to current Code Only
- Assumes No Expansions – Replacement of Existing Portables Only in GPS Estimates
- Construction/ Student Safety Dictate Potential Scheduling of Work
- Same Number of Schools to Operate with Same Space Concerns

Long Term Vision

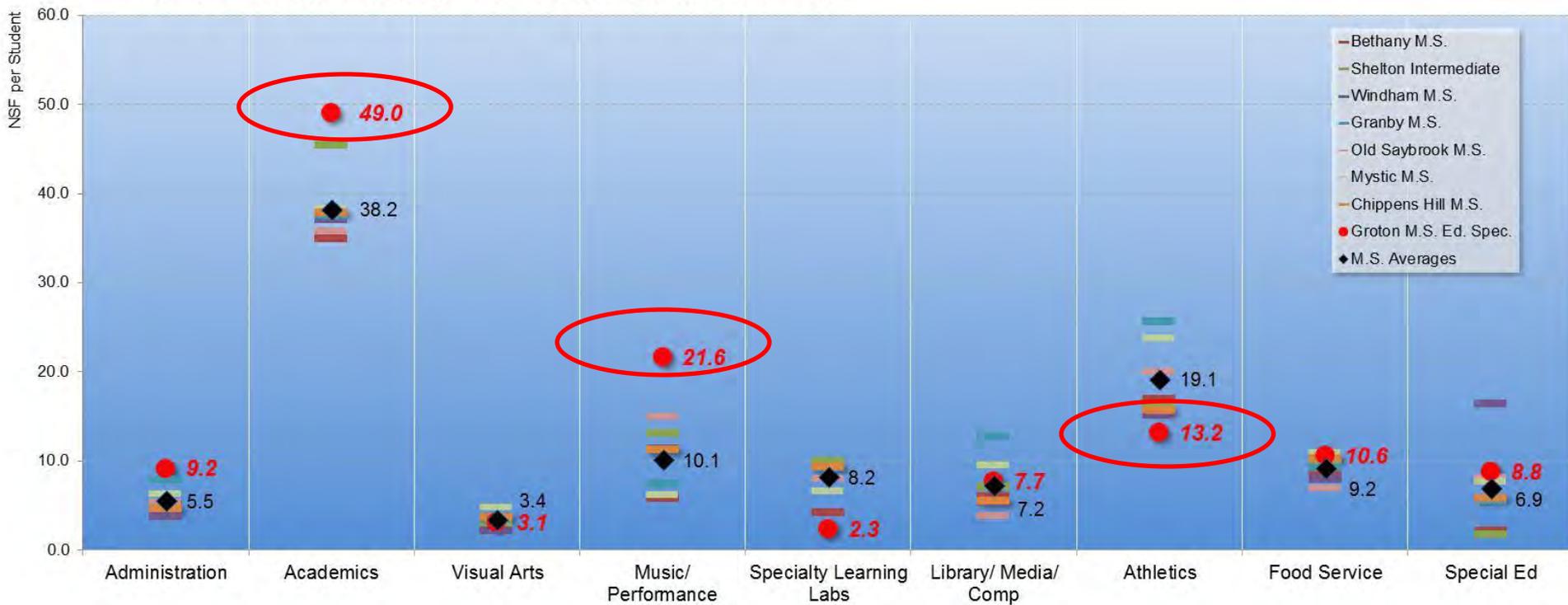
- Construction of Consolidated MS enables the conversion of Cutler & Westside to Larger PreK-5 Elementary Schools.
- Consolidation of Three Elementary Schools (S.B. Butler, Claude Chester & Pleasant Valley)
- Redistrict Elementary Students to ensure diverse schools
- Develop long-term plans to maintain racially balanced elementary schools;
 - Diversity schools, controlled choice enrollments and school assignments may be considered

Ed. Spec Program 6-8 (938)

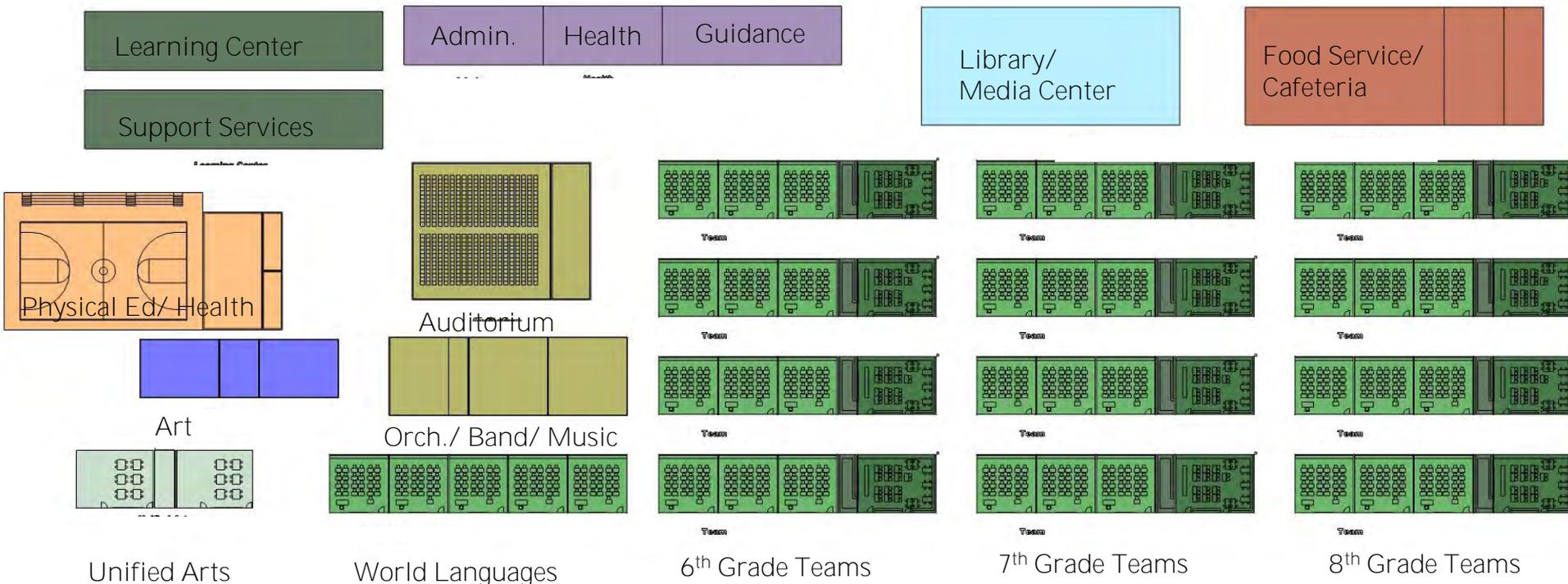
Academics	42,000
Art	2,900
Music	5,500
Physical Ed	12,400
Unified Arts	2,200
World Languages	4,000
Auditorium / Theater	14,800
Learning Center/ Support Svcs:	8,650
Pupil Services/ Guidance	2,600
Administrative Office Complex	2,100
Health Clinic & Offices	1,840
Library Media Center	7,250
Custodial	2,125
Food Service	9,120
Misc.	2,700
<hr/>	
Subtotal:	120,185 (NSF)
Gross Up (1.5 Multiplier)	60,093
Total Building Area	180,278 (GSF)

Middle School Space Program

Middle School Benchmark Comparison - 938 Enrollment (NSF per Student)

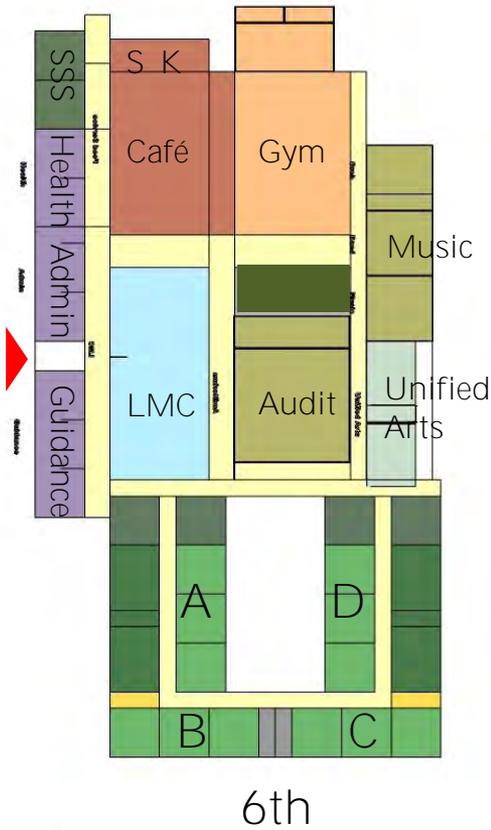


Groton M.S. – Graphic Program

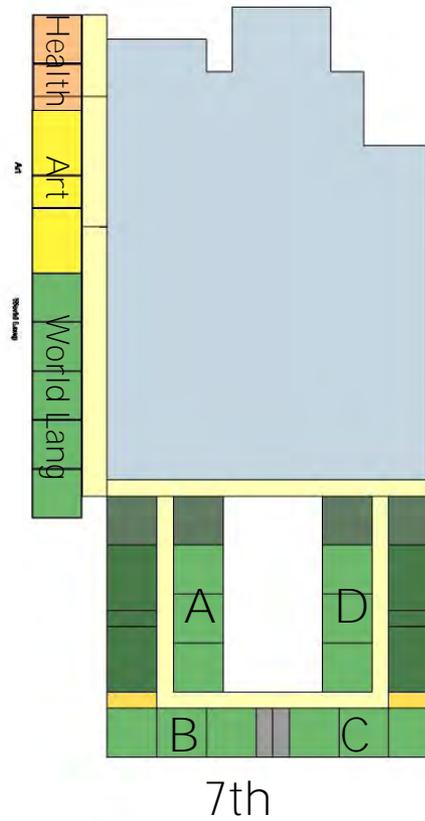




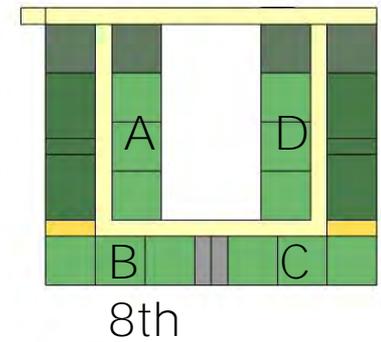
Middle School Diagram – Option D



1



2



3

Site Plan Diagram - Option D

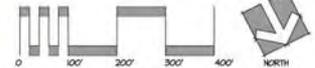


HIGH SCHOOL CAMPUS CONCEPT 'D2'
GROTON MIDDLE SCHOOL
SCHOOL FACILITIES INITIATIVE TASK FORCE

GROTON LONG POINT ROAD
 GROTON, CONNECTICUT DECEMBER 11, 2014

- LEGEND**
- TRAFFIC PINCH POINT & POTENTIAL CONFLICT
 - PARENT ROUTE
 - BUS ROUTE

MILONE & MACBROOM + **SLAM**





Understanding Ed. Specs for New Elementary

Enrollment Projections for Consolidated Schools

YEAR	Claude Chester	S.B. Butler	Pleasant Valley	TOTAL
2014-15	351	280	299	930
2015-16	354	271	290	915
2016-17	331	281	284	896
2017-18	324	272	285	881
2018-19	326	271	286	883
2019-20	330	272	280	882
2020-21	332	271	278	881
2021-22	331	272	281	884
2022-23	332	271	283	886

Projected Class Organization – Functional Capacity

Grade	Projected Enrollment	Number of Classes	Average Class Size	Class Size Standard	Functional Capacity
Pre-K	30-60	2-4	15	15	30-60
Kindergarten	81	5	16.2	20	100
One	79	4	19.75	25	100
Two	73	4	18.25	25	100
Three	65	4	21.7	25	100
Four	70	4	17.5	25	100
Five	74	4	18.5	25	100
TOTALS:	472-502				630-660

Potential Choice Component

Grade	Projected Enrollment	Number of Classes	Functional Capacity	Capacity for Choice
Pre-K	30-60	2-4	30-60	Open
Kindergarten	81	5	100	19
One	79	4	100	21
Two	73	4	100	27
Three	65	4	100	35
Four	70	4	100	30
Five	74	4	100	26
TOTALS:	472-502		630-660	158

- Accommodation for projected 915 students from consolidated PV, CC & SB.
- Functional Capacity at each New Elementary is 630-660 for a 1,260-1,320 Total
- Diversity School Requires – Open Choice – approx. 150 at each school
- Opportunity to ensure long term and sustained racial balance at all schools throughout the district

Understanding Elementary Space

Elementary Facilities Comparison

School	Year Built	Facility Total Sq Ft.	Site (Acres)	Full-Size Classrooms*		Core Facilities			Special Purpose Rooms/ Offices		Other Rooms**	Total Portables	Total Rooms	Capacity	Capacity Without Portables	PK-5th Oct. 2014 Enroll
				Total	Average Size (sq ft)	Gym/ Multi-Purpose (sq ft)	Cafeteria	Media Center	Total	Average Size (sq ft)						
Charles Barnum	1965	43,513	16.02	23	835	3,094		835	5	230		2	30	428	378	358
Catherine Kolnaski	2007	61,642	124.00	24	825	2,992	4,049	1,960	11	270	1		39	469	469	400
Claude Chester	1952	43,581	11.57	26	840	3,254		1,200	2	200	1		31	469	469	356
Mary Morrisson	1963	42,240	36.70	24	850	3,220			2	250		2	29	489	439	395
Northeast Academy	2007	55,278	21.10	21	820	2,992	3,761	1,960	14	180	1		39	408	408	399
Pleasant Valley	1955	33,728	16.74	21	850	3,540		1,628	5	110		5	28	367	242	287
S.B. Butler	1952	37,850	9.33	24	835	2,588	2,050	1,245	4	45	1	4	30	428	328	309
TOTAL:				163									226	3,058	2,733	2,504

*Includes portables, and art and music rooms

** Other special purpose rooms that are larger than average full-size classroom

- Current PK-5th Enrollment – 2,504
- Elementary Capacity with Portables – 3,058
 - If every seat in every school was at maximum class size
 - Removal of all 13 elementary portables – reduces potential capacity by 325 to 2,733

Understanding Net Capacity Impact

- Total Reduction of 1,364 capacity
 - Consolidation of CC, PV & SB would reduce the available elementary capacity by 1,264
 - Removal of Portables at CB (2) & MM (2) would yield an additional reduction of 100.
- Renovation of Cutler & West Side yields an 1260-1320 capacity.
- **Negligible change in overall capacity of the Elementary System**

Elementary Facility Consolidation Scenario			
School	Capacity	Capacity Without Portables & Consolidation	PK-5th Oct. 2014 Enroll
Charles Barnum	428	378	358
Catherine Kolnaski	469	469	400
Claude Chester	469		356
Mary Morrisson	489	439	395
Northeast Academy	408	408	399
Pleasant Valley	367		287
S.B. Butler	428		309
TOTAL:	3,058	1,694	2,504
Capacity Reduction:		1,364	
Space Need:			1,140

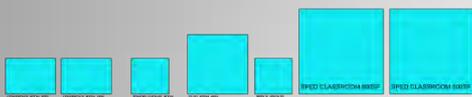
Ed. Spec Program PreK-5 (502 & 632)

Academics	23,000
Art	2,600
Music	2,600
Physical Ed	6,200
Auditorium Stage Seating	400
Learning Center/ Support Svcs:	4,900
Administration	1,830
Health Offices	1,030
Library Media Center	4,300
Custodial	1,875
Cafeteria	5,600
Misc.	1,300
<hr/>	
Subtotal:	55,635 (NSF)
Gross Up (1.5 Multiplier)	27,818
Total Building Area	83,453 (GSF)



Groton Cutler & Westside ES – Graphic Program

LEARNING CENTER/ SUPPORT SERVICES 4,900SF



ADMINISTRATIVE OFFICE COMPLEX 1,930SF



HEALTH OFFICES 1,030SF



CUSTODIAL 1,875SF



CLASSROOMS 23,000SF



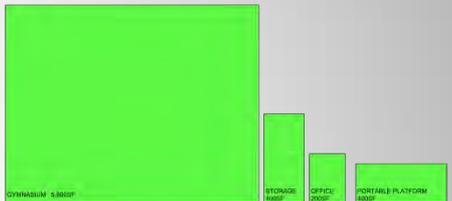
ART 2,600SF



MUSIC 2,600SF



PHYSICAL EDUCATION & HEALTH 6,600SF



LIBRARY MEDIA CENTER 4,100SF



FOOD SERVICES 5,200SF

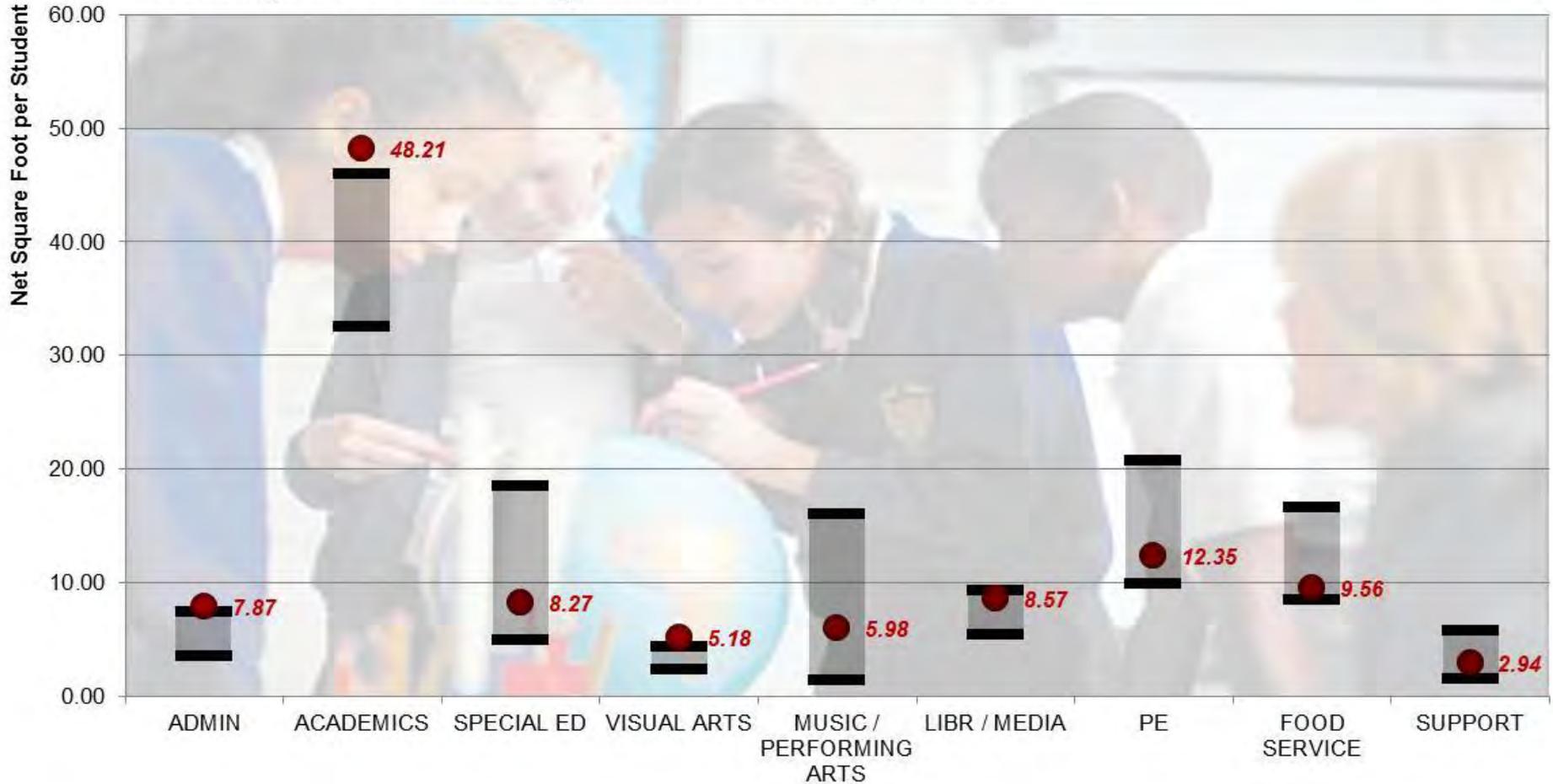


FACULTY/PARENT WORKROOM / INSTR. MAT. & EQ. 1,200SF



PreK-5 (502) - Benchmarking

Elementary School Benchmarking; 502 Enrollment: NSF per Student





PreK-5 (502) – Classroom Count

	Minimum # Classrooms				<i>proj enr</i>	<i>prop capacity</i>	<i>delta</i>	
	PK	K	1-5	Total				
modified: 2022-23	2	4	19	25	502	558	56	
ed specs: 2022-23	2	5	20	27	502	600	98	
Target	2	5	20	27	502	600	98	
<i>Notes:</i>								
	<i>cr = classroom</i>							
<i>Assumptions:</i>								
	- Maximum enrollment in Pre-K program = 60 students (half day classes).							
	- Maximum enrollment range = 472 - 502 students							
	- Maximum classroom occupancy = 22 (grades 1 - 5)							
	- Maximum classroom occupancy = 20 (K)							

Reduced classrooms represents: (1,800 NSF)
(2,700 GSF)

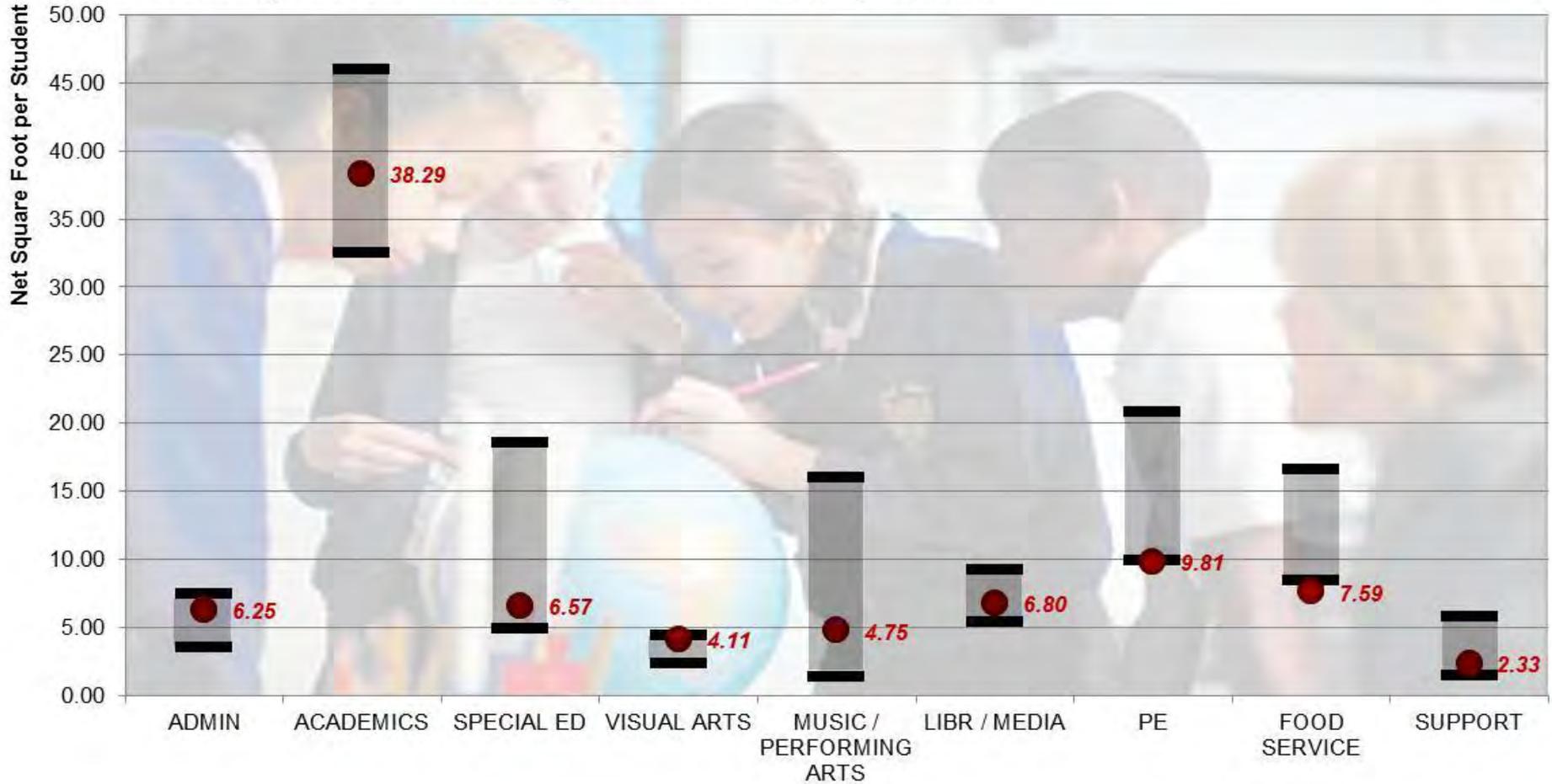


PreK-5 (632) – Classroom Count

	Minimum # Classrooms				proj enr	prop capacity	delta
	PK	K	1-5	Total			
ed specs: 2022-23	2	5	20	27	502	632	130
Target	2	5	20	27	502	632	130
Notes:							
	<i>cr = classroom</i>						
Assumptions:							
	<i>- Maximum enrollment in Pre-K program = 60 students (half day classes).</i>						
	<i>- Maximum enrollment range = 632 - 660 students</i>						
	<i>- Maximum classroom occupancy = 24 (grades 2 - 5)</i>						
	<i>- Maximum classroom occupancy = 22 (grade 1)</i>						
	<i>- Maximum classroom occupancy = 20 (K)</i>						

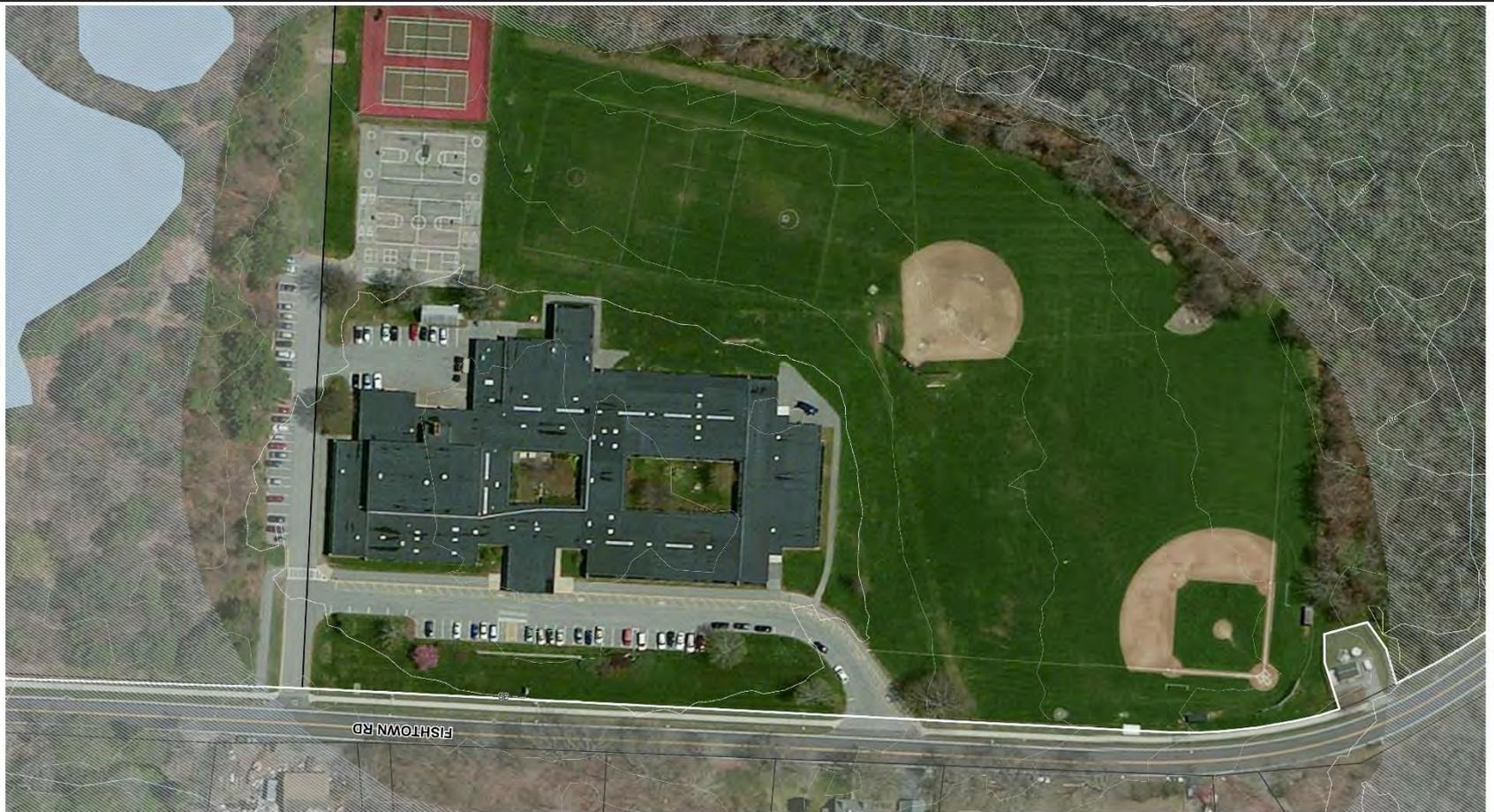
PreK-5 (632) - Benchmarking

Elementary School Benchmarking 632 Enrollment: NSF per Student





Cutler ES – Existing Site

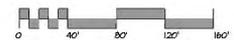


EXISTING CONDITIONS

CUTLER SCHOOL - ELEMENTARY CONVERSION SCHOOL FACILITIES INITIATIVE TASK FORCE

160 FISHTOWN ROAD
GROTON, CONNECTICUT

MILONE & MACBROOM + SLAM



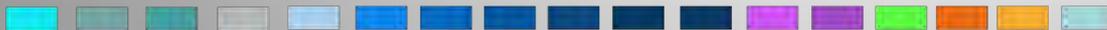
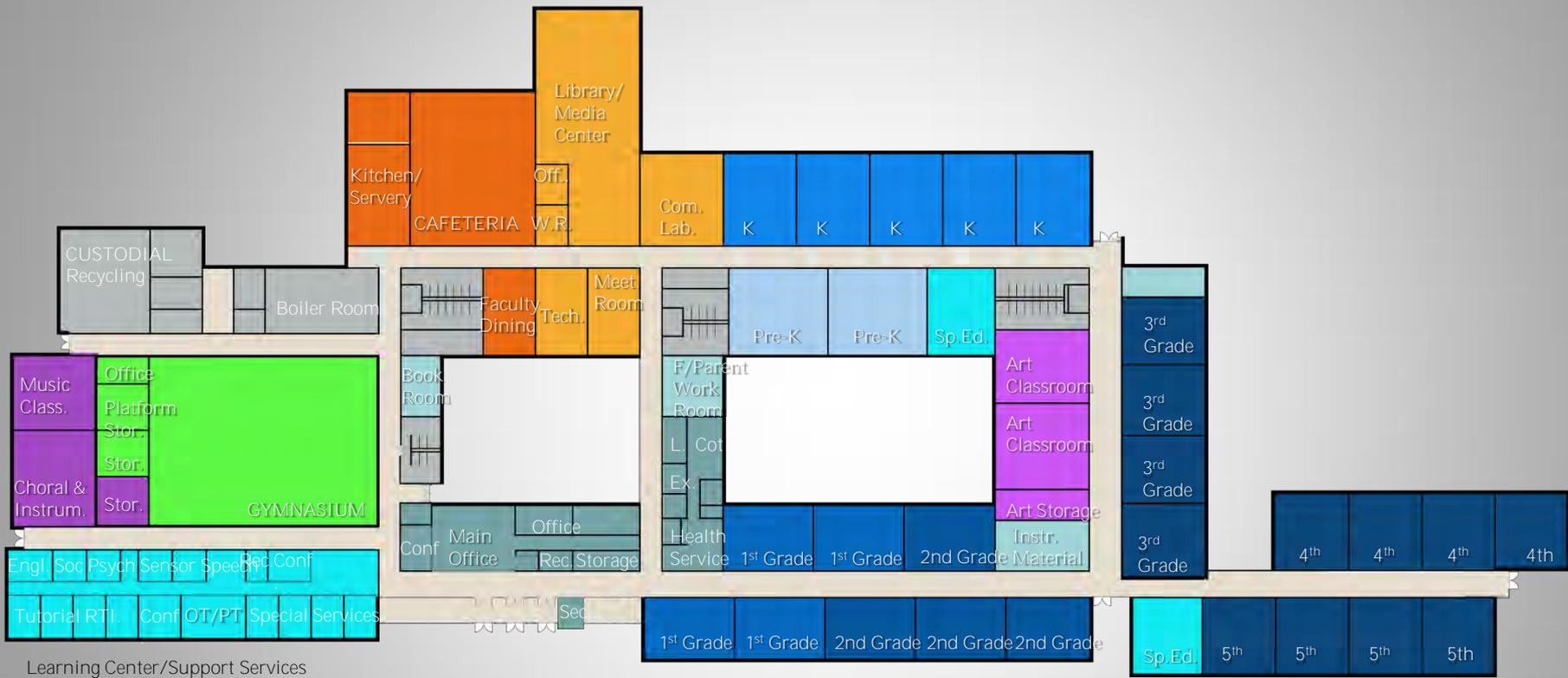


Cutler ES – Existing Site





Cutler ES – Program Fit Study Option 1



Cutler ES – Option 1



CONCEPT "1"

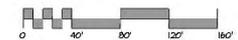
CUTLER SCHOOL - ELEMENTARY CONVERSION SCHOOL FACILITIES INITIATIVE TASK FORCE

160 FISHTOWN ROAD
GROTON, CONNECTICUT

LEGEND

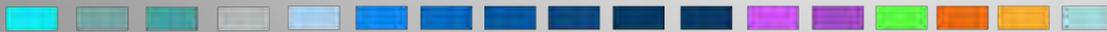
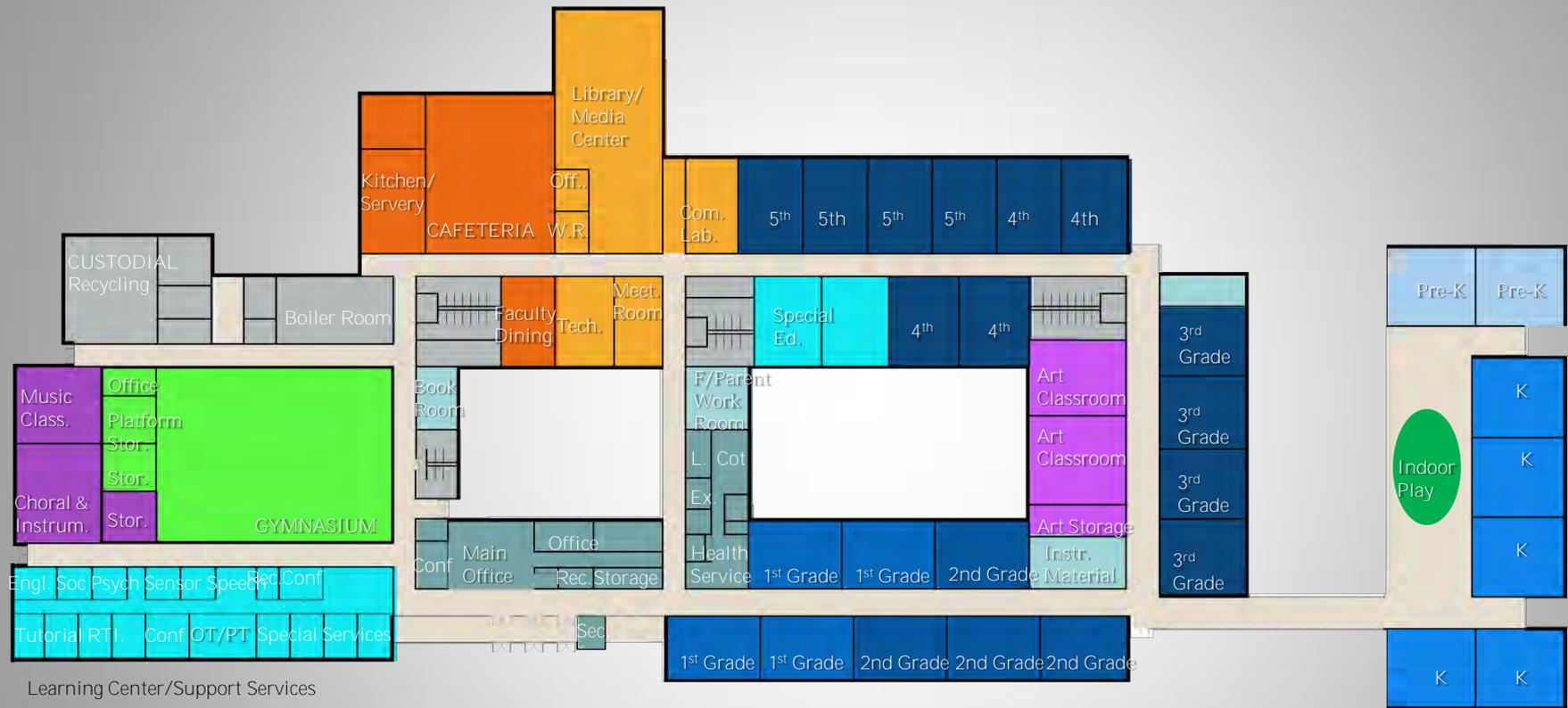
- PARENT ROUTE
- BUS ROUTE
- - - FEMA

MILONE & MACBROOM + SLAM





Cutler ES – Program Fit Study Option 2



Cutler ES – Option 2



CONCEPT "2a"

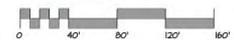
CUTLER SCHOOL - ELEMENTARY CONVERSION SCHOOL FACILITIES INITIATIVE TASK FORCE

160 FISHTOWN ROAD
GROTON, CONNECTICUT

LEGEND

- PARENT ROUTE
- - - BUS ROUTE
- - - FEMA

MILONE & MACBROOM + SLAM





West Side ES – Existing Site

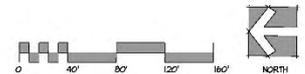


EXISTING CONDITIONS

WEST SIDE ELEMENTARY SCHOOL SCHOOL FACILITIES INITIATIVE TASK FORCE

250 BRANDEGEE AVENUE
GROTON, CONNECTICUT

MILONE & MACBROOM + SLAM



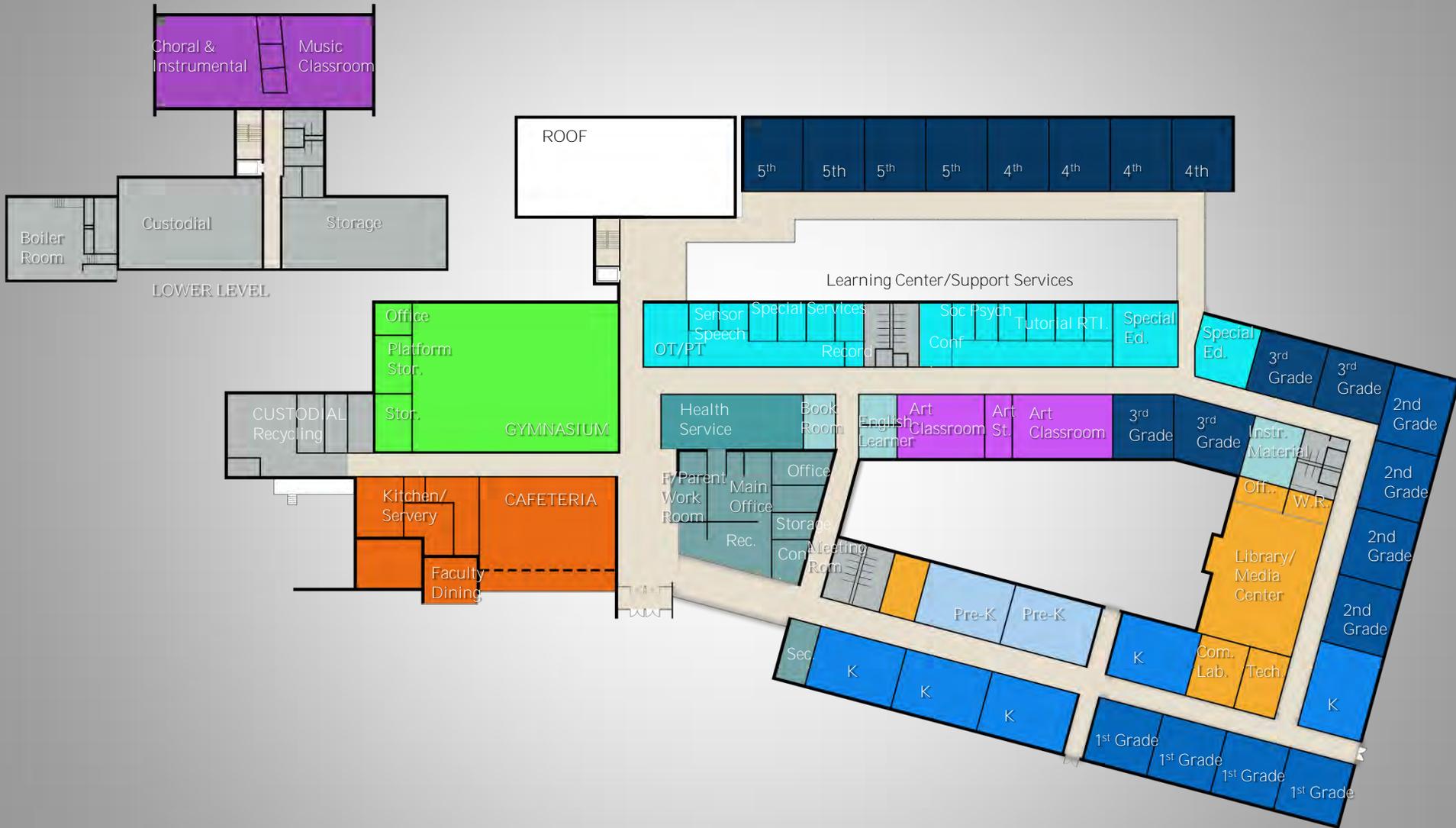


West Side ES – Existing Site





Westside ES – Program Fit Study Option 1





Westside ES –Option 1



CONCEPT "1"

WEST SIDE ELEMENTARY SCHOOL SCHOOL FACILITIES INITIATIVE TASK FORCE

250 BRANDEGEE AVENUE
GROTON, CONNECTICUT

LEGEND

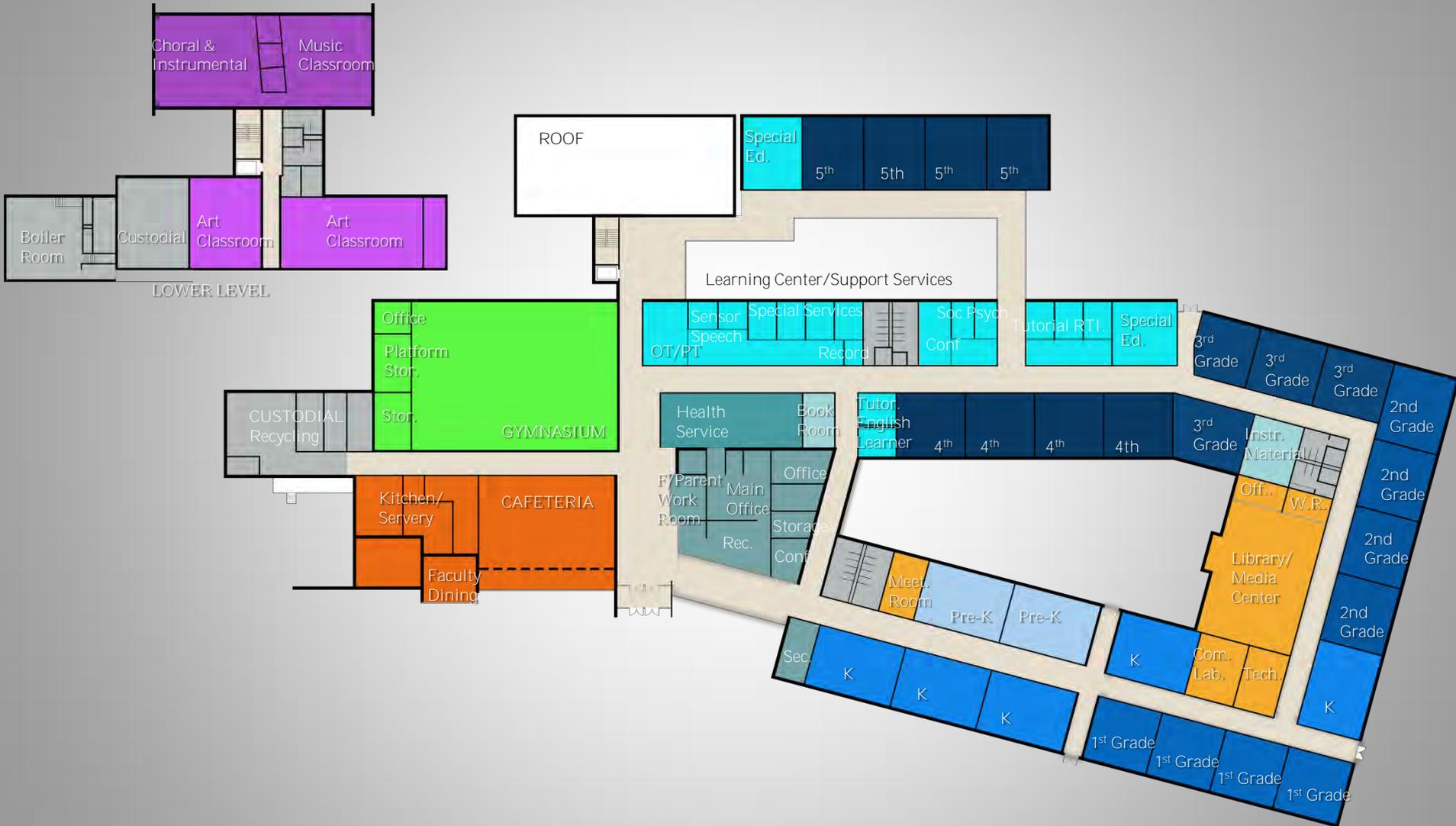
- PARENT ROUTE
- BUS ROUTE

MILONE & MACBROOM + SLAM





Westside ES – Program Fit Study Option 2





Westside ES –Option 2



CONCEPT "2"

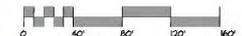
WEST SIDE ELEMENTARY SCHOOL SCHOOL FACILITIES INITIATIVE TASK FORCE

250 BRANDEGEE AVENUE
GROTON, CONNECTICUT

LEGEND

- PARENT ROUTE
- BUS ROUTE

MILONE & MACBROOM + SLAM





Westside ES – Existing Conditions





Reimbursement Overview

➤ Groton Reimbursement Rate Trend

	School Construction (20 – 80%)	New School Construction (10 – 70%)
2012:	57.50	47.50
2013:	56.79	46.79
2014:	56.07	46.07
2015:	58.57	48.57

CT Space Standards – 6-8 (938)

OSF Allowable Area *:	154,139 SF
<small>* Incl. 1% per (CGS 10-286, 10 c, 2)</small>	
Ed Spec:	180,278 GSF
Exterior Walls (~4% of gross):	7,200 SF
Adjusted Ed Spec *:	173,078 SF
<small>* Comparable OSF Area</small>	
Over allowable:	18,939 SF
Eligibility Factor *:	0.8907
<small>* Target 1.0 to maximize reimbursement</small>	
Reimbursement Rate:	0.4857 (New Const.)
Potential Reimbursement:	0.4326 (New Const.)

CT Space Standards – 6-8 (938)

OSF Allowable Area *:

154,139 SF

* Incl. 1% per (CGS 10-286, 10 c, 2)

Ed Spec *:

169,000 GSF

* Adjusted per 11/13/2014 meeting discussion (aggregate program reduction of 7,500 NSF)

Exterior Walls (~4% of gross):

6,760 SF

Adjusted Ed Spec *:

162,240 SF

* Comparable OSF Area

Over allowable:

8,129 SF

Eligibility Factor *:

0.9501

* Target 1.0 to maximize reimbursement

Reimbursement Rate:

0.4857 (New Const.)

Potential Reimbursement:

0.4615 (New Const.)



CT Space Standards – PreK-5 (502)

OSF Allowable Area *:

63,175 SF

* Incl. 1% per (CGS 10-286, 10 c, 2)

Ed Spec:

83,453 GSF

Exterior Walls (~4% of gross):

3,350 SF

Adjusted Ed Spec:

80,100 SF

Over allowable:

16,925 SF

Eligibility Factor *:

0.7887

* Target 1.0 to maximize reimbursement

Reimbursement Rate:

0.8000 (Diversity)

0.5857 (Renovate)

Potential Reimbursement:

0.6309 (Diversity)?

0.4619 (Renovate)



CT Space Standards – PreK-5 (632)

OSF Allowable Area *:

79,535 SF

* Incl. 1% per (CGS 10-286, 10 c, 2)

Ed Spec:

83,453 GSF

Exterior Walls (~4% of gross):

3,350 SF

Adjusted Ed Spec:

80,100 SF

Over allowable:

565 SF

Eligibility Factor *:

0.9929

* Target 1.0 to maximize reimbursement

Reimbursement Rate:

0.8000 (Diversity)

0.5857 (Renovate)

Potential Reimbursement:

0.7943 (Diversity)?

0.5815 (Renovate)



Cost Modeling Assumptions

- Building areas based on approved Ed. Spec. space programs, unless noted otherwise
- Estimated state reimbursement based on 2015 reimbursement rates
- Includes High Performance design to meet CT HPBS (16a-38k)
- Construction Manager at Risk (CMaR) delivery
- Escalated at 3% per year through midpoint of construction (Q4, 2017 – MS; Q4, 2019 – ES)



Cost Modeling Assumptions

- No Project Labor Agreement (PLA)
- Excludes Hazardous Building Material abatement costs
- Excludes site acquisition costs, unless noted otherwise
- Groton proceeds “At Risk” with A/E design services after successful referendum to achieve proposed schedules



Scenario 1 Overview

Scenario 1: One Middle School	Build One New 6-8 Middle School on Merritt Site
	Renovate to New - West Side MS as New West Side PreK-5 Elementary School
	Renovate to New - Cutler MS to PreK-5 Elementary School
	Close Claude Chester, Pleasant Valley and S.B. Butler

938
Student MS
632
Student ES's

- Successive construction projects
- Significant escalation costs
- \$200 K included in MS model for site acquisition
- Model includes the following site development/improvement allowances:
 - \$8 M for New MS
 - \$2.5 M for Cutler
 - \$5 M for West Side

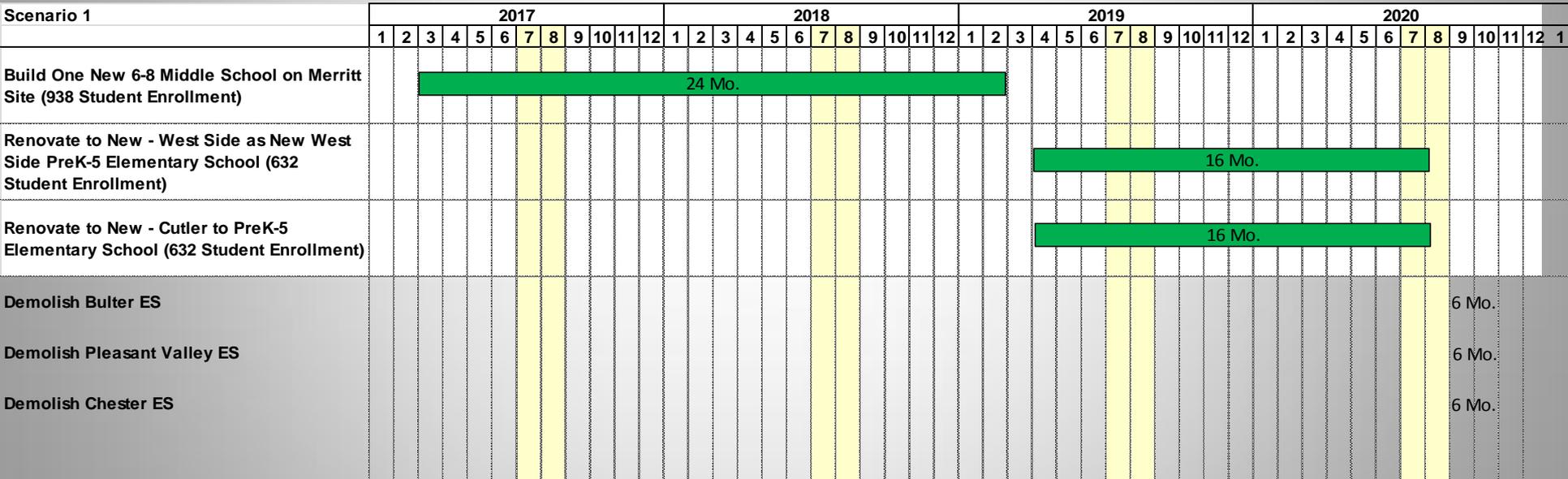


Scenario 1 - Schedule

Scenario 1: One Middle School

- Build One New 6-8 Middle School on Merritt Site
- Renovate to New - West Side MS as New West Side PreK-5 Elementary School
- Renovate to New - Cutler MS to PreK-5 Elementary School
- Close Claude Chester, Pleasant Valley and S.B. Butler

938
Student MS
632
Student ES's



Scenario 1 – Cost Summary

**938
Student MS
632
Student ES's**

Scenario 1: One Middle School	Build One New 6-8 Middle School on Merritt Site
	Renovate to New - West Side MS as New West Side PreK-5 Elementary School
	Renovate to New - Cutler MS to PreK-5 Elementary School
	Close Claude Chester, Pleasant Valley and S.B. Butler

A Scenario 1					
1	Build One New 6-8 Middle School on Merritt Site (938 Student Enrollment)				
2	Renovate to New - West Side as New West Side PreK-5 Elementary School (632 Student Enrollment)				
3	Renovate to New - Cutler to PreK-5 Elementary School (632 Student Enrollment)				
B Scenario 1 Cost Breakdown		Gross Building Area	Total Project Cost	Net Cost to Groton	Remarks
1	Build One New 6-8 Middle School on Merritt Site (938 Student Enrollment)	169,000	\$ 81,373,704	\$ 43,824,043	<i>Building area based on GPS Ed. Spec, with 7,500 NSF reduction to space program as discussed at 11/13/2014 meeting</i>
2	Renovate to New - West Side as New West Side PreK-5 Elementary School (632 Student Enrollment)	83,400	\$ 43,566,566	\$ 9,123,132	<i>Assumes 11,700 GSF Addition and diversity school status (80% reimbursement); See note 1 below.</i>
3	Renovate to New - Cutler to PreK-5 Elementary School (632 Student Enrollment)	83,400	\$ 39,436,142	\$ 16,609,986	<i>Assumes 11,000 GSF addition; See note 1 below.</i>
TOTAL:			\$ 164,376,412	\$ 69,557,162	
Notes:					
1	Assumes renovation status granted by CT DAS				
2	Net Cost to Groton figures are not guaranteed				



CT Renovation Status

OSF Allowable Area (PK-5; 632 Students) *: 79,535 SF

* Incl. 1% per (CGS 10-286, 10 c, 2)

Maximum **Project** cost to be eligible for renovation status is OSF allowable area multiplied by \$450 per SF

Maximum Renovation **Project** cost: \$ 35,790,750
(\$450/SF)

Test Fit Renovation + Addition:

West Side: \$ 43,566,566
(\$548/SF*)

Cutler: \$ 39,436,141
(\$496/SF*)

* Project cost divided by maximum OSF allowable area, not actual/ proposed project building area



Task Force Discussion

Task Force Discussion