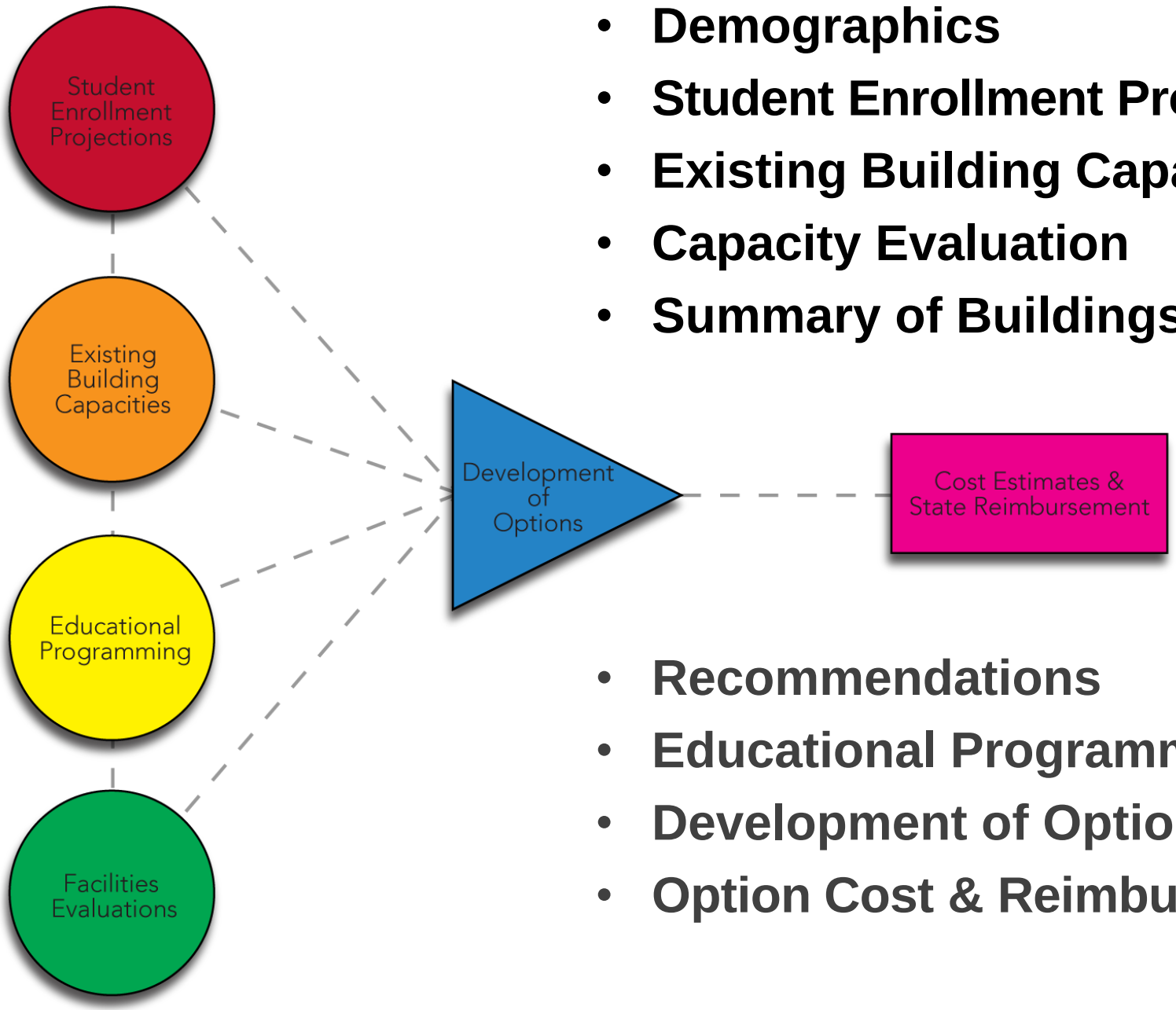
LEHIGHTON AREA SCHOOL DISTRICT

1 December 2010

Timeline

August 2008	• **Land Use Study**
November 2008	• **District-Wide Feasibility Study**
September 2009	• **Miscellaneous Projects**
	Hot water heater replacement at M.S.
January 2010	• **H.S. – Exterior Wall Masonry Repairs**
	East Penn E.S. – Carpet Replacement

Feasibility Study Process



- **Demographics**
- **Student Enrollment Projections**
- **Existing Building Capacity**
- **Capacity Evaluation**
- **Summary of Buildings**

- **Recommendations**
- **Educational Programming**
- **Development of Options**
- **Option Cost & Reimbursement**

District Map

Lehighton Area Schools

A. East Penn Elementary School

B. Franklin Elementary School

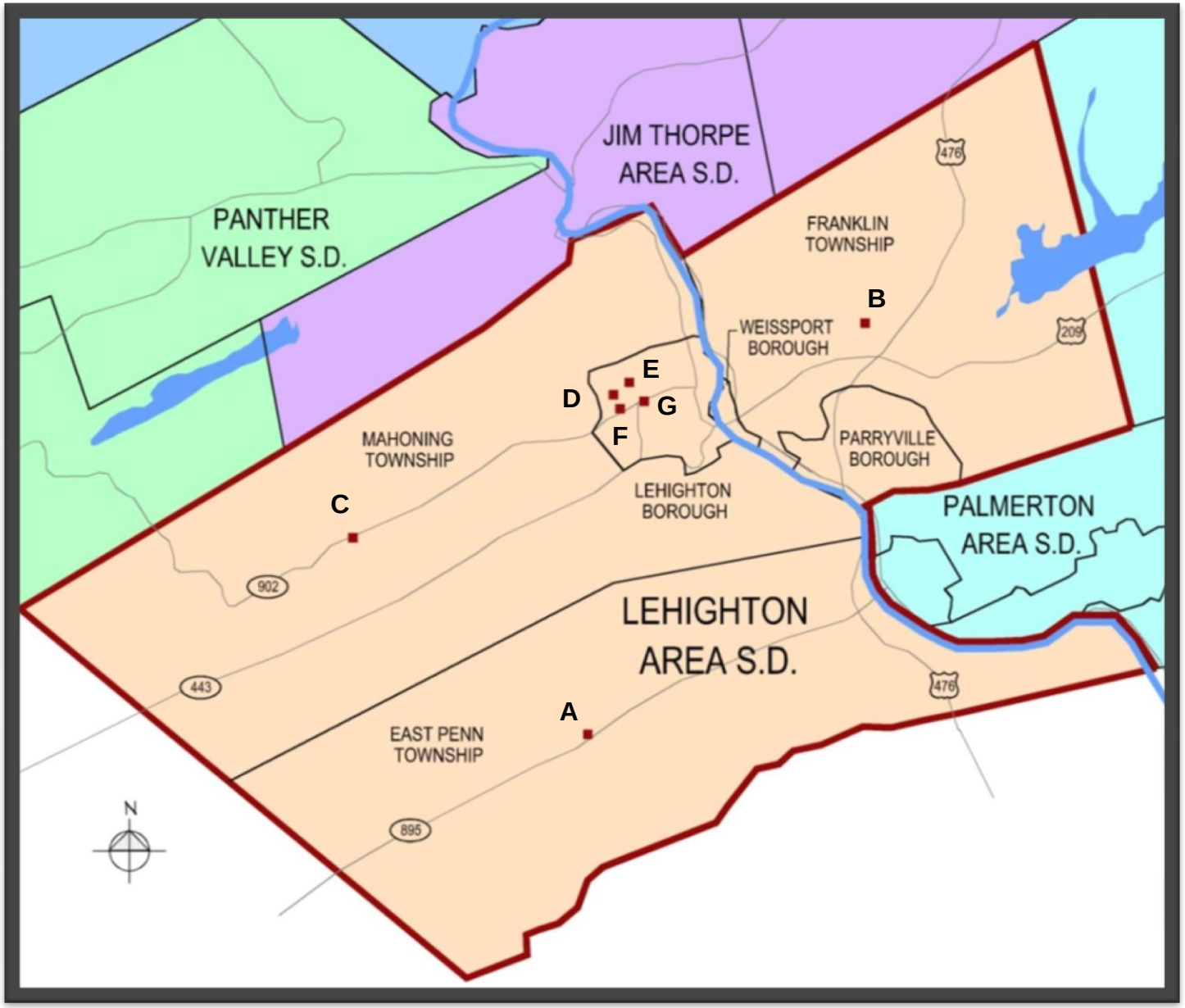
C. Mahoning Elementary School

D. Shull-David Elementary School

E. Lehighton Area Middle School

F. Lehighton Area High School

G. District Administration



(K-4) East Penn Elementary School :

Built:	1954; A&A 1991
Site:	12.65 acres
Area:	24,270 SF
Capacity:	125
Current Enrollment:	150

(K-4) Franklin Elementary School :

Built:	1954; A&A 1992
Site:	25.5 acres
Area:	39,915 SF
Capacity:	300
Current Enrollment:	288

(K-4) Mahoning Elementary School :

Built:	1954; A&A 1991
Site:	7.13 acres
Area:	28,470 SF
Capacity:	175
Current Enrollment:	193

(K-4) Shull-David Elementary School :

Built:	1959; A&A 1993
Site:	3.63 acres
Area:	38,515 SF
Capacity:	250
Current Enrollment:	306

(5-8) Lehighton Area Middle School :

Built:	1964; A&A 1993
Site:	17 acres
Area:	118,450 SF
Capacity:	729
Current Enrollment:	736

(9-12) Lehighton Area High School :

Built:	1992
Site:	91.52 acres
Area:	148,940 SF
Capacity:	781
Current Enrollment:	783

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Built:	1994
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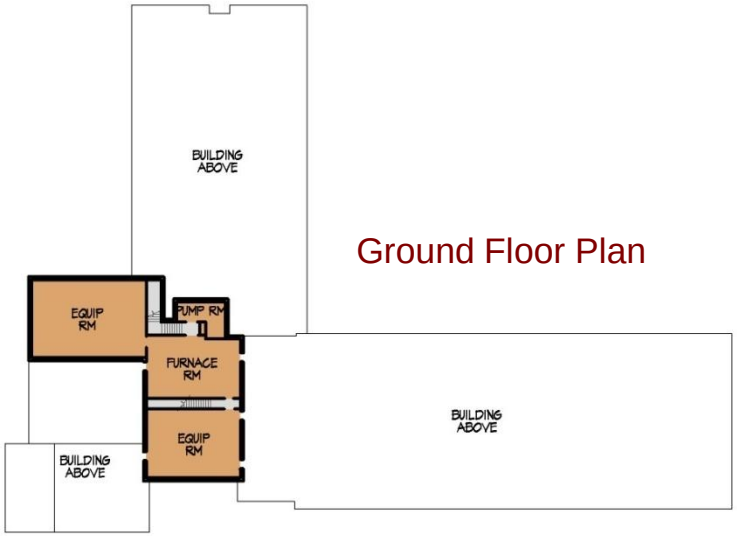
IMPROVEMENTS

- Upgrade Mechanical, Electrical, Lighting & Plumbing Systems
- Building Code Upgrades
- Accessibility Upgrades
- Upgrade Security Systems
- Reduction of Energy Use
- Technology Upgrades
- Roof Replacement
- Refurbish Interior Finishes

- Increased Parking
- Repair Paving and Sidewalks
- Improve Site Drainage
- Improve Site Lighting
- Safety at Play Areas
- Increased Security Fencing

First Floor Plan



Ground Floor Plan

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- Repair Running Track

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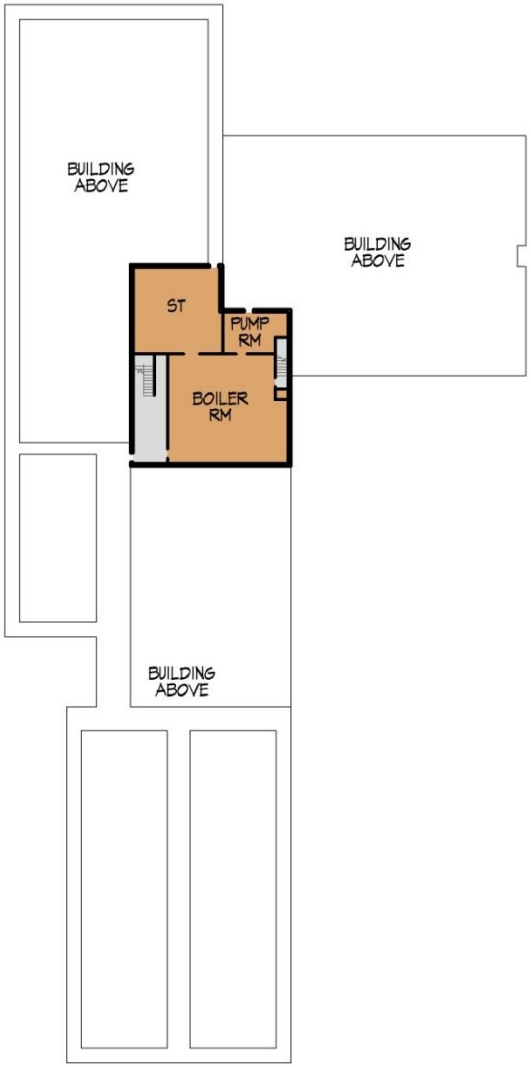

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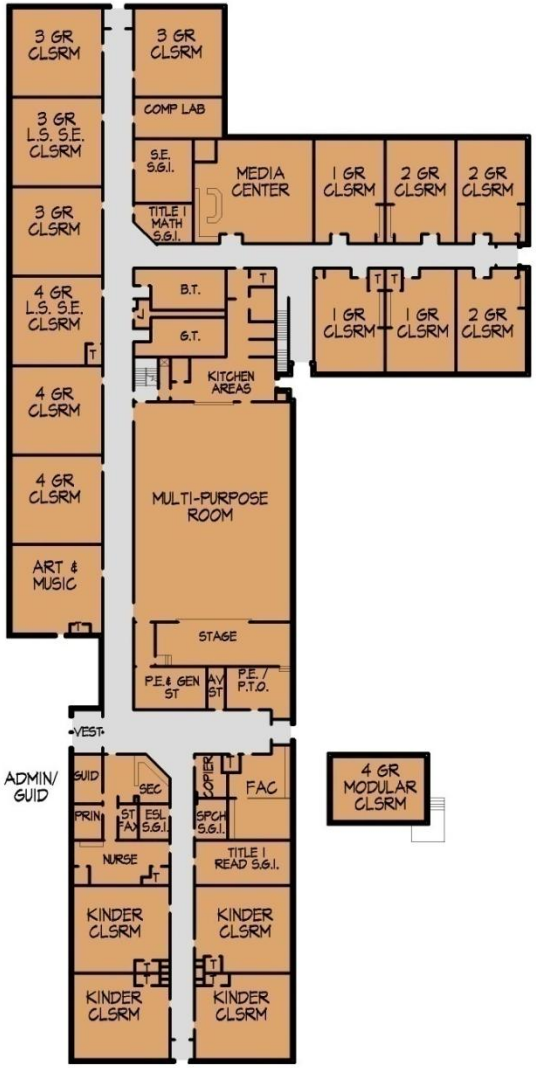

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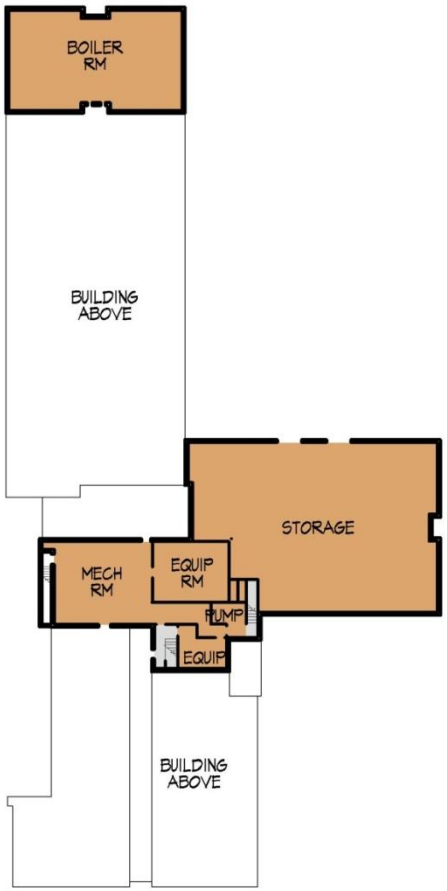

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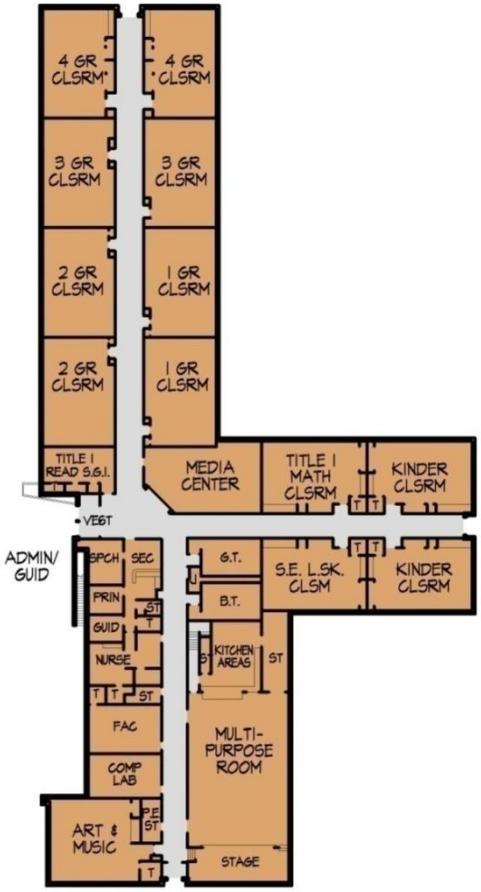

Lehighton Area Schools

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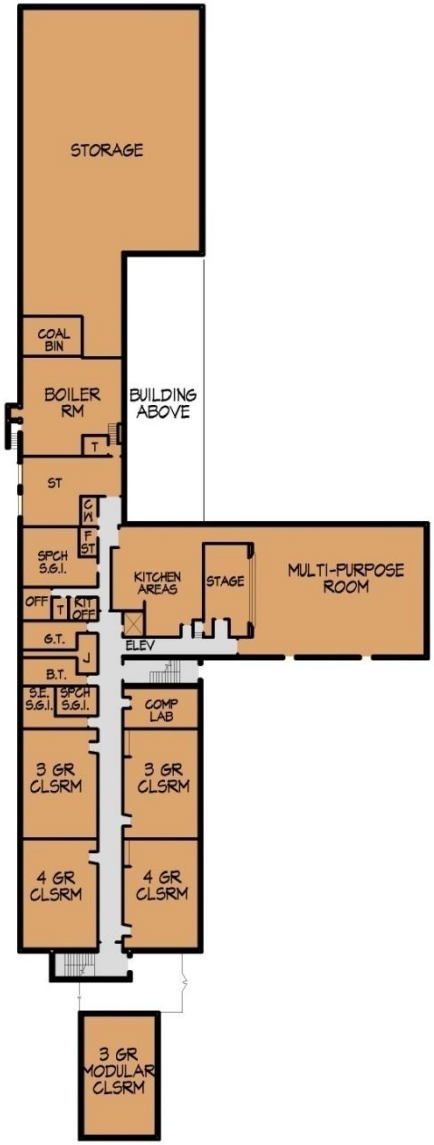

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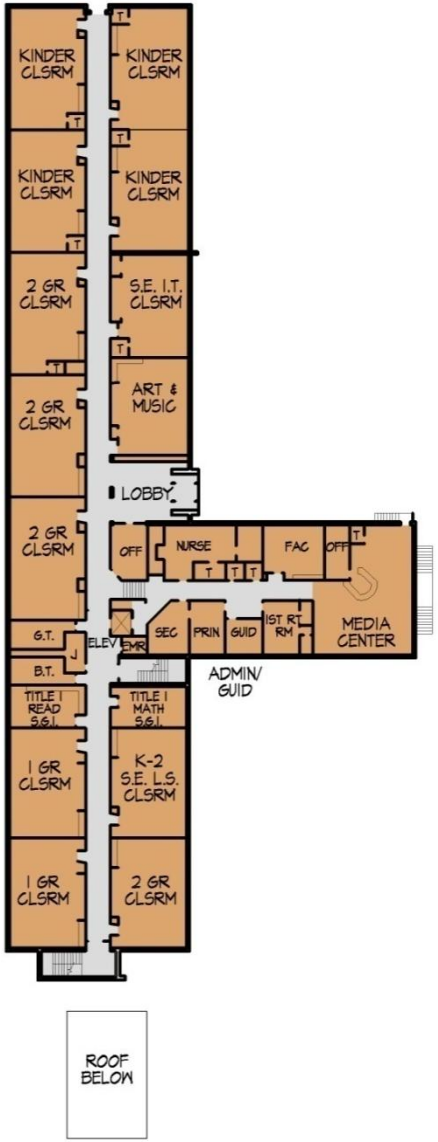

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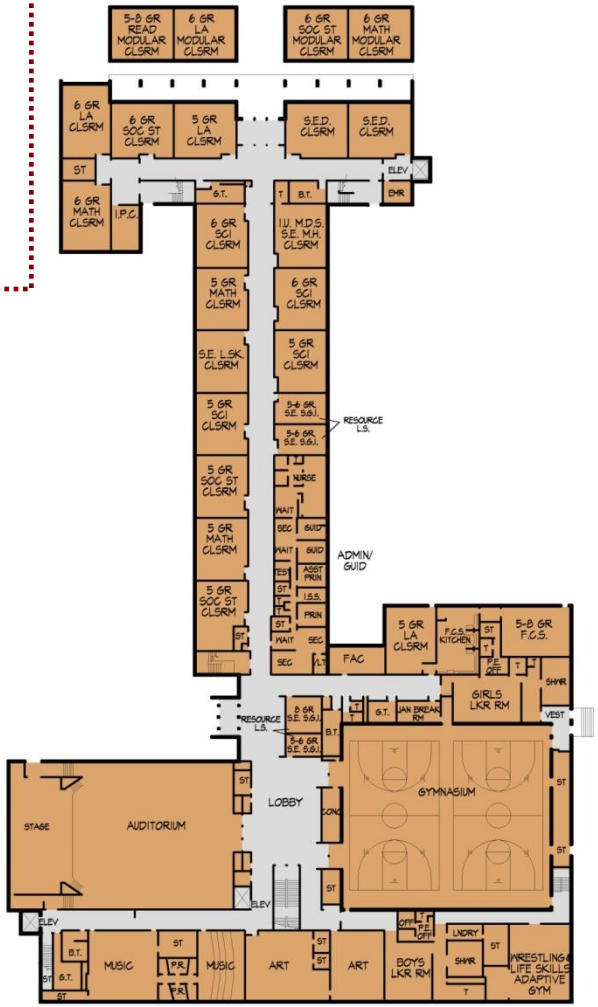
- Technology Upgrades
- Roof Replacement
- Window Replacement
- Refurbish Interior Finishes

- Repair Paving and Sidewalks
- Improve Site Drainage
- Improve Site Lighting

FIRST FLOOR



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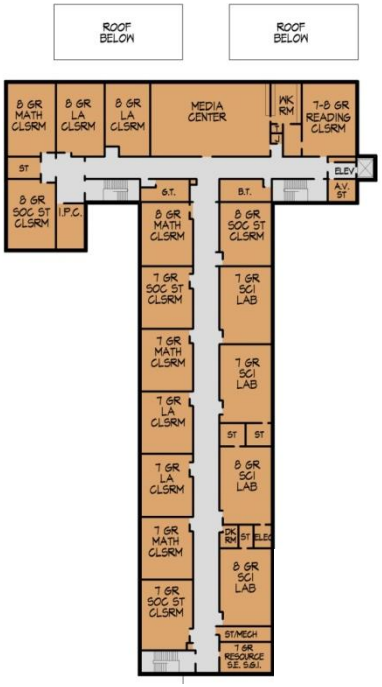

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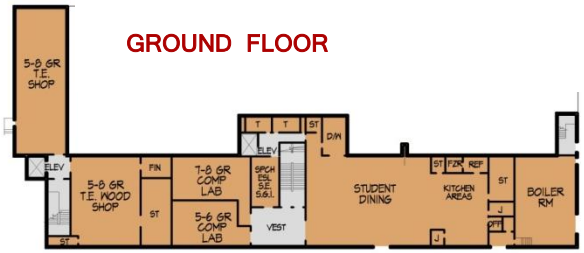

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- Improve Field Irrigation System
- Improve ADA Access to Fields

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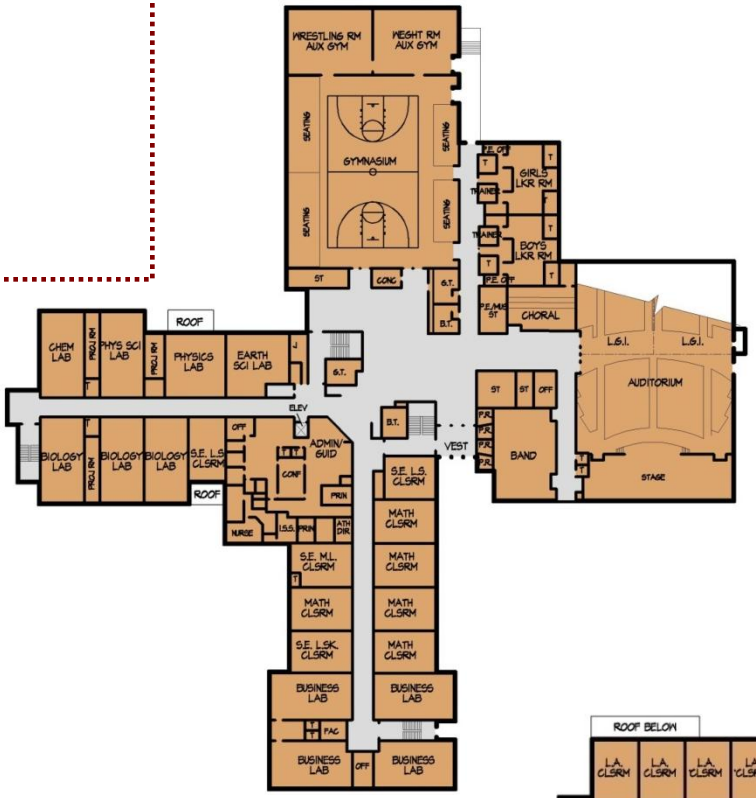

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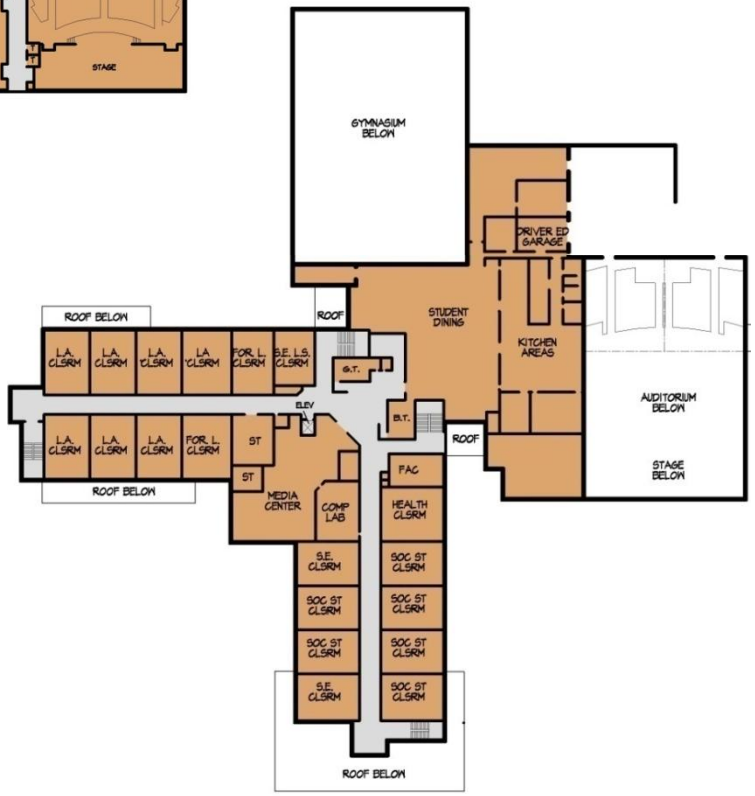

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Built:	**1994**
Site:	
Area:	**17,330 SF**
Capacity:	**29**
Current Enrollment:	**N/A**

IMPROVEMENTS

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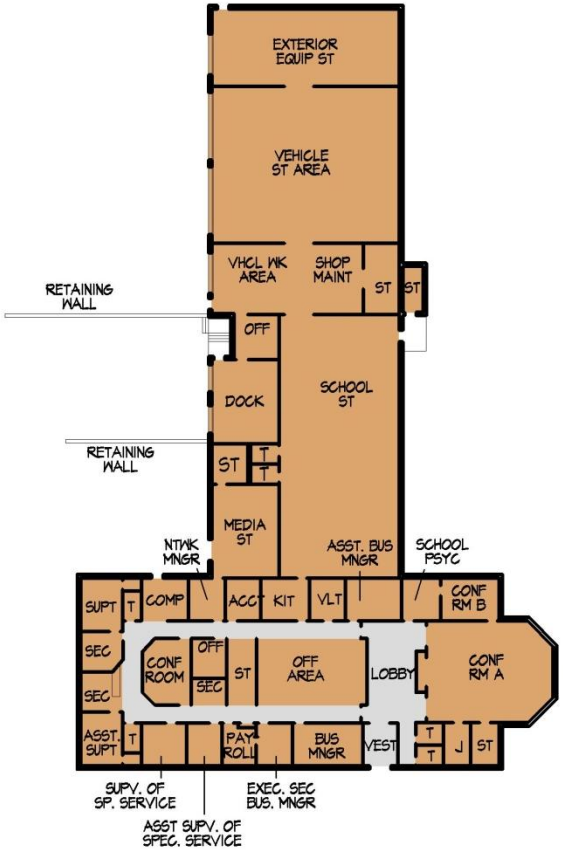
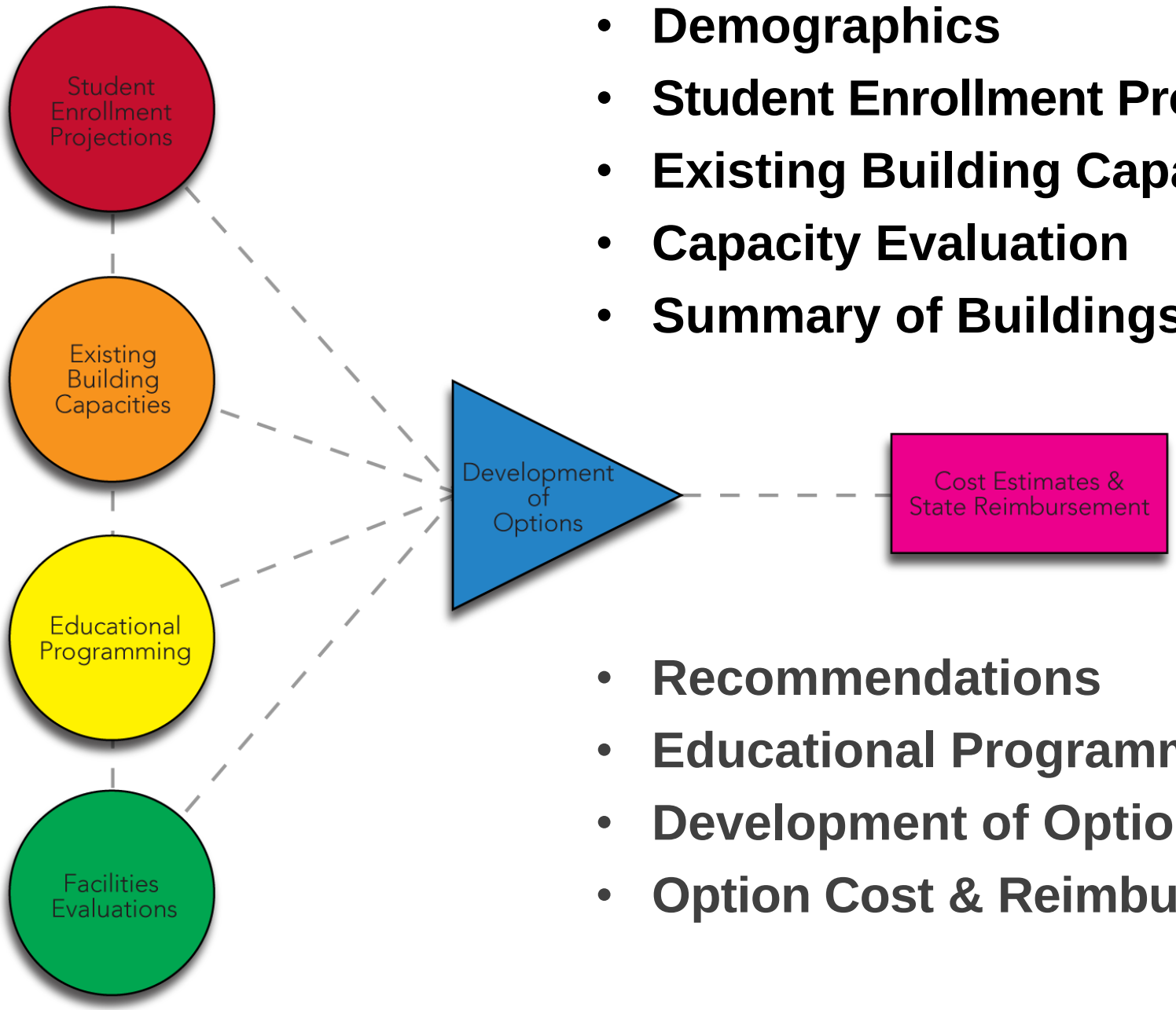
- Repair Paving and Sidewalks



Feasibility Study Process



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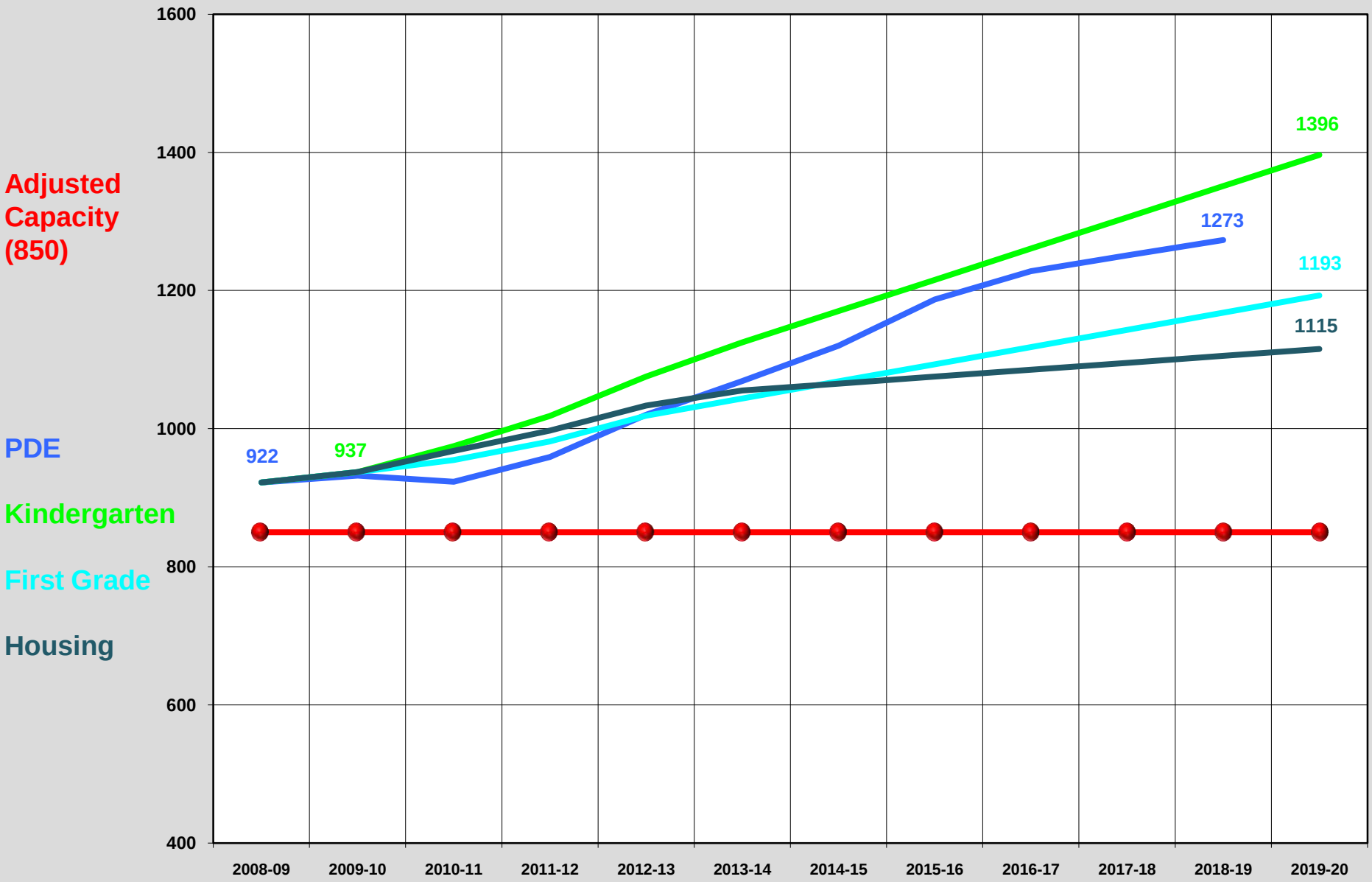
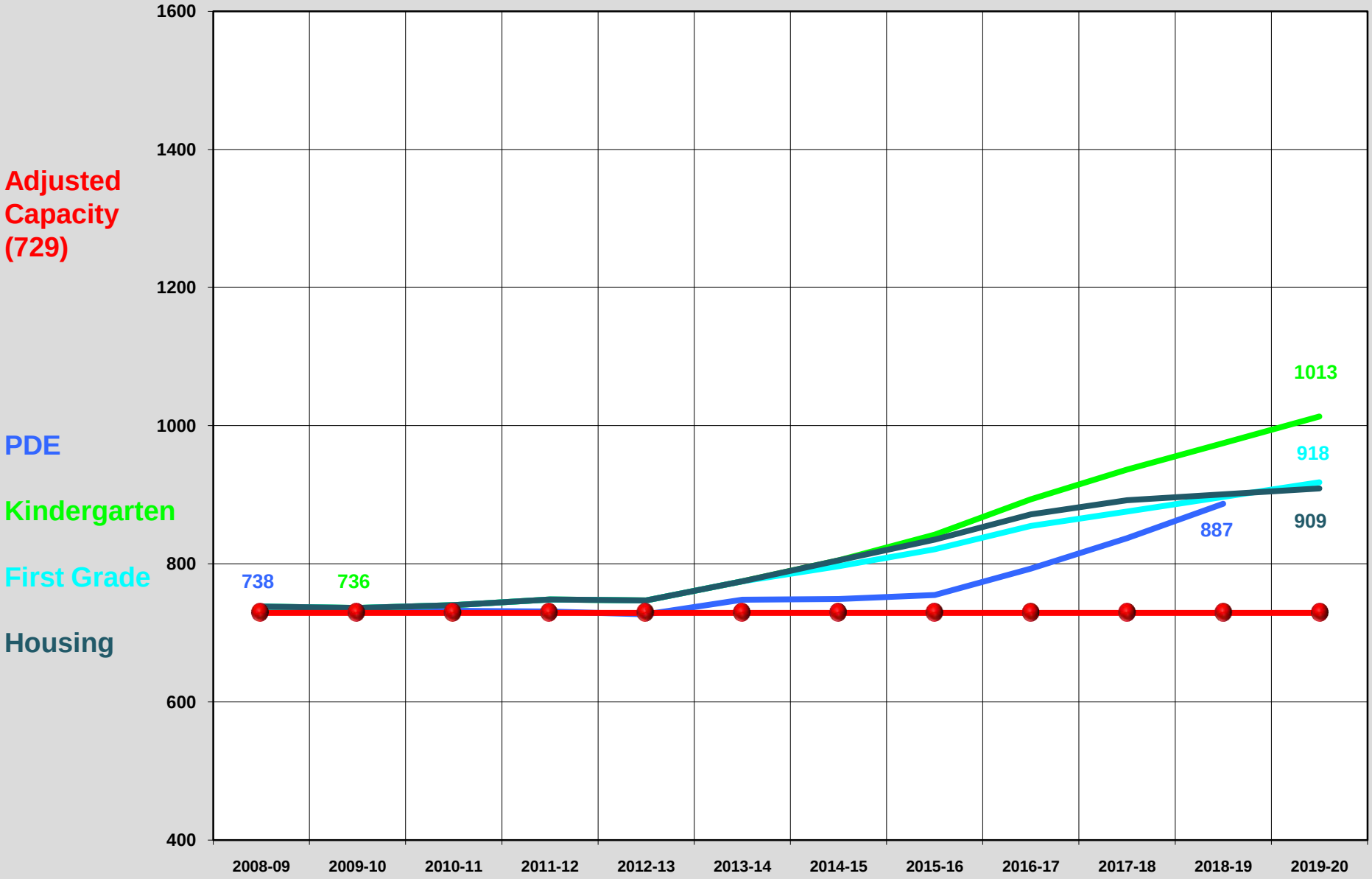
Pennsylvania Department of Education Enrollment Projections

	K	1	2	3	4	**K - 4**	5	6	7	8	**5 - 8**	9	10	11	12	**9 - 12**	**K-12**
2004-05	162	183	175	180	163	**863**	216	163	203	209	**791**	246	205	198	164	**813**	**2467**
2005-06	170	175	168	172	173	**858**	171	209	164	208	**752**	212	202	217	203	**834**	**2444**
2006-07	166	176	166	167	190	**865**	178	171	207	154	**710**	214	194	222	201	**831**	**2406**
2007-08	189	185	188	169	183	**914**	178	197	179	218	**772**	174	240	213	255	**882**	**2568**
2008-09	207	184	172	185	174	**922**	184	179	194	181	**738**	218	180	227	198	**823**	**2483**
RATIOS	1.157	1.195	0.932	0.995	1.005		1.005	99107	1.007	1.007		1.014	1.024	1.05	1.007		
2009-10	194	201	172	171	194	**932**	175	182	180	195	**732**	184	223	189	229	**825**	**2489**
2010-11	185	201	187	171	179	**923**	195	173	183	181	**732**	198	188	234	190	**810**	**2465**
2011-12	216	191	187	186	179	**959**	180	193	174	184	**731**	184	203	197	236	**820**	**2510**
2012-13	238	223	178	186	195	**1020**	180	178	194	175	**727**	187	188	213	198	**786**	**2533**
2013-14	243	246	208	177	195	**1069**	196	178	179	195	**748**	178	191	197	215	**781**	**2598**
2014-15	248	251	229	207	185	**1120**	196	194	179	180	**749**	198	182	201	198	**779**	**2648**
2015-16	252	256	234	228	217	**1187**	186	194	195	180	**755**	183	203	191	202	**779**	**2721**
2016-17	257	260	239	233	239	**1228**	218	184	195	196	**793**	183	187	213	192	**775**	**2796**
2017-18	262	265	242	238	244	**1251**	240	216	185	196	**837**	199	187	196	215	**797**	**2885**
2018-19	266	270	247	241	249	**1273**	245	238	218	186	**887**	199	204	196	197	**796**	**2956**

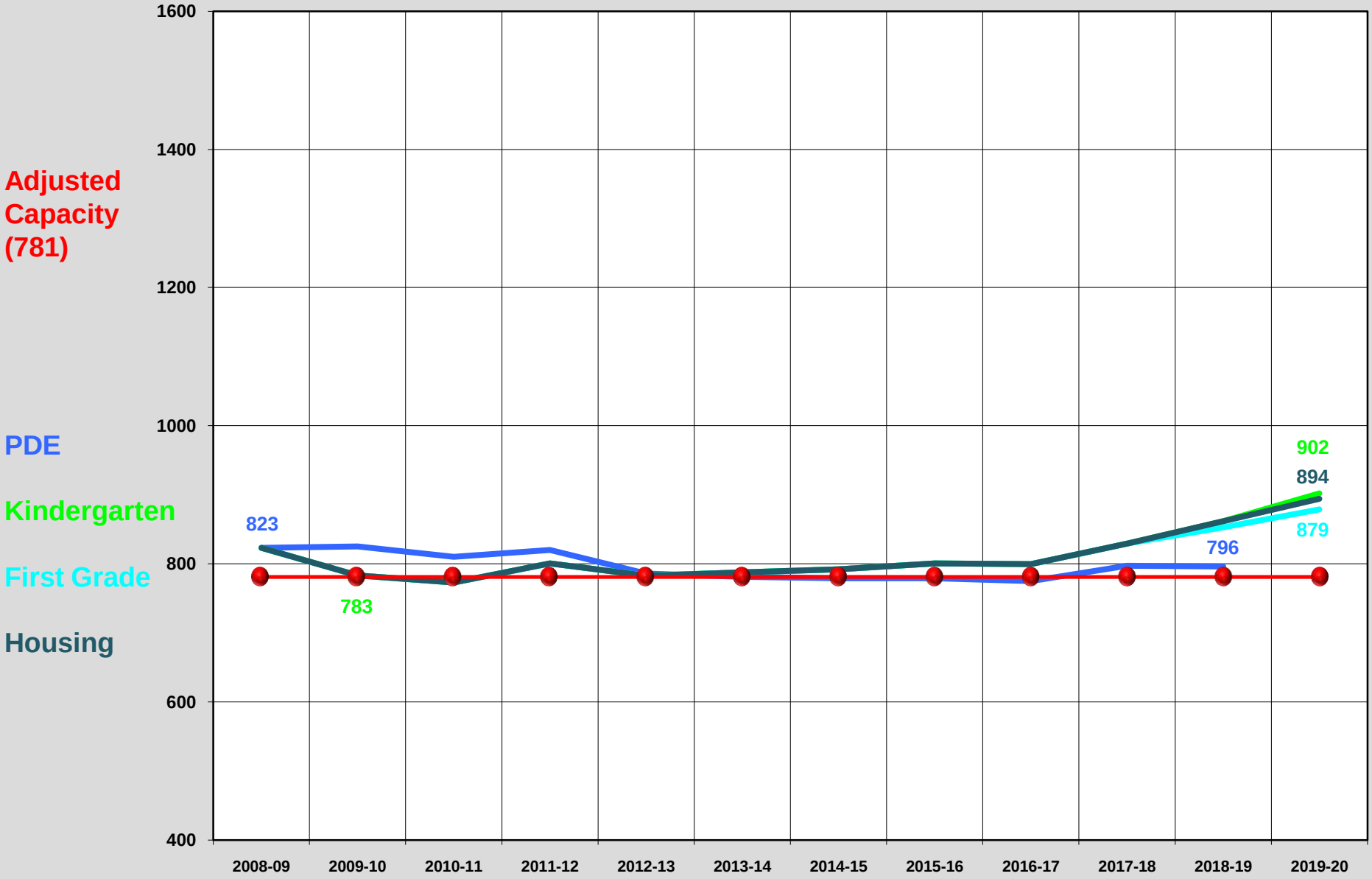
K – 4 Capacity vs. Enrollment



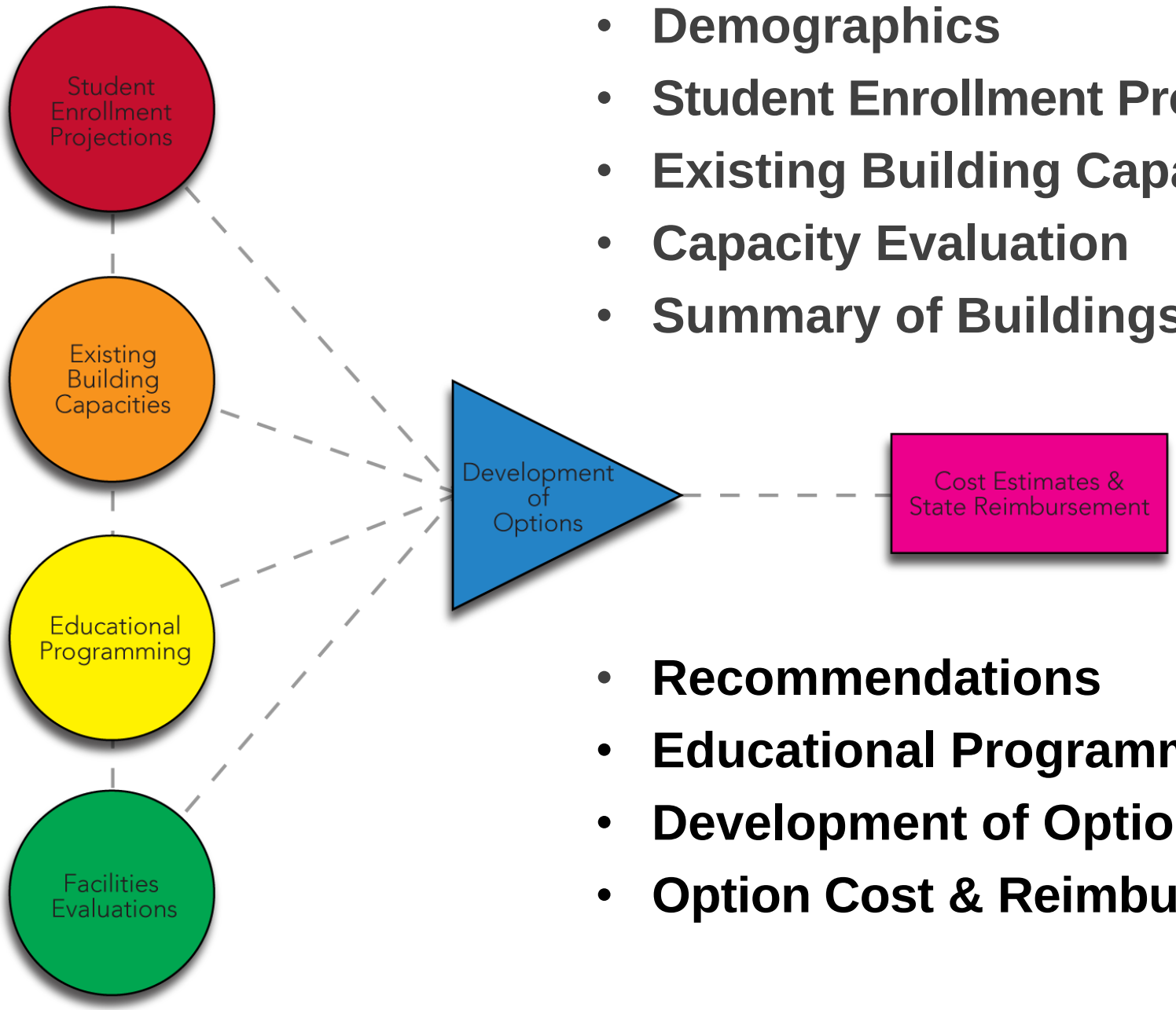
5 – 8 Capacity vs. Enrollment



9 – 12 Capacity vs. Enrollment



Recommendations



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Lehighton Area Middle School

GRADES 5-8

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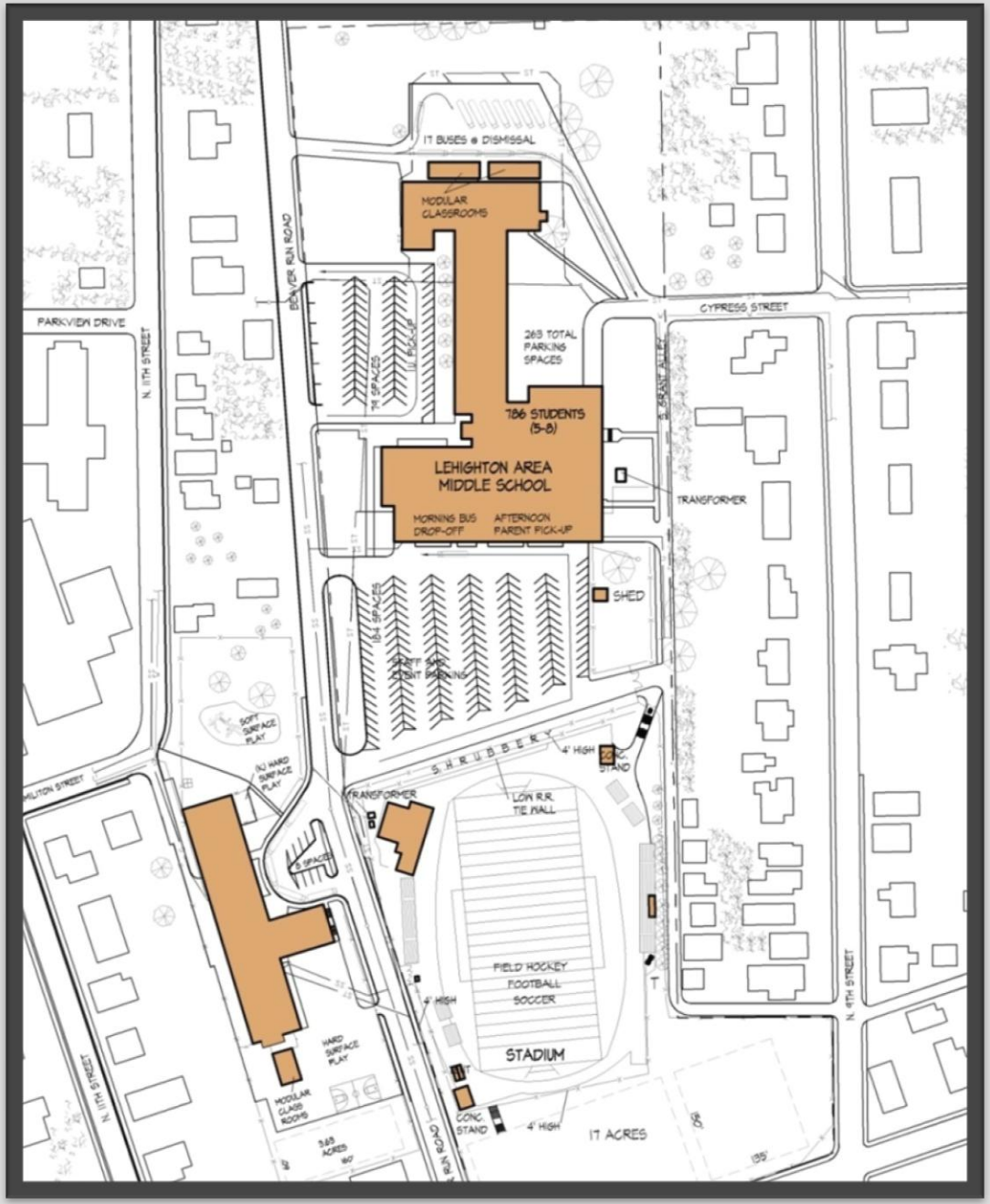
Lehighton Area Middle School

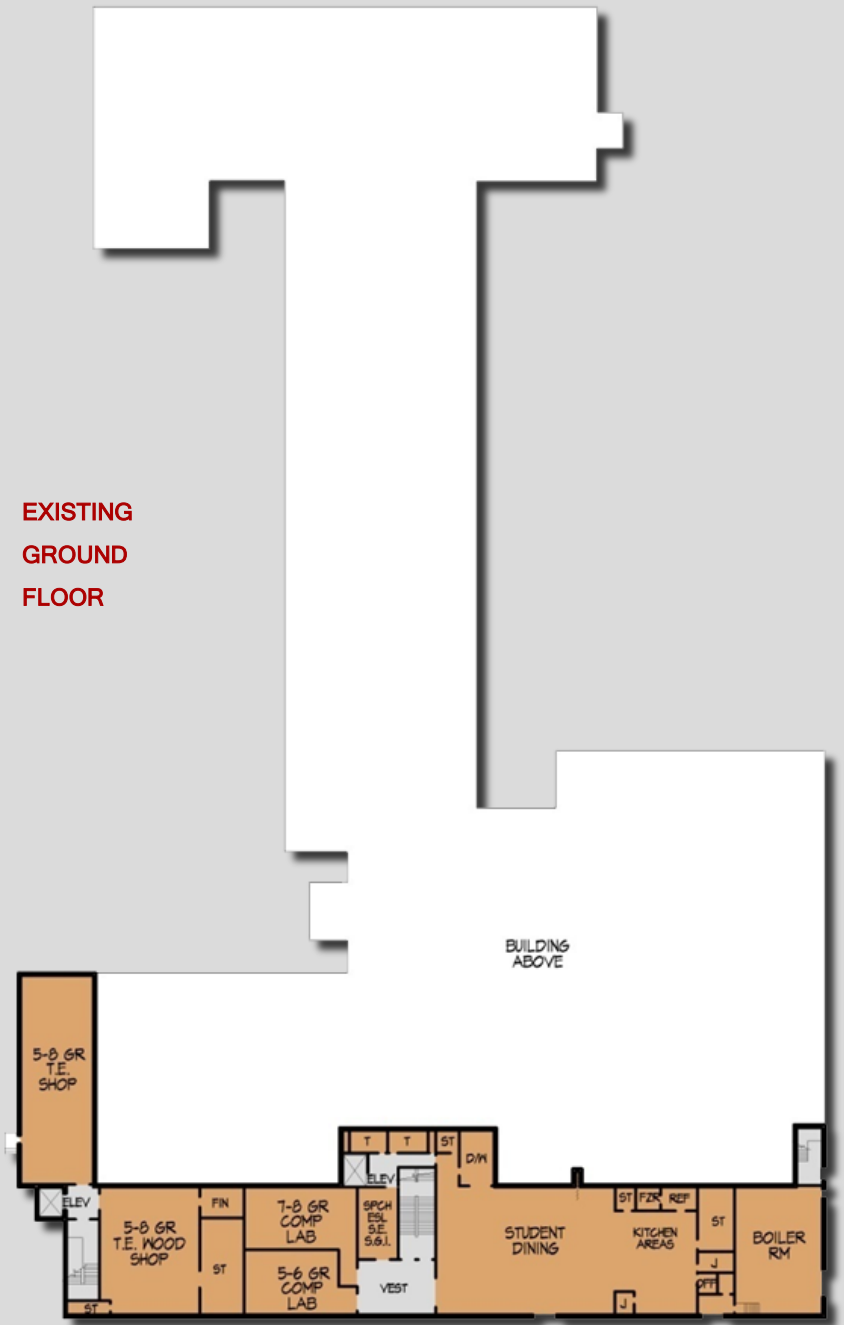


SITE IMPROVEMENTS

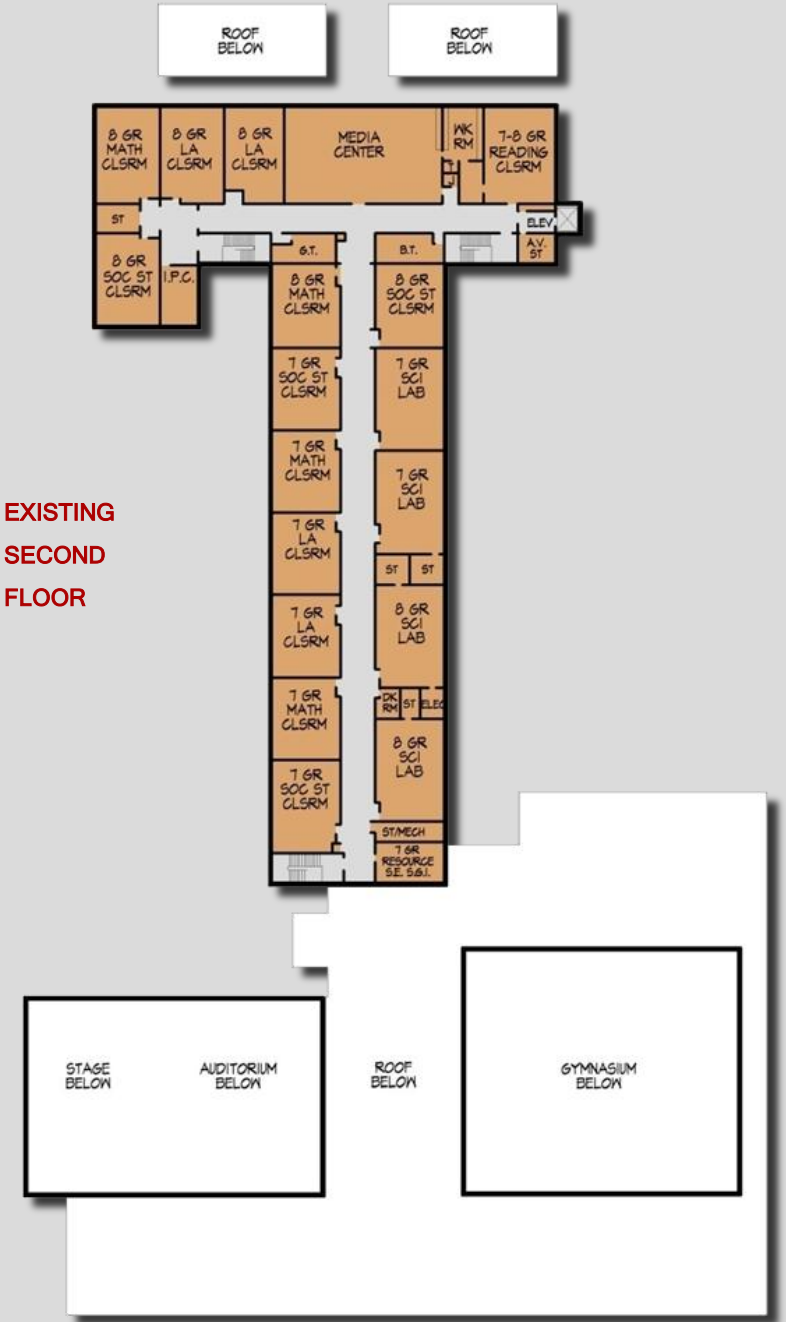
- Repair Paving
- Improve Site Drainage
- Improve Site Lighting

Lehighton Area Middle School

EXISTING GROUND FLOOR



EXISTING FIRST FLOOR



EXISTING SECOND FLOOR

IMPROVEMENTS

- Replace Infrastructure Systems:

  Mechanical Electrical Plumbing

- Security & Technology
- Building Code and Accessibility
- Improved Energy Use

Lehighton Area Middle School

Paving deteriorating in Drives

Paving deteriorating in Drives

Lehighton Area Middle School

Typical Roof Area-Installed in 1988 (rubber roof)

Recoated to extend life cycle of rubber membrane

Stair Railings (do not meet current requirements)

Emergency Generator (Exit Signs and Egress Lighting Only)

Blocked Drains (in walls and below concrete)

ATC Air Compressor/Air Dryer (pneumatic controls limited outdated technology)

Typical Asbestos Pipe Insulation and Valves Throughout Building (above ceilings etc.) (please note many of the valves leak or are frozen in their current position)

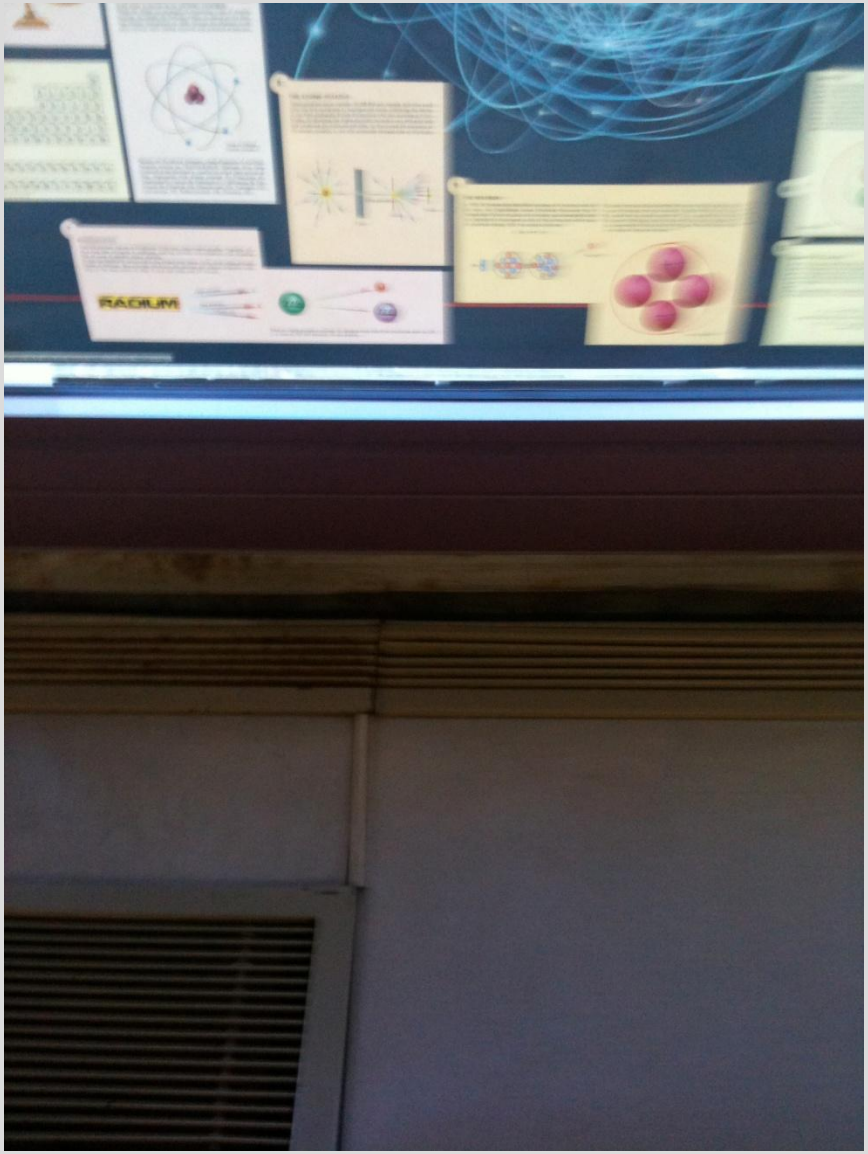
Lehighton Area Middle School

Asbestos Floor Tiles in Classrooms (also underneath carpeted areas)

Typical Pipe Chase with Asbestos Insulation

Lehighton Area Middle School

Unit Vent/No Wall Insulation



Unit Vent/No Wall Insulation

Deterioration of External Dryvit Insulation System and Caulking

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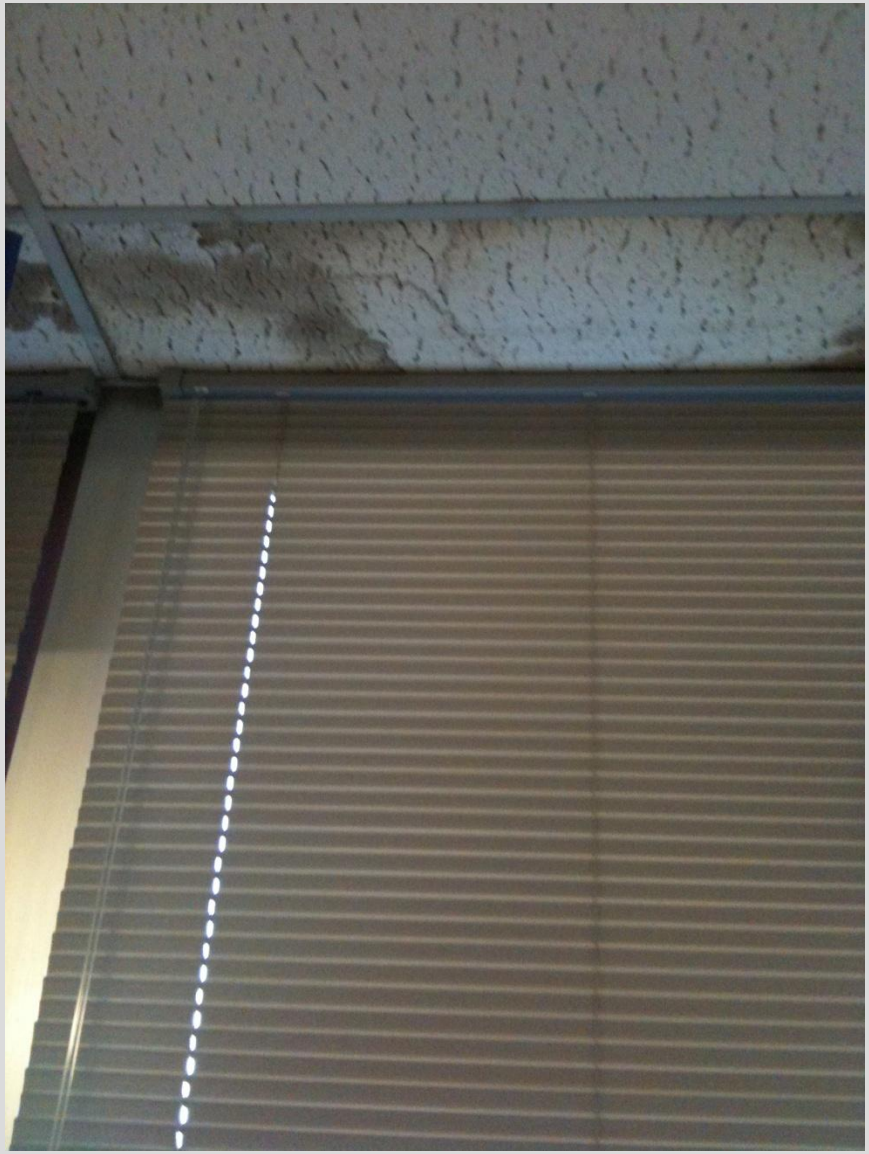


Leaking Curtain Wall System

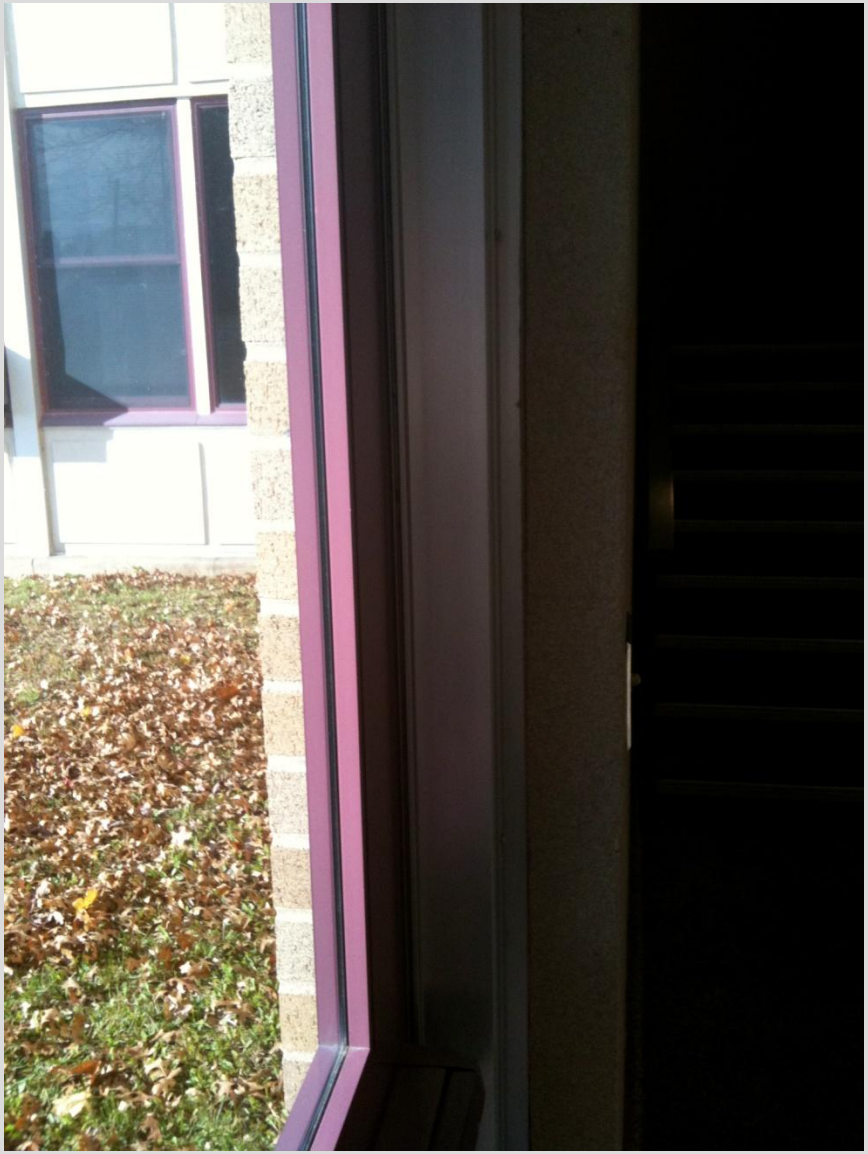
Fire Alarm Panel / Phone Dialer-Non Addressable System (Does Not Meet Current NFPA Code Requirements)

Security Panel (Obsolete Currently to be Replaced)

Typical Sub-Main Electrical Distribution Panel (Breakers Overheating Internally)

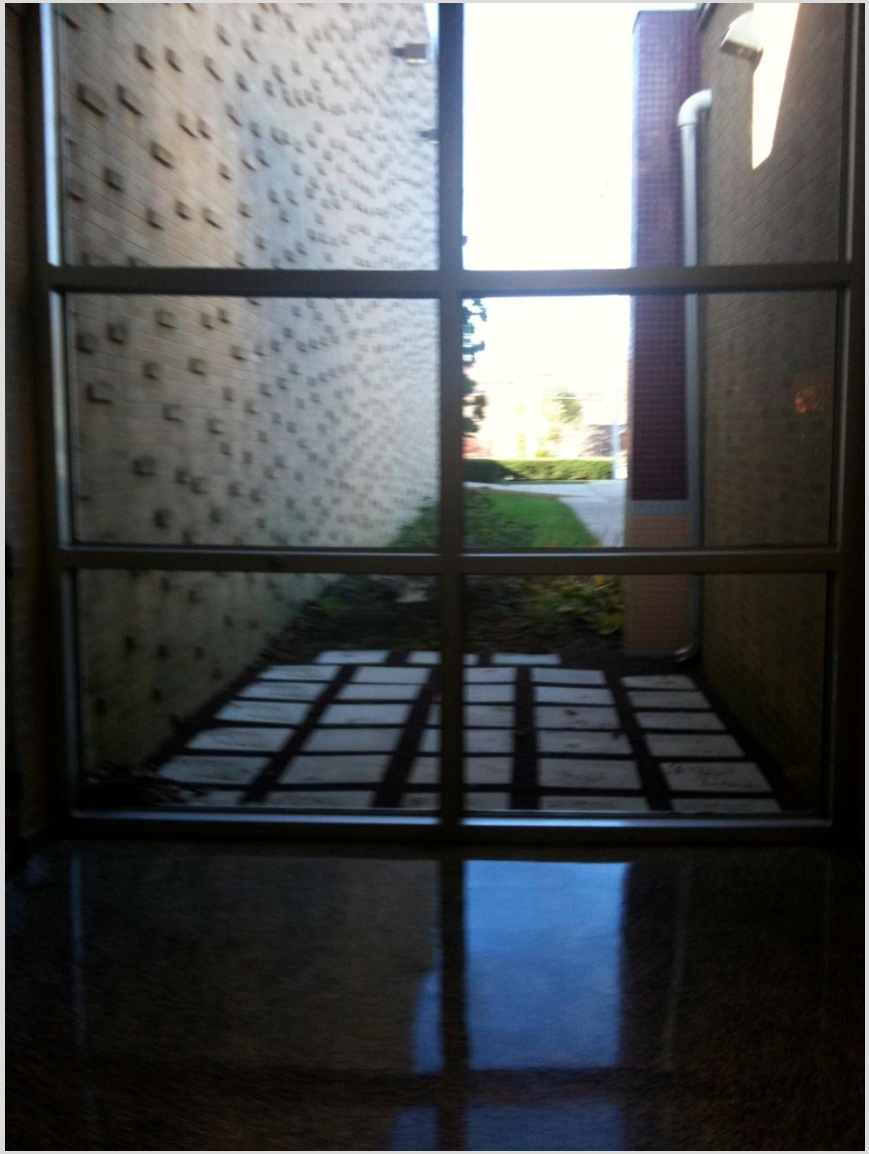
Lehighton Area Middle School

Typical Exterior Dryvit Panels Installed Over Metal Sheeting



Masonry Side View at Doorway-No Insulation Between Interior and Exterior Masonry Units

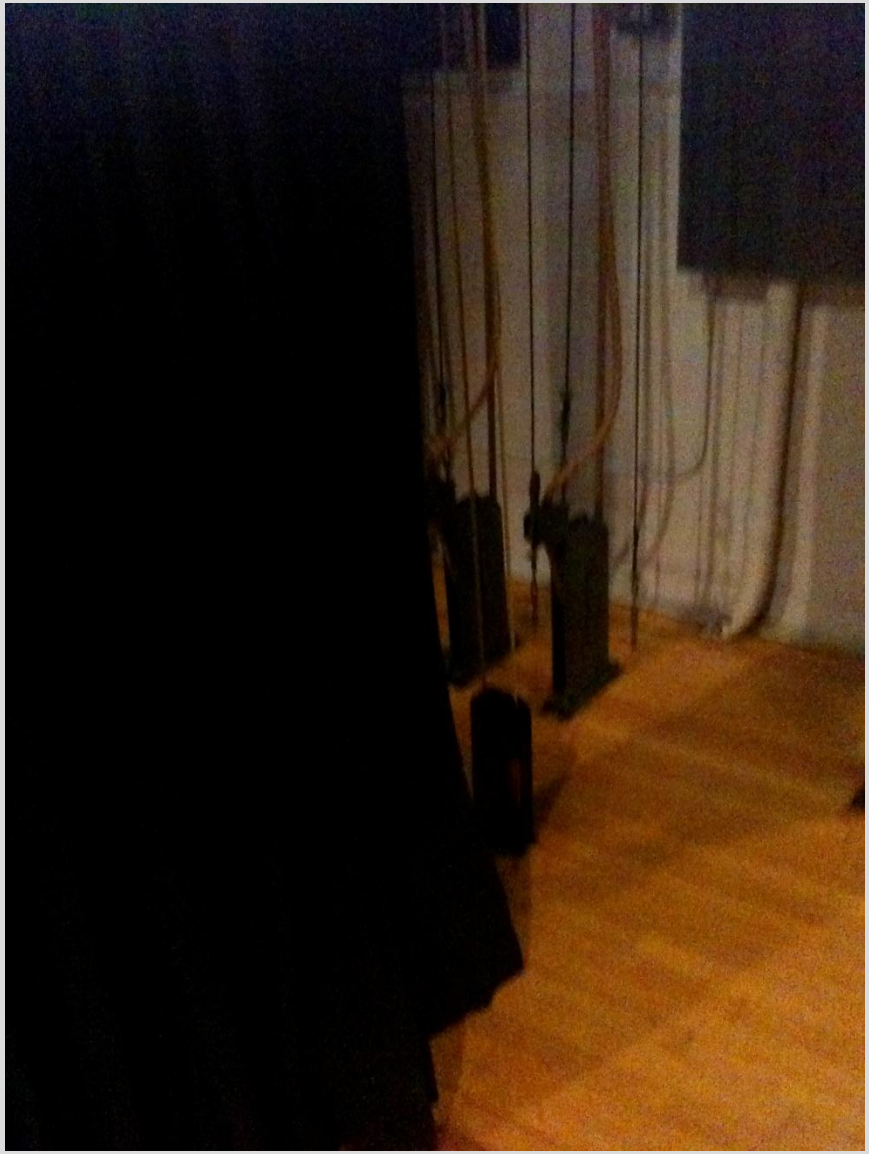
Lehighton Area Middle School



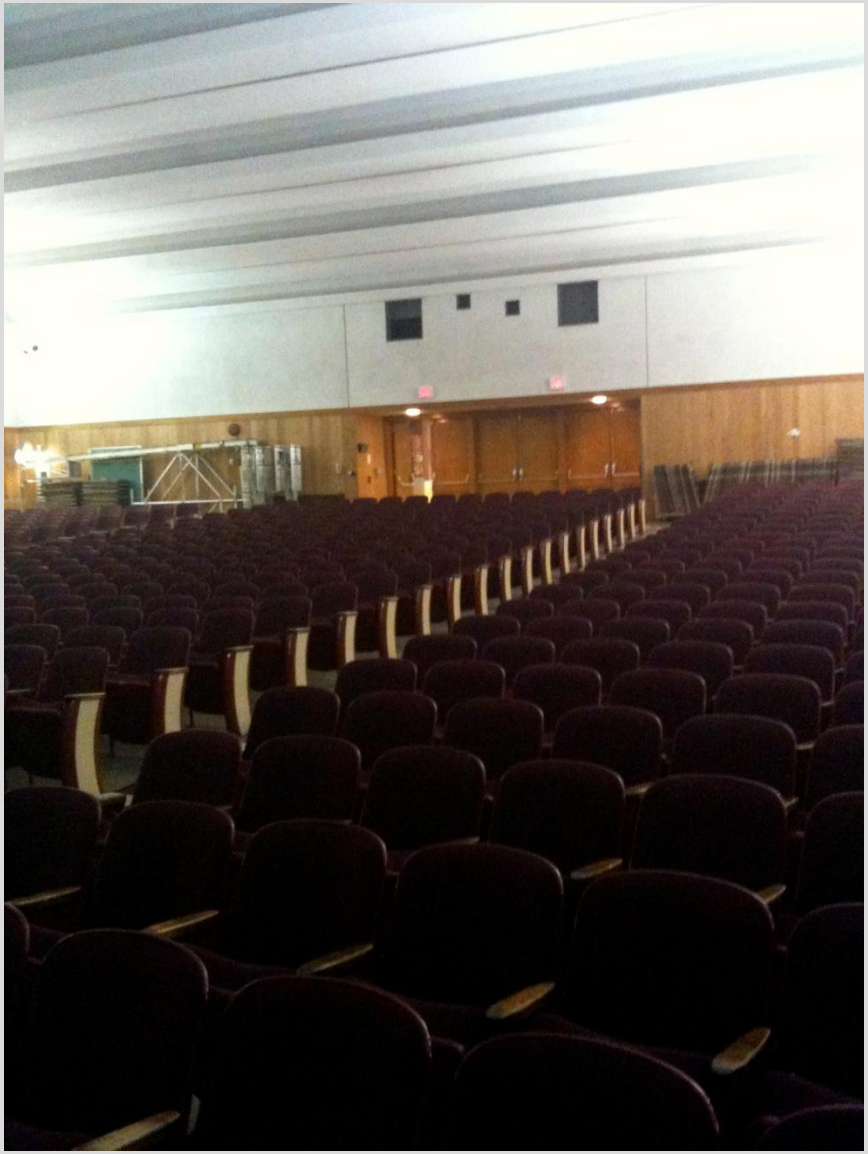
Single Pane Glass/Aluminum Frame at Main Entrance

Single Pane Glass/Aluminum Frame at Main Entrance

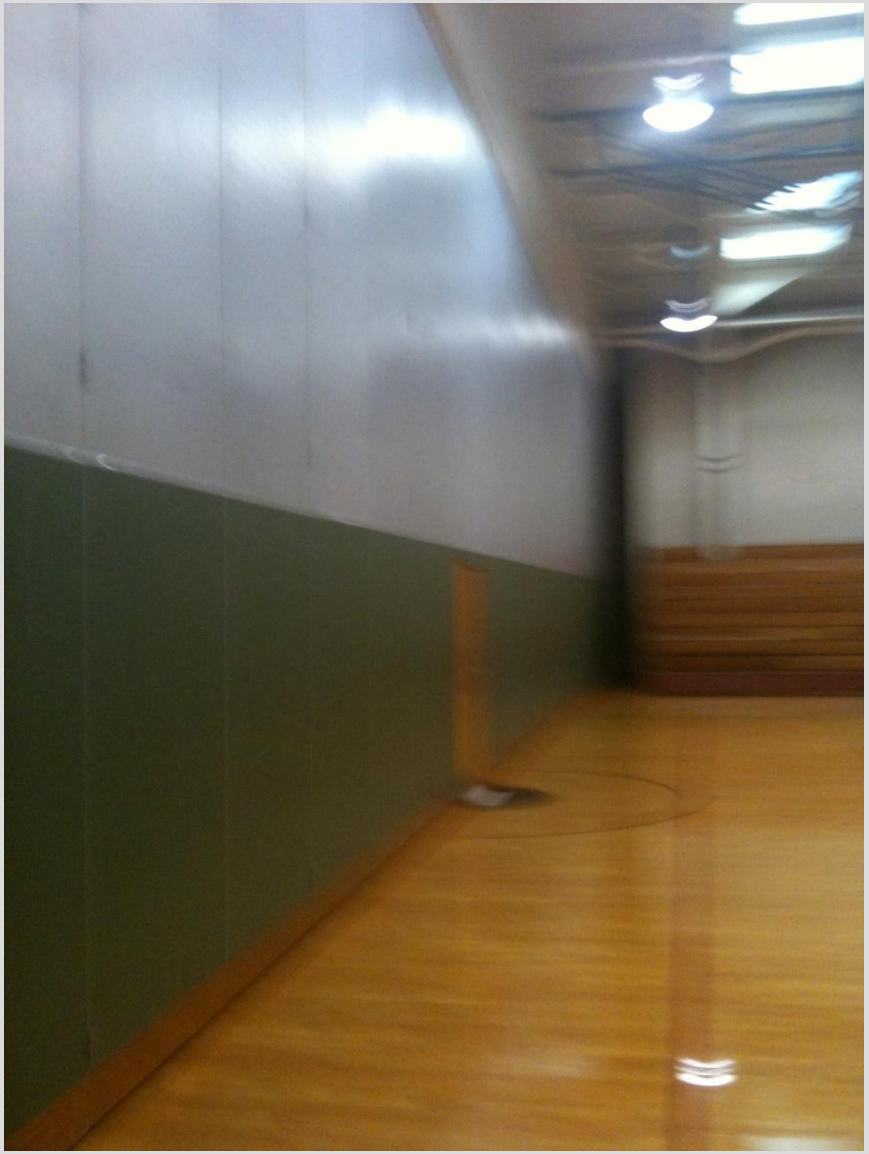
Lehighton Area Middle School



Stage Curtain Weighted Rope System (Safety Concern)



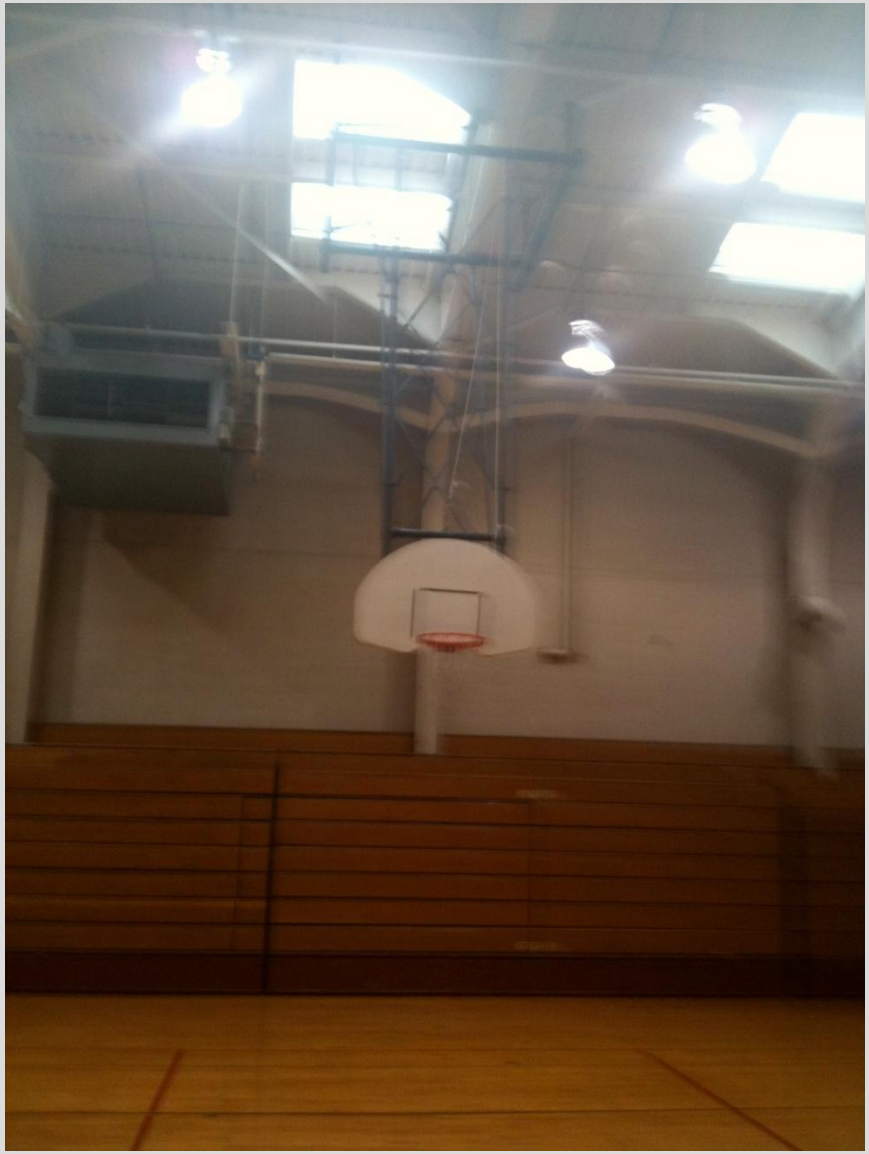
House Lighting/Asbestos Ceiling (lighting poor and inefficient)



Retractable Divider Wall (Safety and Maintenance Concerns)

Basketball Backboard Winch (Safety/Maintenance Concerns)

Lehighton Area Middle School



Sky Lights that are Deteriorating/Leaking as well as roof fasteners protruding through roof decking

Asbestos pipe insulation throughout

Lehighton Area Middle School

Dishwasher Room (old equipment , floor drain issues through out lower level of building)

Dishwasher Room (old equipment , floor drain issues through out lower level of building)

Lehighton Area Middle School

Food Serving Area

Walk-in Refrigerator/ Freezer (too small)

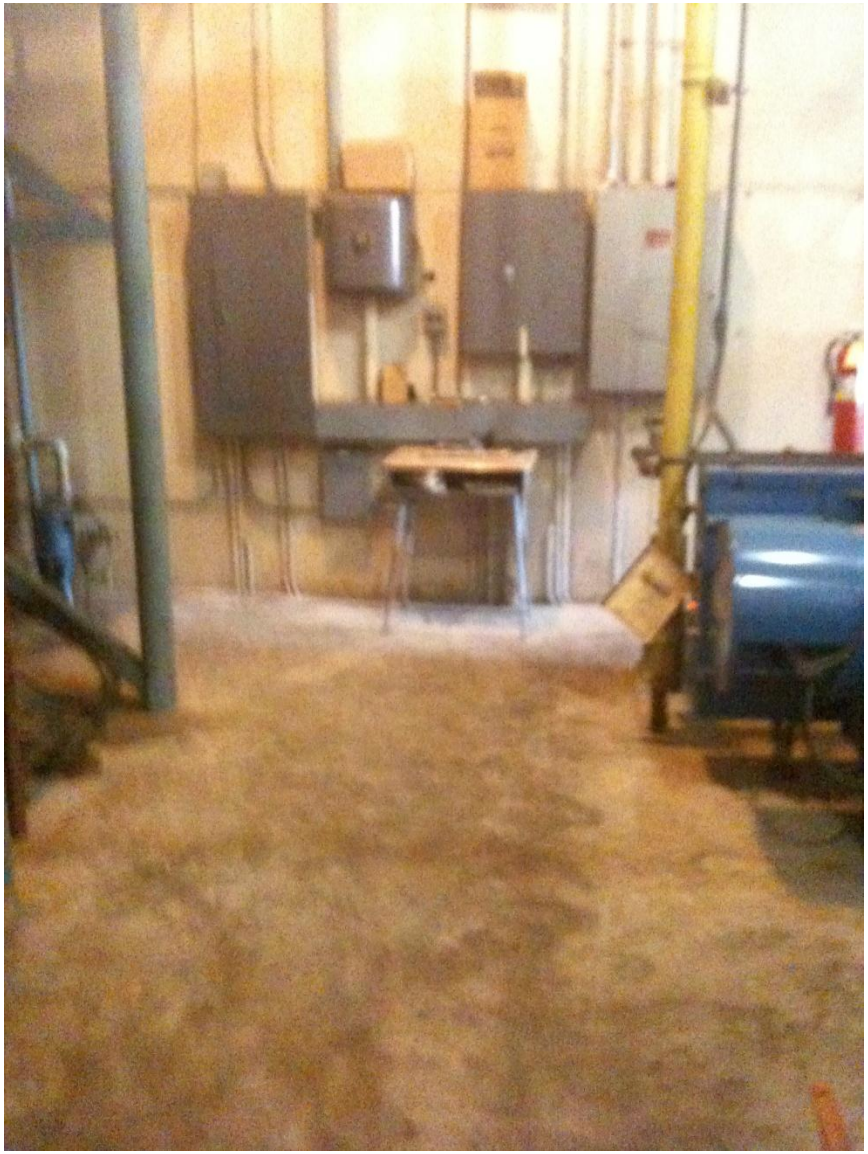
Lehighton Area Middle School

Student Area

Kitchen Equipment (old)

Lehighton Area Middle School

Electrical Main Panel



Electrical Sub Panel

Building Improvement Construction Costs

IMPROVEMENT CATEGORY	COST
SITE EVALUATION	$500,000.00
EXTERIOR EVALUATION	$83,500.00
INTERIOR EVALUATION	$2,269,000.00
HEATING / VENTILATION EVALUATION	$5,030,000.00
PLUMBING EVALUATION	$805,000.00
ELECTRICAL EVALUATION	$2,237,000.00
CODE EVALUATION	$1,199,500.00
SUBTOTAL	$12,124,000.00
EDUCATIONAL UPGRADES	$595,000.00
EDUCATIONAL RENOVATIONS	$2,679,500.00
TOTAL BUILDING	$15,398,500.00

Total Building cost addresses building improvements needed within the existing building. It does not include costs for any building additions which would address the modular classrooms or modifications for security.

Lehighton Area Middle School -- Options

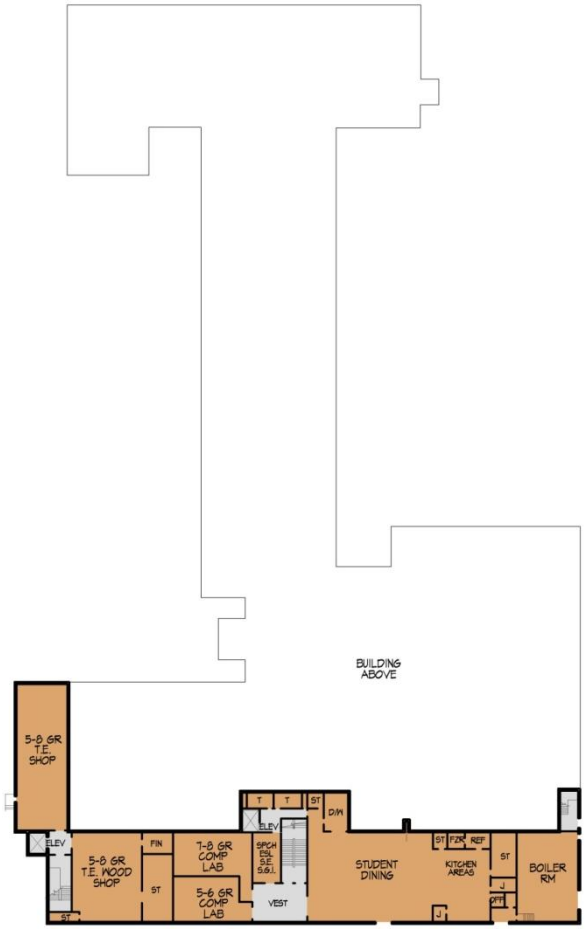
OPTION -- 5-8 Middle School Renovation & Expansion

Project Cost:	$21,500,000	
Max. Eligible Reimbursement:	$8,200,000	
Local Effort		$1,553,000
Millage Impact:		1.85

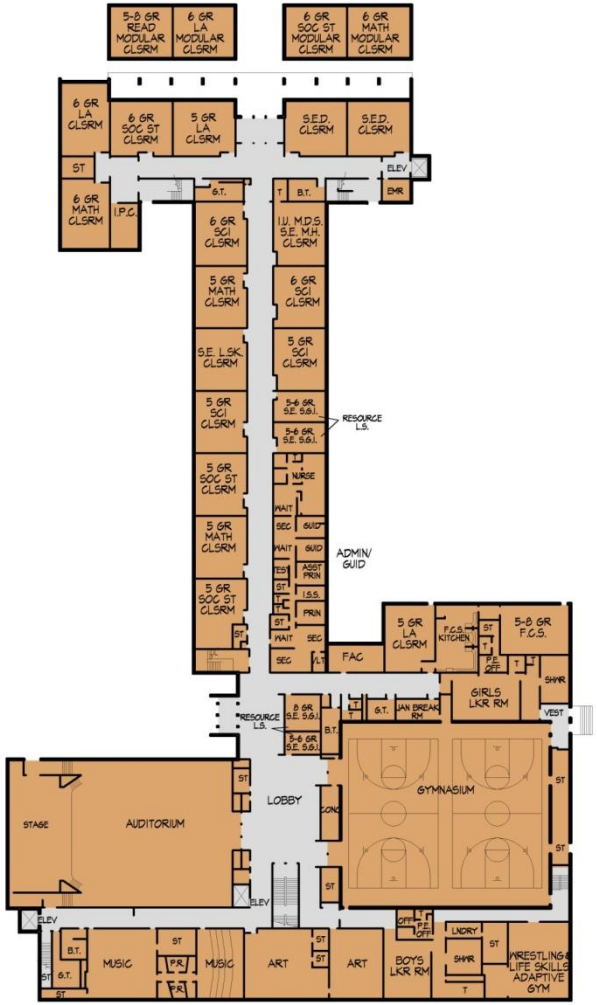
OPTION -- 5-8 New Middle School

Project Cost:	$25,875,000	
Max. Eligible Reimbursement:	$8,200,000	
Local Effort		$1,819,600
Millage Impact:		2.46

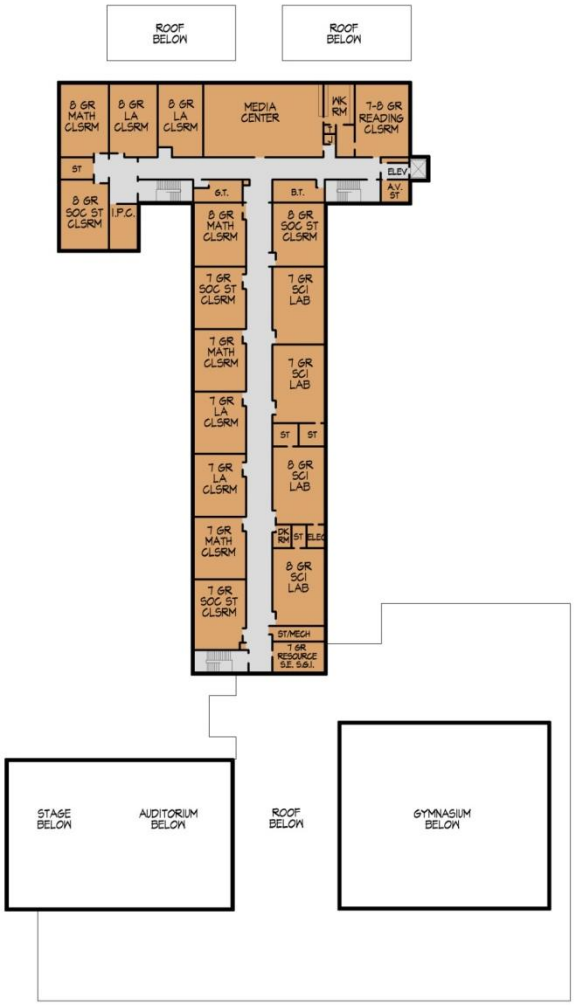
Existing Building



GROUND FLOOR



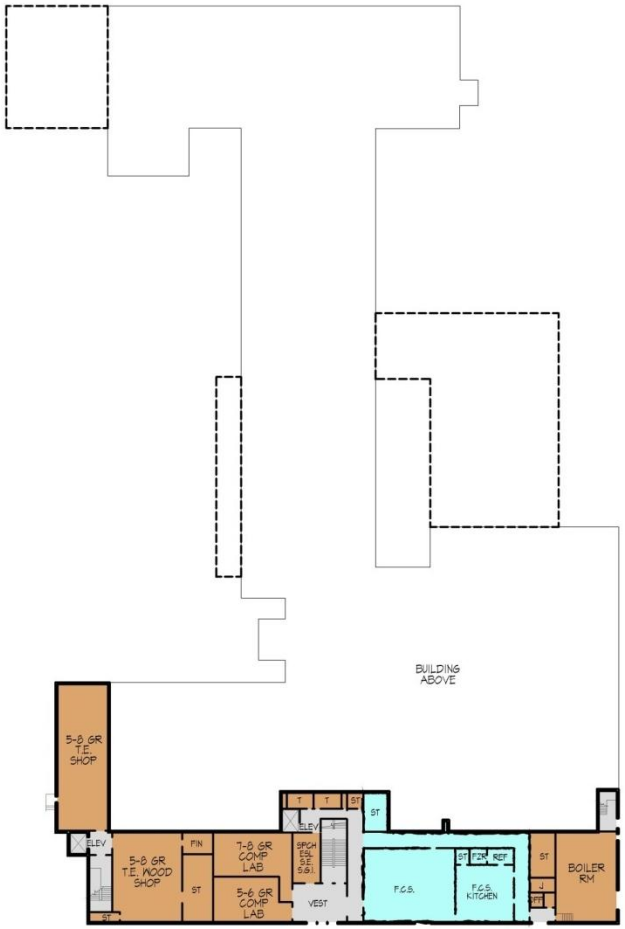
FIRST FLOOR



SECOND FLOOR

Option -- Renovation & Expansion

EXISTING AREA
RENOVATED AREA
NEW AREA



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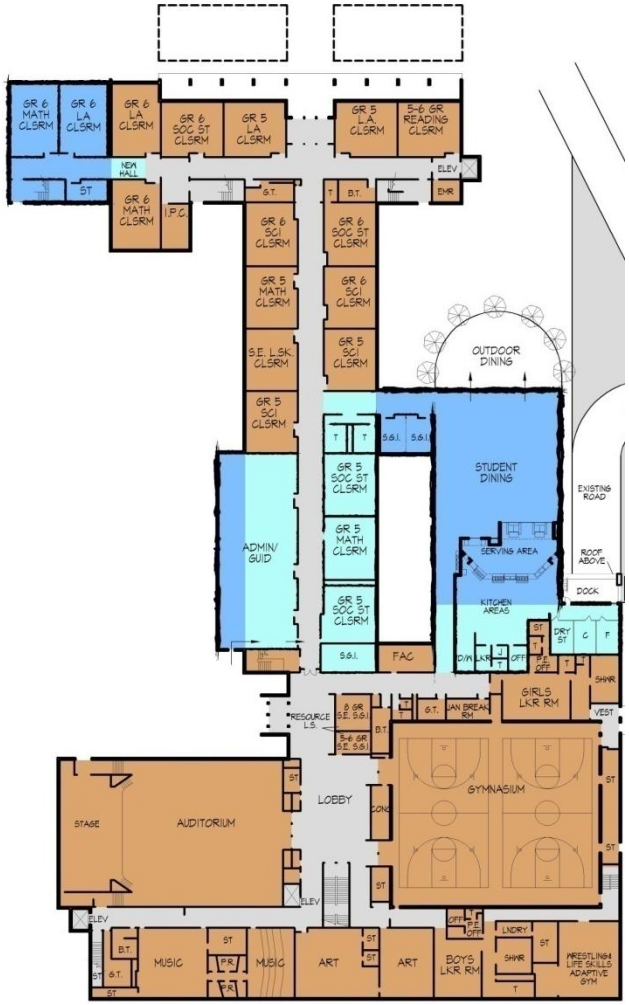
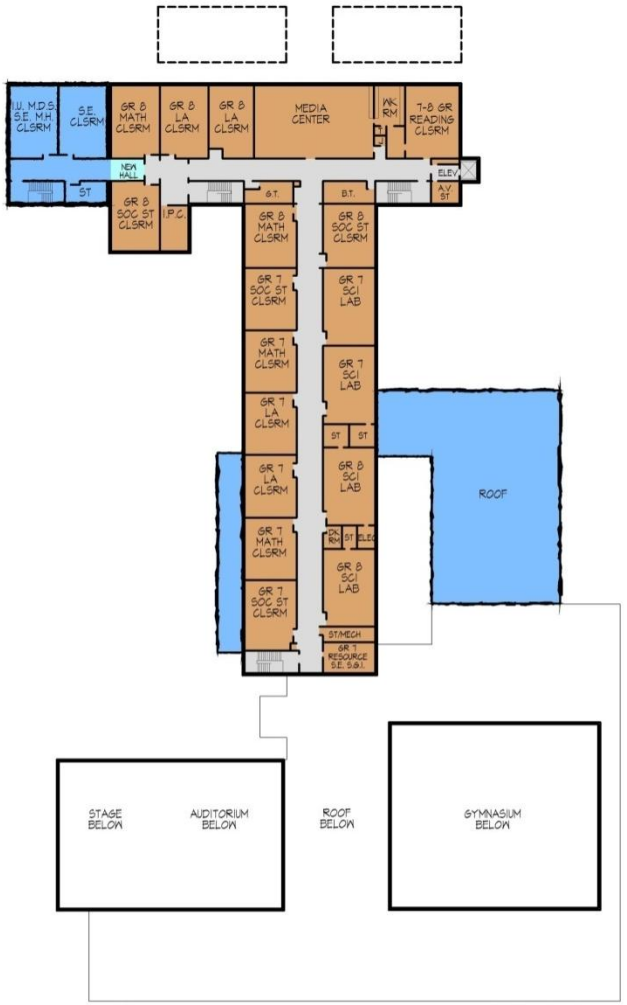


FIRST FLOOR



SECOND FLOOR

Lehighton Area Middle School

Option :

Renovation

& Expansion

Proposed Total Cost of Project	Local Effort after PDE Reimbursement	Cost to Taxpayers in Millage
$21,500,000	$1,553,000	1.85 Mills

Average Assessed Home Value : $44,250

Annual Cost : $80 Per Household

Break it down even more.....

Weekly Cost : $1.60

Daily Cost : 20 ¢

ENERGY COST DIFFERENCE : JUNE 2009 - MAY 2010

TRADITIONAL VS. GREEN SCHOOLS

SALISBURY ELEMENTARY SCHOOL

Building Area : 102,000 s.f.
Year Built : 1963, Addition in 1970 & 2002
Student Capacity: 600
Yearly Energy Cost :

$82,016 (.81¢ / S.F.)

PARADISE ELEMENTARY SCHOOL

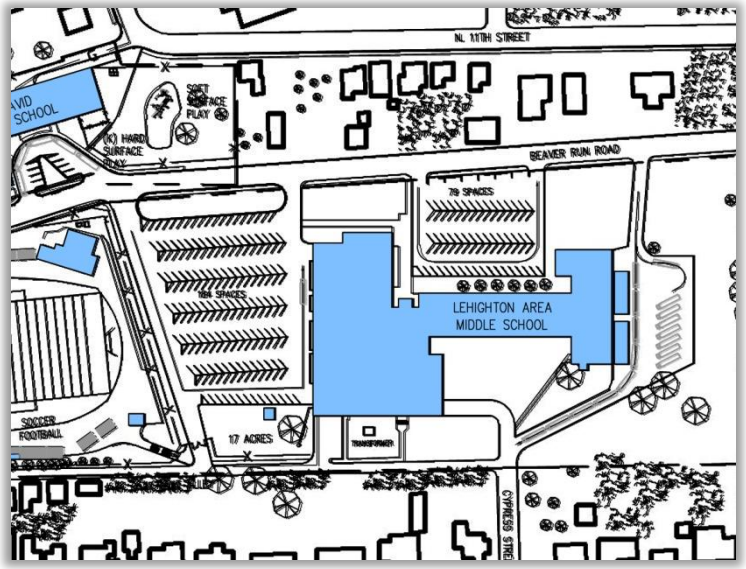
Building Area : 92,140 s.f.
Year Built : December 2008
Student Capacity: 600
Yearly Energy Cost :

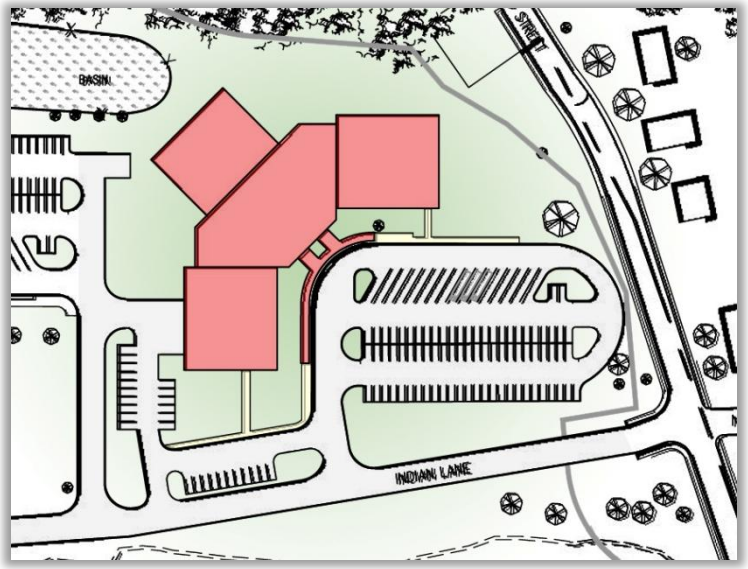
$29,489 (.32¢ / S.F.)

$52,527
YEARLY DIFFERENCE

ENERGY COST DIFFERENCE : 1 YEAR ESTIMATION

EXISTING MIDDLE SCHOOL VS. NEW MIDDLE SCHOOL





EXISTING LEHIGHTON AREA MIDDLE SCHOOL

Building Area : 118,400 s.f.

July 2009 to June 2010

NEW LEHIGHTON MIDDLE SCHOOL

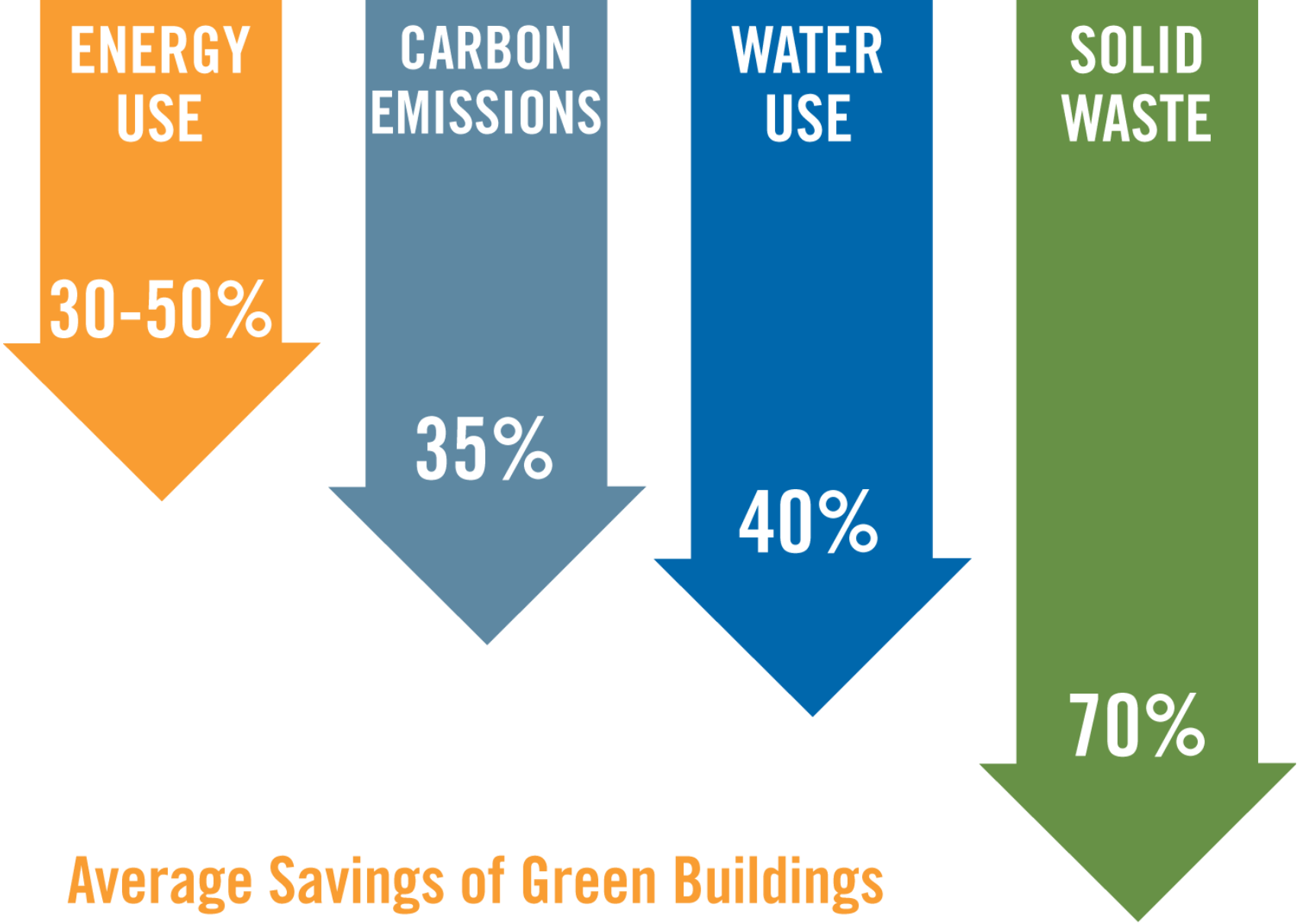
Building Area : 115,000 s.f.

$156,437 ($1.32 / S.F.)

$40,250 (.35¢ / S.F.)

$116,180

YEARLY DIFFERENCE



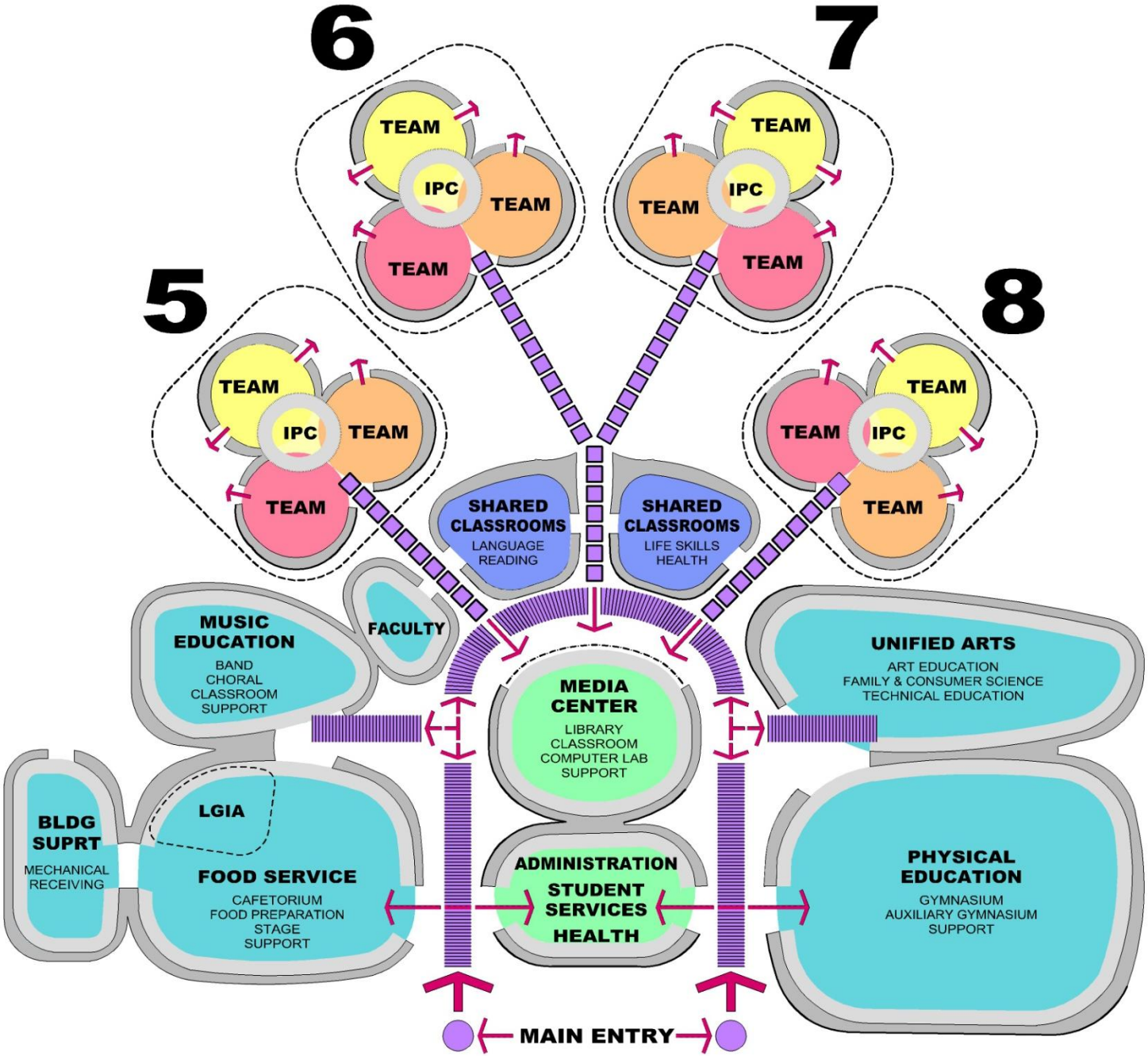
Average Savings of Green Buildings

PDE Eligible Reimbursement for LEED

$730,000

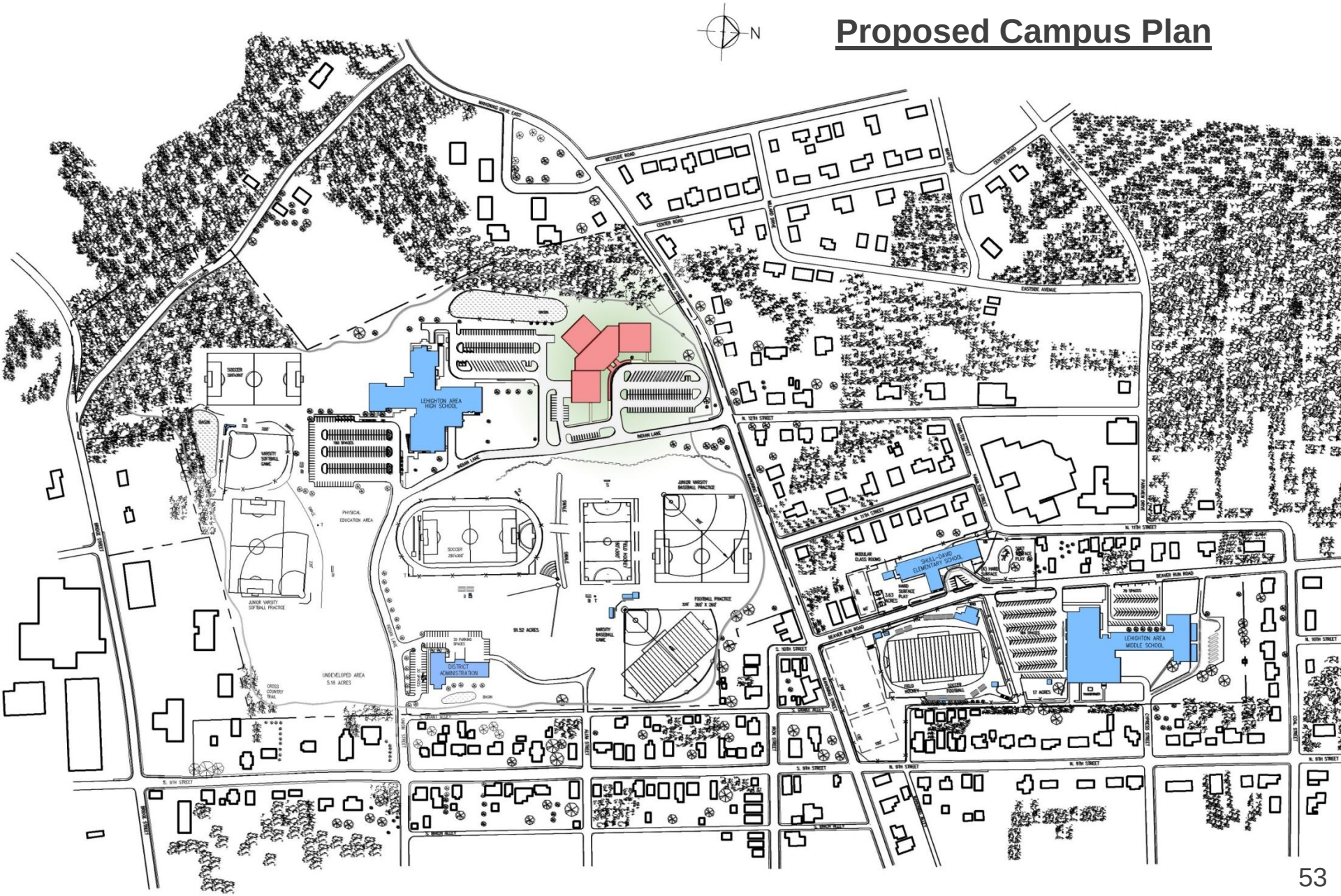
Pennsylvania Department of Education provides 10% Additional Eligible Reimbursement for LEED Silver Certified Projects

Middle School Conceptual Diagram



Option -- New Building

Proposed Campus Plan



Option -- New Building

Proposed Campus Plan

Lehighton Area Middle School

Option :

New Middle School

Proposed Total Cost of Project	Local Effort after PDE Reimbursement	Cost to Taxpayers in Millage
$25,875,000	$1,819,600	2.46 Mills

Average Assessed Home Value : $44,250

Annual Cost : $110 Per Household

Break it down even more.....

Weekly Cost : $2.10

Daily Cost : 30 ¢

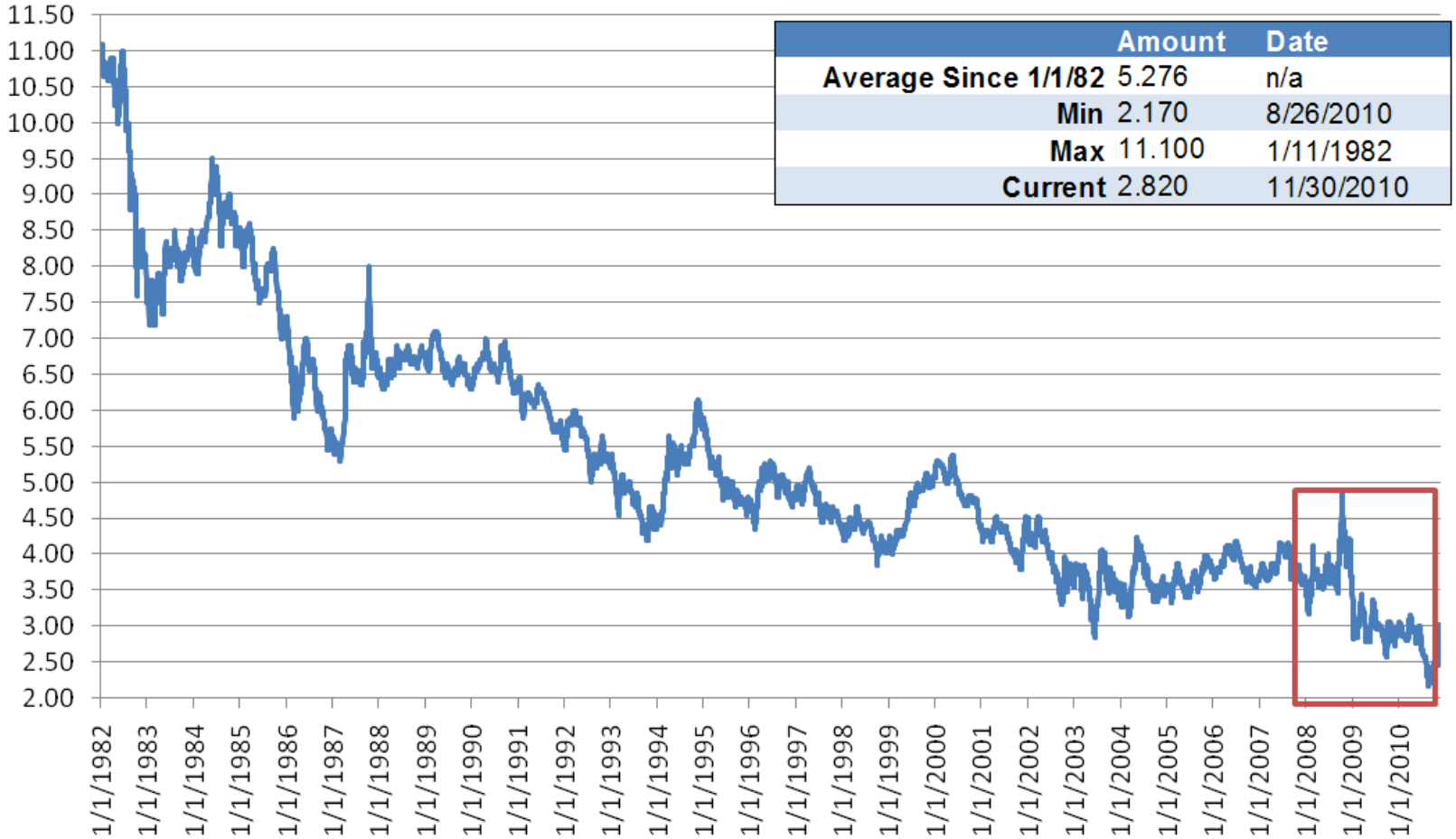
Option : Renovation & Expansion

Project Cost	Millage Impact	Daily Cost
$21,500,000	1.85	20 ¢

Option : New Building

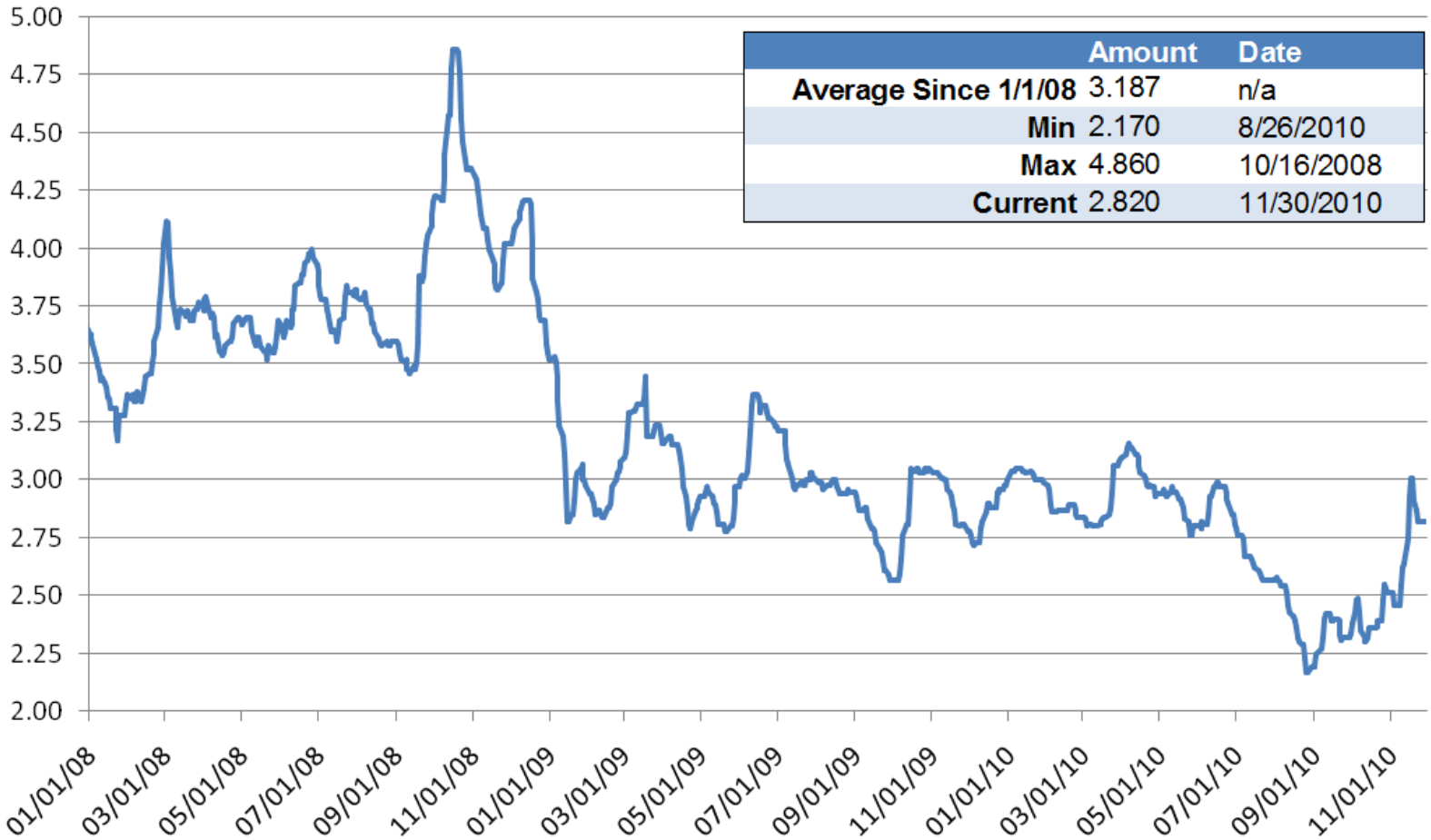
Project Cost	Millage Impact	Daily Cost
$25,875,000	2.46	30 ¢

10 Year MMD *(AAA Fixed Rate Bond Rates)*
1/1/1982 - 11/29/2010



	Amount	Date
Average Since 1/1/82	5.276	n/a
Min	2.170	8/26/2010
Max	11.100	1/11/1982
Current	2.820	11/30/2010

10 Year MMD *(AAA Fixed Rate Bond Rates)*
1/1/2008 - 11/29/2010



	Amount	Date
Average Since 1/1/08	3.187	n/a
Min	2.170	8/26/2010
Max	4.860	10/16/2008
Current	2.820	11/30/2010

Renovation & Expansion

Pros :

1. Reuse of Existing Building
2. Expand to Current Enrollment
3. Improved Energy Efficiency

Cons :

1. Impact on Education – Occupied Building During Construction
2. Layout Dependent upon Existing Building Constraints – "Middle School Teaming Concept"
3. Energy Efficiency Relative to Existing Building Constraints

New Building

Pros :

1. Building Layout Designed for Educational Program & Enrollment
2. Maximize Energy Efficiency
3. Campus Plan
4. Less Impact to Students
5. Long-Term Educational Solution

Cons :

1. Construction Cost

Project Timeline

1 December 2010	• Community Meeting
Dec – Jan 2011	• Decision Making Process
February 2011	• Choose an Option
March 2011	• Start PlanCon Process
March 2011	• Schematic Design & Design Development
April 2011	• Act 34 Hearing
June 2011 – Jan 2012	• Develop Construction Documents
February 2012	• Bid Project / Award
March 2012	• Begin Construction
July 2013	• Complete Project
	Begin 2013-2014 School Year

LEHIGHTON AREA SCHOOL DISTRICT

1 December 2010