



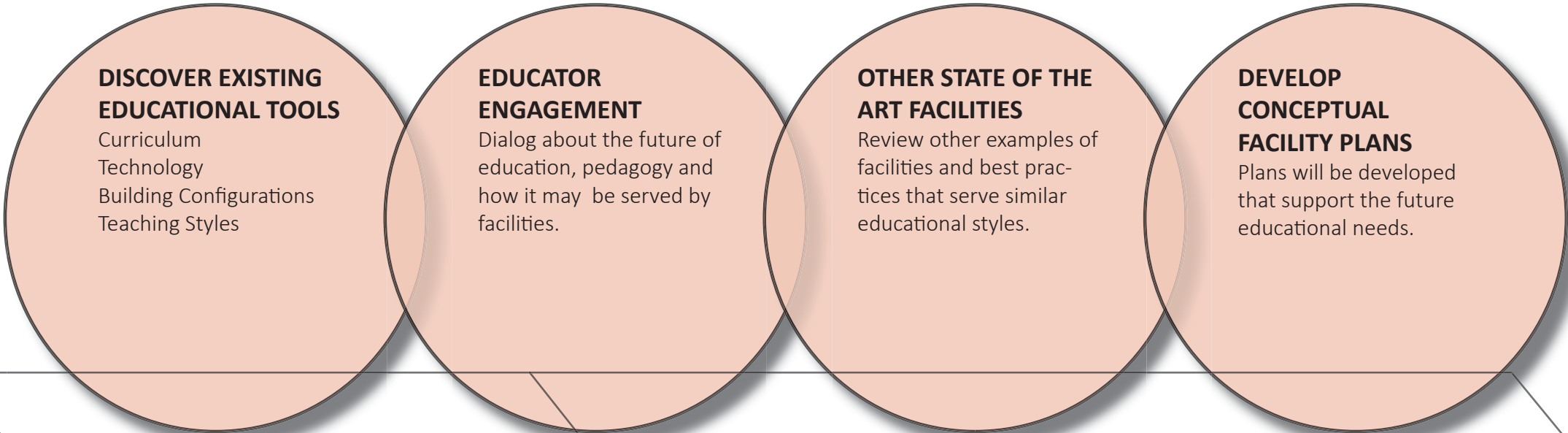
Contents

1. What was the process ?
2. What are our priorities ?
3. What is our mission?
4. What will our enrollment be?
5. What is the Structural and Envelope condition of our buildings?
6. What is the condition of our mechanical systems ?
7. Are there opportunities for energy savings ?
8. How big should our buildings be for our future ?
9. How can the buildings be safer ?
10. What are possible changes to the High School ?
11. Is there an Alternative Plan ?
12. What are the costs ?
13. Precedence



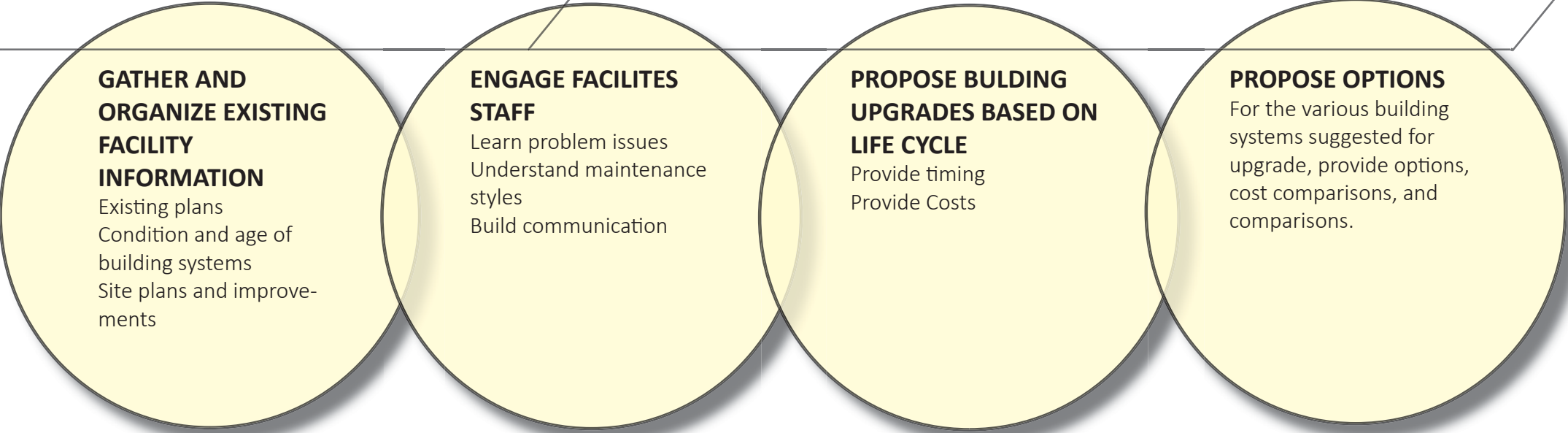
August 14, 2017

Track 1 - Educational Engagement

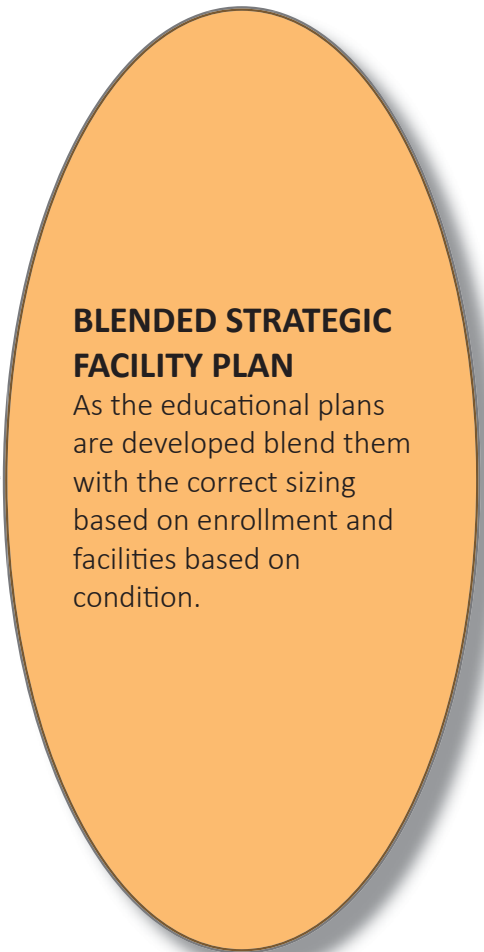


Track 2- Understand The Future Enrollment Needs

Develop a projection of future enrollment that will allow the buildings to be properly sized to match that enrollment. This size becomes is a benchmark to compare planning schemes .



Track 3 - Facility Condition Planning



Priorities

Through conversation, a list of priorities was developed. Below, in general order is the priorities that were developed

1 Schools are structurally and mechanically sound.

2 Energy Efficient Mechanical and electrical systems.

3 Provide buildings that are of the right size to match our current and future population of students.

4 A feeling of Safety and Security

5 Change the buildings to provide better educational environments overall including:
Educational technology
More collaborative spaces and arrangements that contributes to project based learning and team teaching
Increased size of some rooms
Better daylighting and views in some spaces
Better flexibility

6 Project Based Learning
Provide space for Project Lead the Way at the MS
Design and Animation – at Middle School
Biomedical and Computer Science at High School

7 Better spaces for Arts:

The auditorium at the HS is too small and poor acoustically
The band and choir rooms

8 Provide better spaces for special education students.

This treats our students better and reduces costs compared to sending them to other schools.

9 Improve athletic facilities at the High School

Eliminate Practice in the Halls
Weight training spaces
Outdoor track repairs
Other athletic facility upgrades
Repair Locker Rooms

10 A better overall image in the buildings that Will contribute to community pride and help Inspire the kids.

A campus feel

Mission:

Alexandria Community School Corporation prepares students to positively contribute to the local and global community by fostering curiosity, thinking critically, acquiring knowledge, and communicating effectively through a variety of curricular and extracurricular experiences.

We live our mission by:

Recognizing and affirming the unique and intrinsic worth of each individual child.

Modeling and developing persistence, optimism, and curiosity.

Treating all those we serve with compassion and kindness.

Acting with honesty and integrity.

Trusting our colleagues, parents, students, and community as valuable members of our team.

A Transition to Live Our Mission:

Alexandria Community Schools realizes that in order to truly live our mission, our schools need to transition to a modern learning environment that provides students with opportunities to explore their interests and learn deeply. Rigorous programming that emphasizes critical thinking, problem solving, and inquiry must be implemented at all levels of the school district. When this happens, student interests are honored and become a driving force for learning.

From Elementary to High School:

The elementary Project Lead the Way STEM courses lead directly into the high school's four career pathways: Computer Science, Medical Science, Career and Technical Education, and Liberal Arts. The goal is simply to provide engaging and rigorous opportunities for all students to explore their interests and reach their fullest potential.

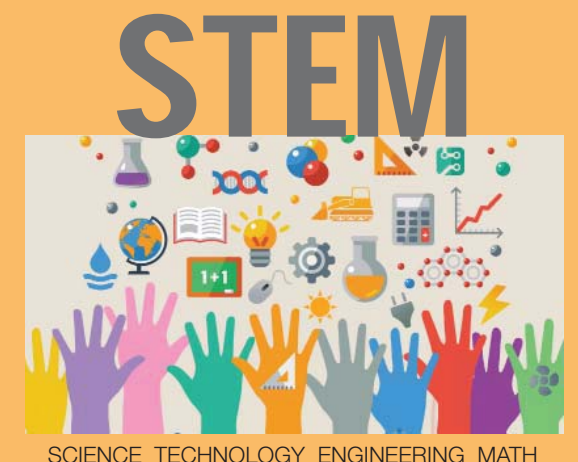
A Need in Our Facilities:

This type of collaborative, experiential learning requires changes in the way content is taught, as well as a different type of flexible learning space that promotes collaboration, communication, and critical thinking. Eric Sheneringer (2016) states, “educators who want to build collaboration and engage students in problem-solving and higher-order thinking skills miss opportunities to unleash student genius by packing them into industrial era classrooms.

Learning spaces need to be flexible, provide areas for movement, and promote collaboration and inquiry.” Therefore, as our curriculum changes, so must our ideas of what a classroom looks like.

An Example in STEM:

An example for how this might look across the district is the implementation of Project Lead the Way's Launch and Gateway programs. These programs provide STEM pathways for students in grades K-8 that emphasizes engineering, computer science, and biomedical engineering. Students can explore interests and learn about many different STEM career options in a hands-on engaging way.



How Many Students Will We be Educating ?

Appendix D: Enrollment Forecast

Alexandria Community School Corporation

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
K	116	111	97	101	130	107	112	112	112	111	111	110	109	107	106	104	105
1	114	111	110	100	113	114	113	116	115	115	114	113	112	111	109	108	106
2	122	107	108	114	99	107	129	111	114	113	114	113	112	111	110	107	106
Total: K-2	352	329	315	315	342	328	354	339	341	339	339	336	333	329	325	319	317
3	126	118	102	109	126	105	119	133	114	117	116	117	116	115	114	112	109
4	116	132	119	98	104	109	103	114	128	109	112	111	112	111	110	109	108
5	120	111	131	119	103	105	128	105	116	131	111	114	113	114	113	111	110
6	119	129	114	134	124	106	111	132	108	119	135	114	117	116	117	115	113
Total: 3-6	481	490	466	460	457	425	461	484	466	476	474	456	458	456	454	447	440
7	124	135	130	119	133	118	115	113	135	110	123	139	117	121	119	119	117
8	118	125	128	123	130	122	124	113	111	132	108	121	136	115	119	115	115
9	127	133	139	125	145	129	131	130	119	117	140	114	128	144	122	127	123
10	121	122	121	140	136	151	125	130	129	118	116	139	113	127	143	121	126
11	146	106	114	129	142	129	134	119	124	123	112	110	132	107	121	136	115
12	112	140	96	106	116	124	123	126	112	117	116	105	103	124	101	114	128
Total: 7-12	748	761	728	742	802	773	752	731	730	717	715	728	729	738	725	732	724
Total: K-12	1,581	1,580	1,509	1,517	1,601	1,526	1,567	1,554	1,537	1,532	1,528	1,520	1,520	1,523	1,504	1,498	1,481
Total: K-12	1,581	1,580	1,509	1,517	1,601	1,526	1,567	1,554	1,537	1,532	1,528	1,520	1,520	1,523	1,504	1,498	1,481
Change		-1	-71	8	84	-75	41	-13	-17	-5	-4	-8	0	3	-19	-6	-17
% Change		-0.1%	-4.5%	0.5%	5.5%	-4.7%	2.7%	-0.8%	-1.1%	-0.3%	-0.3%	-0.5%	0.0%	0.2%	-1.2%	-0.4%	-1.1%
Total: K-2	352	329	315	315	342	328	354	339	341	339	339	336	333	329	325	319	317
Change		-23	-14	0	27	-14	26	-15	2	-2	0	-3	-3	-4	-4	-6	-2
% Change		-6.5%	-4.3%	0.0%	8.6%	-4.1%	7.9%	-4.2%	0.6%	-0.6%	0.0%	-0.9%	-0.9%	-1.2%	-1.2%	-1.8%	-0.6%
Total: 3-6	481	490	466	460	457	425	461	484	466	476	474	456	458	456	454	447	440
Change		9	-24	-6	-3	-32	36	23	-18	10	-2	-18	2	-2	-2	-7	-7
% Change		0.0%	-4.9%	-1.3%	-0.7%	-7.0%	8.5%	5.0%	-3.7%	2.1%	-0.4%	-3.8%	0.4%	-0.4%	-0.4%	-1.5%	-1.6%
Total: 7-12	748	761	728	742	802	773	752	731	730	717	715	728	729	738	725	732	724
Change		13	-33	14	60	-29	-21	-21	-1	-13	-2	13	1	9	-13	7	-8
% Change		1.7%	-4.3%	1.9%	8.1%	-3.6%	-2.7%	-2.8%	-0.1%	-1.8%	-0.3%	1.8%	0.1%	1.2%	-1.8%	1.0%	-1.1%
Forecasts Developed April 2017																	
Green Cells (2016-17 and earlier) are historical data																	
Blue Cells (2017-18 and later) are forecasted years																	

Enrollment is forecast to drop slightly over the next 10 years.

For the purposes of this study it is projected to remain the same.

The main drivers on enrollment are:

Quantity of available housing.

Ages of the Alexandria residents.

There would likely be more young people if there was more housing.

The schools are good
The housing is affordable
There are jobs available

What is the Structural Condition of Our School Buildings ?

Intermediate School

- Standing Seam Metal Roof
 - Red finish coat worn and primer visible in spots
 - Peeling paint on the face of gutters. Corrosion visible.
- Attic
 - One leak observed near the northwest corner of the building at a wire penetration.
- Original Flat Roof
 - Were able to see the old flat roof metal deck at a duct penetration
 - The metal roof deck also appears to be the exposed ceiling structure visible in the cafeteria.
 - No evidence of Rapidex observed
- Downspouts
 - One had a gap and water was running down face
 - Another was not hooked up to a leader
 - Brick saturated behind damaged down spouts
- Organic growth / staining on brick.
- Peeling paint on soffits
- Vinyl siding
 - Vents and siding damaged in a few spots
- Door 11
 - Downspout/gutter appears to be leaking
 - Brick behind downspout saturated and stained.
 - Expansion joint
 - Copper EJ insert
 - Old caulk remained in spots
 - New caulk smeared over top
- Concrete heaving at entry doors
- Grade level limestone course
 - Eroded head joints
 - Spalling
 - Vegetation growing in one head joint
- Basement
 - Water collecting in basement appears to be coming in from below, not coming in from the concrete roof structure above.
 - No structural concerns observed based upon photographs provided to us.
 - No access was granted to the electrical vault.

High School

- EPDM Roof
 - Reportedly 15 years old +/-
 - Good condition
 - Great slope
 - One leak was reported and observed in the teacher's lounge. Four roof segments meet above this location.
- Brick / Façade
 - Metal fascia panels
 - Bubbling paint
 - Reportedly have required reattachment and several appeared to be loose.
 - Loose wood fascia trim piece.
 - Vertical cracks at building corners (no expansion joints)
 - Similar vertical cracks adjacent to brick picture framed around windows.
 - Corrosion at metal panels glazed into windows
- Interior
 - Gymnasium
 - Gaskets between siding panels have come loose.
 - Music room
 - Crack in CMU wall
 - Storage room
 - Cracks in tile
 - Kitchen freezer
 - Condensation sits on floor
 - Tile heaved/cracked inside freezer
 - Kitchen door
 - Stuck
 - Cracked tile
 - Door won't close
 - Girls locker room
 - Drain has raised cone around is crack/spalled

Elementary School

- Roof in good condition (EPDM)
 - Some drains holding water
- Settlement crack at northwest corner
- Sealant past its life expectancy. Separated from brick substrate in one location.
- Scaling limestone at base along southeast corner of building.
- Deteriorated concrete steps along west elevation. Missing railing.

The structural and envelope condition of all the buildings is good.

There are some maintenance items that should be addressed.

What is the Structural Condition of Our School Buildings ?



Photo 48
Another leak was observed in the teachers' lounge.



Photo 53
Paint blisters were also observed on metal fascia panels.

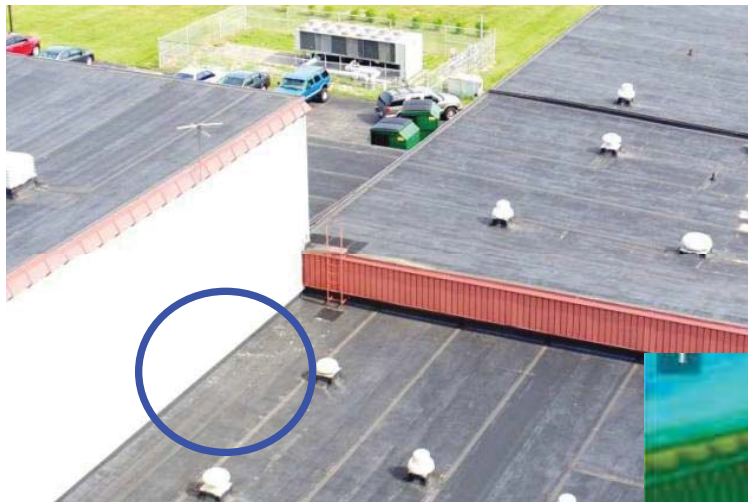


Photo 49
Four sections of roof meet adjacent to the location of the leak.

Photo 50
This area was viewed using thermal imaging, but no areas appeared to be holding significant amounts of moisture.

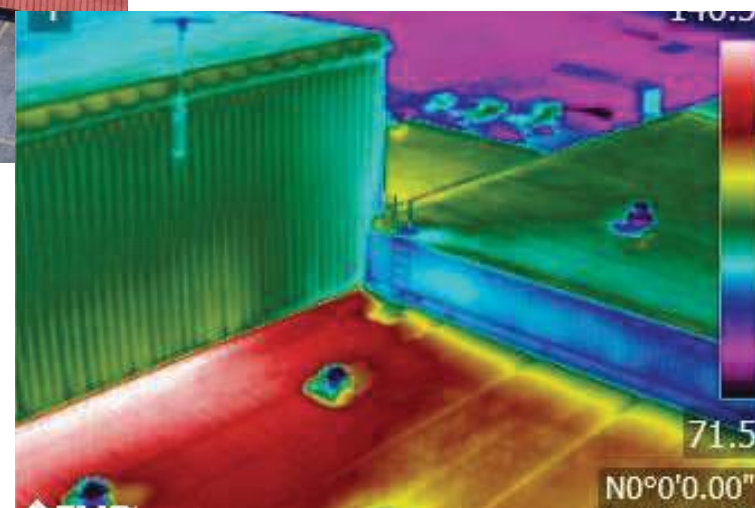


Photo 54
Similar condition in another location.

What is the Structural Condition of Our School Buildings ?



Photo 57
Vertical cracking was observed at several building corners creating a natural expansion joint.



Photo 12 Overall view of the Intermediate School.



Photo 58
These should be saw cut and installed with backer rod and sealant to allow for expansion / contraction.



Photo 13 The red finish coat on the standing seam metal roof is worn in spots.

What is the Structural Condition of Our School Buildings ?



Photo 14 An active leak was observed in the attic near the northwest corner of the building.

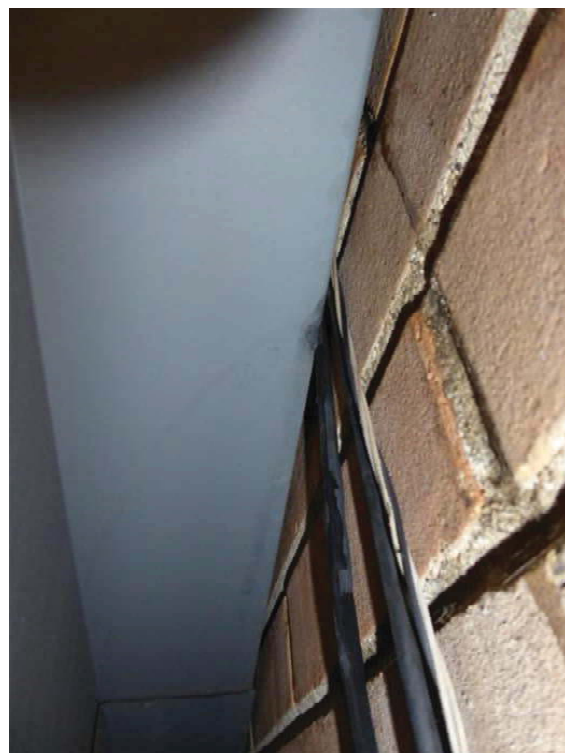


Photo 15 Water enters at a wire penetration...

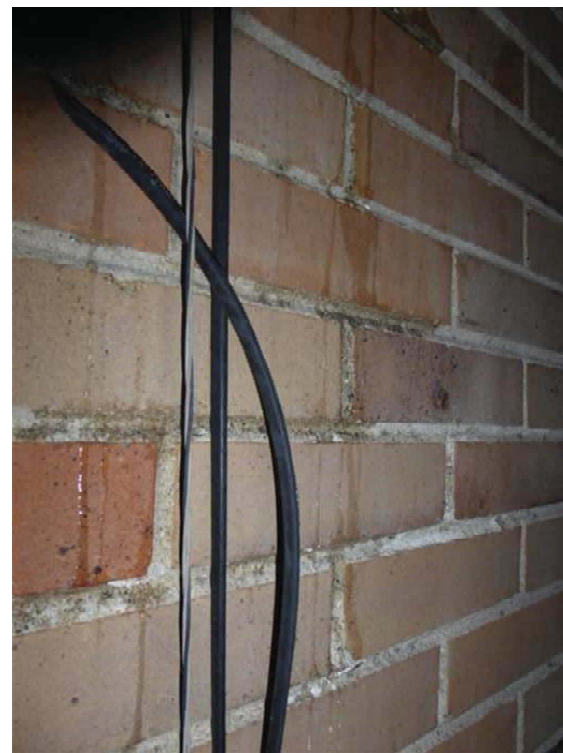


Photo 16 ...and runs down the face of the brick.




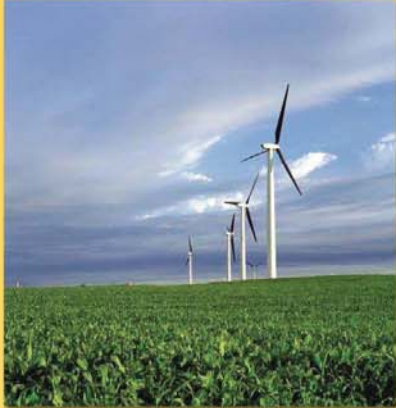



Photo 31
Vinyl siding clads much of the building.

Photo 32
A few areas of damage were observed...



Photo 33
....but the roof overhang has protected the siding from major damage.

What is the Condition of the Mechanical and Electrical Systems ?




MEP Facility Assessment Report


**Alexandria School
Corporation**
Alexandra, Indiana

July 11, 2017

Prepared by:
Heapy Engineering
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Mechanical Conditions

The middle school and elementary schools were in good condition. This is based primarily on the newer upgrades that have occurred. The high school has older equipment that could benefit from upgrades. In addition, there are opportunities for energy savings that were found in the possible change of equipment. One interesting item that is noted at the middle school is the heat pump units could be set up to provide heat as well as cooling. This would replace the electric resistance heating in the building for most of the heating season.

Are There Utility Costs That we Can Reduce ?

Table 1: Energy Star Target Finder Results for the Elementary School

Metric	Elementary	Design Target	Average
ENERGY STAR score (1-100)	70	75	50
Source Energy Intensity (kBtu/ft²)	124	118.1	151.1
Site Energy Intensity (kBtu/ft²)	57.5	54.8	70
Total Site Energy Use (kBtu/year)	2,644,702.10	2,519,559.80	3,221,859.00
Total GHG Emissions (Metric Tons CO2e/year)	324.2	308.9	395

Energy Star Evaluation

Energy Star Compares your building to other similar size school buildings including region.

An Energy Star rating of 50 indicates your building performs better than 50% of other building and not as well as the other 50%. Higher is better.

Thurston = score of 70
Intermediate = score of 43
High School = score of 43

Table 2: ENERGY STAR Target Finder Results for the Intermediary School

Metric	Intermediate	Design Target	Average
ENERGY STAR score (1-100)	43	75	50
Source Energy Intensity (kBtu/ft²)	151.1	111.5	142.6
Site Energy Intensity (kBtu/ft²)	48.1	35.5	45.4
Total Site Energy Use (kBtu/year)	3,584,718.90	2,645,367.00	3,382,733.50
Total GHG Emissions (Metric Tons CO2e/year)	660.7	487.6	623.5

Table 3: ENERGY STAR Target Finder Results for the High School

Metric	High School	Design Target	Average
ENERGY STAR score (1-100)	43	75	50
Source Energy Intensity (kBtu/ft²)	128.2	94.9	121.3
Site Energy Intensity (kBtu/ft²)	59	43.7	55.8
Total Site Energy Use (kBtu/year)	8,169,691.00	6,045,592.10	7,730,733.40
Total GHG Emissions (Metric Tons CO2e/year)	1009.9	747.3	955.6

How Big Should Our Schools Be For Our Number of Students ?

Enrollment (From McKibben)

Elementary School (K-6)	823	students
High School (7-12)	731	
Total	1,554	

Elementary Grades Building
The K-6 Total Buildings could be somewhat smaller. (Maybe 18,000 square feet)

K-6 Elementary School Space Program Summary

1.00	Administration	2,360	square feet
2.00	Special Purpose Rooms	4,800	
3.00	General	2,600	
4.00	Kindergarten	5,900	
5.00	First Grade	4,240	
6.00	Second Grade	4,020	
7.00	Third Grade	4,020	
8.00	Fourth Grade	4,020	
9.00	Fifth Grade	4,020	
10.00	Sixth Grade	4,020	
11.00	Media Center, LGI, and Conf Rooms	6,500	
12.00	Physical Education	8,150	
13.00	Special Education	3,210	
14.00	Food Services	7,060	
15.00	Music	1,400	
16.00	Art	1,400	
	Total Net Useable Space	67,720	sf
	Unassigned Space (% of Net)	33,860	sf
	Total K-6 Building Size	101,580	sf
	Area per student	123	sf per st

High School Building
The High School Building is somewhat small for the number of students which could explain the general feeling of crowding. 189 sf per high school student is some below the average of over 200 sf per student.

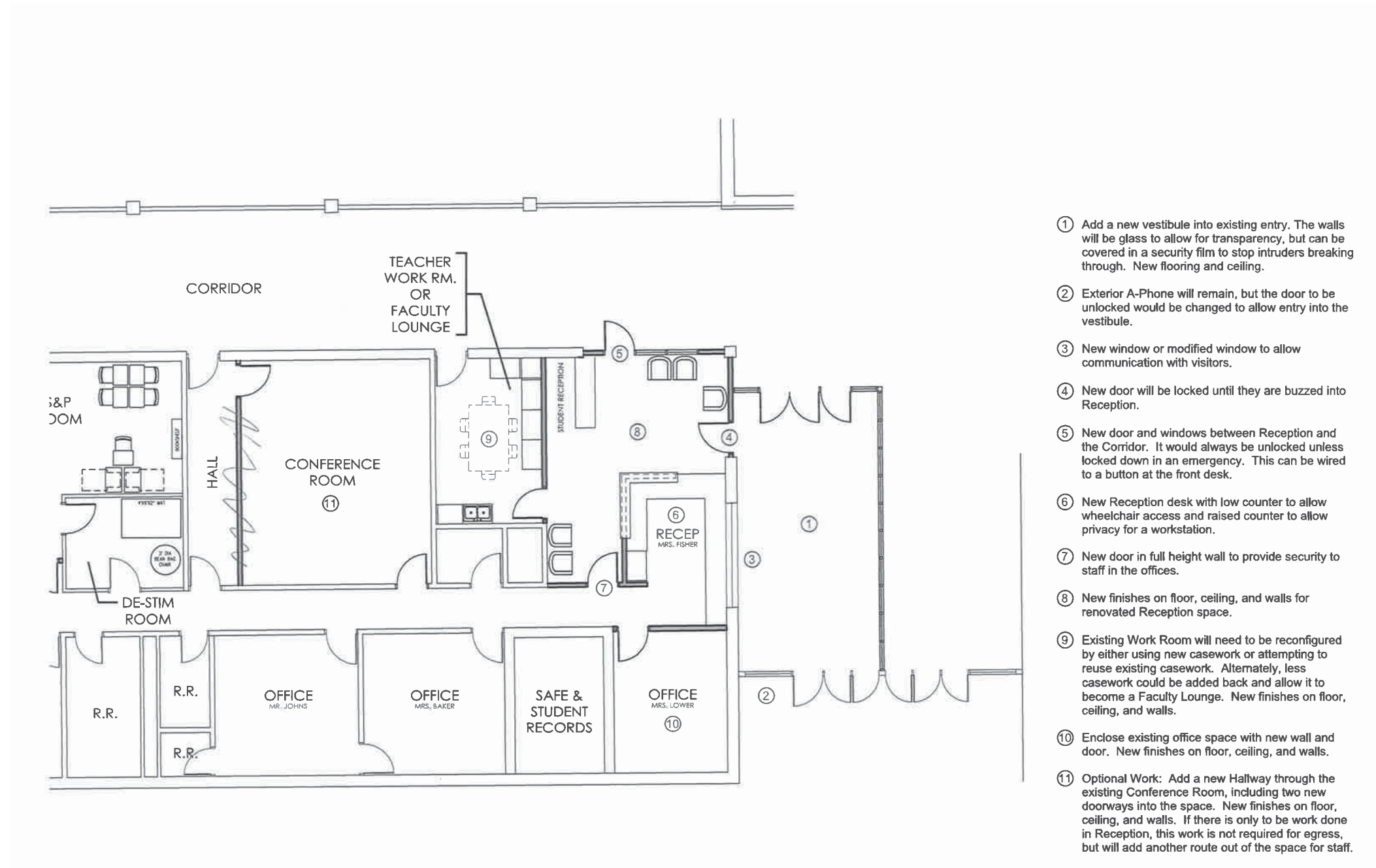
Existing Thurston Elementary	46,000	sf
Existing Intermediate School	74,500	sf
Total Existing K-6 Building Size	120,500	
Area per student	146	sf per st

Gap Between Program and Existing (18,920) sf
existing bigger than it may need to be

High School

Existing Building Size	138,500	sf
Area per student	189	sf per st

How Can We Improve Safety ?



Previously Developed High School Secure Entrance Plan

Safety Steps

(In order of priority)

1. Work with local law enforcement.
2. Educate all staff on security protocols.
3. Secure all doors and have one entrance as much as possible.
4. At the Main Entry set up a secure vestibule.
5. An operable Public address system.
6. Classroom lock doors.
7. Have closed circuit TV.
8. Safety glass to slow down intrusion.

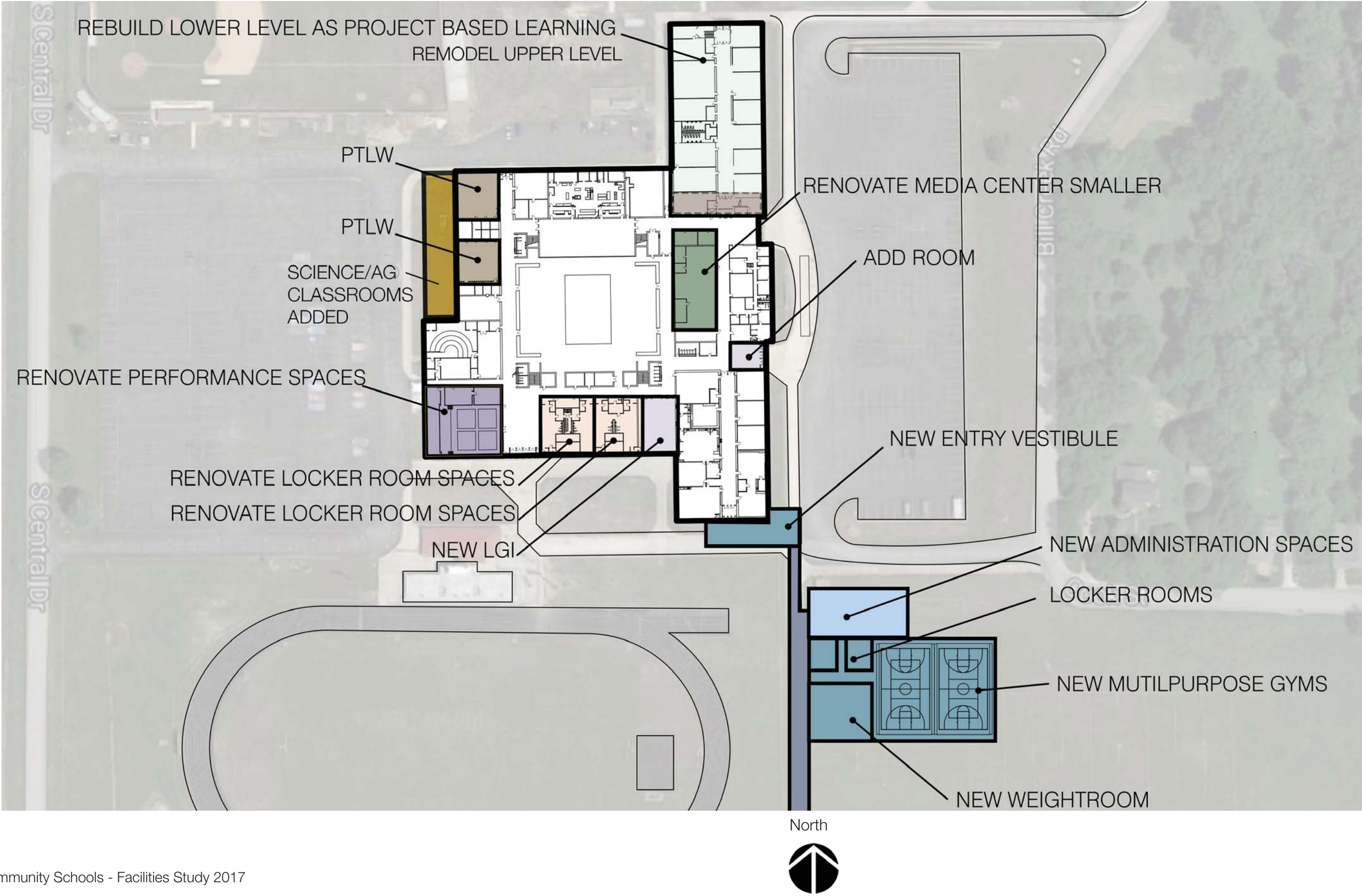
Other Processes

Follow CPTED Concepts
Crime Prevention Through Environmental Design.

Few places to hide

Transparency in spaces so actions are visible.

What Are Possible Changes at the High School to Support Education ?



What Are Possible Changes at the High School to Support Education ?



Possible Changes at the North Entrance Area

Is There an Alternative Campus Plan ?



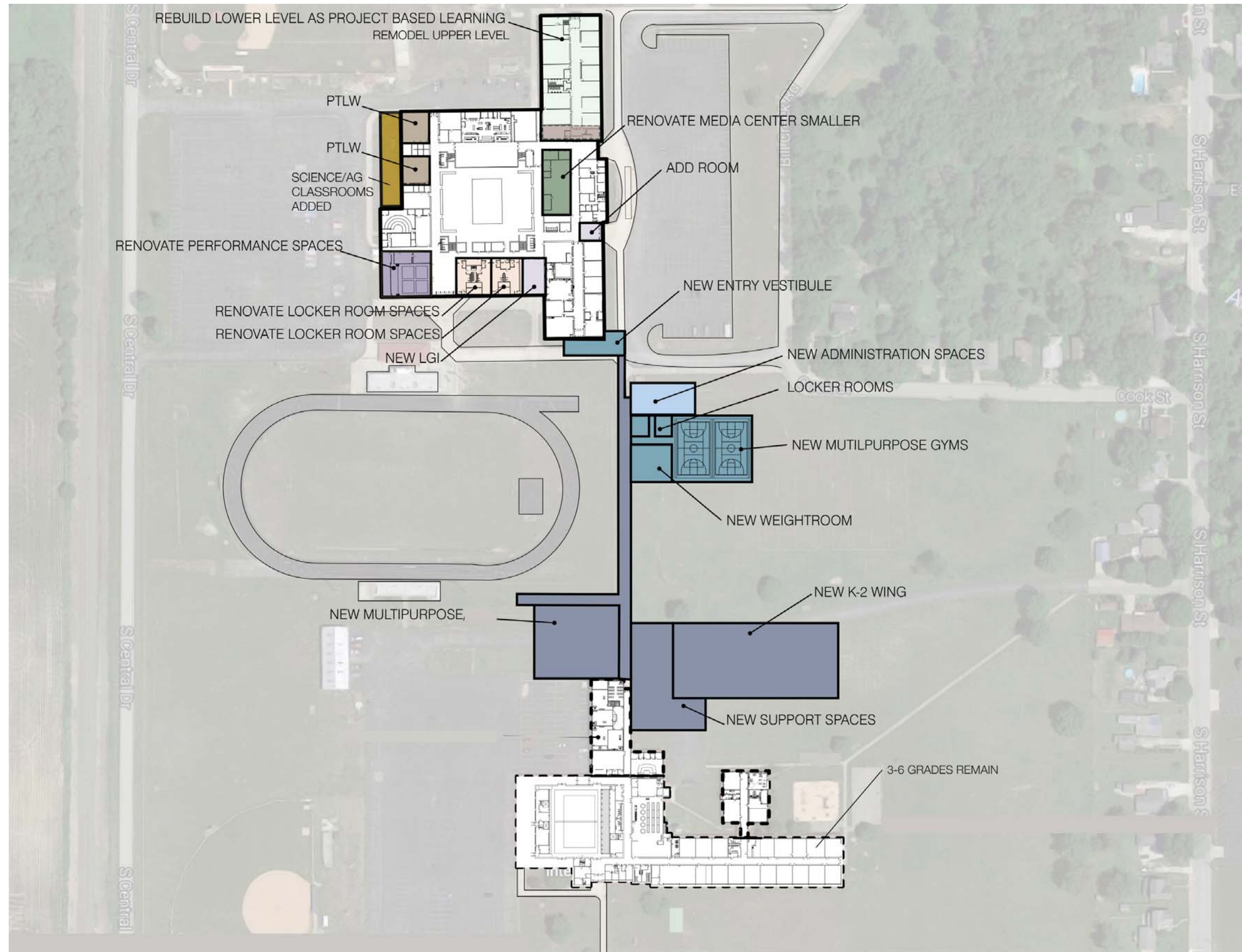
Existing High School and Intermediate School Ariel Photo

North



Existing Thurston Elementary Ariel Photo

Is There an Alternative Campus Plan ?



An Alternative Plan Could Be
A Single Campus.

This Could:

- Right Size The Buildings
- Reduce Costs of a Single Site
Compared to Two Sites

The Plan Shown is Modular

Most of the pieces can be
implemented at any time
independent of each other.



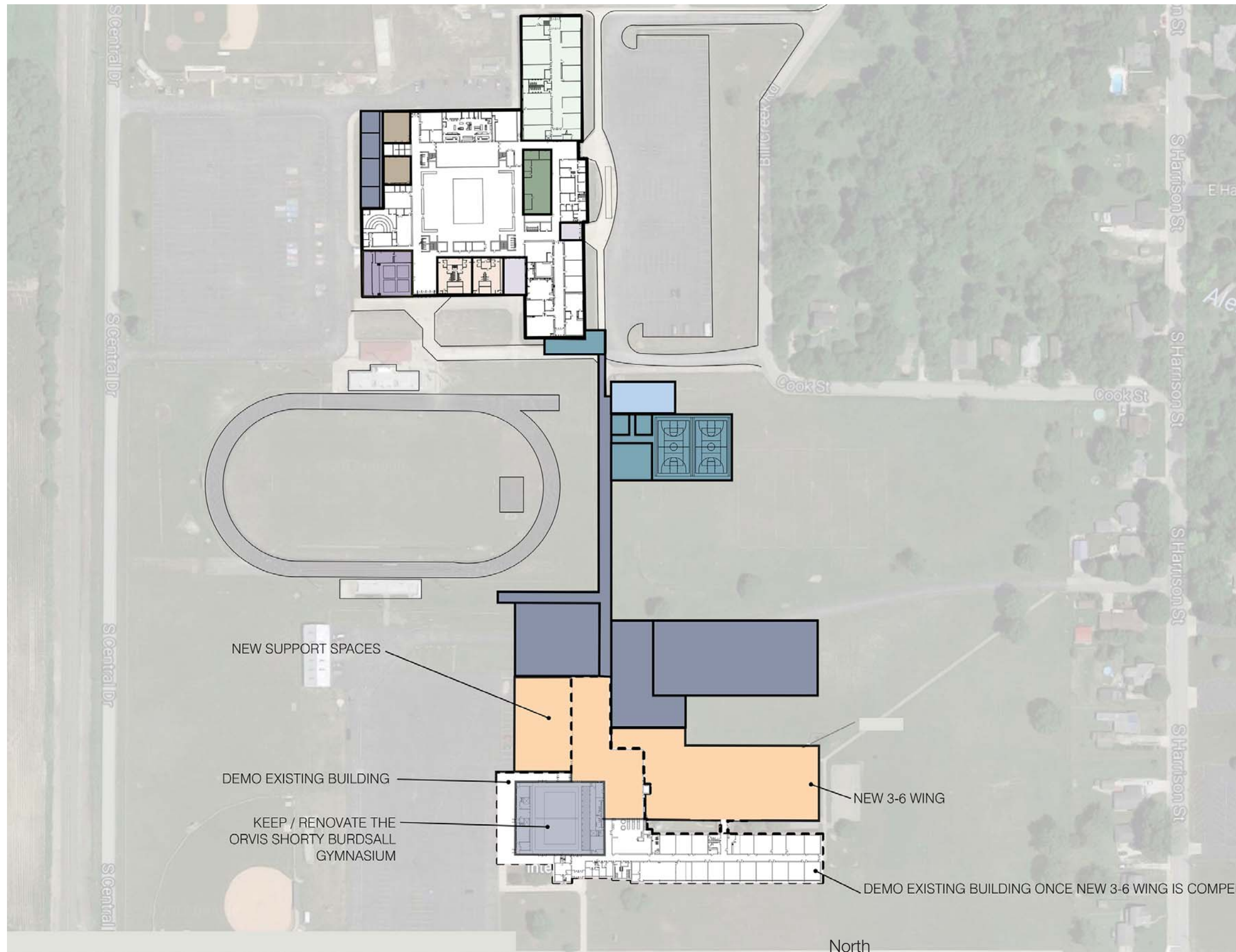
Is There an Alternative Campus Plan ?

A Future Plan Could:

- Allow the Removal of the Oldest Building

- Retain the Shorty Birdsall Gym

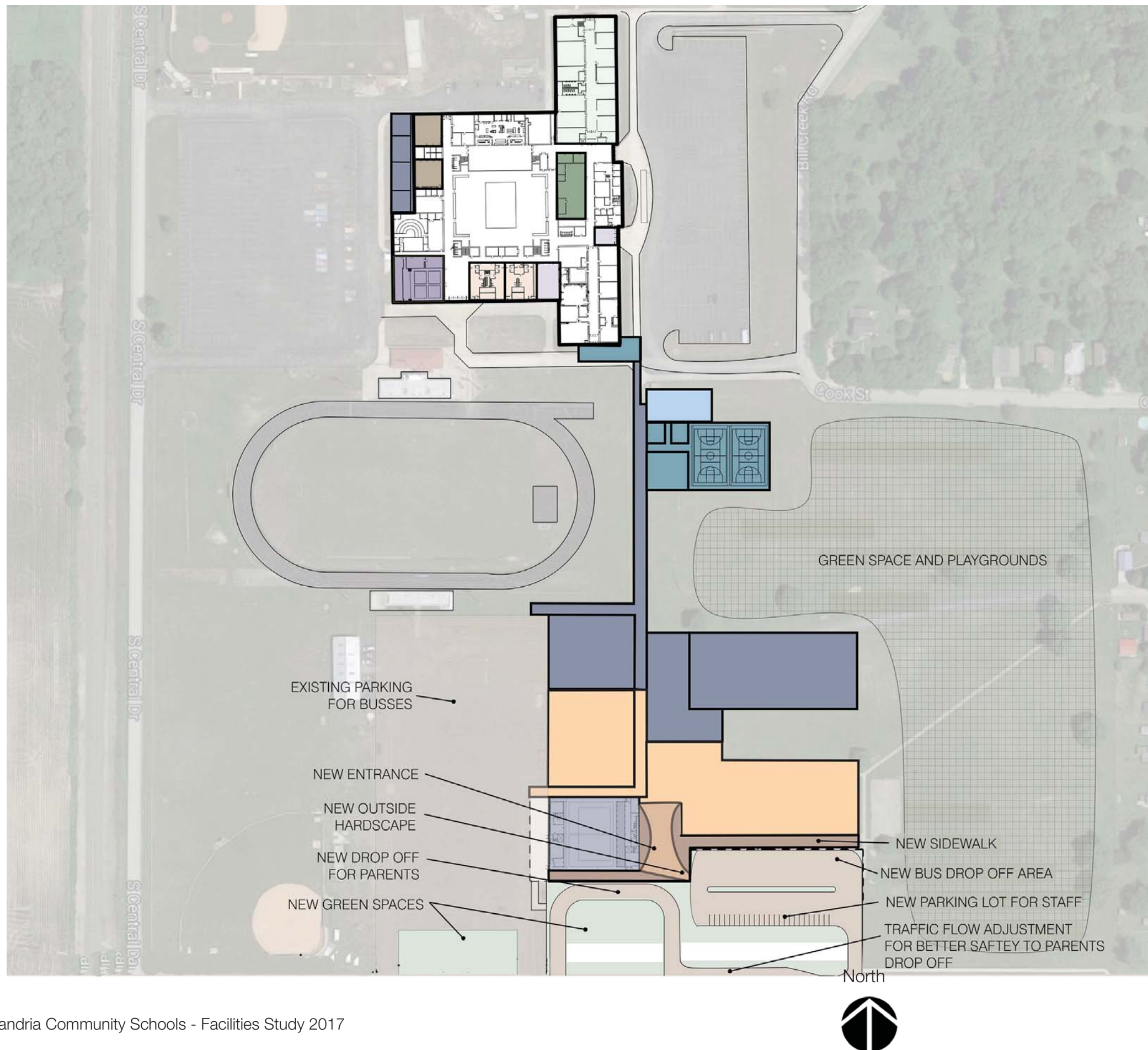
- Support Replacing the Oldest Building



Is There an Alternative Campus Plan ?

A Future Final Plan Could:

Enhance The South Entry with improved bus drop off and exterior appearance.



What are The Costs ?

Estimated Deferred Maintenance Costs

The estimate below are a summary of items that should be considered for repair or upgrade. The details of the estimates are listed on pages 114 through 117.

Alexandria High School MEP Improvements	
Sub-total of Trades	\$ 1,345,000
Contingency	\$ 121,050
General Conditions, CM and AE Costs	\$ 263,889
HS MEP Improvements DM	\$ 1,729,939
Alexandria High School Structural and Other Needed Improvements	
Sub-total of Trades	\$ 2,422,000
Contingency	\$ 217,980
General Conditions, CM and AE Costs	\$ 475,196
High School Site and Struct DM	\$ 3,115,176
Total High School DM (Deferred Maintenance)	\$ 4,845,115
Intermediate School MEP Improvements	
Sub-total of Trades	\$ 1,113,000
Contingency	\$ 100,170
General Conditions, CM and AE Costs	\$ 218,371
Intermediate School MEP DM	\$ 1,431,541
Intermediate School Structural and Building Improvements	
Sub-total of Trades	\$ 760,000
Contingency	\$ 68,400
General Conditions, CM and AE Costs	\$ 149,112
Intermediate School Core and Shell DM	\$ 977,512
Total Intermediate School DM (Deferred Maintenance)	\$ 2,409,053
Thurston Elementary MEP Improvements	
Sub-total of Trades	\$ 355,000
Contingency	\$ 31,950
General Conditions, CM and AE Costs	\$ 69,651
Thurston Elementary MEP DM	\$ 456,601
Thurston Elementary Structural and Shell	
Sub-total of Trades	\$ 120,000
Contingency	\$ 10,800
General Conditions, CM and AE Costs	\$ 23,544
Thurston Structural and Shell DM	\$ 154,344
Total Thurston Elem DM (Deferred Maintenance)	\$ 610,945
Total All Buildings Deferred Maintenance	\$ 7,865,113

Alternative Plan Estimate

Listed below is the cost summary if the buildings are re-configured onto a single campus. This plan would eliminate some of the deferred maintenance items due to demolition or closure.

Alexandria High School	
Classroom Technology Upgrades	\$ 120,000
Renovate Lower Level for Project Based Learning	\$ 3,072,000
Second floor classroom finishes upgrade	\$ 450,000
Renovate Media Center	\$ 648,000
Project Lead the Way spaces	\$ 576,000
Performance Spaces Renovation	\$ 720,000
New LGI space within building	\$ 240,000
New Room (at second entry)	\$ 192,000
New Entry Vestibule (South)	\$ 255,000
Addition of 4 science classrooms	\$ 918,000
Allowance for walks, lighting, landscaping	\$ 400,000
Sub-total Trades	\$ 7,591,000
Contingency	\$ 683,190
General Conditions, CM and AE Costs	\$ 1,489,354
Total Alexandria High School	\$ 9,763,544
New K-2 School	
New Connector Hall	\$ 2,250,000
New K2 Multipurpose Spaces	\$ 1,280,000
New K-2 Wing	\$ 5,100,000
New K2 Support Spaces (Media, Café, etc.)	\$ 1,190,000
New Furniture	\$ 900,000
Sub-Total	\$ 10,720,000
Contingency	\$ 964,800
General Conditions, CM and AE Costs	\$ 2,103,264
Total New K-2 School	\$ 13,788,064
Multipurpose Building	
New Gyms	\$ 1,375,000
New Locker Rooms	\$ 600,000
New Weight room	\$ 375,000
Sub-Total	\$ 2,350,000
Contingency	\$ 211,500
General Conditions, CM and AE Costs	\$ 461,070
Total Multipurpose Building	\$ 3,022,570
Existing Intermediate School (Temporary)	\$ 575,520
Administration Building	\$ 1,090,698
Total Alternative Plan Construction Costs	\$ 28,240,396
Future Phase A (2017 dollars)	\$ 9,703,093
Future Phase B (2017 dollars)	\$ 3,492,033

High School Deferred Maintenance (DM)

Alexandria High School MEP Improvements					
Replacement of AHU of Media Center,Gym, Band	1	al	\$ 600,000	\$	600,000
Doors to close off gym for Air conditioning	1	al	\$ 25,000	\$	25,000
Weight room and lockers HVAC improvement	1	al	\$ 50,000	\$	50,000
Add Demand Control Ventilation - 20 AHU	1	al	\$ 100,000	\$	100,000
LED Lighting	130,000	sf	\$ 4	\$	520,000
Renovate Plumbing Chases	5	ea	\$ 10,000	\$	50,000
Sub-total of Trades				\$	1,345,000
Contingency				9%	\$ 121,050
Sub-total					\$ 1,466,050
General Conditions, CM and AE Costs				18%	\$ 263,889
HS MEP Improvements DM					\$ 1,729,939

Alexandria High School Structural and Other Needed Improvements					
Re-Surface the Running track	39,000	sf	\$ 10	\$	390,000
Drives and Parking re-surfacing	235,000	sf	\$ 3	\$	705,000
Locker Room Renovations	6,200	sf	\$ 150	\$	930,000
Security (Entry and limited closed circuit TV)	1	al	\$ 150,000	\$	150,000
Removal of buired tank	1	al	\$ 80,000	\$	80,000
Implement repairs to address the leak in the teachers' lounge	1	al	\$ 20,000	\$	20,000
Re-secure loose metal fascia panels. Clean and repaint bubbling paint on metal fascia panels	1	al	\$ 25,000	\$	25,000
Remove and re-install or replace loose piece of wood fascia trim	1	al	\$ 5,000	\$	5,000
Saw cut vertical cracks at building corners and cracks adjacent to windows picture framed with brick. Install backer rod and sealant to create an expansion joint	1	al	\$ 12,000	\$	12,000
Consider replacement of the metal panels glazed into the windows between sections of vision glass	1	al	\$ 35,000	\$	35,000
Remove loose gaskets from the back side of metal siding panels cladding the upper portion of the gymnasium. Caulk all seams where gaskets are removed	1	al	\$ 15,000	\$	15,000
Rout and caulk cracked CMU and glazed tile in interior partition walls. Re-paint to blend in caulking. A polyurethane based sealant should be used in lieu of silicone. Paint will not adhere to silicone sealants	1	al	\$ 8,000	\$	8,000
Repair cracked tile adjacent to walk-in freezer door and kitchen entry door	1	al	\$ 40,000	\$	40,000
Rework the heaved drain and surrounding concrete in the women's locker room	1	al	\$ 7,000	\$	7,000
Sub-total of Trades				\$	2,422,000
Contingency				9%	\$ 217,980
Sub-total					\$ 2,639,980
General Conditions, CM and AE Costs				18%	\$ 475,196
High School Site and Struct DM					\$ 3,115,176
Total High School DM (Deferred Maintenance)					\$ 4,845,115

Intermediate School Deferred Maintenance (DM)

Intermediate School MEP Improvements

Electrical Equipment replacement	1	al	\$ 200,000	\$ 200,000
Heat Pump Change to Heat also	1	al	\$ 220,000	\$ 220,000
Replace Gym HVAC units	1	al	\$ 350,000	\$ 350,000
Replace electrical panels	1	al	\$ 80,000	\$ 80,000
Single timer for exterior lighting	1	al	\$ 3,000	\$ 3,000
Transformer relocation	1	al	\$ 50,000	\$ 50,000
Sanitary Pipe exterior repairs	300	lf	\$ 150	\$ 45,000
Replace PVC with insulated steel/copper	1	al	\$ 125,000	\$ 125,000
LED Lighting	1	al	\$ 40,000	\$ 40,000
Sub-total of Trades				\$ 1,113,000
Contingency			9%	\$ 100,170
Sub-total				\$ 1,213,170
General Conditions, CM and AE Costs			18%	\$ 218,371
Intermediate School MEP DM				\$ 1,431,541

Intermediate School Structural and Building Improvements

Basement foundation Water repair	1	al	\$ 125,000	\$ 125,000
Entrance Security (entry and limited CCTV)	1	al	\$ 100,000	\$ 100,000
Roof Drain on perimeter	1	al	\$ 30,000	\$ 30,000
Replace vinyl siding with masonry	1	al	\$ 200,000	\$ 200,000
Repair leak in attic	1	al	\$ 35,000	\$ 35,000
Spot re-coating of the standing seam roof	75,000	sf	\$ 1	\$ 75,000
Clean and re-coat corroded gutters	1	al	\$ 25,000	\$ 25,000
Clean the brick	1	al	\$ 50,000	\$ 50,000
Clean and re-coat peeling soffits	1	al	\$ 15,000	\$ 15,000
Repair limestone at grade joints	1	al	\$ 15,000	\$ 15,000
Pavement Repairs	30,000	sf	\$ 3	\$ 90,000
Sub-total of Trades				\$ 760,000
Contingency			9%	\$ 68,400
Sub-total				\$ 828,400
General Conditions, CM and AE Costs			18%	\$ 149,112
Intermediate School Core and Shell DM				\$ 977,512

Total Intermediate School DM (Deferred Maintenance) \$ 2,409,053

Thurston Elementary Deferred Maintenance (DM)

Thurston Elementary MEP Improvements

Kitchen and Dishwashing MEP improvements	1	al	\$ 120,000	\$ 120,000
Recalculate and Resize HVAC systems in Computer Labs	1	al	\$ 85,000	\$ 85,000
BAS Upgrade - JACE connection	1	al	\$ 40,000	\$ 40,000
Restroom Remodel (2)	2	ea	\$ 35,000	\$ 70,000
LED Lighting	1	al	\$ 40,000	\$ 40,000
Sub-total of Trades				\$ 355,000
Contingency			9%	\$ 31,950
Sub-total				\$ 386,950
General Conditions, CM and AE Costs			18%	\$ 69,651
Thurston Elementary MEP DM				\$ 456,601

Thurston Elementary Structural and Shell

Settlement Crack at NW Corner (Leave)				\$ -
Security (Entry and limited CCTV)	1	al	\$ 60,000	\$ 60,000
Sealant Repair	1	al	\$ 20,000	\$ 20,000
Scaling Limestone base at Spoutheast Corner	1	al	\$ 15,000	\$ 15,000
Deteriorated Concrete steps and missing rail West Side	1	al	\$ 15,000	\$ 25,000
Sub-total of Trades				\$ 120,000
Contingency			9%	\$ 10,800
Sub-total				\$ 130,800
General Conditions, CM and AE Costs			18%	\$ 23,544
Thurston Structural and Shell DM				\$ 154,344

Total Thurston Elem DM (Deferred Maintenance) \$ 610,945

Alternative Plan

Alexandria High School

Classroom Technology Upgrades	40	each	\$	3,000	\$	120,000	
Renovate Lower Level for Project Based Learning	19,200	sf	\$	160	\$	3,072,000	
Second floor classroom finishes upgrade	18,000	sf	\$	25	\$	450,000	
Renovate Media Center	5,400	sf	\$	120	\$	648,000	
Project Lead the Way spaces	4,800	sf	\$	120	\$	576,000	
Performance Spaces Renovation	6,000	sf	\$	120	\$	720,000	
New LGI space within building	2,400	sf	\$	100	\$	240,000	
New Room (at second entry)	1,200	sf	\$	160	\$	192,000	
New Entry Vestibule (South)	1,500	sf	\$	170	\$	255,000	
Addition of 4 science classrooms	5,400	sf	\$	170	\$	918,000	
Allowance for walks, lighting, landscaping	1	al	\$	400,000	\$	400,000	
Sub-total Trades					\$	7,591,000	
Contingency				9%	\$	683,190	
Sub-total					\$	8,274,190	
General Conditions, CM and AE Costs				18%	\$	1,489,354	
Total Alexandria High School					\$	9,763,544	

New K-2 School

New Connector Hall	15,000	sf	\$	150	\$	2,250,000	
New K2 Multipurpose Spaces	8,000	sf	\$	160	\$	1,280,000	
New K-2 Wing	30,000	sf	\$	170	\$	5,100,000	
New K2 Support Spaces (Media, Café, etc.)	7,000	sf	\$	170	\$	1,190,000	
New Furniture	60,000	sf	\$	15	\$	900,000	
Sub-Total	45,000	sf			\$	10,720,000	
Contingency				9%	\$	964,800	
Sub-total					\$	11,684,800	
General Conditions, CM and AE Costs				18%	\$	2,103,264	
Total New K-2 School					\$	13,788,064	

Alternative Plan

Existing Intermediate School (Temporary)

Reconfigure existing classrooms	22,000	sf	\$	20	\$	440,000	
Sub-Total					\$	440,000	
Contingency				9%	\$	39,600	
Sub-total					\$	479,600	
General Conditions, CM and AE Costs				20%	\$	95,920	
Total Existing Intermediate School					\$	575,520	

Multipurpose Building

New Gyms	11,000	sf	\$	125	\$	1,375,000	
New Locker Rooms	3,000	sf	\$	200	\$	600,000	
New Weight room	3,000	sf	\$	125	\$	375,000	
Sub-Total	17,000	sf			\$	2,350,000	
Contingency				9%	\$	211,500	
Sub-total					\$	2,561,500	
General Conditions, CM and AE Costs				18%	\$	461,070	
Total Multipurpose Building					\$	3,022,570	

Administration Building

New Building	5,300	sf	\$	160	\$	848,000	
Sub-Total					\$	848,000	
Contingency				9%	\$	76,320	
Sub-total					\$	924,320	
General Conditions, CM and AE Costs				18%	\$	166,378	
Total Administration Building					\$	1,090,698	

Total Alternative Plan Construction Costs					\$	28,240,396	
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Future Phase A

New 3-6 Building						
New 3-6 Wing	40,000	sf	\$	170	\$	6,800,000
Sub-total	40,000	sf			\$	6,800,000
Contingency				9%	\$	612,000
Sub-total					\$	7,412,000
General Conditions, CM and AE Costs				18%	\$	1,334,160
Total New 3-6 Building					\$	8,746,160
Existing Intermediate School						
Demolish existing building	62,000	sf	\$	12	\$	744,000
Keep Orvis Shorty Burdsall Gym - Renovate	16,800	sf	\$	35	\$	588,000
Sub-Total					\$	744,000
Contingency				9%	\$	66,960
Sub-total					\$	810,960
General Conditions, CM and AE Costs				18%	\$	145,973
Total Existing Intermediate School					\$	956,933
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Sub-Total					\$	9,703,093
Two year inflation and phasing factor				7.0%	\$	679,216
Total Phase Two in two years					\$	10,382,309

Future Phase B

Site Improvements						
Green Spaces	1	allow	\$	500,000	\$	500,000
Playgrounds	20,000	sf	\$	20	\$	400,000
Intermediate School Pavement Resurfacing	150,000	sf	\$	2	\$	300,000
Intermediate School Parking and Drives	58,000	sf	\$	5	\$	290,000
Allowance for walks, lighting, landscaping	1	ea	\$	600,000	\$	600,000
Sub-total					\$	2,090,000
Contingency				9%	\$	188,100
Sub-total					\$	2,278,100
General Conditions, CM and AE Costs				18%	\$	410,058
Total Site Improvements					\$	2,688,158
New K-6 School Entrance						
New Final Entrance Entrance	2,500	sf	\$	250	\$	625,000
Sub-Total					\$	625,000
Contingency				9%	\$	56,250
Sub-total					\$	681,250
General Conditions, CM and AE Costs				18%	\$	122,625
Total New K-6 School					\$	803,875
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Sub-Total					\$	3,492,033
Four Year Inflation and Phasing Factor				13%	\$	453,964
Total Phase Three					\$	3,945,997



Media Center Examples

Media Center Examples

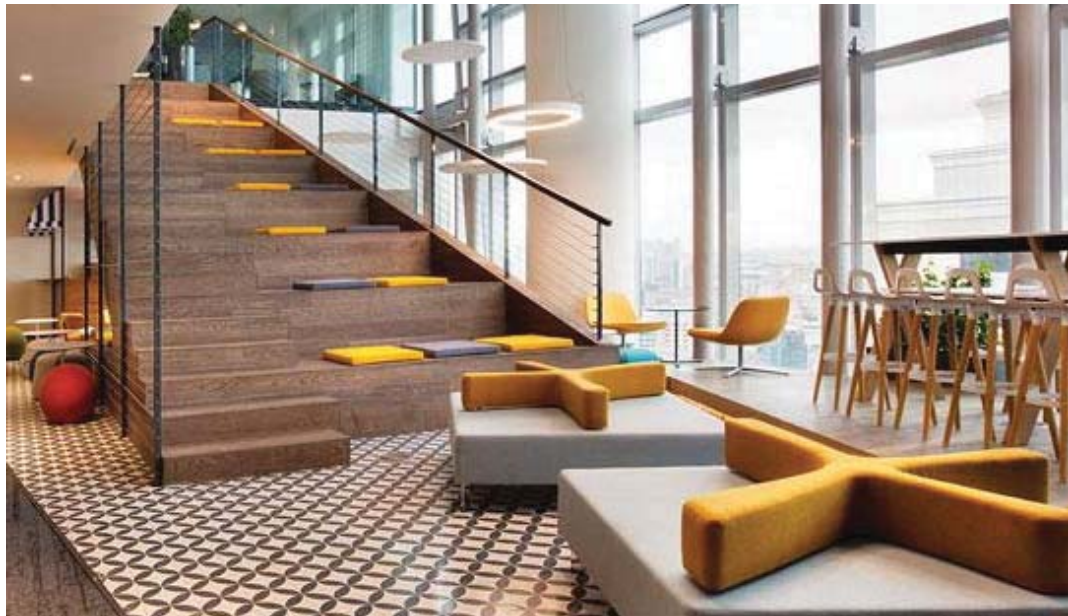




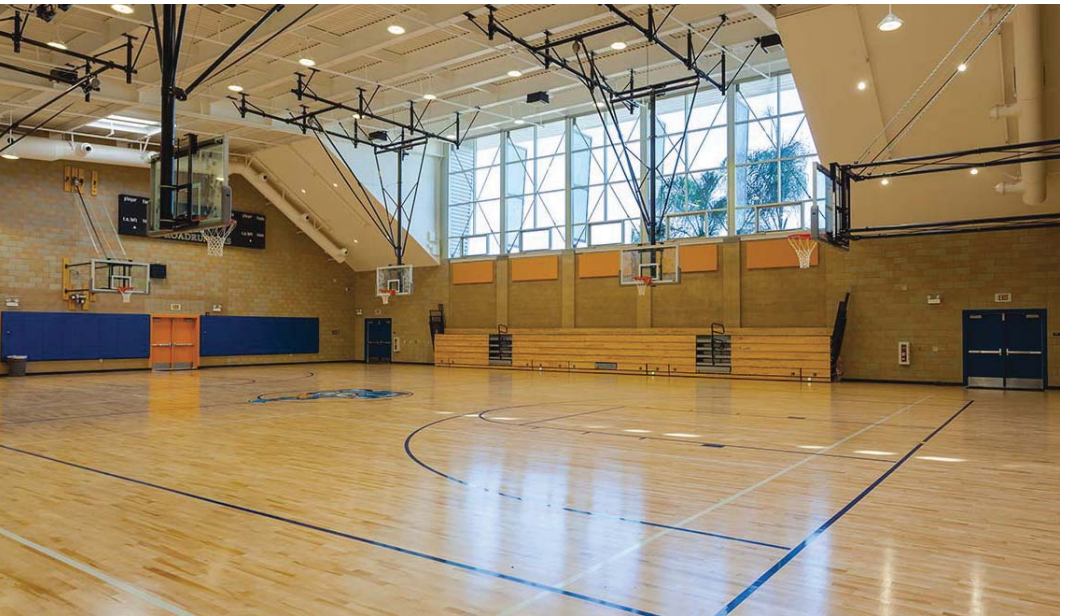
Flexible spaces with write on walls for idea generation, daylighting, movable seating

Graphics to support school identity and school pride



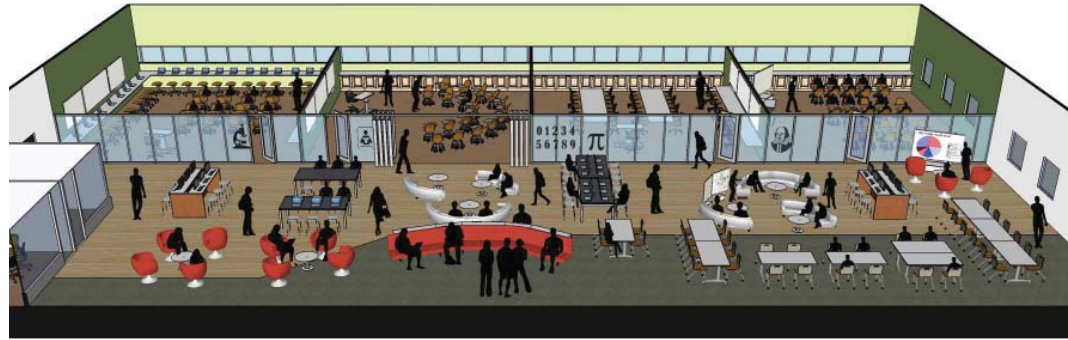


Examples of informal gathering and learning spaces



Daylighting in gym and music and art spaces





Media Center as collaborative hub with breakout gathering spaces



Larger science labs for combined classes



Moveable walls to allow flexibility in teaching



Spaces between science labs
Alexandria Community Schools - Facilities Study 2017



Media Center Example