



Upper Adams School District Facility Study Presentation Part 2

November 17, 2016



Providing a Client Oriented Approach to Architecture

Crabtree, Rohrbaugh & Associates, Architects



Agenda



Part 1 – Current Assessments

- ✓ Purpose & Goals
- ✓ Enrollment Analysis
- ✓ Building Capacity Analysis
- ✓ Renovation Costs / Approach
- ✓ Building Evaluations

Part 2 – Proposed Planning

- ✓ Preliminary Construction Cost Estimates:
 - Upgrades to Current Standards
 - Educational Program Additions
- ✓ Facility Options & Cost Summary
- ✓ Financial Discussion
- ✓ Schedule / Decision Making



Renovation Costs



Facility Study level estimates for planning and decision

CRA Historical cost data

Compliance with building codes

Expectation to meet current construction standards to qualify for reimbursement – 20 year cycle

Board controls cost of the project based upon approved scope of work

Renovation Costs



Purpose:

Develop an understanding of the work required to bring existing school facilities up to current construction standards – Pa Dept. of Education

- State Building Code Compliance, ADA
- Qualify for potential state reimbursement (20 Year cycle)
- Maximizes School District funds; long term
- Comprehensive Renovations Throughout
 - Building Systems; HVAC, Electrical, Plumbing, Technology
- Apples to Apples comparison for all school buildings



					38,900	Existing SF	
		Unit	SF Quant	Unit Cost	Low Range Cost	Unit Cost	High Range Costs
Optional Building Improvements							
1	Building Engineering Systems						
2	HVAC System Renovations EXCLUDES BLDG WIDE COOLING	SF	38,900	1.0	\$38,900	1.5	\$58,350
3	Plumbing (fixture replacement, pipe scoping)	SF	38,900	1.0	\$38,900	1.5	\$58,350
4	Fire Protection (as required)	SF	38,900	2.5	\$97,250	3.0	\$116,700
5	Electrical System:	SF	38,900	3.0	\$116,700	4.5	\$175,050
6	(Upgrades - Emergency Generator, Distribution, Data Network						
7	Communications, Building Security)						
8							
9	Exterior - Energy Envelope						
10	Roof (deferred maintenance) (EPDM)	100%	38,900	3.0	\$116,700	5.0	\$194,500
11	Window Replacement	SF	3,000	50	\$150,000	65	\$195,000
12	Storefront Replacement	SF	1,200	45	\$54,000	55	\$66,000
13	Walls (repointing, cleaning)	ALLOW	2000	28	\$56,000	32	\$64,000
14							
15	Interior Upgrades						
16	Secured Entrance Vestibule Upgrades	ALLOW			\$20,000		\$35,000
17	Probable Code Related Upgrades	ALLOW			\$20,000		\$35,000
18	ADA Compliance / Fire Rating						
19	Acoustical Tile Ceilings (original construction only)	60%	23,340	2.25	\$52,515	2.5	\$58,350
20	Interior Doors (original construction only)	ALLOW			\$15,000		\$20,000
21	Wall Finishes	75%	29,175	1.5	\$43,763	2.0	\$58,350
22	Floor Finishes (original construction only)	60%	23,340	2	\$46,680	2.5	\$58,350
23	Abatement Contingency	LS			\$25,000		\$45,000
24							
25	Specialties						
26	Food Service Upgrade	ALLOW			\$10,000		\$25,000
27	Classroom Casework	ALLOW			\$10,000		\$15,000
28	Library Furnishings	ALLOW			\$30,000		\$45,000
29	Markerboard / Tackbd (New)	ALLOW			\$15,000		\$25,000
30	Toilet Partitions	ALLOW			\$15,000		\$25,000
31	Window Treatment (New Blinds)	ALLOW			\$10,000		\$20,000
32	Subtotal				\$981,408		\$1,393,000
33							
34	Site Improvement Allowance (parking expansion)	ALLOW			\$200,000		\$300,000
35					\$1,181,408		\$1,693,000
36	Estimating Contingency	10%			\$118,141		\$169,300
37	Construction Escalation	5%			\$59,070		\$84,650
38	Subtotal RENOVATION CONSTRUCTION COSTS				\$1,358,619	to	\$1,946,950
39	Renovation Cost/SF				\$30		\$42
40							
41	Estimated Soft Costs	25%			\$339,655		\$486,738
Potential Total Project Costs					\$1,698,273	to	\$2,433,688
					low range		high range

Arendtsville Elementary School



Costs to Upgrade to current standards:

- Equipment replacement for HVAC, Plumbing and Electrical (Limited AC)
- New roofing, windows, storefront
- Secure Vestibule, ADA compliance, new ceilings, flooring and painting
- Furniture/Casework allowances
- Parking expansion
- Contingencies & Soft Costs included

Total Estimated Project Costs
Range \$1.7M – \$2.4M

				38,900	Existing SF	
		Unit	SF Quant	Unit Cost	Low Range Cost	Unit Cost High Range Costs
Optional Building Additions per District Educational Program Input						
1	New Gymnasium - Demolish Existing Café, Convert MP Room to Café	SF	5,500	175	\$962,500	190 \$1,045,000
2	Classroom Addition - includes new Science Cirm and	SF	8,000	165	\$1,320,000	175 \$1,400,000
3	(4) General Cirms - 2 displaced and 2 new for additional capacity					
4	Library Addition	SF	600	165	\$99,000	175 \$105,000
5					\$2,381,500	\$2,550,000
6						
7	Site Work Allowance	LS			\$200,000	\$300,000
8	Subtotal New ADDITIONS		14,100		\$2,581,500	to \$2,850,000
Optional Building Improvements						
Building Engineering Systems						
1	HVAC System Renovations INCLUDES BUILDING WIDE COOLING	LS	38,900		\$1,122,500	\$1,367,000
2	Plumbing (fixture replacement, pipe scoping)	SF	38,900	1.0	\$38,900	\$58,350
4	Fire Protection (as required)	SF	38,900	2.5	\$97,250	\$116,700
5	Electrical System:	SF	38,900	3.0	\$116,700	\$175,050
6	Upgrades - Emergency Generator, Distribution, Data Network					
7	Communications, Building Security)					
8						
Exterior - Energy Envelope						
10	Roof (deferred maintenance) (EPDM)	100%	38,900	3.0	\$116,700	5.0 \$194,500
11	Window Replacement	SF	3,000	50	\$150,000	65 \$195,000
12	Storefront Replacement	SF	1,200	45	\$54,000	55 \$66,000
13	Walls (repointing, cleaning)	ALLOW	2000	28	\$56,000	32 \$64,000
14						
Interior Upgrades						
16	Secured Entrance Vestibule Upgrades	ALLOW			\$20,000	\$35,000
17	Probable Code Related Upgrades	ALLOW			\$20,000	\$35,000
18	ADA Compliance / Fire Rating					
19	Acoustical Tile Ceilings (original construction only)	60%	23,340	2.25	\$52,515	2.5 \$58,350
20	Interior Doors (original construction only)	ALLOW			\$15,000	\$20,000
21	Wall Finishes	75%	29,175	1.5	\$43,763	2.0 \$58,350
22	Floor Finishes (original construction only)	60%	23,340	2	\$46,680	2.5 \$58,350
23	Abatement Contingency	LS			\$25,000	\$45,000
24						
Specialties						
26	Food Service Upgrade	ALLOW			\$10,000	\$25,000
27	Classroom Casework	ALLOW			\$10,000	\$15,000
28	Library Furnishings	ALLOW			\$30,000	\$45,000
29	Markerboard / Tackbd (New)	ALLOW			\$15,000	\$25,000
30	Toilet Partitions	ALLOW			\$15,000	\$25,000
31	Window Treatment (New Blinds)	ALLOW			\$10,000	\$20,000
32	Subtotal				\$2,065,008	\$2,701,650
33						
34	Site Improvement Allowance (parking expansion, new construction)	ALLOW			\$350,000	\$450,000
35					\$2,415,008	\$3,151,650
36	Estimating Contingency	10%			\$241,501	\$315,165
37	Construction Escalation	5%			\$120,750	\$157,583
38	Subtotal RENOVATION CONSTRUCTION COSTS				\$2,777,259	to \$3,624,398
39	Renovation Cost/SF				\$62	\$82
40	Subtotal RENOVATION + ADDITIONS CONSTRUCTION COSTS				\$5,358,759	\$6,474,398
41	Estimated Soft Costs	22%			\$1,178,927	\$1,424,367
Potential Total Project Costs - Renovations + Additions					\$6,537,686	to \$7,898,765

Arendtsville Elementary School



Costs to Upgrade to current standards
PLUS ADDITIONAL EDUCATIONAL SPACE:

- 14,000 SF – Classrooms, Gym, Library
- Equipment replacement for HVAC, Plumbing and Electrical (Full AC)
- New roofing, windows, storefront
- Secure Vestibule, ADA compliance, new ceilings, flooring and painting
- Furniture/Casework allowances
- Parking expansion
- Contingencies & Soft Costs included

Total Estimated Project Costs
Range \$6.5M – \$7.9M

					38,500	Existing SF	
		Unit	SF Quant	Unit Cost	Low Range Cost	Unit Cost	High Range Costs
Optional Building Improvements							
1	Building Engineering Systems						
2	HVAC System Renovations EXCLUDES BLDG WIDE COOLING	SF	38,500	1.0	\$38,500	1.5	\$57,750
3	Plumbing (fixture replacement, pipe scoping)	SF	38,500	1.0	\$38,500	1.5	\$57,750
4	Fire Protection (as required)	SF	38,500	2.5	\$96,250	3.0	\$115,500
5	Electrical System:	SF	38,500	3.0	\$115,500	4.5	\$173,250
6	(Upgrades - Emergency Generator, Distribution, Data Network						
7	Communications, Building Security)						
8							
9	Exterior - Energy Envelope						
10	Roof (deferred maintenance) (EPDM / Ballasted)	100%	38,500	3.0	\$115,500	5.0	\$192,500
11	Window Replacement	SF	2,500	50	\$125,000	65	\$162,500
12	Storefront Replacement	SF	750	45	\$33,750	55	\$41,250
13	Door Replacement Hollow Metal	SF	275	58	\$15,950	62	\$17,050
14	Walls (repointing, cleaning)	SF	2000	28	\$56,000	32	\$64,000
15							
16	Interior Upgrades						
17	Secured Entrance Vestibule Upgrades	ALLOW			\$20,000		\$35,000
18	Probable Code Related Upgrades	ALLOW			\$20,000		\$35,000
19	ADA Compliance / Fire Rating						
20	Acoustical Tile Ceilings (original construction only)	40%	15,400	2.25	\$34,650	2.5	\$38,500
21	Interior Doors (original construction only)	ALLOW			\$15,000		\$20,000
22	Wall Finishes	75%	28,875	1.5	\$43,313	2.0	\$57,750
23	Floor Finishes (original construction only)	40%	15,400	2	\$30,800	2.5	\$38,500
24	Abatement Contingency	LS			\$25,000		\$45,000
25							
26	Specialties						
27	Food Service Upgrade	ALLOW			\$10,000		\$25,000
28	Classroom Casework	ALLOW			\$50,000		\$75,000
29	Library Furnishings	ALLOW			\$30,000		\$45,000
30	Markerboard / Tackbd (New)	ALLOW			\$15,000		\$25,000
31	Toilet Partitions	ALLOW			\$15,000		\$25,000
32	Window Treatment (New Blinds)	ALLOW			\$10,000		\$20,000
33	Subtotal				\$953,713		\$1,366,300
34							
35	Site Improvement Allowance (parking expansion)	ALLOW			\$200,000		\$300,000
36					\$1,153,713		\$1,666,300
37	Estimating Contingency	10%			\$115,371		\$166,630
38	Construction Escalation	5%			\$57,686		\$83,315
39	Subtotal RENOVATION CONSTRUCTION COSTS				\$1,326,769	to	\$1,916,245
40	Renovation Cost/SF				\$29		\$42
41							
42	Estimated Soft Costs	25%			\$331,692		\$479,061
Potential Total Project Costs					\$1,658,462	to	\$2,395,306

Bendersville Elementary School



- Costs to Upgrade to current standards :
- Equipment replacement for HVAC, Plumbing and Electrical (Full AC)
 - New roofing, windows, storefront
 - Secure Vestibule, ADA compliance, new ceilings, flooring and painting
 - Furniture/Casework allowances
 - Parking expansion
 - Contingencies & Soft Costs included

Total Estimated Project Costs
Range \$1.7M – \$2.4M

					38,500	Existing SF
	Unit	SF	Unit	Low Range	Unit	High Range
	Quant	Cost	Cost	Cost	Cost	Costs
Optional Building Additions per District Educational Program Input						
1 New Gymnasium - Demolish Existing MP Room	SF	5,500	175	\$962,500	190	\$1,045,000
2 Classroom Addition - includes new Science Ctrm and	SF	5,500	165	\$907,500	175	\$962,500
3 (3) General Ctrms displaced w/ new educational program						
4 Library Expansion	SF	500	165	\$82,500	175	\$87,500
5 Kitchen Expansion	SF	500	165	\$82,500	175	\$87,500
6 Cafeteria / Stage Expansion - Addition	SF	2,000	165	\$330,000	175	\$350,000
7				\$2,365,000		\$2,532,500
8 Estimating / Escalation Contingency	8%			\$189,200		\$202,600
Subtotal New ADDITIONS		14,000		\$2,554,200	to	\$2,735,100
Optional Building Improvements						
1 Building Engineering Systems						
2 HVAC System Renovations INCLUDES BUILDING WIDE COOLING	LS	38,500		\$1,112,500		\$1,355,000
3 Plumbing (fixture replacement, pipe scoping)	SF	38,500	1.0	\$38,500	1.5	\$57,750
4 Fire Protection (as required)	SF	38,500	2.5	\$96,250	3.0	\$115,500
5 Electrical System:	SF	38,500	3.0	\$115,500	4.5	\$173,250
6 (Upgrades - Emergency Generator, Distribution, Data Network						
7 Communications, Building Security)						
8						
9 Exterior - Energy Envelope						
10 Roof (deferred maintenance) (EPDM / Ballasted)	100%	38,500	3.0	\$115,500	5.0	\$192,500
11 Window Replacement	SF	2,500	50	\$125,000	65	\$162,500
12 Storefront Replacement	SF	750	45	\$33,750	55	\$41,250
13 Door Replacement Hollow Metal	SF	275	58	\$15,950	62	\$17,050
14 Walls (repointing, cleaning)	SF	2000	28	\$56,000	32	\$64,000
15						
16 Interior Upgrades						
17 Secured Entrance Vestibule Upgrades	ALLOW			\$20,000		\$35,000
18 Probable Code Related Upgrades	ALLOW			\$20,000		\$35,000
19 ADA Compliance / Fire Rating						
20 Acoustical Tile Ceilings (original construction only)	40%	15,400	2.25	\$34,650	2.5	\$38,500
21 Interior Doors (original construction only)	ALLOW			\$15,000		\$20,000
22 Wall Finishes	75%	28,875	1.5	\$43,313	2.0	\$57,750
23 Floor Finishes (original construction only)	40%	15,400	2	\$30,800	2.5	\$38,500
24 Abatement Contingency	LS			\$25,000		\$45,000
25						
26 Specialties						
27 Food Service Upgrade	ALLOW			\$10,000		\$25,000
28 Classroom Casework	ALLOW			\$50,000		\$75,000
29 Library Furnishings	ALLOW			\$30,000		\$45,000
30 Markerboard / Tackbd (New)	ALLOW			\$15,000		\$25,000
31 Toilet Partitions	ALLOW			\$15,000		\$25,000
32 Window Treatment (New Blinds)	ALLOW			\$10,000		\$20,000
33 Subtotal				\$2,027,713		\$2,663,550
34						
35 Site Improvement Allowance (parking expansion, new construction)	ALLOW			\$350,000		\$450,000
36				\$2,377,713		\$3,113,550
37 Estimating Contingency	10%			\$237,771		\$311,355
38 Construction Escalation	5%			\$118,886		\$155,678
39 Subtotal RENOVATION CONSTRUCTION COSTS				\$2,734,369	to	\$3,580,583
40 Renovation Cost/SF				\$62		\$81
41 Subtotal RENOVATION + ADDITIONS CONSTRUCTION COSTS				\$5,288,569		\$6,315,683
42						
42 Estimated Soft Costs	22%			1,163,485		1,389,450
Potential Total Project Costs				\$6,452,055	to	\$7,705,133

Bendersville Elementary School



Costs to Upgrade to current standards
PLUS ADDITIONAL EDUCATIONAL SPACE:

- 14,000 SF – Classrooms, Gym, Library, Kitchen and Cafeteria
 - Equipment replacement for HVAC, Plumbing and Electrical (Full AC)
 - New roofing, windows, storefront
 - Secure Vestibule, ADA compliance, new ceilings, flooring and painting
 - Furniture/Casework allowances
 - Parking expansion
 - Contingencies & Soft Costs included
- Total Estimated Project Costs
Range \$6.5M – \$7.7M

Building Capacity



Building Capacity - CURRENT

✓ Biglerville, Arendtsville, Bendersville ES
– ALL are at maximum utilization

Capacity of Existing Buildings based on <i>CURRENT Use of Space</i>					
K - 3 Elementary School					
		Utilization Rate		Utilization Rate	
	Current Bldg	Current 2/2016	% Full Current	Enrollment Per % Local	% Full 2020 Pop
School	Capacity*	Enrollment	Enrollment	2020 Pop	2020 Pop
Biglerville ES	550	498	91%	491	89%
	550	498	91%	491	89%
Capacity Available***		52		59	
4 - 6 Intermediate Schools					
		Utilization Rate		Utilization Rate	
	Current Bldg	Current 2/2016	% Full Current	Enrollment Per % Local	% Full 2020 Pop
School	Capacity	Enrollment	Enrollment	2020 Pop	2020 Pop
Arendtsville ES	225	202	90%	199	88%
Bendersville ES	175	174	99%	171	98%
	400	376	94%	371	93%
Capacity Available***		24		29	
7 - 12 Middle / High School					
		Utilization Rate		Utilization Rate	
	Current Bldg	Current 2/2016	% Full Current	Enrollment Per % Local	% Full 2020 Pop
School	Capacity	Enrollment	Enrollment	2020 Pop	2020 Pop
Middle / High School	940	791	84%	779	83%
	940	791	84%	779	83%
Capacity Available***		149		161	
Total Enrollment		1,665		1,641	

← 91%

← 90%
99%

← 84%

Preliminary Options



Option ONE			
Maintain Current Grade Alignments and Facilities			
Biglerville ES	K-3	Deferred Maintenance	
Bendersville ES	4 - 6	Additions / Renovations or Limited Renovations	
Arendtsville ES	4 - 6	Additions / Renovations or Limited Renovations	
Middle / High School	7 - 12	Deferred Maintenance	
Option TWO			
Maintain Current Grade Alignments, Vacate Bendersville ES			
Biglerville ES	K-3	Deferred Maintenance	
Bendersville ES		Vacate	
Arendtsville ES	4 - 6	Additions / Renovations	
Middle / High School	7 - 12	Deferred Maintenance	
Option THREE			
Maintain Current Grade Alignments, Vacate Bendersville AND Arendtsville ES			
Biglerville ES	K-3	Deferred Maintenance	
Bendersville ES		Vacate	
Arendtsville ES		Vacate	
New ES	4 - 6	525 Student capacity facility	
Middle / High School	7 - 12	Deferred Maintenance	
Option FOUR			
New ES & DAO			
	4 - 6	525 Student capacity facility w/ DAO Offices	
Repurpose current DAO space at the High School			

Evaluate Status Quo

Discuss Limited renovations vs comprehensive Renovations

Short term vs long term

Future Capital Improvement Budget

Maintain preferred grade alignments

Identify Pros and Cons of Options

Educational Benefits

Operational Savings

Financial considerations

Transportation

Other ?

Arendtsville Elementary School							
Comprehensive Additions and Renovations for Consolidated 4 - 6 Elementary School							
				38,900	Existing SF		
		Unit	SF	Unit	Low Range	Unit	High Range
		Unit	Quant	Cost	Cost	Cost	Costs
Proposed Additions							
1	New Gymnasium - Convert MP Room to Café, Kitchen	SF	12,000	175	\$2,100,000	180	\$2,160,000
2	Classrooms & Support Spaces	SF	25,000	165	\$4,125,000	170	\$4,250,000
3	Selective Demolition	LS	0	1	\$75,000		\$95,000
4					\$6,300,000		\$6,505,000
5							
6	Site Work Allowance	LS			\$325,000		\$500,000
7	Subtotal New ADDITIONS		37,000		\$6,625,000		\$7,005,000
Comprehensive Renovations							
		NET	36,000	\$/SF			
1	General Construction	SF	36,000	\$ 45	\$ 1,620,000	\$ 50	\$ 1,800,000
2	Site Improvements	LS			\$ 250,000		\$ 300,000
3	HVAC Construction (Building Wide Cooling)	SF	36,000	\$ 30	\$ 1,122,500	\$ 32	\$ 1,152,000
4	Plumbing	SF	36,000	12.0	\$ 432,000	14.0	\$ 504,000
5	Fire Protection	SF	36,000	2.0	\$ 72,000	3.0	\$ 108,000
6	Electrical System & Technology	SF	36,000	14.0	\$ 504,000	16.0	\$ 576,000
7	subtotal			103.0	\$4,000,500	115.0	\$ 4,440,000
8							
9							
10	New Additions & Renovations Subtotal				\$10,625,500		\$11,445,000
11	Estimated Soft Costs & Contingencies	25%			\$2,656,375		\$2,861,250
12							
13	Preliminary Total Project Costs				\$13,281,875		\$14,306,250

Arendtsville ES



Consolidate Arendtsville : 525 student
4 – 6 Elementary School

- Selective Demolition
- 37,000 SF New additions
- Comprehensive Renovations to remaining 36,000 SF
- New building envelope, site work, all new building systems, full AC, all new interior finishes
- Contingencies & Soft Costs included

Total Estimated Project Costs
Range \$13.3M – \$14.3M

Option Cost Summary



			Comprehensive Scope Range			
Elementary Facilities			Costs to Upgrade Range		Additions & Renovations	
			Total Project Cost		Total Project Cost	
Arendtsville ES	38,900	SF	1.7	2.4	6.5	7.9
Biglerville ES	64,000	SF	0.6	0.7	3.4	3.7
Bendersville ES	38,500	SF	1.7	2.4	6.5	7.7
			4	5.5	16.4	19.3
Grades 4 - 6	525 Students		Structure	Site	Soft Costs	Total Project Cost
Arendtsville Additions/Renovations			10.8	0.9	2.6	14.3
New Elementary School *			12.4	1.6	3	17
* located on existing school district land						

Facility study level estimates

- Total Project Cost shown (all construction and soft costs)
- Establishes costs to upgrade
- Understand cost of “no work”
- Proposed additions and comprehensive renovations
- Comparison to new construction costs
- New Building scenario planned for 525 students
- May consider DAO at new ES facility and repurpose High School SF (Approx. \$900K)

Financial Discussion



- District Administration conducting ongoing discussions with financial consultant
- Analyzing current debit service
- Developing understanding of potential borrowing capacity
- What is the probable timeline for projects / borrowing
- Other ?



	2016			2017												2018												2019											
FACILITY STUDY	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Options	1	2																																					
Cost			3																																				
Recommendation				4																																			
DESIGN																																							
Schematic Design					1	2	3																																
Design Development								4	5																														
Act 34 Hearing ?																																							
Const Documents											6	7	8	9																									
Bidding														10																									
Construction															1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18							

Next Step



Review Preliminary Options

- Determine which option provides best educational program and vision
- Establish financial parameters
- Prioritize projects; short term and long term
- Community Meetings
- Other ?



Purpose of the Study is to Prioritize Projects and develop a schedule which meets the Districts financial expectations



Upper Adams School District

Questions?



Providing a Client Oriented Approach to Architecture

Crabtree, Rohrbaugh & Associates, Architects

School

- Grades 4 - 6

- Planned for 525 students

- Selective Demo, New Additions &

- Total Approx. 73,000 SF

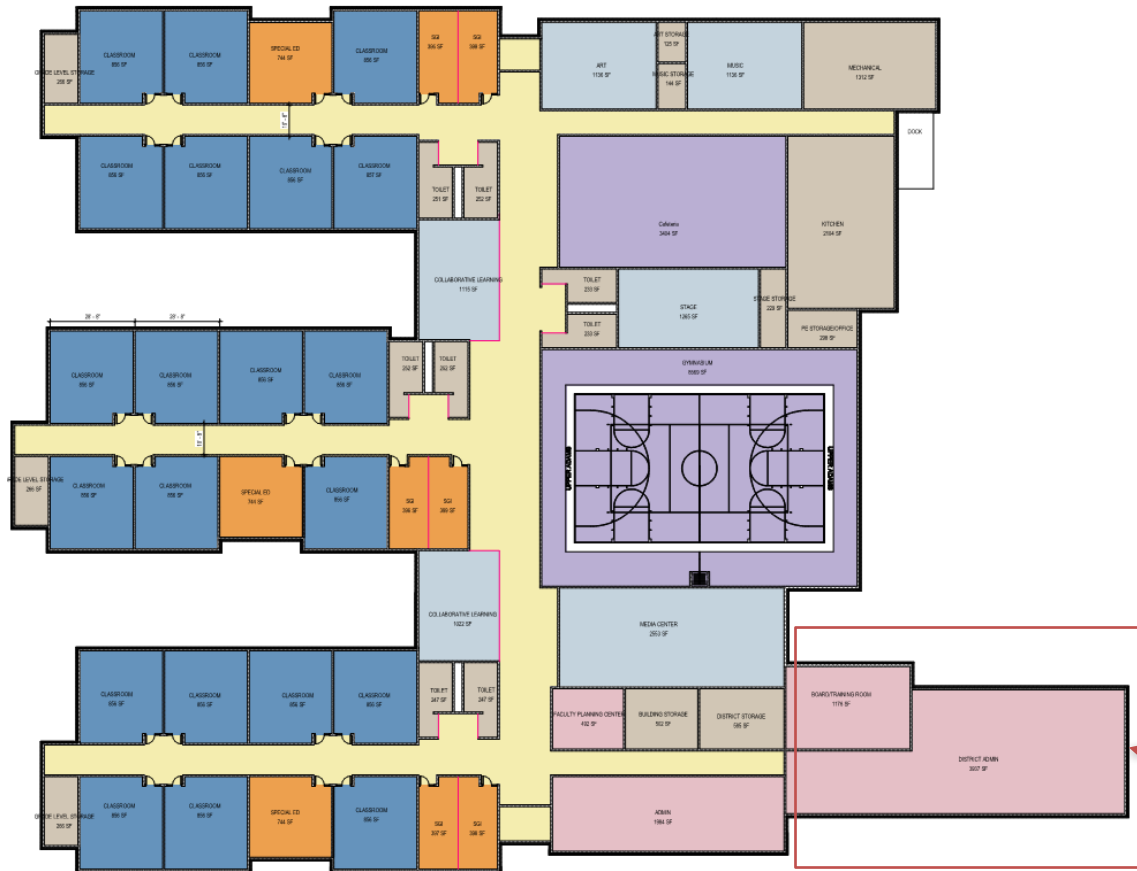
- New building envelope, site work, all

- Contingencies & Soft Costs included

Total Estimated Project Costs

Range \$13.3M – \$14.3M





New Elementary School

New 4 – 6 Elementary School Concept Only

- Planned for 525 students
- One Story Solution
- Total Approx. 75,000 SF
- All new Construction and Site Work
- Contingencies & Soft Costs included

Total Estimated Project Costs \$17M

Potential DAO
Offices 5,000 SF +/-