



October 03, 2022

6:00 P.M.
H.S. Library

Mr. Todd Engel
President
Region III

Mr. Steve Rupert
Vice President
Region II

Mrs. Cathy Bachman
Treasurer
Region III

Mrs. Sue Bowman
Region I

Mr. Ben Brigandi
Region I

Mrs. Summer Bukeavich
Region II

Mrs. Diane Cramer
Region II

Mr. John Hitesman
Region III

Mr. Nathan Miller
Region I

Dr. Eric Briggs
Superintendent

Mrs. Jamie Mowrey
Board Secretary

Mr. Fred Holland
Solicitor

Agenda

Work Session of the Board

The board may take action on any items that may properly come before the board.

Opening

Call to Order

Silent Meditation & Pledge of Allegiance

Roll Call

Preliminary Comments on Agenda Items

Action Items

1. Girls Basketball Coach

It is recommended the school board approve Dean Kriebel as Head Girls Varsity Girls Basketball Coach for the 2022-2023 season at a rate of \$4,756. Dean meets two of the three criteria for his salary to be above the minimum. Dean has personal playing experience and has shown success in building programs in the past.

Superintendent's Items for Discussion

- 1. Scoreboard Project**
- 2. ADA Ramp**
- 3. Central Elementary Renovations – Attachment #1**

Old Business

New Business

Courtesy to the Floor

Final Remarks by Board Members

Adjournment

Attachment 1

TO: SWASD School Board of Directors

FROM: Eric Briggs

DATE: September 26, 2022

RE: Update on Central Elementary

Board:

The purpose of this email is to provide you with an update of the work that has been done and the working we are looking to move forward with at Central Elementary. Recall, at our September board meeting, we approved the now renovation project for \$9.1 million. Since that meeting, we have had another meeting with Larson Design and Vern McKissick to review what the specifics of that work looks like. I have attached those meeting minutes and notes to this email (attachment titled "220912 Meeting Minutes"). I have also attached, as an outcome of that meeting, the two options (attachment titled "220912 Central Options I and II). Per Vern's minutes, he is planning on talking about these two options at our upcoming committee meeting at the end of October.

Upon receiving these minutes, I reviewed them and posed a question about additional options. For example, in the meeting, I asked about what the cost difference would be from a construction perspective should we move just fifth grade or if we moved fifth and sixth grade to Central Elementary School. When I received the options (see attached "220912 Central Options I and II) from McKissick, none of the options included an option having 6th grade at Central. When I posed this question, I was provided a summary of the history of the project which is provided below:

- **2018-2019** - The District and McKissick went through a feasibility study process in which we reviewed several possible realignments, additions, and closures throughout the district. A ranking matrix of the options studied and presented during the summer of 2019 is attached (titled "**Central Options Matrix**").
- **2020** - From there, Option 2B was modified, refined, and selected as the final option for design of a K-6 ES (The HS would remain 7-12 and a new stadium would be built between the schools). We were contracted to proceed with designing the work in January 2020. We proceeded with schematic design, but then were put on hold due to COVID in April 2020. The K-6 ES schematic floor plans from April 2020 are attached (titled **220912 – K-6 Option at Central**).
- **2021** - Then in the Fall of 2021, the District and McKissick revisited the feasibility study's master plan, and it was decided that the ES would become K-5 and the HS would house 6-12. The new stadium and the fieldhouse at Central were eliminated. That plan was presented in January 2022, and is attached (titled **220912 – January 2022 Plan**).
- **2022** - Since January, the project at the ES was reduced to a maintenance project to upgrade mechanical, electrical and plumbing systems, which is what we reviewed during our meeting two weeks ago. And, as you said, there still seems to be a desire for a multi-purpose room and classroom addition, or more.

Now, I am going to attempt to summarize what I believe McKissick is thinking, and I am sharing this with you as I want to make sure we are all on the same page with (or not) McKissick's thinking.

- McKissick believes our Building Advisory Team (BAT) has already determined that they would recommend to the board (or have) that Central become K-5 and the South Williamsport Junior/Senior High School become 6th-12th. To my knowledge, this board has never voted/approved that, but I believe that is where Mr. McKissick believes we stand.
- I am of the impression this board (and I may be wrong) has never formally agreed to any grade reconfiguration.
- Mr. McKissick, I believe, is also under the assumption that it has been determined that Rommelt will be "offline" at some point and all grade levels will be at Central and the Junior/Senior High School.

I wanted you to have this information as we moved forward. My plan is to talk more about this at our October 3rd Work Session. Below are some questions I believe we need to look toward answering (and I do not expect to answer them at our work session):

1. No matter how we reconfigure the 5th and 6th grade, is the board in agreement that Rommelt will **eventually** no longer house students?
2. What is the district going to do with Rommelt once the 5th and 6th grades vacate the building?
3. Is the board in agreement to have a K-5 elementary school and a 6th -12th high school at some point in the future?
4. When we go to expand rooms at Central Elementary School, do we move forward with a multi-purpose room or a large gymnasium? Where do we add on/provide for the additional space needed to include the 5th grade and/or 6th grade classes?

Please note, I believe there is additional planning that must occur, however, I am attempting to lead us through this in small steps. Once we figure out answers to the above questions, we need to determine what needs done with (in no order listed below):

- The High School (renovations)
- Rodney K Morgan Football Field (Renovations)
- Soccer Complex with Track (This will need increased debt service to complete the project).
- Additions at Central (This will need increased debt service to complete the project).

OPTIONS											
OPTIONS											
SWASD ATTRIBUTES CONSIDERED											
	1A	1B	2A	2B	3	4A	4B	5A	5B	6A	6B
1A	Status Quo Building Renewal	Educational Upgrades w/in Existing Facilities	K-5, 6-12, Close Rommelt, Central Addition	K-6, 7-12, Close Rommelt, Central Addition	K-4, 5-12, Close Rommelt, Jr/Sr HS Addition	K-6, 7-12, Close Central, Rommelt Addition	K-5, 6-12, Close Central, Rommelt Addition	K-6, 7-12, Replace Central & Rommelt with New Elementary	K-5, 6-12, Replace Central & Rommelt with New Elementary	K-8, 9-12, Convert HS to Elementary, Convert Central to High School	K-8, 9-12, Convert HS to Elementary, Build New High School
FEATURES											
Grade Structure	K-4, 5-6, 7-12	K-4, 5-6, 7-12	K-5, 6-12	K-6, 7-12	K-4, 5-12	K-6, 7-12	K-5, 6-12	K-6, 7-12	K-5, 6-12	K-8, 9-12	K-8, 9-12
Existing Building Area Remaining	276,769 SF	276,769 SF	214,282 SF	214,282 SF	214,282 SF	220,929 SF	220,929 SF	158,442 SF	158,442 SF	214,282 SF	158,442 SF
New Building Area	---	2,159 SF	11,200 SF	15,610 SF	7,919 SF	12,400 SF	8,800 SF	87,050 SF	78,937 SF	22,200 SF	86,800 SF
Total Building Area	276,769 SF	278,928 SF	225,482 SF	229,892 SF	222,201 SF	233,329 SF	229,729 SF	245,492 SF	237,379 SF	236,482 SF	245,242 SF
Total Area Change	---	2,159 SF	-51,287 SF	-46,877 SF	-54,568 SF	-43,440 SF	-47,040 SF	-31,277 SF	-39,990 SF	-40,287 SF	-31,527 SF
BUILDINGS USED											
Avoided Capital Maintenance	---	---	- \$ 4,476,881	- \$ 4,476,881	- \$ 4,476,881	- \$ 4,387,976	- \$ 4,387,976	- \$ 8,864,858	- \$ 8,864,858	- \$ 4,476,881	- \$ 8,864,858
Total Number of Buildings	3	3	2	2	2	2	2	2	2	2	2
FIRST COST											
Elementary Cost	\$ 8,864,858	\$ 9,723,827	\$ 7,987,322	\$ 10,214,150	\$ 5,400,524	\$ 12,315,587	\$ 8,879,264	\$ 25,742,429	\$ 23,405,798	\$ 17,678,644	\$ 17,282,164
Secondary Cost	\$ 12,091,722	\$ 14,856,108	\$ 15,690,376	\$ 16,328,968	\$ 17,528,615	\$ 15,741,448	\$ 15,690,376	\$ 15,741,448	\$ 15,690,376	\$ 13,878,662	\$ 29,670,000
Stadium / Athletic Fields Cost	\$ 1,982,437	\$ 1,982,437	\$ 1,982,437	\$ 1,982,437	\$ 1,982,437	\$ 5,650,472	\$ 5,650,472	\$ 1,982,437	\$ 1,982,437	\$ 1,982,437	\$ 1,982,437
Synthetic Turf Upgrade	\$ 831,785	\$ 831,785	\$ 831,785	\$ 831,785	\$ 831,785	\$ 0	\$ 0	\$ 831,785	\$ 831,785	\$ 831,785	\$ 831,785
Total Project Cost	\$ 23,770,802	\$ 27,393,957	\$ 26,491,921	\$ 29,357,341	\$ 25,743,362	\$ 33,707,507	\$ 30,220,112	\$ 44,298,099	\$ 41,910,397	\$ 34,371,529	\$ 49,766,386
State Aid	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
%	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %
Local Effort	\$ 23,770,802	\$ 27,393,957	\$ 26,491,921	\$ 29,357,341	\$ 25,743,362	\$ 33,707,507	\$ 30,220,112	\$ 44,298,099	\$ 41,910,397	\$ 34,371,529	\$ 49,766,386
Annual Debt Recovery Rate	5.7%	\$ 1,354,936	\$ 1,510,039	\$ 1,673,368	\$ 1,467,372	\$ 1,921,328	\$ 1,722,546	\$ 2,524,992	\$ 2,388,893	\$ 1,959,177	\$ 2,836,684
AVERAGE SCORE:	4	3.44	3.58	3.14	3.7	2.47	3.01	0.84	1.21	2.37	0
WEIGHTED SCORE:	0.43	0.37	0.38	0.34	0.4	0.26	0.32	0.09	0.13	0.25	0
FIRST COST											

OPTIONS											
OPTIONS											
1A	1B	2A	2B	3	4A	4B	5A	5B	6A	6B	
Status Quo Building Renewal	Educational Upgrades w/n Existing Facilities	K-5, 6-12, Close Rommel, Central Addition	K-6, 7-12, Close Rommel, Central Addition	K-4, 5-12, Close Rommel, Jr/Sr HS Addition	K-6, 7-12, Close Central, Rommelt Addition	K-5, 6-12, Close Central, Rommelt Addition	K-6, 7-12, Replace Central & Rommelt with New Elementary	K-5, 6-12, Replace Central & Rommelt with New Elementary	K-8, 9-12, Convert HS to Elementary, Convert Central to High School	K-8, 9-12, Convert HS to Elementary, Build New High School	
ANNUAL COST											
Avoided Debt on Capital Maint	5.7%	***	-\$ 255,182	-\$ 255,182	-\$ 255,182	-\$ 250,115	-\$ 250,115	-\$ 505,297	-\$ 255,182	-\$ 505,297	
Professional Staff Savings		***									
Support Staff Savings		***									
Food Service Impact		***									
Transportation Cost Impact		***									
Curricular Cost Impact - TBD		***									
Operations/Maint. Existing	\$ 5.68/sf	***	-\$ 367,424	-\$ 367,424	-\$ 367,424	-\$ 328,339	-\$ 695,763	-\$ 695,763	-\$ 367,424	-\$ 695,763	
Operations/Maint. New	\$ 5.23/sf	***	\$ 58,576	\$ 81,640	\$ 41,416	\$ 64,852	\$ 46,024	\$ 455,272	\$ 116,106	\$ 453,964	
Year 1											
Total Indirect Cost Impact - Year 1		\$ 11,292	-\$ 564,030	-\$ 540,966	-\$ 581,189	-\$ 513,602	-\$ 532,430	-\$ 745,768	-\$ 506,500	-\$ 747,096	
Debt Less Indirect Costs/Savings - Year 1		\$ 1,354,936	\$ 946,010	\$ 1,132,403	\$ 886,182	\$ 1,407,726	\$ 1,190,117	\$ 1,779,204	\$ 1,452,677	\$ 2,089,588	
Less Current Budgeted Debt Service		\$ 1,280,000	\$ 1,280,000	\$ 1,280,000	\$ 1,280,000	\$ 1,280,000	\$ 1,280,000	\$ 1,280,000	\$ 1,280,000	\$ 1,280,000	
Annual Net Impact - Year 1		\$ 74,936	-\$ 333,990	-\$ 147,597	-\$ 393,818	\$ 127,726	-\$ 89,883	\$ 499,204	\$ 172,677	\$ 809,588	
Year 15											
Total Indirect Cost Impact - Year 15		\$ 17,080	-\$ 853,146	-\$ 818,259	-\$ 879,101	-\$ 776,869	-\$ 805,348	-\$ 1,128,071	-\$ 766,126	-\$ 1,130,049	
Debt Less Indirect Costs/Savings - Year 15		\$ 1,354,936	\$ 656,894	\$ 855,110	\$ 588,270	\$ 1,144,459	\$ 917,198	\$ 1,396,921	\$ 1,193,051	\$ 1,706,635	
Less Current Budgeted Debt Service		\$ 1,280,000	\$ 1,280,000	\$ 1,280,000	\$ 1,280,000	\$ 1,280,000	\$ 1,280,000	\$ 1,280,000	\$ 1,280,000	\$ 1,280,000	
Annual Net Impact - Year 15		\$ 74,936	-\$ 623,106	-\$ 424,890	-\$ 691,730	-\$ 135,541	-\$ 362,802	\$ 116,921	-\$ 86,949	\$ 426,635	
Year 30											
Aggregate Impact Year 30	3.0%/yr	***	-\$ 25,594,371	-\$ 24,547,766	-\$ 26,373,035	-\$ 23,306,066	-\$ 24,160,437	-\$ 33,842,121	-\$ 35,767,613	-\$ 22,983,792	
Aggregate 30 Year Debt Service		\$ 40,648,071	\$ 45,301,184	\$ 50,201,053	\$ 44,021,149	\$ 57,639,837	\$ 51,676,392	\$ 75,749,750	\$ 71,666,779	\$ 85,100,521	
Less Aggregate of Current Budgeted Debt Service		\$ 38,400,000	\$ 38,400,000	\$ 38,400,000	\$ 38,400,000	\$ 38,400,000	\$ 38,400,000	\$ 38,400,000	\$ 38,400,000	\$ 38,400,000	
Aggregate Impact Year 30		\$ 2,248,071	-\$ 18,693,186	-\$ 12,746,713	-\$ 20,751,888	-\$ 4,066,229	-\$ 10,894,046	\$ 3,507,629	-\$ 2,500,834	-\$ 2,608,478	
ANNUAL COST											
AVERAGE SCORE:		1.26	0.46	3.05	4	2.01	2.82	1.11	1.82	1.84	0
WEIGHTED SCORE:	11.4%	0.14	0.05	0.35	0.46	0.23	0.32	0.13	0.21	0.21	0

SWASD ATTRIBUTES CONSIDERED		OPTIONS										
		1A	1B	2A	2B	3	4A	4B	5A	5B	6A	6B
1A		Status Quo Building Renewal										
1B		Educational Upgrades w/n Existing Facilities										
2A		K-5, 6-12, Close Rommel, Central Addition										
2B		K-6, 7-12, Close Rommel, Central Addition										
3		K-4, 5-12, Close Rommel, Jr/Sr HS Addition										
4A		K-6, 7-12, Close Central, Rommelt Addition										
4B		K-5, 6-12, Close Central, Rommelt Addition										
5A		K-5, 7-12, Replace Central & Rommelt with New Elementary										
5B		K-5, 6-12, Replace Central & Rommelt with New Elementary										
6A		K-8, 9-12, Convert HS to Elementary, Convert Central to High School										
6B		K-6, 9-12, Convert HS to Elementary, Build New High School										
EXECUTION		EXECUTION										
EXECUTION	Speed of Implementation	3	3	3	3	3	3	3	1	1	2	1
	Number of Buildings Affected	3	3	3	3	3	2	2	4	4	3	4
	Community Sentiment	2	2	2	2	2	2	2	2	1	2	1
	Minimal Disruption to District	2	2	2	3	3	2	3	3	3	2	3
	No Borrowing Referendum Required	4	4	4	4	4	4	4	4	4	4	4
	AVERAGE SCORE:	2.8	2.8	2.8	3	3	2.60	2.8	2.8	2.6	2.60	2.60
WEIGHTED SCORE:	0.13	0.13	0.13	0.14	0.14	0.12	0.13	0.13	0.12	0.12	0.12	
4.5%												
STUDENT IMPACT		STUDENT IMPACT										
STUDENT IMPACT	Educational Specifications Met	1	3	3	3	3	3	3	3	3	4	4
	Progression Model Supported by 3rd Party Research	1	1	3	2	3	2	3	2	3	3	3
	Improves K-6 Program Offerings	1	3	4	4	4	4	4	4	4	4	4
	Improves 7-12 Program Offerings	1	2	2	2	2	2	3	2	2	4	4
	E-rate and Other Grant Impact	0	0	0	0	0	0	0	0	0	0	0
	Technology Access and Connectivity	2	3	3	3	3	3	3	4	4	3	4
AVERAGE SCORE:	1.00	2.00	2.60	2.33	2.50	2.33	2.67	2.50	2.67	3.00	3.17	
WEIGHTED SCORE:	0.17	0.34	0.43	0.4	0.43	0.4	0.46	0.43	0.46	0.51	0.54	
17.1%												
FLEXIBILITY		FLEXIBILITY										
FLEXIBILITY	Scalability with Enrollment Changes	4	4	3	3	2	3	2	3	2	2	2
	Provides Swing Space	1	1	3	3	3	3	3	4	4	3	4
	Potential to Add Future Programs	3	4	2	3	2	3	2	3	2	2	2
	Potential for Resale of Closed Sites	0	0	3	3	3	2	2	4	4	3	4
	Potential for Reuse of Closed Sites	0	0	3	3	3	2	2	4	4	3	4
	Age & Cond of Remaining Bldgs	2	2	2	2	2	2	2	3	3	3	3
AVERAGE SCORE:	1.67	1.83	2.67	2.83	2.60	2.50	2.17	3.50	3.17	2.67	3.17	
WEIGHTED SCORE:	0.21	0.24	0.34	0.36	0.32	0.32	0.28	0.45	0.41	0.34	0.41	
12.9%												

SWASD ATTRIBUTES CONSIDERED	OPTIONS										
	1A Status Quo Building Renewal	1B Educational Upgrades w/in Existing Facilities	2A K-5, 6-12, Close Rommel, Central Addition	2B K-5, 7-12, Close Rommel, Central Addition	3 K-4, 5-12, Close Rommel, Jr/Sr HS Addition	4A K-6, 7-12, Close Central, Rommel Addition	4B K-5, 6-12, Close Central, Rommel Addition	5A K-6, 7-12, Replace Central & Rommel with New Elementary	5B K-5, 6-12, Replace Central & Rommel with New Elementary	6A K-8, 9-12, Convert HS to Elementary, Convert Central to High School	6B K-8, 9-12, Convert HS to Elementary, Build New High School
SUSTAINABILITY / GREEN DESIGN	Energy Use Reduction	2	2	3	3	2	2	4	4	3	4
	LEED/Green Globes Potential	0	0	2	2	2	2	3	3	3	3
	Student Walkability	3	3	3	3	3	3	3	3	3	3
	Transportation Reduction	0	0	0	0	0	0	0	0	0	0
	Embodied Energy Savings Through Reuse of Existing Building	4	4	3	3	3	3	2	2	3	2
AVERAGE SCORE:	1.80	1.80	2.20	2.20	2.20	2.00	2.00	2.40	2.40	2.40	2.40
WEIGHTED SCORE:	0.19	0.19	0.23	0.23	0.23	0.21	0.21	0.25	0.25	0.25	0.25
COMMUNITY ACCESS TO FACILITIES	Potential for Shared Community Services	2	2	1	1	1	1	1	1	1	1
	Access to Performance Spaces	2	2	2	2	2	2	2	2	4	4
	Access to Full Sized Gymnasium	2	2	2	3	2	2	3	3	4	4
	Access to Playfields	3	3	3	3	3	3	3	3	3	3
	Joint Use Recreation Facility	2	2	2	2	2	2	2	2	2	2
ATHLETICS & ACCESSIBILITY	Off Season Training Facility	3	3	2	2	2	2	2	2	2	3
	AVERAGE SCORE:	2.33	2.33	2.00	2.17	2.00	2.00	2.17	2.17	2.67	2.83
	WEIGHTED SCORE:	0.15	0.15	0.13	0.14	0.13	0.13	0.14	0.14	0.17	0.18
	Athletics: Variety & Participation	2	2	2	2	2	2	1	1	2	1
	Transportation Impact	0	0	0	0	0	0	0	0	0	0
ATHLETICS & ACCESSIBILITY	Multi Use Stadium (soccer/football)	0	0	0	0	0	0	0	0	0	0
	Modernization / Revitalization of Fields	2	2	2	2	2	2	2	2	2	2
	Adequate Gymnasium Space	2	2	2	3	2	2	3	3	3	4
	Reduce maintenance cost with Turf	0	0	0	0	0	0	0	0	0	0
	AVERAGE SCORE:	1.00	1.00	1.00	1.17	1.00	1.00	1.00	1.00	1.17	1.17
WEIGHTED SCORE:	0.16	0.16	0.16	0.18	0.16	0.18	0.16	0.16	0.16	0.18	0.18

SWASD ATTRIBUTES CONSIDERED	OPTIONS										
	1A Status Quo Building Renewal	1B Educational Upgrades w/in Existing Facilities	2A K-5, 6-12, Close Rommel, Central Addition	2B K-6, 7-12, Close Rommel, Central Addition	3 K-4, 5-12, Close Rommel, Jr/Sr HS Addition	4A K-6, 7-12, Close Central, Rommelt Addition	4B K-5, 6-12, Close Central, Rommelt Addition	5A K-6, 7-12, Replace Central & Rommelt with New Elementary	5B K-5, 6-12, Replace Central & Rommelt with New Elementary	6A K-8, 9-12, Convert HS to Elementary, Convert Central to High School	6B K-8, 9-12, Convert HS to Elementary, Build New High School
WEIGHTED AVERAGE	1.58	1.63	2.23	2.14	2.27	1.86	2.01	1.78	1.88	2.03	1.68
RANKING	11	10	2	3	1	7	5	8	6	4	9
VOTING RESULTS	5	4	3	2	11	9	7	9	11	1	7

[illegible]

Client: South Williamsport Area School District

First Floor
PLAN

Project Status
Issue Date
April 6 2020
Project Number
2020-02
Drawn By
Author

Drawing Number
PRA1.1



[illegible]

Q1401
SOUTH WILLIAMSPORT AREA
SCHOOL DISTRICT

Central Elementary School
Renovations & Additions

Drawings Title
**SECOND &
THIRD FLOOR
PLAN**

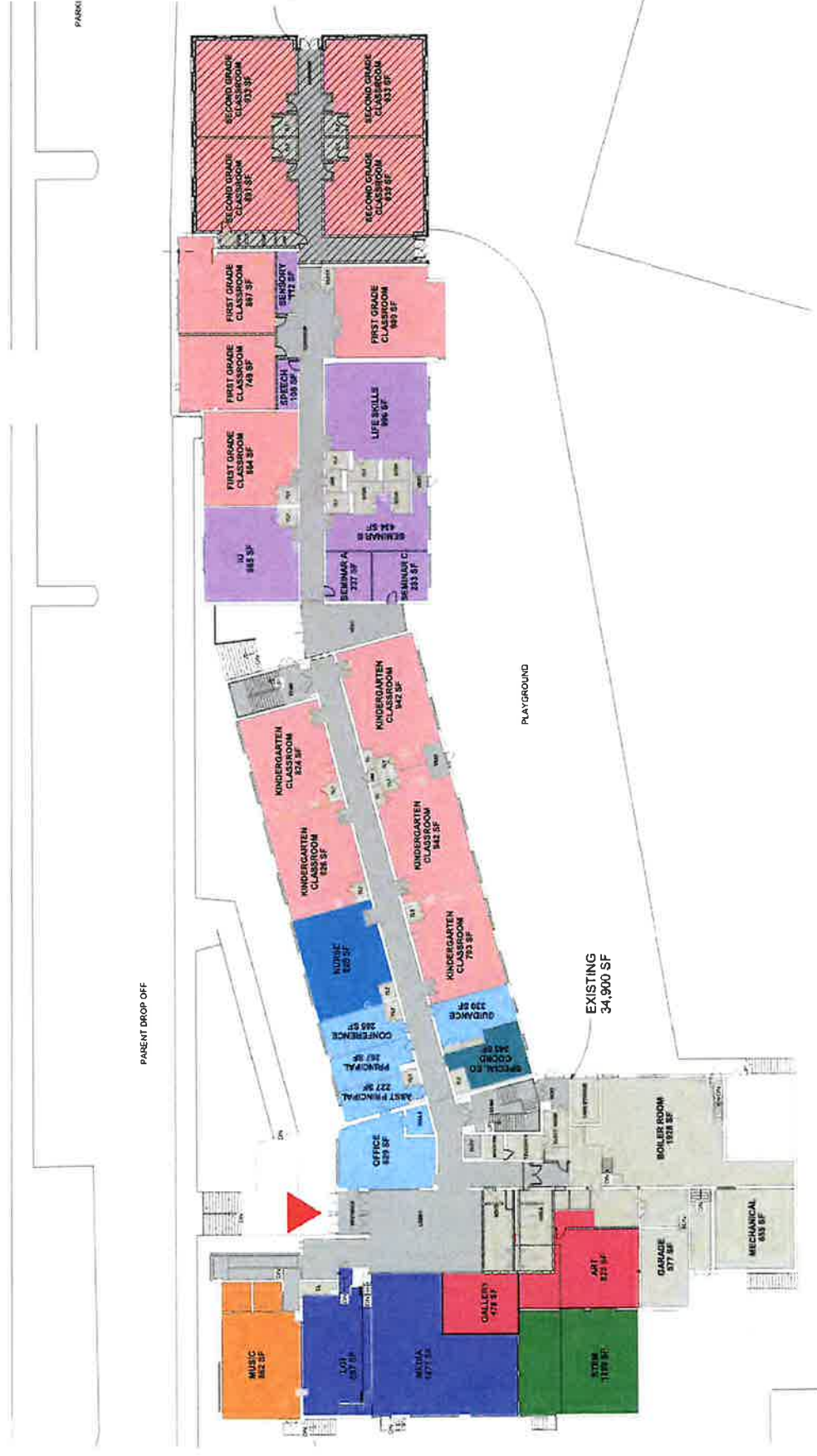
Project Status	Project Number	Drawn By
Issue Date	2020-02	Author
April 6, 2020		
	Drawing Number	

PRA1.2



Central Elementary School, K-5

Plan, First Floor

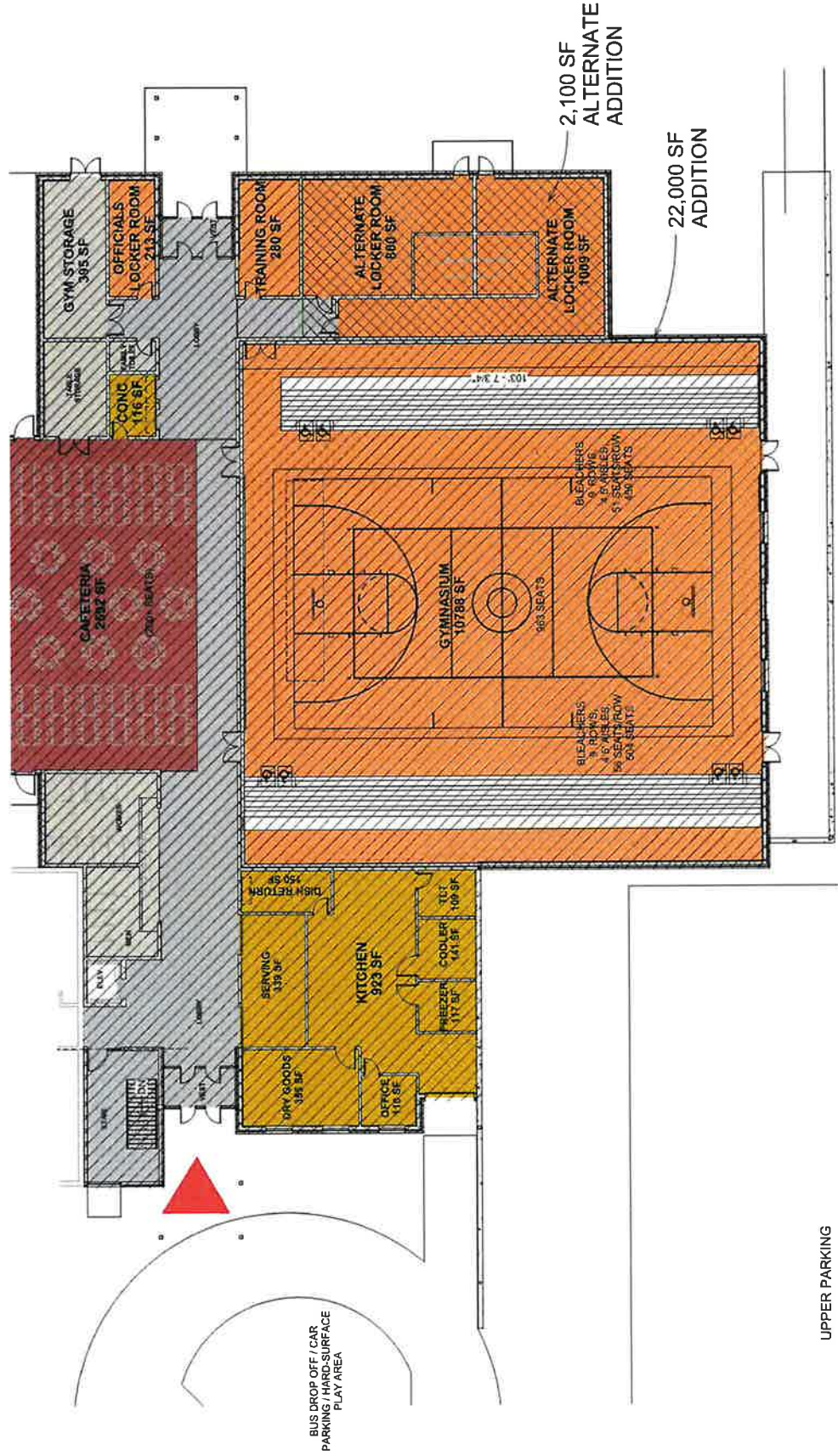


Plan, Second Floor



Central Elementary School, K-5

Plan, Third Floor – Community Center



Design Conference Report #1

South Williamsport Area School District – Central Elementary School (#2022-12)

Date/Time: September 12, 2022, 12:30 PM to 2:30 PM

Location: Rommelt Elementary School – MIL

Purpose: Design Team Kickoff Meeting

Attendees: Dr. Eric Briggs – Superintendent - SWASD
 Steve Rupert – VP Board – SWASD
 John Hitesman – Board Member - SWASD
 Jamie Mowrey – Business Manager - SWASD
 Bill Reifsnnyder – Dir Buildings & Grounds - SWASD
 Dick Edmonston – Maintenance - SWASD
 Craig Inners – Maintenance - SWASD
 Michele Loomis – Elementary Principal
 Andrew Metzger – Mechanical Engineer – Larson Design Group
 Stacy Witmer PE – Electrical Engineer – Larson Design Group
 Matt Yoder – Electrical Engineer – Larson Design Group
 Vern McKissick AIA – Principal Architect - McKissick Architecture
 Trina Gribble AIA – Project Architect - McKissick Architecture

Items of Discussion:

1. Overview. McKissick reviewed the scope of work for the renovation of Central Elementary School that has resulted from recent discussion with school representatives to reach its current budget for the project. The scope of work is identified in both the attached estimate of cost and outline specification.
2. Site Scope
 - a. The project has a limited scope with regard to the site – no new parking, roadways, or bus loops. No playground upgrades are current included. Scope will include repair of concrete, asphalt paving, retaining walls and handrails
3. Architectural Scope.
 - a. Roof Assembly
 - i. Bill Reifsnnyder noted that there has been discussion with TREMCO to test and scan the roof. He also noted that repair (coating) of the membrane roofs and replacement of the 1998 music and library ballasted roofs could be handled as a separate maintenance project outside of the main renovation project.

Vern L. McKissick, III, AIA, ALEP
President

Carl J. Kanaskie, Jr., AIA
*Director of Architecture
 Associate Partner*

Trina L. Gribble, AIA
Director of Operations

Benjamin F. Crum, AIA
Director of Design

R. Wayne Roberts, AIA, CPTED
Senior Vice President

Robert A. Oetti, Jr., AIA
Associate

Henry D. Brunett, III, AIA
Associate

Kristen P. McKissick
Associate

mmmmmmmmr

- ii. McKissick/Larson noted concerns about timing of roof coating/replacement in terms of coordinating the multiple roof penetrations that will be needed for the mechanical, electrical and plumbing renovations as well as wear and tear from the heavy amount of traffic that will be on the roof to install equipment. Therefore, McKissick/Larson recommends that the roof replacement/repair be included in the project for coordination purposes. If the District decides to have the roof work done by State contract, the work should occur simultaneously with the main project.

b. Doors

- i. Exterior doors are slated for repair or replacement.
- ii. Jamie Mowery noted that the district is pursuing a Tier 1 Security Grant. The cost of the doors would likely need to be broken out for purposes of the grant.

c. Interior Finishes

- i. The project would include replacement of the ceilings because the overhead ductwork will require their removal.
- ii. Flooring will be replaced and floors would be leveled with a leveling compound

d. Food Service

- i. Replacement of the existing kitchen equipment, cooler and freezer is included since they have passed their useful lives.
- ii. It was noted that a chilled service line is needed
- iii. Michele Loomis also noted that if another grade would be added to the K-4 school, a second serving line would be needed.

4. Mechanical

- a. The new system will include (DOAS) air handler units on the roof that will temper and dehumidify the air. Then, the downstream fan coil boxes will further temper and dehumidify the air within the building with use of a chilled water coil and a hot water coil.
- b. Air quality will meet code requirements and will significantly improve from the existing unit ventilator system. If further air purification is desired, bi-polar ionization or ultra violet treatment could be included as an add alternate.
- c. It was explained that the plan is to keep the 6-8 year old chiller and replace the boiler. The cost benefit of keeping the chiller led the team away from a VRF system, which would also require additional money be spent on upgrading the electrical service.



5. Electrical

- a. The existing main service is 1200 amps, plus the chiller has its own 600 amp. The project scope is to overlay the existing system, not replace it.
- b. To understand the current electrical loads and peak loads, Stacy Witmer requested the latest utility bills.
- c. It was noted that the project includes replacement of the lights with LED fixtures. The LED fixtures will reduce the load, while a new panel will be needed for the rooftop equipment.
- d. The kitchen panel is slated for replacement
- e. The fire alarm system works, therefore the project would only modify the system at areas where the floor plan changes.
- f. It was noted that the entire clock system and PA system will be replaced. The district likes American Fire & Signal and Sage.

6. Plumbing

- a. Vern McKissick reviewed the limited scope that had been included in the revised budget for plumbing upgrades.

7. Building Code

- a. The design team will confirm that the elementary renovation scope of work would be considered a maintenance project, which would then avoid the need for fire ratings and additional ADA improvements.

8. Educational Upgrades

- a. A limited allowance has been included that could be used to replace casework, markerboards, etc. The items are yet to be identified.

9. Coordination of Project Work with Future Educational Programming Needs

- a. It seems that the District may want to consider moving 5th grade (and maybe 6th grade) to Central ES as some point in the future. Eric Briggs asked what it would cost (approximately) to add 4 classrooms. The addition of more students would also require a larger multi-purpose room and kitchen given the already overloaded existing multi-purpose. Hypothetically, we could gage the area to be about 17,000sf or more, which would cost \$275-350/sf in construction.
- b. The multipurpose room or classrooms could be located beyond the library since the district purchased the neighboring property, or could be located on a third floor to the south of the building.
- c. McKissick will prepare conceptual plans to better understand the area and cost implications.
- d. It was noted that an Act 34 Hearing would be required if an addition is greater than 20% of the existing building, or about 12,500 sf.
- e. A classroom addition could potentially be an add alternate.
 - i. The 30+/- days needed before and the 30+/- days needed after the hearing could be explained to the bidders as part of the alternate in the bid documents.



10. Next Project Steps

- a. MEP building walkthrough with Bill Reifsnyder
- b. Architectural building walkthrough with Bill Reifsnyder
 - i. Including destructive testing of building envelope
- c. District to obtain TREMCO thermal scans
- d. Building Committee Meeting – October 26, 6pm

TLG

Please contact the writer with comments or corrections within seven days or please make further distribution of these minutes to all other persons affected by this portion of the project so that we can receive corrections or additions to this report. If exception is taken to any item, please inform us within seven (7) days of receipt, or this report will be considered factually correct.

Distribution: Eric Briggs, SWASD
All Attendees
MA File



South Williamsport Area Central Elementary School

Detailed Summary

K-4 Renovation @ Central August 10, 2022	Strategy:	Renovate
	Grades:	K-4
	Exist Bldg.:	55,840 SF
	Scheduled:	34,809 SF of above
	New Const:	0 SF
	Scheduled:	TBD
Total Area:		55,840 SF

	Quantity	Unit Cost	Sub-Total
Architectural - Renovations		Sub-total	\$ 2,600,854
General Building Maintenance		Sub-total	\$ -
General Misc. Maintenance Allowance			
Original 1958 Building	46,210.0 SF	\$ 0.00 / SF	\$ -
1998 Wing	7,130.0 SF	\$ 0.00 / SF	\$ -
2001 Wing	2,500.0 SF	\$ 0.00 / SF	\$ -
Building Exterior		Sub-total	\$ 1,271,381
Miscellaneous masonry repair at entire exterior			
Original Building	46,210.0 SF	\$ 2.52 / SF	\$ 116,449
1998 Wing	7,130.0 SF	\$ 1.26 / SF	\$ 8,984
2001 Wing	2,500.0 SF	\$ 1.26 / SF	\$ 3,150
Exterior Panel Remediation			
Original Building	46,210.0 SF	\$ 2.84 / SF	\$ 131,005
1998 Wing	7,130.0 SF	\$ 2.52 / SF	\$ 17,968
2001 Wing	2,500.0 SF	\$ 2.52 / SF	\$ 6,300
Repaint Exterior Panels, Trim, etc	30,000.0 SF	\$ 10.71 / SF	\$ 321,300
Rooft Replacement (10 Yr. Recoating & Repairs)			
Original Building	25,620.0 SF	\$ 18.90 / SF	\$ 484,218
1998 Wing	7,130.0 SF	\$ 18.90 / SF	\$ 134,757
2001 Wing	2,500.0 SF	\$ 18.90 / SF	\$ 47,250
Building Interior		Sub-total	\$ 1,329,473
Original Building			
Repair/replace exterior doors	273.0 SF	\$ 94.50 / SF	\$ 25,799
Door Keying System Replacement	85.0 EA	\$ 0.00 ea.	\$ -
Replace Windows System	0.0 SF	\$ 70.00 / SF	\$ -
Renovate Existing Restrooms	2.0 rms	\$ 44,100.00 ea.	\$ 88,200
Provide new drop AC tile ceilings as required	1.0 lump	\$ 31,500.00 / SF	\$ 31,500
Upgrade Finishes	0.0 SF	\$ 0.00 / SF	\$ -
Asbestos Abatement Floor Tile	0.0 SF	\$ 0.00 ea.	\$ -
Asbestos Ceiling	0.0 @	\$ 0.00 ea.	\$ -
Asbestos Misc. Materials	0.0 lump	\$ 0.00 ea.	\$ -
Classroom Floor Finishes Including leveling compound	23,148.0 SF	\$ 8.19 / SF	\$ 189,582
Kitchen Equipment Refresh	1.0 lump	\$ 535,500 / SF	\$ 535,500
Replace/Relocate Cooler/Freezer	1.0 lump	\$ 107,100 ea.	\$ 107,100
Upgrades to Accommodate New HVAC System	46,210.0 SF	\$ 6.30 ea.	\$ 291,123

1998 Wing					
Repair/replace Exterior doors	0.0	SF	\$ 0.00 / SF	\$	
Door Keying System Replacement	0.0	EA	\$ 0.00 ea.	\$	
Replace Windows System	0.0	SF	\$ 0.00 / SF	\$	
Renovate Existing Restrooms	0.0	EA	\$ 0.00 ea.	\$	
Provide new drop AC tile ceilings as required	0.0	SF	\$ 0.00 / SF	\$	
Upgrade Finishes	0.0	SF	\$ 0.00 / SF	\$	
Locker Room Upgrades	0.0	@	\$ 0.00 ea.	\$	
New Floor Finishes Including leveling compound	0.0	SF	\$ 0.00 / SF	\$	
Upgrades to Accommodate New HVAC System	7,130.0	SF	\$ 6.30 ea.	\$	44,919
2001 Wing					
Repair/replace exterior doors	0.0	SF	\$ 0.00 / SF	\$	
Door Keying System Replacement	0.0	EA	\$ 0.00 ea.	\$	
Replace Windows System	0.0	SF	\$ 0.00 / SF	\$	
Renovate Existing Restrooms	0.0	rms	\$ 0.00 ea.	\$	
Provide new drop AC tile ceilings as required	0.0	SF	\$ 0.00 / SF	\$	
Upgrade Finishes	0.0	SF	\$ 0.00 / SF	\$	
New Floor Finishes Including leveling compound	0.0	SF	\$ 0.00 / SF	\$	
Upgrades to Accommodate New HVAC System	2,500.0	SF	\$ 6.30 ea.	\$	15,750
Structural				Sub-total	\$ -
Original Building	46,210.0	SF	\$ 0.00 / SF	\$	
1998 Wing	7,130.0	SF	\$ 0.00 / SF	\$	
2001 Wing	2,500.0	SF	\$ 0.00 / SF	\$	
New Construction				Sub-total	\$ -
New Classroom Addition (8 classrooms)	0.0	SF	\$ 0.00 / SF	\$	
New Kitchen	0.0	SF	\$ 0.00 / SF	\$	
Restrooms/Circulation/Storage at Café/Gym Wing	0.0	EA.	\$ 0.00 / SF	\$	
Locker Rooms (Alternate)	0.0	SF	\$ 0.00 / SF	\$	
New Multipurpose Room	0.0	EA.	\$ 0.00 / SF	\$	
Separate Cafeteria to seat 220	0.0	EA.	\$ 0.00 / SF	\$	
Site				Sub-total	\$ 353,273
General Improvements				Sub-total	\$ 353,273
Site concrete repairs – allowance	1.0	SF	\$ 50,400.00 / SF	\$	50,400
K-2 Playground Location Improvements/Rubber Play Surface	0.0	lump	\$ 0.00 ea.	\$	
Site asphalt repair	3,600.0	SY	\$ 56.70 / SY	\$	204,120
Retaining wall repairs	2,135.0	SF	\$ 31.50 / SF	\$	67,253
Repair Site Handrails	1.0	lump	\$ 31,500.00 ea.	\$	31,500
Storm Water System	0.0	lump	\$ 0.00 ea.	\$	
Utility Relocations (Gas, Water, Sanitary)	0.0	lump	\$ 0.00 ea.	\$	
Miscellaneous Allowance (Landscaping/Signage)	0.0	lump	\$ 0.00 ea.	\$	
Demo Home-	0.0	lump	\$ 0.00 ea.	\$	
New Construction Site				Sub-total	\$ -
Site Grading for New Additions	0.0	SF	\$ 0.00 / SF	\$	
Parking Replacement	0.0	SP	\$ 0.00 / SF	\$	
Extend Drop Off Loop at Front	0.0	LF	\$ 0.00 / LF	\$	
Grade for playground	0.0	CY	\$ 0.00 / SF	\$	

Mechanical, Electrical, Plumbing		Sub-total		\$ 4,137,210
Heating, Ventilation & Air Conditioning		Sub-total		\$ 2,888,806
Demolition	160 HR	\$ 162.82 ea		\$ 26,051
General Improvements (All areas)				
Startup and Testing	1 LS	\$ 23,259.60 ea		\$ 23,260
Flush and Fill	1 LS	\$ 23,259.60 ea		\$ 23,260
Duct Cleaning	1 LS	\$ 17,444.70 ea		\$ 17,445
RTU	1 LS	\$ 50,126.86 ea		\$ 50,127
Fan Coils	1 LS	\$ 30,417.83 ea		\$ 30,418
Controls	1 LS	\$ 418,672.80 ea		\$ 418,673
Unit Ventilators	1 LS	\$ 423,999.25 ea		\$ 423,999
Split Ductless (IDF)	1 LS	\$ 11,018.07 ea		\$ 11,018
Exhaust Fans	1 LS	\$ 14,020.89 ea		\$ 14,021
Convectors	1 LS	\$ 1,249.04 ea		\$ 1,249
Baseboard	1 LS	\$ 10,145.84 ea		\$ 10,146
HW Duct Coil	1 LS	\$ 8,108.30 ea		\$ 8,108
AHU	1 LS	\$ 91,254.39 ea		\$ 91,254
Dielectric Fittings	25 EA	\$ 581.49 ea		\$ 14,537
Unit Heaters	1 LS	\$ 11,957.76 ea		\$ 11,958
Pumps HW/CW Loop	1 LS	\$ 324,061.59 ea		\$ 324,062
Expansion Tank	2 EA	\$ 10,985.51 ea		\$ 21,971
Duct Insulation	7500 SF	\$ 4.63 ea		\$ 34,715
Pipe Insulation	3000 LF	\$ 15.26 ea		\$ 45,775
Boilers	2 EA	\$ 80,513.11 ea		\$ 161,026
HVAC - Complete Replacement Beyond above Amounts	55840 SF	\$ 20.16 / SF		\$ 1,125,734
Plumbing & Fire Protection		Sub-total		\$ 81,755
Demolition	0 HR	\$ 129.22 ea		\$ -
General				
Automatic Water Closet Flush Valve	0 EA	\$ 923.00 ea		\$ -
Automatic Lav Faucet	0 EA	\$ 923.00 ea		\$ -
Automatic Urinal Flush Valve	0 EA	\$ 923.00 ea		\$ -
DHW Boiler	1 EA	\$ 48,810.27 ea		\$ 48,810
DHW Storage Tank	1 EA	\$ 31,400.46 ea		\$ 31,400
Recirc Pumps	2 EA	\$ 772.22 ea		\$ 1,544
General Maintenance & HVAC Allowance	55,840 SF	\$ - / SF		\$ -
Electrical Systems		Sub-total		\$ 1,166,649
Demolition				\$ -
General				
Generator 35 KW	1 EA	\$ 41,732.37 ea		\$ 41,732
Electrical Power Disconnect/Reconnect	37 EA	\$ 1,162.98 ea		\$ 43,030
General Maintenance Allowance	55,840 SF	\$ - / SF		\$ -
Central System				
Switchboard Testing	0-0 lump	\$ 0.00 ea		\$ -

Original Building					
Replace Wiring	0.0	SF	\$ 0.00 /SF	\$	_____
Replace Fire Alarm System	46,210.0	SF	\$ 0.00 /SF	\$	_____
Digital TV	0.0	SF	\$ 0.00 /SF	\$	_____
Data System Upgrades	0.0	SF	\$ 0.00 /SF	\$	_____
Security Upgrades	46,210.0	lump	\$ 1.89 / SF	\$	87,337
Upgrade PA system	46,210.0	SF	\$ 0.95 / SF	\$	43,668
Kitchen Panel Upgrade	1.0	ea.	\$ 44,100.00 ea.	\$	44,100
Upgrades associated with Full HVAC replacement	46,210.0	SF	\$ 10.08 / SF	\$	465,797
Original Building Replace Lighting to LED	46,210.0	SF	\$ 5.67 / SF	\$	262,011
1998 Addition					
Replace Wiring	0.0	SF	\$ 0.00 /SF	\$	_____
Replace Fire Alarm System	0.0	SF	\$ 0.00 /SF	\$	_____
Digital TV	0.0	SF	\$ 0.00 /SF	\$	_____
Data System Upgrades	0.0	SF	\$ 0.00 /SF	\$	_____
Security Upgrades	7,130.0	lump	\$ 1.89 / SF	\$	13,476
Upgrade PA system	7,130.0	SF	\$ 0.95 / SF	\$	6,738
Upgrades associated with Full HVAC replacement	7,130.0	SF	\$ 10.08 / SF	\$	71,870
Original Building Replace Lighting to LED	7,130.0	SF	\$ 5.67 / SF	\$	40,427
2001 Addition					
Replace Wiring	0.0	SF	\$ 0.00 /SF	\$	_____
Replace Fire Alarm System	2,500.0	SF	\$ 0.00 /SF	\$	_____
Digital TV	0.0	SF	\$ 0.00 /SF	\$	_____
Data System Upgrades	0.0	SF	\$ 0.00 /SF	\$	_____
Security Upgrades	2,500.0	lump	\$ 1.89 / SF	\$	4,725
Upgrade PA system	2,500.0	SF	\$ 0.95 / SF	\$	2,363
Upgrades associated with Full HVAC replacement	2,500.0	SF	\$ 10.08 / SF	\$	25,200
Original Building Replace Lighting to LED	2,500.0	SF	\$ 5.67 / SF	\$	14,175
New Construction			Sub-total	\$	-
NA					
Building Codes			Sub-total	\$	96,025
ADA Handicapped Accessibility, Exterior Upgrades			Sub-total	\$	-
	0.0	@	\$ 0.00 ea.	\$	-
ADA Handicapped Accessibility, Interior Upgrades			Sub-total	\$	37,800
Original Building					
ADA accessibility to Existing Restrooms	2.0	@	\$ 18,900 ea.	\$	37,800
Miscellaneous (doors entry's, hardware, barrier rem.)	0.0	SF	\$ 0.00 /SF	\$	_____
Provide new interior ADA signage	0.0	SF	\$ 0.00 /SF	\$	_____
2001 Addition					
ADA accessibility to Existing Restrooms	0.0	@	\$ 0.00 ea.	\$	_____
Miscellaneous (doors entry's, hardware, barrier rem.)	0.0	SF	\$ 0.00 /SF	\$	_____
Provide new interior ADA signage	0.0	SF	\$ 0.00 /SF	\$	_____

IBC Code Compliance, Interior Upgrades			Sub-total	\$ 58,225
Original Building	46,210.0 SF		\$ 1.26 / SF	\$ 58,225
1998 Addition	7,130.0 SF		\$ 0.00 / SF	\$
2001 Addition	2,500.0 SF		\$ 0.00 / SF	\$
Sprinkler installation or fire zone separations				
Sprinklers installation at new storage rooms	0.0 SF		\$ 0.00 / SF	\$
Original Building	0.0 SF		\$ 0.00 / SF	\$
2001 Addition	0.0 SF		\$ 0.00 / SF	\$
Educational Upgrades			Sub-total	\$ 161,312
General Upgrades			Sub-total	\$ 161,312
Original Building				
General Allowance	46,210.0 SF		\$ 3.15 / SF	\$ 145,562
1998 Addition				
Convert Library to 1st Grade Classrooms	0.0 SF		\$ 0.00 / SF	\$
Convert MP to STEM	0.0 SF		\$ 0.00 / SF	\$
Convert MP to Library	0.0 SF		\$ 0.00 / SF	\$
Convert MP to Gallery	0.0 SF		\$ 0.00 / SF	\$
Convert Kitchen to Art	0.0 SF		\$ 0.00 / SF	\$
Relocate Main Restrooms/Corridor	0.0 SF		\$ 0.00 / SF	\$
Subdivide One Classrooms w/operable partitions	0.0 SF		\$ 0.00 / SF	\$
Convert Stage to Black Box LGI	0.0 SF		\$ 0.00 / SF	\$
Expand & Renovate Health Suite	0.0 SF		\$ 0.00 / SF	\$
Convert Nurse to Guidance/SP Ed	0.0 SF		\$ 0.00 / SF	\$
Install Addition Faculty Restroom at 2nd Floor	0.0 SF		\$ 0.00 / SF	\$
General Allowance	2,500.0 SF		\$ 3.15 / SF	\$ 7,875
2001 Addition				
General Allowance	2,500.0 SF		\$ 3.15 / SF	\$ 7,875

Central ES Construction Cost Summary	Renovation	New Construction	Total
Site	\$ 353,273	\$ -	\$ 353,273
New Construction	\$ -	\$ -	\$ -
Architectural	\$ 2,600,854	\$ -	\$ 2,600,854
Mechanical, Electrical, Plumbing	\$ 4,137,210	\$ -	\$ 4,137,210
Building Codes	\$ 96,025	\$ -	\$ 96,025
Educational Upgrades	\$ 161,312	\$ -	\$ 161,312
Total Construction Cost	\$ 7,348,672	\$ -	\$ 7,348,672

Inflation Adjustment			
After 2/2023 assume 1% per month	\$ 7,348,672	1.00% =	\$ -
Total ES Construction Cost			\$ 7,348,672

Central ES Project Cost Summary	Renovation	New Construction	Total
Furnishings Allowance @ 6%	\$ 440,920	\$ -	\$ 440,920
Project Related Costs @ 17%	\$ 1,249,274	\$ -	\$ 1,249,274
Construction Costs	\$ 7,348,672	\$ -	\$ 7,348,672
Total Project Cost	\$ 9,038,867	\$ -	\$ 9,038,867

PROJECT OUTLINE SPECIFICATIONS

~~APRIL 6, 2020~~
~~NOVEMBER 30, 2021~~
AUGUST 4, 2022

**South Williamsport Area School District
Additions & Renovations to the Central Elementary School
Schematic Design Phase**

1.1. CODES AND VARIANCES

A. Code Compliance

1. International Building Code, ~~2015~~ 2018 Edition as amended by PA
2. Use Group E
- ~~3. Type 2B Construction for new classroom wing.~~
- ~~4. Type 2B Construction for new gymnasium wing.~~
5. Separate by code required fire walls.
6. International Existing Building Code, ~~2015~~ 2018 Edition as amended by PA
7. Type 2B existing building areas.
8. International Plumbing, Mechanical, and Electric Codes
9. NFPA 101: National Fire Protection Association
10. ANSI 117.1 2009
11. Americans with Disabilities Act - 1990, Title II & Title I.
12. Borough of South Williamsport Zoning Ordinances

B. Local Jurisdiction

1. Borough of South Williamsport
2. Borough Inspector: N/A
3. Borough Engineer: N/A
- ~~4. Zoning Board~~

C. Variances / Special Exceptions

1. ~~Parking number – standalone or in concert with overall campus development.~~
2. ~~Bus loop maximum grade~~

1.2. CONSTRUCTION CONTRACTS

A. Multiple Prime

1. General Contractor – shall act as Lead Contractor
2. HVAC - Heating, Ventilation & Air Conditioning
3. Plumbing
4. Electrical
5. Food Service
6. Asbestos Abatement (by Owner)

B. Building Specific Information

1. Target PDE Pupil Capacity: (See PLANCON Part A Page A10) is based upon projected District Kindergarten – 4th ~~5th~~ Grade enrollment of ~~536~~ **495** in the ~~2023-22~~ **2024-25** School year plus 10% allowance (~~590-545~~) in accordance with PDE reimbursement regulations. Building is projected to have a capacity of ~~625~~ **525** regular student and ~~150-~~ **121** pupil special education Full Time Equivalency (FTE) for a total capacity of ~~775~~ **646**.
2. ~~New construction of 4,700 SF +/- Classroom wing and 22,000 SF +/- gym wing. Existing building 55,840 SF. Approximate Gross Architectural Area of completed facility 83,318 SF.~~
3. Cafeteria Seating Capacity Goal = ~~200~~ **134 pupils, 3 4** servings.
4. Building Age: The building consists of three distinct additions; 1962 original, 1998 classroom wing, and a smaller two room 2001 addition. The scope of required work as outlined below will vary based upon the ages of additions.
5. Anticipated Construction Bid Date **2/2023** ; Substantial Completion of ~~new additions TBD,~~ renovations **8/2024**. Construction will occur in phases to allow for continued use of the facility without interrupting schooling. Phasing to be as developed in conjunction with the South Williamsport Area School District.

1.3. SITE WORK

- A. Earthwork and Grading.
- B. Demolition.
- C. Install erosion and sediment controls.
- D. Demolish existing portions of ~~Central Elementary building,~~ site paving, concrete, and ~~woods~~ as required to accommodate new work.
- E. Provide and maintain temporary chain link protective fence at perimeter of disturbed area.

F. Topsoil:

1. Strip and stockpile topsoil

G. Grading:

- ~~1. Grade site via cut and fill to accommodate new building additions, bus loop road and parking, play areas and the associated storm water management.~~
- ~~2. Rough and finish grading, fertilizing and seeding of lawn areas immediately around building.~~
3. Backfill: Any fill operations to be conducted by the General Contractor under the supervision of testing agency under direct contract with School System
- ~~4. Layout of roadways/grading shall take into account snow removal and storage.~~

~~H. Stabilized Access Pathways. Provide grass stabilization system, "grass-crete," and other provisions as required to not impede emergency fire truck access to perimeter of the building.~~

I. Bituminous.

- ~~1. Provide new bituminous drives and parking areas. Create a minimum of 17-0 new parking spaces to replace spaces lost through the closure of the Rommelt Elementary School for regular use at the Central Elementary building and for bus queuing.~~
2. Existing site paving. Mill and repave with 1 ½" top wearing course at locations to be identified on drawings +/- 3,600 SY.
3. Accommodate up to 8 buses, arriving at a time in the morning and loading concurrently in the afternoon.
- ~~4. Construct bus loop for district bus circulation as well as access to elementary kitchen loading dock.~~

J. Existing Public Roadways.

1. Provide replacement and repair of sidewalks and curbs along West Mountain Avenue based upon review with Owner/Borough of South Williamsport.

K. Fields.

1. Reconfigure site to provide outdoor play areas as depicted on plans.
2. PE to utilize existing practice/new all-weather turf field.
- ~~3. Bus que area will also act as a hard surface play area.~~

L. Utilities.

1. In general, maintain and extend existing utility services.
- ~~2. Provide for utilities to future field house location (water, sanitary, power) to location indicated on plans.~~

M. Site Concrete.

1. Provide new concrete walks, curbs, stairs and ramps as indicated on the drawings. This shall include rear staircases.

N. Retaining Walls.

1. New. Modular earth retained unitary CMU wall system at new bus lot/hard surface play (Keystone, Anchor or equivalent).
 2. Walls. Provide repairs to existing site concrete walls as identified with SWASD maintenance department.
 - O. Landscaping.
 1. General. Trees, plants and shrubs as required by Borough of South Williamsport. Geographically adaptive for low maintenance and longevity.
 2. ~~Provide Plantings/Rock Surface at hillside to west parking lot.~~
 3. ~~Provide landscaping/ground seeping at steep grass bank between drop off loop and street for safety.~~
 - P. Fencing. Provide 4' ornamental fencing at key locations and vinyl coated fence system for security at perimeter of playground areas.
 - Q. Signage. Traffic and pedestrian signage as required.
 - R. Flagpoles. Maintain existing.
 - S. Bollards. Bollards at gas meters and transformers as required.
 - T. Storm Water.
 1. Underground. ~~Installation of underground storm water management system/ erosion and sediment control is anticipated. Extent to be determined in conjunction with Borough of South Williamsport. Some use of "raingarden" infiltration pond systems as appropriate.~~
 2. Roof Drains: All existing roof drains will continue to outfall on grade and remain disconnected from any new stormwater facility.
 - U. Bicycle Racks. New as noted on drawing.
 - V. Site Lighting. Pole mounted LED fixtures as required by Borough of South Williamsport.
 1. Playground. Provide (3) play areas – one existing upgraded for grade 3-5 4 use; one new to east for K-2, and a third hard surface play area for grade K-5 4 use. Fence perimeter of all play areas.
 2. K-2 Play. Provide rubber play surface at new east play area. Equipment concept by architect, equipment procurement and installation by owner under separate contract.
 3. 3-5 4 Play. Survey and provide identified repairs.
 4. K-5 4 Play. Provide game markings on pavement, provide basketball backstops at perimeter of hard surface play area.
 5. Site Hand Railings. Provide for repair/replacement as necessary of handrails at site.
- 1.4. AVAILABLE UTILITIES
- A. Water: Williamsport Municipal Water Authority
 - B. Sewage Disposal: Lycoming County Water & Sewer Authority

- C. Electricity: PP&L
- D. Natural Gas: UGI
- E. Telephone: TBD
- F. Internet: TBD
- G. Cable: TBD

1.5. ARCHITECTURAL

A. ~~New~~

- 1. ~~Footings: Reinforced concrete with earth formed spread footings.~~
- 2. ~~Foundation Walls: Reinforced concrete block and reinforced concrete.~~
- 3. ~~Structure:~~
 - a. ~~Construction Type: Non-combustible~~
 - b. ~~Classroom and Specialty Support Area Addition:~~
 - 1) ~~Masonry/Concrete Bearing/Steel Frame: Limited area of beams, plate girders, purlins and joists with masonry infill.~~
 - 2) ~~Exterior brick (Glen Gary, Belden, or equal) with colored mortar selected to match existing building.~~
 - c. ~~Multipurpose addition:~~
 - 1) ~~Steel column, steel beams, and steel joists throughout new additions.~~
 - 2) ~~Steel trusses over new Gym/Café area.~~
 - 3) ~~Metal deck.~~
 - 4) ~~Epic ER2RA acoustic deck for Gym/Cafe area~~
 - 5) ~~Non acoustical traditional deck other locations.~~

B. Existing:

- 1. Masonry supported in combination with a steel frame system. Provide additional support where necessary to effect plan changes.
- 2. Rework flashing and expansion joints as required.
- 3. Floors
 - a. ~~New~~
 - 1) ~~Concrete slab on grade: Provide vapor barrier and perimeter insulation. Provide under slab drainage system.~~
 - 2) ~~5" thick at Gymnasium and 4" elsewhere.~~
 - 3) ~~3" thick vertical perimeter insulation extended to the top of footings~~
 - 4) ~~Supported floors: Reinforced concrete cast on top of profiled steel decking~~
 - b. Existing.

- 1) Concrete slab and reinforced concrete on deck construction to remain.
- 2) Provide repair at locations where slab removal is required to accommodate new work.
- 3) Provide skim coat leveling as required to accommodate new finishes and to level floors at locations where walls have been removed.

C. Roof System

1. ~~New Roofing~~

a. ~~Low Pitch: White EPDM Rubber 90 mil full adhered (Carlisle or equal).~~

- 1) ~~Manufacturer to provide a minimum 30-year full system warranty.~~
- 2) ~~Code required rigid polyiso insulation (with tapered insulation in some areas) R-40 +/-.~~
- 3) ~~1/2 Rigid recovery board and 1/2 protection board~~
- 4) ~~Vapor barrier (Soprema Soprapap'r or equal at areas of acoustical metal deck/Reef Industries Membrane T-90 FR at standard decking or existing decking).~~
- 5) ~~Some areas of internal roof drains. Structure sloped to internal drains to minimize tapering insulation requirements~~

b. ~~Pitched roofs (if utilized)~~

- 1) ~~Standing seam aluminum roof, Garland R-mer or equal.~~
- 2) ~~Gravel Stops/Fascia: Fluoropolymer coated aluminum. Color as selected by Architect.~~
- 3) ~~Gutter and Downspouts: Generally interior roof drains connected to building stormwater conveyance system. Otherwise, fluoropolymer coated aluminum. Color as selected by Architect.~~

c. ~~New/Existing Entrances Canopies: Pre-finished aluminum and/or cement plaster over moisture-resistant gypsum/cement board sheathing in combination.~~

2. Existing.

- a. Existing roof system to be ~~replaced with new white EPDM membrane roofing system.~~ Recoated with 10 year warranty liquid applied surfacing. Provide additional tapering insulation if required to insure proper water drainage.
- b. White EPDM Rubber 90 mil full adhered (~~Carlisle Tremco~~ or equal) at 2001 additions to be replaced.
 - 1) Manufacturer to provide a minimum 30-year full system warranty.
 - 2) Code required rigid polyiso insulation (with tapered insulation in some areas) R-40 +/-.
 - 3) 1/2 Rigid recovery board and 1/2 protection board
 - 4) Vapor barrier (Soprema Soprapap'r or equal at areas of acoustical metal deck/Reef Industries Membrane T-90 FR at standard decking or existing decking).
 - 5) Some areas of internal roof drains. Structure sloped to internal drains to minimize tapering insulation requirements
- c. Roof Access: Add new and maintain all existing access hatches to provide access to all distinct roof levels.

D. Exterior Wall Systems:

1. Existing:

- a. Repair and repoint limited areas of brickwork as required. Assume 5% of building exterior masonry.
- b. Destructively investigate and develop remediation plan for existing exterior panels. These were purchased from a Company named CARA.

2. New

- a. ~~In general, 4" brick and cast stone masonry with rigid cavity insulation, 2" air space or CMU block backup (thickness as required for bearing) and interior finish as indicated on final drawings.~~
- b. ~~In selected areas~~
 - 1) ~~Provide prefinished exterior metal panel systems — Atlas, Centria, Morin or equal~~
 - 2) ~~Provide prefinished cementitious lap type siding — Hardiboard or equal.~~
 - 3) ~~Provide in selected areas provide 4" veneer of engineer size brick — manufacturer to be selected or equal.~~
 - 4) ~~On exterior face in selected areas provide 4" veneer of oversized jumbo utility brick~~
 - 5) ~~On exterior face in selected areas provide 4" veneer of ground face integrally colored CMU block.~~
 - 6) ~~On exterior provide metal panel for accent.~~
 - 7) ~~On exterior provide translucent insulated fiberglass 4" thick panels to match existing.~~
 - 8) ~~Foundation/retaining walls provide surface applied waterproofing system with drain board. All concrete in foundations adjacent to rooms below grade will include a waterproofing admixture in the concrete along with a water stop at the footing.~~

E. Windows

1. New

- a. ~~Combination operable and fixed aluminum frame windows, Kawneer (existing units are Kawneer), EFCO, Graham or equal, color coated or anodized with insect screens. Roller shades to be provided at typical window. Colors and finishes as selected by Architect from manufacturers full range of options and colors. Provide interior slate or Corian stools and exterior cast stone sills.~~
- b. ~~Interior hollow metal frame windows will include roller shades for privacy at particular locations.~~
- c. ~~Fixed Aluminum Curtainwall Frame System as manufactured by Kawneer, EFCO or equal for large fixed/non operable glazed exterior openings. Provide the same glass used in the operable aluminum windows.~~

2. Existing

- a. Inspect and repair existing window units. Revised flashing, as well as installing new flashing at sills.

F. Exterior Doors

1. Existing

- a. Original Building: Replace limited exterior doors as indicated in the drawings. Install anodized aluminum doors to meet ADA requirements. Other original doors to be replaced with like units. In some cases, recently replaced ADA compliant aluminum doors are to remain. In a few instances, provide hollow metal doors and frames with 1" insulated tempered glass. Color by Architect

2. ~~New~~

- a. ~~Fluoropolymer coated aluminum doors and frames with 1/4" tempered glass doors with airlocks, otherwise provide Low-E insulated Glass where airlocks do not exist. Doors to be clear aluminum finish. Aluminum doors are preferred to hollow metal steel~~
- b. ~~Storefront Assembly: Fluoropolymer coated aluminum framing with 1" insulated tempered glass assembly (tinted high performance outboard pane with 1/2" airspace and clear low-E inboard pane).~~
- c. ~~Painted HM in service locations not exposed to weather.~~
- d. ~~Color by Architect~~

3. Door Hardware

- a. Preferred manufacturers, to be determined in concert with owner.
- b. Provide recessed door pulls.
- c. Provide new door closers.
- d. Provide electric strikes interconnected to security system at locations to be determined.
- e. Card access system.
- f. Provide ADA compliant hardware at locations noted.
- ~~g. Replace existing door keying system.~~
- h. All panic hardware to be externally mount for ease of maintenance.

G. Interior Partitions:

1. ~~New~~

- a. ~~Low or Zero VOC Painted 4", 6" and 8" concrete block. Water Based Epoxy painted in Gymnasium, Restrooms, Locker Rooms, Janitor's Closets and Corridors. Provide water-based epoxy in kitchen and food service areas on wall surfaces not clad in ceramic tile.~~
- b. ~~Bases: Natural/Vulcanized "through-body" Rubber in areas having resilient flooring, and carpet; Porcelain tile in areas having porcelain tile; quarry tile in areas having quarry tile.~~
- c. ~~Selective use of metal studs and gypsum wallboard in Administration areas, and between classrooms, and in other supervised non-corridor locations with sound batts. Gypsum wallboard to be abuse resistant throughout.~~
- d. ~~Restrooms to be painted if walls are CMU.~~
- e. ~~Restroom walls to be fully tiled where wall construction is metal stud framed at plumbing chases. Metal stud framing at limited locations based upon structural concerns most restrooms to be full CMU wall construction.~~

2. Existing

- a. Demolish existing interior partitions as designated on plans.
- b. Classroom and Other Instructional Areas: Where used at Corridor walls for infill, typically use filled and epoxy painted concrete block, thickness to match existing. Metal studs and drywall for most door alcoves and for most new walls between classrooms.
- c. New walls at existing areas: Metal studs and gypsum wallboard with sound batts. Gypsum wallboard to be abuse resistant
- d. Folding Partitions. Provide high quality sliding panel folding door system with mechanically expanding acoustical seal at locations noted. Modernfold or equal.
- e. ~~Folding Glass Walls at STEM Center — Nanawall SL45 or equal.~~

H. Interior Doors:

1. ~~New~~

- a. ~~Classrooms: Generally solid core, wood veneers;~~
- b. ~~Corridors. Aluminum, Hollow Metal and Fire Rated at fire rated barriers and walls.~~
- c. ~~Vestibules: Anodized aluminum and 1/4"/1" tempered glass~~
- d. ~~Door Frames and Interior Glass Sidelights and Transoms: Generally painted hollow metal. Aluminum doors and frames may be used at selected non-fire rated locations for aesthetics.~~
- e. ~~Stair Tower Doors and Frames: Integrated Assemblies that are classified as Fire Resistive with temperature protection.~~
- f. ~~Provide Access doors as needed for access to chases and ceiling where valves, dampers and such are located.~~
- g. ~~Coiling Doors~~
 - 1) ~~Full height at Kitchen serving area and STEM Center~~
 - 2) ~~Counter height at Dishwash Area — stainless steel, manual operation~~

2. Existing

- a. Generally existing to remain.

I. Floor Finishes:

1. New

- a. ~~Vinyl Composition Tile: Corridors, Vestibules, Lobbies, Classrooms and all areas not specified otherwise.~~
- b. ~~Carpet at administration, media center, and faculty areas. Some areas of VCT at "wet" zones in these rooms.~~
- c. ~~Poured Epoxy:~~
 - 1) ~~Toilet rooms. Provide threshold between lavatory area and corridor and floor drain at lavatories for ease of cleaning.~~
 - 2) ~~Kitchen and Locker Room: Provide epoxy floor with integral epoxy base. Provide quarry tile with cove base under additive alternate.~~

- ~~3) Under alternate bid: Provide slip resistant 2x2 porcelain tile in locker room showers area.~~
 - ~~d. Concrete with Opaque Concrete Sealer: General and instructional storage rooms, data closets, janitor's closets and mechanical spaces.~~
 - ~~e. Gymnasium: Wood. (Robbins, or equal)~~
- 2. Cafeteria: TPS Rubber sheet flooring 3.5mm AB Pure or equal in Cafeteria.
- 3. Existing
 - a. Provide new floor finishes, including leveling compound.
 - b. Rubber Tile. Nora or equal at all STEM areas.
 - c. Remove existing classroom carpeting and replace with SVT (solid vinyl tile) under alternate bid.
 - d. Cafeteria: TPS Rubber sheet flooring 3.5mm AB Pure or equal in Cafeteria.

J. Ceilings:

- 1. ~~New~~
 - ~~a. Lay-In Acoustic Tile: Generally, 2 x 2 tile throughout with selected areas having 2 x 4. Including, but not limited corridors, small instruction areas and school office. Provide "standard non-specialty" ceiling panels from Armstrong or equal.~~
 - ~~b. Classrooms: Exposed painted concrete plank, ductwork and other utilities running in gypsum board bulkheads.~~
 - ~~c. Gypsum Board~~
 - ~~1) Group and Single Occupancy Restrooms: Suspended painted high impact drywall.~~
 - ~~2) Soffits, bulkheads and ceilings in select areas, stair towers and restrooms.~~
 - ~~d. Exposed Construction~~
 - ~~1) Gym & Cafeteria: Exposed painted deck, structure, ductwork, and other utilities running in gypsum board bulkheads~~
 - ~~2) Data, Janitorial, Storage and Support: Exposed painted metal decking or painted concrete plank as appropriate.~~
 - ~~3) Mechanical Rooms: Exposed painted concrete plank with appropriate fireproofing~~
 - ~~e. Moisture-Resistant Vinyl-coated Gypsum Acoustic Tile: Kitchen and Food Service Area.~~
- 2. Existing
 - a. Replace ceilings as required with 2 x 2 suspended acoustical tile system to match existing.
 - b. Group and Single Occupancy Restrooms. Suspended painted high impact drywall.
 - c. Soffits, bulkheads and ceilings in select areas, stair towers and restrooms.
 - d. **Moisture-Resistant Vinyl-coated Gypsum Acoustic Tile: Kitchen and Food Service Area.**

K. Miscellaneous:

- 1. Elevator:

- a. ~~New. One 2 stop hole less/high energy efficient with key operated control and phone. Thyssen Krupp "Gen 2 machine room less or equal. No need for building added square footage for a machine room. Non-proprietary software.~~
- b. Existing. Existing Thyssen Krupp unit to remain with code required upgrades. Upgrade closer from touch rubber to LED type.
- 2. Signage.
 - a. Provide ADA compliant graphic signage system throughout.
 - b. Freestanding exterior building sign.
 - c. Provide building mounted metal letter signage at entries
 - d. Plaque, date stone, and named bricks.
- 3. Casework.
 - a. Plastic laminate casework throughout as indicated on the drawings.
- 4. Restrooms.
 - a. Apron in front of group bathroom lavatory shall work with hinge and key lock for ease of cleaning. Exposed group restroom counters to have solid surface tops and cover panels.
 - b. Countertop supports shall end at 4" a.f.f. (above finished floor) to clear cove base and allow for easier cleaning.
- 5. Classrooms.
 - a. Provide **limited replacement** of wood veneer solid core classroom casework as indicated on drawings. Woodmode or equal.
 - b. Provide expanded scope under alternate bid.
- 6. Music/~~Band/Black Box. Provide casework by Wenger or equal under additive alternate.~~
- 7. Gymnasium Equipment
 - a. Gymnasium padding and equipment as indicated on the drawings.
 - b. Wall Padding, Porter Model #00353-102 PANEL Mat Series
 - c. Electrically operated retractable basketball backstops, height adjustable. Provide 3 sets, 1 for main court and 2 for side courts
 - d. 3-1/2" volleyball sleeves. Provide 1 3 sets, 1 for main court ~~and 2 for side courts~~
 - e. Game and PE markings as indicated on the drawings.
 - f. ~~Power operated ceiling roll up mesh divider curtain~~
 - g. ~~Bleachers.~~
 - 1) ~~Provide NFPA compliant retractable electrically operated bleacher seating. Provide school name super graphic on seating, Interkal, Hussey or equal.~~
 - 2) ~~Type: Wall Attached.~~
 - 3) ~~Quantity: 1100 to 1200 seats, approx.~~
 - 4) ~~ADA: Notch outs. Provide 3' 0 1/4" wide wheel chair spaces~~
 - h. ~~Blackbox Equipment~~

- ~~1) Risers. Portable~~
 - ~~i. Black iron lighting pipe grid with pigtails w/ 30 dimmable circuits~~
 - ~~j. Wall mounted acoustical metal baffles, Alpro or equal 1000sf.~~
 - ~~k. Curtains. Provide 140 lf of theater curtains and track.~~
- 8. Student Furnishings.
 - a. Provide new instruction furnishings as shown on drawing in specialty areas.
 - b. Provide NIC (Not in Contract) by separate contract by owner – designed by architect.
- 9. ~~STEAM center~~
 - ~~a. Provide computer desks w/ integrated power and data.~~
 - ~~b. Metal storage shelving. Metal storage shelving at storage areas to be provided by Owner~~
- 10. Lockers
 - a. Kitchen: Provide metal staff lockers.
 - b. Gym Locker Room: Under alternate bid, metal lockers, Lyon or equal. Single units and triple stacked units with vented door. Built-in Combination lock and panel and graspable handle. Sloped top.
 - c. Cubicle curtains and track in nurse's office
 - d. Teacher mailboxes to plastic laminated slots to accommodate 8-1/2" x 11" size mail.
- 11. Instructional Display Systems.
 - a. Porcelain enameled markerboards and vinyl - cork tack boards with aluminum trim as required.
 - ~~b. Provide full wall magnetic glassboards in STEAM Center and other designated areas Clarus Glass boards or equal.~~
 - ~~c. Full wall sisal carpeted tackable wall surface in classrooms and art room to maximize useable surface and to provide acoustic absorption.~~
 - ~~d. Digital Projector mounts provided by Owner, installed by GC at Gym, and Media/STEM Center. Interactive display/markerboards furnished by Owner, installed by GC.~~
 - ~~e. Wall mounted interactive video TV displays at classrooms. Mounts and TV by owner – blocking and mount installation by GC.~~
 - f. Install dual layers of cork tacks strips in corridors.
 - ~~g. Electrically operated projection screens where indicated on the drawings in Media/STEM Center and Gymnasium.~~
- 12. Restrooms
 - a. ~~New~~
 - ~~1) Toilet areas shall have solid resin floor mounted toilet partitions with double roll paper holders furnished by Owner, installed by G.C.~~
 - ~~2) Roll towel paper towel dispensers, sanitary napkin dispensers/receptacles, soap dispensers and trash receptacles furnished by Owner. Installed by G.C.~~
 - b. Existing

- 1) Renovate restrooms as noted on drawings to include solid resin toilet partitions.
13. Semi-recessed aluminum fire extinguisher cabinets typical. ~~Recessed type in Gym and Media/STEM Center.~~ Surface mounted type to be located in utility and mechanical areas. Fire extinguishers to be furnished by Owner with contractor to install.
14. Janitor closet shelves and hooks. Provide in janitorial closets on wall opposite of mop sink plumbing trim.
- ~~15. Master keying system as required by Owner. Verify locking system manufacturer with Owner.~~
16. Magnetic hold open doors where indicated on drawings.
- ~~17. Relocate kiln from existing Art room.~~
18. Provide **repair/replacement** of manually operated folding partition systems at classrooms where indicated. Modernfold or equal.
19. At Mechanical room provide new exterior door with a 60/40 leaf slip to accommodate deliveries and general service access.

L. Food Service Construction

1. Provide new kitchen, serving and dishwashing equipment as specified by Food Service Equipment Consultant. Work to include new freezer/cooler unit at kitchen.
2. Limited salvage a few items of equipment from former kitchen as identified by SWASD staff.

M. Asbestos Abatement

1. Specifications supplied by Owner's consultant under separate contract.
2. In general, limited removal of asbestos containing materials is expected. All asbestos floor tile and on above grade piping that has not been addressed in prior projects shall be abated, as it is uncovered during construction. Asbestos contract to include 48-hour callback provision for hidden discovered asbestos materials.

1.6. HVAC

A. Boilers

1. Install new boilers. Boilers shall be modular condensing type natural gas fired manufactured by Lochinvar, Viessman, Weil McClain, or equal. These will replace existing Cast Iron Boilers.

B. Chiller

1. Existing chiller shall remain. The existing chiller is a 120-ton Air Cooled Trane Unit installed approximately 79 years ago. Circulation pumps were replaced concurrent with new chiller and shall remain.

C. Automatic Temperature Controls

1. Install a direct digital control (DDC) energy management system. The system will be microprocessor based with standalone controllers for each ~~Unit Ventilator~~, **Fan Coil**, Boiler, Chiller and each other major system. Controllers will be networked together into central control system. The system will be provided with a web server device that will enable access to the system from any computer with internet access. System to be compatible with existing equipment to remain. All damper and valve actuators will be electric.
2. All systems, including coolers/freezers, to have built-in alarms.
3. System shall be a ~~Trane~~ **Johnson Controls** system shall be proprietary base bid and integrate with existing district-wide system
4. Alternates ATC manufacturers to be selected for cost control.

~~D. Unit Ventilators~~ **Fan Coil Units at Classrooms**

1. New ~~unit ventilators~~ **fan coil mixing box units** shall replace existing UV HVAC equipment. New unit ventilators shall include VFD fan capabilities, modulating OA control with CO2 sensor for better sound and humidity control. Each classroom shall include a RH sensor to monitor humidity levels. **Units shall be equipped with bi-polar ionization for improved air quality.**

E. Air Handling Units and Air Terminal Equipment

1. The air-handling units (AHUs) serving the existing cafeteria shall be replaced with new AHUs with zoned for the new floor layout. The new AHUs will have constant air volume fans with VFDs for balancing with an enthalpy wheel type heat recovery system. The air handlers will also incorporate an air-side economizer cycle, return fan, and exhaust fan chilled water cooling off of the existing chiller.
2. Indoor air handling units shall be manufactured by Trane, Aaon, Carrier, or equal. **Units shall be equipped with bi-polar ionization or ultra violet lighting for improved air quality.**
3. ~~Existing AHUs 1 and 2 serving the music area shall remain. The fan motor, motorized valves will be replaced and the coils cleaned and components inspected.~~
4. New terminal heating only equipment such as cabinet unit heaters, and horizontal unit heaters shall be installed in mechanical spaces, entry vestibules (ceiling mounted), stairwells (ceiling mounted) and similar areas. All existing equipment will be replaced.

F. Rooftop Units

1. Outdoor packaged Rooftop Units shall be manufactured by Trane, Aaon, Carrier, or equal. Outdoor packaged Rooftop Units shall be CAV with VFDs on fans for balancing, DX cooling with VFD compressor control, hot gas bypass, gas heat, economizer,
2. The ~~new~~ **existing** classroom wing shall utilize an outdoor packaged RTU with VAV control, DX cooling, hot gas bypass, gas heat, economizer, Energy Recovery wheel. Classroom zoning shall be provided by VAV boxes with hot water reheat.

G. Hydronic Systems

1. Existing Hot water and chilled water piping shall be ~~reused where possible~~ **replaced.**
2. ~~The insulation on the chilled water piping shall be replaced to prevent condensation.~~

3. The heating and chilled water systems are primary-secondary pumping system. Two existing secondary (building loop) system water pumps shall be replaced for the Hot Water Loop. The chilled water pumps were replaced with the chiller and shall remain. The pumps shall be provided with variable frequency controllers to provide an energy-saving variable flow system. Most hot water control valves shall be of the 2-way type.

H. Exhaust/Ventilation

1. Roof mounted fans and ductwork shall be installed as necessary to meet current ASHRAE ventilation requirements. Install exhaust systems in Storage Rooms and Janitors Closets with exhaust fans and ductwork to provide adequate exhaust and make up air to meet the requirements.
2. All air intakes and exhaust fans to be tied to DDC control system.
3. New exhaust hoods and grease rated fans (as necessary) shall be supplied for the new kitchen area.

I. Small Ductless Air Conditioning

1. Data closets shall be provided with DX mini-split system air conditioners to provide cooling of these spaces.
2. Reuse and relocate new mini-split at current IDF room.

J. Design Standards

1. The complete HVAC system shall meet the requirements of the 2015~~8~~ ICC building codes, ASHRAE Ventilation Standards Guide, National Fire Protection Association, and Standard Engineering Practices.

K. Ductwork

1. ~~New~~

- a. ~~Ductwork shall be galvanized sheet metal with fiberglass wrap insulation. Duct construction will comply with all applicable SMACNA standards.~~
- b. ~~The new gymnasium shall consider fabric duct for air distribution.~~

2. Existing.

- a. ~~AHU 1/2 ductwork in the music area shall be cleaned and reused pending cooling load calculations.~~
- b. **Ductwork shall be galvanized sheet metal with fiberglass wrap insulation. Duct construction will comply with all applicable SMACNA standards.**

L. Piping

1. Refrigerant piping shall be copper as recommended by manufacturer.
2. Condensate piping shall be PVC sch 40.
3. Hot water and chilled water supply and return piping shall be Type "L" copper (or Schedule 40 black steel pipe) with fiberglass insulation.
4. All dielectric fittings will be replaced.

1.7. PLUMBING

A. Main Domestic Water Service

1. Main Building.

- a. Retain existing 2" water service entrance with backflow preventer.
- b. ~~Gymnasium/Cafeteria.~~
 - 1) ~~Install a new municipal water service. The water service entrance shall include a backflow preventer, strainer, and valves. Size to be confirmed based on fixture demand.~~

B. Fixtures

1. ~~New Fixtures:~~

- a. ~~Install plumbing fixtures in restrooms, classrooms and kitchen throughout the building. These fixtures shall meet all water conservation criteria as required and shall be in compliance with ADA as required.~~
- b. ~~Faucets and flush valves shall be automatically operated. Sloan automatic flush valves will be basis of design. Hardwire in lieu of battery.~~
- c. ~~All new fixtures shall be vitreous china.~~
- d. ~~Water closets shall be wall hung in large group restrooms, and floor mounted type in single use restrooms.~~
- e. ~~Lavatory fixtures can be gang sinks with multiple faucets.~~
- f. ~~Handicapped fixtures shall meet current ADA standards.~~
- g. ~~Provide floor mounted slop sinks at all janitor's closets. Provide for wall mounted chemical feed system to be provided by Owner.~~
- h. ~~Floor drains will be installed in each gang restroom. Provide recessed wall hydrant at each restroom.~~

2. Existing:

- a. Replace existing manual lavatory faucets, water closet flush valves, urinal flush valves with automatic units. Metered lavatory faucets to be specified.

C. Hot Water

- 1. Provide new gas fired domestic hot water heater by PVI, Lochinvar, or equal to replace existing gas fired water heater.
- 2. Replace storage tank and recirculation pumps.
- 3. ~~Provide point of use gas fired units in remote locations if required. Basis of design manufacturer will be Navien with Rinnai or equal allowed.~~

D. Water Coolers

- 1. Water coolers have recently been replaced, except at the school office. New water coolers shall be installed to meet the requirements of the Americans with Disabilities Act of 1990.

2. The new electric water coolers will consist of dual height fixtures to comply with ADA requirements.
3. Fixtures shall be in groups of 2.
4. Provide bottle filling capability at gymnasium and cafeteria.

E. Grease Trap

1. Install **a new** exterior underground grease interceptor for kitchen grease laden waste. Location to be coordinated with Owner for ease of access for cleaning.

F. Design Standards

1. This project will be designed in accordance with the requirements the 2015~~8~~ International Plumbing Code and any additional local jurisdiction regulations.

G. Soil, Waste, and Vent Piping

1. Schedule 40 PVC piping shall be used above ground and Schedule 40 PVC piping or PVC SDR-35 pipe shall be used in any areas below ground. CPVC piping will be utilized in areas that are subjected to water temperatures that are greater than 125 degrees F. PVC piping installed adjacent to finished areas of the building shall be insulated with fiberglass pipe covering.

H. Water Piping

1. New hot and cold-water distribution piping shall be Type "L" copper and shall be insulated with fiberglass pipe covering.

I. Rainwater Piping

1. Schedule 40 PVC piping shall be used above ground and Schedule 40 PVC piping or PVC SDR-35 pipe shall be used below ground.

J. Exterior

1. ~~New~~/Existing Locations. Provide frost proof exterior water hydrants on each elevation – one per 100' of perimeter.

1.8. ELECTRICAL

A. Electric Service

1. Install a new 480/277-volt, 3-Phase electric, location to be determined.
2. Subfeed existing main distribution panel, chiller, ~~new additions and possibly the stadium.~~

B. Panelboards.

1. Install panelboards throughout the building **as required for new HVAC system.**
2. GE is preferred panel manufacturer for all buildings.

C. Receptacles

1. Specification grade receptacles shall be installed throughout the building **in limited areas where required.**

2. Ground fault circuit interrupter type receptacles shall be installed in restrooms, kitchen, at the exterior of building and any other location where required by the National Electric Code.
3. Use J hooks above the corridor ceiling for wire management of the data wiring. Patch panels to terminate the data wiring shall be installed in designated data server rooms in the building.

D. Emergency Power

- ~~1. Need to analyze existing emergency lighting. May possibly change all emergency lighting over to inverters.~~
2. The existing emergency generator needs to be upsized and placed outside the building. Additional analysis needs to be completed on existing transfer switch and emergency loads.

E. Lighting

1. New.
 - a. Install lighting in classrooms and corridors utilizing LED lighting fixtures. Lighting shall have multiple switches to allow multiple lighting levels. Hubble Lighting is preference of SWASD.
 - b. Provide recessed fixtures in areas with suspended ceiling
 - c. Provide indirect/direct suspended fixtures at areas with exposed concrete plank ceilings.
 - d. Install LED lighting fixtures in the storage rooms.
 - e. Occupancy Sensors. Provide occupancy sensors where feasible to control lighting in classrooms. Provide occupancy sensors shall be located in the bathrooms.
2. Existing.
 - a. Existing lighting in areas that are not being remodeled will be listed as a bid alternate for replacement with LED fixtures.
 - b. Existing areas that are being remodeled will be replaced with LED fixtures
 - c. Relamp in lieu of replace fixtures under alternate bid.
3. Exterior lighting.
 - a. Include disk-to-dawn sensors in lieu of timer
 - ~~b. Existing wall mounted luminaires will be replaced with LED fixture to match the new building additions.~~
 - c. Existing pole mounted site lighting will be modified as needed for new building additions and site improvements
4. Emergency Egress Lighting.
 - a. Install emergency lighting in the corridors, the boiler room, multi-purpose room, and at exterior of exits. ~~Additional analysis needs to be done to determine if the emergency lighting will be by inverters or the generator.~~
 - b. Install L.E.D. type exit signs where required.

F. Phone System

1. The phone system was replaced recently with an IP internet-based data phone system. Extend as necessary for new floor plan configuration.

G. Public Address System

1. Install a public address system in the building integrated with IP phone system. The system shall consist of IP phones speaker in each classroom augmented by speakers in hallways, common spaces, cafeteria, gymnasium, and selected exterior. The system shall incorporate class change clock and tone generation. Named Preferred Manufacturer or equal.

H. Fire Alarm System

1. Install a new fire alarm system that meets Labor and Industry and American Disabilities Act of 1990 (as amended) requirements. The system shall be an addressable system incorporating pull stations, smoke detectors, horns, and strobes (in classrooms). The system shall have a digital communicator to contact the local fire response organization. A new main fire alarm panel has been recently installed (2019) in the school with accommodations for additional alarm points to be added; additional design will need to be completed to determine if this panel has adequate capacity to handle the additions.

I. Cable Television

1. No cabling to be installed. Classrooms to utilize smartboards or TV screens – no projectors with cable tuners. No cable TV at classrooms, streaming only.
2. Provide video server at central data closet MDF to modulate signal for video distribution via building data backbone.

J. Master Clock System

1. A wireless central master clock system connected to permanent power will be utilized.
2. Clocks shall be digital face battery operated with radio repeater type synchronization.

K. Security System

1. Install an access system for the building entrances. System requirements shall be coordinated with the school districts current key pad system. Provide under project an empty conduit system for security (motion sensing) in corridors and stairs. Devices by SWASD.
2. Camera system was replaced in 2020 with POE type. **Extend as needed to improve security to building additions**
3. Include buzzer bell to kitchen and main office from loading dock.

L. Data

1. Reconfigure existing Category 6E data distribution network wiring system in the renovated areas ~~and new additions~~. The data wiring shall consist of category 6E data wire installed from each data outlet in the building to a patch panel located in designated network closet.

M. Electrical Equipment

1. Electrical equipment including switchboards and panelboards shall be as manufactured by General Electric, Cutler Hammer, Square D, or Siemens.

N. Lighting Fixtures

1. Lighting fixtures shall include programmed LED lamps depending upon location.
2. Lighting fixtures shall be as manufactured by Hubbel (Owner preferred manufacturer)

O. Fire Alarm

1. The fire alarm system was replaced approximately 4 years ago and is oversized to accommodate an addition.
2. Fire alarm, phone, cable TV and other low voltage systems to be run in cable hooks in lieu of conduits.

1.9. ALTERNATE BIDS

A. General Construction:

1. Add Alternate: Provide for sheet linoleum in lieu of VCT at corridors
2. Add Alternate: Provide for solid body vinyl tile at corridors in lieu of VCT.
- ~~3. Deduct Alternate: Delete installation of folding partitions at classrooms.~~
4. Deduct Alternate: Provide painted steel in lieu of solid plastic toilet partitions
5. Add Alternate: Provide KEE-PVC chemically resistant roofing in lieu of EPDM at low slope roof areas in close proximity to HVAC equipment.
- ~~6. Add Alternate: Classroom Casework. Provide for expanded scope of classroom casework.~~

B. Heating, Ventilating and Air Conditioning:

1. Alternate temperature control system manufacturers in lieu of ~~Johnson Controls.~~

C. Plumbing Construction:

1. None

D. Electrical

1. LED lighting replacement at existing locations.

1.10. UNIT PRICES

- ~~A. Provide rock removal per CY~~
- ~~B. Provide replacement of unsuitable soils.~~
- C. Provide additional data outlets.
- D. Provide additional electrical receptacles.

Approved

MCKISSICK ARCHITECTURE

BY: _____
Vern L. McKissick III, AIA, President

Approved

SOUTH WILLIAMSPORT AREA SCHOOL DISTRICT

BY: _____

TITLE: _____

DATE: _____

END OF SECTION

[illegible]

South WilliamSPORT AREA
SCHOOL DISTRICT

Grading SITE PLAN - OPTION 1

Project Status: **Not Started**
 Issue Date: **October 17, 2002**
 Issue Number: **2002-17**
 Created By: **Author**
 Approved By: **Author**

PRA1.0



[illegible]

Client
SOUTH WILLAMSFORT AREA
SCHOOL DISTRICT

Central Elementary School
Renovations

Drawing title
FIRST FLOOR
PLAN - OPTION 1

Figure 1 (cont.)

Issue Date	October 17, 2022
Debt to Equity	1.60
Debt to Capitalization	0.62
Debt to Total Assets	0.40

PRA1.1





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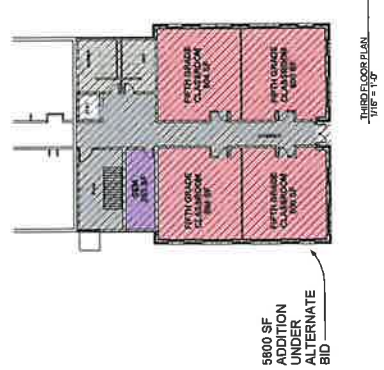
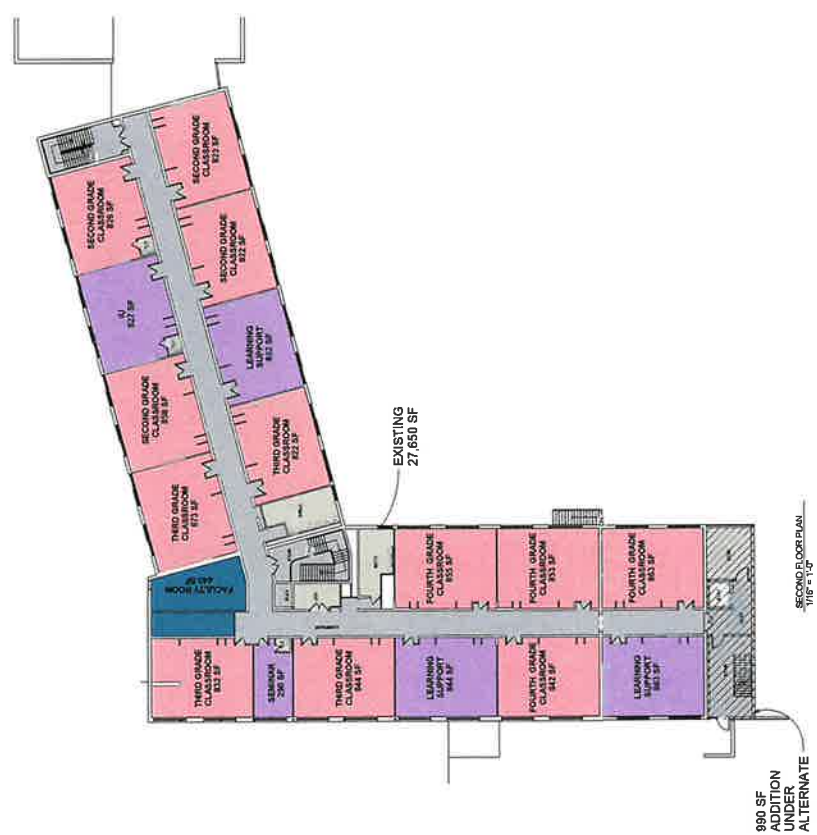
Client
SOUTH WILLIAMSPOUR AREA
SCHOOL DISTRICT

Central Elementary School
Renovations

Drawing Title
**SECOND FLOOR
PLAN - OPTION 1**

Project Status: **Complete**
Issue Date: **October 17, 2022**
Project Manager: **William J. Hurd**
Project Number: **2022-12**
Drawing Number: **11G**

PRA1.2



Central Elementary School
Bloomington, Indiana

PRA2.0



