



FEASIBILITY STUDY UPDATE

FOR



KENNETT
CONSOLIDATED SCHOOL DISTRICT

CHESTER COUNTY, PA

**GREENWOOD ELEMENTARY SCHOOL
NEW GARDEN ELEMENTARY SCHOOL**

MAY 2, 2022

BRESLIN **ARCHITECTS**



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Purpose of the Study

The Kennett Consolidated School District plans to modernize Greenwood and New Garden Elementary Schools to create state of the art learning environments, provide parity among the three elementary schools, and improve building infrastructure. As the District considers these major capital projects, the first step is to prepare a Pennsylvania Department of Education, PDE, compliant Feasibility Study. PDE requires that School Districts complete a Study of Facilities owned by the District prior to beginning a reimbursable capital project. Though submissions for new reimbursable projects remain in moratorium, completing the study best positions the District should the moratorium be lifted. The study must provide an appraisal as to each facility’s ability to meet current and planned educational needs. It must also describe the degree to which the facilities meet current construction standards, applicable codes, and provide estimated costs of repairs and upgrades. In addition, the Study must contain an analysis of construction or renovation options with cost estimates.

This Study provides an update for Greenwood and New Garden Elementary schools to the district’s existing Study of Facilities to help inform the direction of the modernization project. This report builds upon previously developed studies including:

- Public School Enrollments for Kennett Consolidated School District, by Sundance Associates, September 2021
- Facilities Study: Greenwood and New Garden Elementary Schools, by ICS Consulting, Inc, February 2019
- Master Facilities Plan for Kennett Consolidated School District, by Gilbert Architects Inc., March 2009

This study provides an assessment of the space and capacity of the two elementary schools, an analysis of enrollment projections, and the physical condition assessments for each facility. This study also provides preliminary building construction options to address issues identified by the assessments through the following strategies:

- Capital maintenance and repair needs of the existing buildings over the next 10 years
- Additions and renovations to modernize the existing buildings
- New buildings

Author’s Credentials & Acknowledgments

This report has been prepared by Breslin Architects. Over the last 50 years Breslin Architects has been the Architect for a wide range of educational projects encompassing more than 4 billion dollars in current construction value. The following professional staff contributed to the completion of this report:

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Breslin Architects wishes to acknowledge the contributions of the following companies for their assistance in evaluating the existing conditions and recommending solutions:

T&M Associates

In addition, we thank Mark T. Tracy, Chief Financial Officer; George A. Wolhaffe, Director of Facilities; the entire Facilities Staff; and the School Principals for their guidance and input in the completion of this Study.

Overview of the District

Kennett Consolidated School District, located in Chester County, Pennsylvania serves the borough of Kennett Square, Kennett Township, New Garden Township, and a portion of East Marlborough, Township. The district covers an area of approximately 33 square miles and has a population of approximately 27,000 residents. As of March 2022, the district serves just under 4,000 students in 6 schools:

Kennett High School	(9-12)	1,332 students
Kennett Middle School	(6-8)	919 students
Bancroft Elementary School	(1-5)	407 students
Greenwood Elementary School	(1-5)	552 students
New Garden Elementary School	(1-5)	507 students
Mary D. Lang Kindergarten Center	(K)	259 students

The student body is comprised of roughly equal proportions, 45% and 47%, of Hispanic and White identifying students, respectively. 3% of students report as multi-racial; Asian and Black students each make up under 2% of students.

Refer to the School District map located in the body of this study.

Overview of School District Elementary Educational Program

The Kennett Consolidated School District’s new elementary school projects shall be designed to meet the current and future needs of our students. The building’s design will foster instructional teaming and high-quality learning with a strong emphasis on students’ developmental needs.

The Kennett Consolidated School District philosophy exemplifies the mission, vision and core values outlined below:

Vision

Kennett Consolidated School District is an inclusive community that nurtures, prepares and empowers ALL, showing everyone they matter in their journey to succeed in the world.



Introduction

Mission

To inspire innovative thinkers by fostering inclusive, supportive relationships, and developing resiliency through rigorous, relevant, educational experiences.

Core Values

Our core values serve to guide our actions and improve our working relationships as members of the Kennett Consolidated School District

- Integrity
- Resilience
- Student centered
- Accountability
- Collaboration

The Kennett Consolidated School District provides grades 1 through 5 in the aforementioned three elementary schools. Kindergarten is provided in a dedicated facility for the entire district.

The elementary years are a time when students begin to develop their academic self-concept and their feelings of competence and confidence as learners. They are beginning to develop decision-making, communication and life skills, as well as character values. It is also a time when students develop and acquire attitudes toward school self, peers, social groups, and family.

Each of the Kennett Consolidated School District's three elementary schools follow a standards-based curriculum in reading, language arts, mathematics, science, and social studies. Core goals and curriculum maps have been developed for all subject areas. Additionally, elementary students receive instruction in music, art, physical education, and health weekly. All teachers utilize a variety of instructional strategies to address the needs of our diverse student population.

Student services at all of the Kennett Consolidated School District's elementary schools include school counseling, nurse, occupational therapy, physical therapy, hearing, speech, instructional support, reading support, English as a Second Language, special education, and academically talented.

The goal of the Kennett Consolidated School District is for each child to be Proficient or higher on benchmarks to the Pennsylvania Academic Standards at each grade level. The district provides report cards with skill indicators under the reading and writing sections to communicate strengths and weaknesses to parents.

The Kennett Consolidated School District offers STEM education at every grade level. For elementary students, the district offers a summer STEM Robotics Camp and an after-school Launch program focused on the application of physical science topics for kindergarten through 4th grade. These courses are taught by Project Lead The Way certified teachers through hands-on project-based activities.

In 2017, the district implemented Math in Focus, Singapore Math, in kindergarten through 5th grade. The program emphasizes problem solving and critical thinking skills using strategies of abstract reasoning and Algebraic thinking. Concepts are taught using 2-D graphics, which aide students in developing abstract understanding of each concept. Students using this research based program have consistently measured higher than US students on international benchmark tests.

Enrollment and Capacity Snapshot

Both the Pennsylvania Department of Education (PDE) and the Sundance projections indicate reduced student enrollments through 2031 across all grade levels.

This study uses the PDE benchmark projection of actual enrollment plus 10% for planning purposes and for reporting with PDE. The benchmark is 1,613 students in grades 1 through 5.

Current enrollments do not exceed the District’s capacity. However, the PDE benchmark projection of 110% of current enrollment does indicate capacity deficits at Greenwood and New Garden Elementary schools.

The total enrollment for grades 1 through 5 reduced by 105 students from 1550 in 2016/2017 to 1445 in 2020/2021, a 6.8% decrease over that time. Sundance projects an additional 7.4% decrease of 107 students through 2030/2031. PDE projects a 12.3% decrease of 177 students through 2030/2031.

While enrollment is projected to decrease at both Greenwood and New Garden Elementary schools through 2030/2031, the number of sections expected to be offered per grade remains the same as currently provided.

Act 34 Compliance

Act 34 requires districts to justify construction costs in relationship to instructional capacity of schools, via a per pupil cost allowance. The Act determines the project’s public approval process depending on whether the cost is below a calculated maximum construction cost, determined by multiplying the per pupil cost allowance by the capacity of the school. If the cost exceeds the maximum construction cost, the project must be voted on by the public via referendum. The goal is to stay below the maximum construction cost.

The scope of the law applies to all new buildings and substantial additions to existing buildings. The focus of the law is on new construction costs, not the cost of renovations, site work, or other project expenses.

Common challenges for elementary school projects under Act 34 include adding gymnasiums/multipurpose rooms to existing schools and building new schools with separate gymnasiums and cafeterias.

To make projects fall under the maximum construction cost, additional building scope may be required, often in the form of additional classrooms, which increases the capacity of the school and therefore increases the maximum construction cost.

- Several variables factor into the impact of Act 34 on future projects:
- Annual increases to the PDE per pupil cost allowance
 - Cost per square foot projections in a volatile market
 - Building design: meeting the District’s educational needs while minimizing the school’s overall footprint

Existing Sites

The areas of both the Greenwood and the New Garden sites, 24.4 acres and 25 acres respectively, can feasibility accommodate potential addition/renovation projects or new construction projects. Due to Greenwood’s terrain and proximity to wetlands, site constraints limit the area for new construction and create additional logistical issues during construction. No currently known constraint would make construction prohibitive on either site.

Zoning

The two schools fall under two separate zoning authorities, Kennett Township and New Garden Township and therefore have different zoning requirements.

Per preliminary site analysis, Greenwood’s existing configuration exceeds the zoning allowance for impervious lot coverage, including building footprint, driveways, parking lots, sidewalks, paved playgrounds, etc. The project may require a zoning variance to accommodate proposed building and site changes.

Waste water

Greenwood utilizes an on-site septic system, including septic tank and leach field. The district has previously investigated the feasibility of connecting to the public sewer. This will require further investigation by the district as the project moves forward. The existing leach field overlaps the proposed site for the new construction option and would need to be addressed in that option.

New Garden is connected to public sewer.

Potable water

Greenwood was recently connected to public water.

New Garden is connected to public water.

Storm water

Greenwood’s storm water outlets flow to the south-east and they cross through the proposed location for either the addition or the new building site. They will need to be rerouted or another storm water strategy implemented.

New Garden utilizes a storm water detention basin. Both construction options maintain the existing basin. Further investigation will be required if expanding or retrofitting the existing basin.

Environmental

Per the Pennsylvania Natural Diversity Inventory (PNDI) search, both sites were flagged for potential presence of protected species, further investigations are required to confirm.



Executive Summary

Greenwood and New Garden Elementary School Capital Needs Summary

The following charts summarize the cost of capital maintenance and repair needs of the existing buildings as identified by ICS's Facilities Study. These costs maintain the existing schools to functional standards but do not address the goal to modernize the schools. These estimated costs do not provide state of the art learning environments nor provide elementary school parity.

Greenwood Elementary School

	Priority #1	Priority #2	Priority #3	Total
Building System	Action Required 1-3 Years	Action Required 4-7 Years	Action Required 8+ Years	
Site	\$ 194,192	\$ 14,000	\$ 10,000	\$ 218,192
Building Envelope	\$ 1,343,298	\$ 477,500	\$ -	\$ 1,820,798
Building Interior	\$ 405,000	\$ 240,078	\$ 180,933	\$ 826,011
Mechanical	\$ 1,792,119	\$ 3,157,590	\$ -	\$ 4,949,709
Electrical	\$ 303,966	\$ 1,239,344	\$ 50,661	\$ 1,593,971
Life Safety / ADA	\$ 76,254	\$ 3,781,489	\$ -	\$ 3,857,743
Commercial Equipment	\$ -	\$ -	\$ 115,000	\$ 115,000
Construction Costs:	\$ 4,114,829	\$ 8,910,001	\$ 356,594	\$ 13,381,424
Escalation:	\$ 1,028,707	\$ 2,227,500	\$ 89,149	\$ 3,345,356
Soft Costs:	\$ 1,234,449	\$ 2,673,000	\$ 106,978	\$ 4,014,427
Total Costs:	\$ 6,377,985	\$ 13,810,502	\$ 552,721	\$ 20,741,207

New Garden Elementary School

	Priority #1	Priority #2	Priority #3	Total
Building System	Action Required 1-3 Years	Action Required 4-7 Years	Action Required 8+ Years	
Site	\$ 26,884	\$ 58,400	\$ 50,000	\$ 135,284
Building Envelope	\$ 1,448,618	\$ 480,000	\$ 25,000	\$ 1,953,618
Building Interior	\$ 197,685	\$ 195,597	\$ 502,500	\$ 895,782
Mechanical	\$ 754,876	\$ 3,209,884	\$ 311,696	\$ 4,276,456
Electrical	\$ 947,260	\$ 300,000	\$ 85,717	\$ 1,332,977
Life Safety / ADA	\$ 3,970,228	\$ 37,500	\$ 175,329	\$ 4,183,057
Commercial Equipment	\$ 65,000	\$ 100,000	\$ -	\$ 165,000
Construction Costs:	\$ 7,410,551	\$ 4,381,381	\$ 1,150,242	\$ 12,942,174
Escalation:	\$ 1,852,638	\$ 1,095,345	\$ 287,561	\$ 3,235,544
Soft Costs:	\$ 2,223,165	\$ 1,314,414	\$ 345,073	\$ 3,882,652
Total Costs:	\$ 11,486,354	\$ 6,791,141	\$ 1,782,875	\$ 20,060,370

Construction Options Summary - Cost

Option 1: Addition/Renovation

The projected cost represents appropriate additions/renovations to modernize the schools and meet district needs, but exceeds the maximum construction cost limit as determined by Act 34. Additional instructional space could be added to each elementary school’s project scope to fall under the Act 34 limit, however this would add cost to the project. The additional expense would bring the cost of addition/renovation closer to the cost to replace with new buildings.

GREENWOOD ELEMENTARY ADDITIONS/RENOVATIONS	NEW GARDEN ELEMENTARY ADDITIONS/RENOVATIONS
Estimated Construction Cost: \$26,899,250 Estimated Total Project Cost: \$35,783,551	Estimated Construction Cost: \$28,998,750 Estimated Total Project Cost: \$38,492,063
Estimated over Act 34 Limit: \$239,170	Estimated over Act 34 Limit: \$1,269,390

Option 2A / 2B: New Buildings

Option 2A, a new 625 capacity elementary school, falls just under the Act 34 limit, per the current cost estimate assumptions. Option 2B, a new 750 capacity elementary school would provide a greater buffer to the Act 34 maximum construction cost limit. A buffer of roughly one million dollars is recommended for a construction project of this size.

NEW 625 STUDENT ELEMENTARY SCHOOL	NEW 750 STUDENT ELEMENTARY SCHOOL
Estimated Construction Cost: \$35,060,000 Estimated Total Project Cost: \$45,394,778	Estimated Construction Cost: \$37,812,000 Estimated Total Project Cost: \$48,824,596
Estimated under Act 34 Limit: \$104,660	Estimated under Act 34 Limit : \$1,550,560

The total cost for addition/renovation for both schools is 82% of the total cost to replace both schools with new buildings. The threshold for evaluating the value of renovation versus replacement costs is commonly 60% to 70%.

Construction Options Summary - Schedule

Determining schedule is a next step decision as part of the 10-year capital program process. This report focuses on informing the initial decision on which construction option to move forward with.

Overlapping Timeline

New Construction - New Schools Open:	
Greenwood ES	Fall 2025
New Garden ES	Fall 2026
Additions/Renovations - Schools Completed:	
Greenwood ES	Fall 2027
New Garden ES	Fall 2028

Linear Timeline - construction phases do not overlap

New Construction - New Schools Open:	
Greenwood ES	Fall 2025
New Garden ES	Fall 2027
Additions/Renovations - Schools Completed:	
Greenwood ES	Fall 2027
New Garden ES	Fall 2030



Enrollments and Capacities

Scope and Methodology

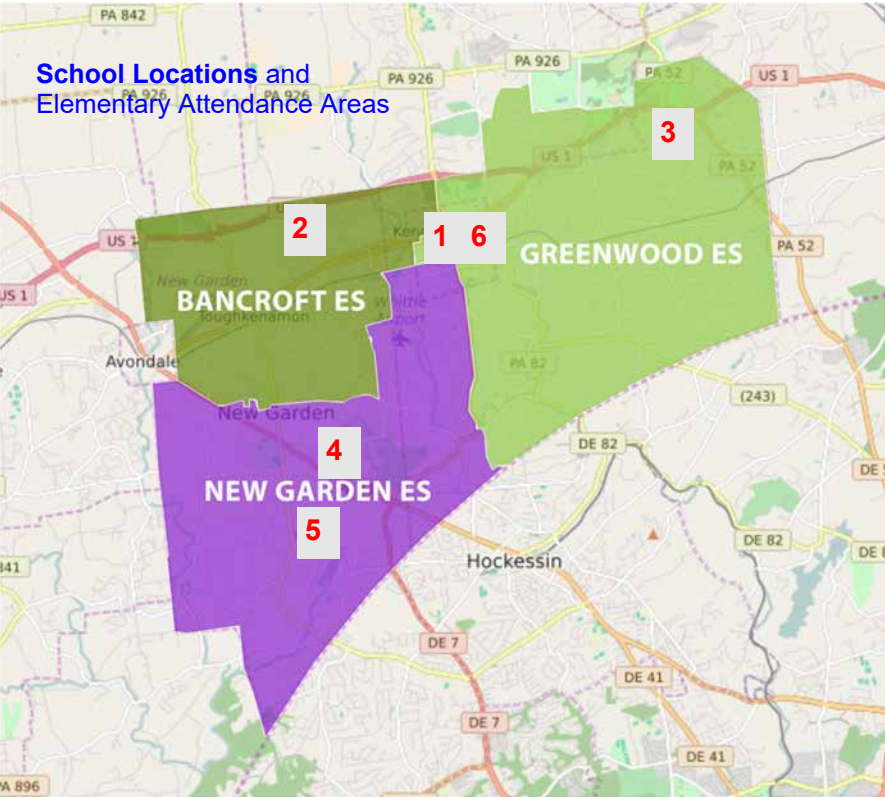
This evaluation analyzes and documents the educational space needs for Kennett’s three elementary schools through the 2030/2031 school year:

- Bancroft Elementary School
- Greenwood Elementary School
- New Garden Elementary School

The Architect has inspected each school using Pennsylvania Department of Education (PDE) Standards for determining the rated building capacity for purposes of reimbursement. The capacity analysis for each building is located in the appendix, using PDE PlanCon forms.

The capacities for the target grade structure category (elementary schools: grades 1 through 5) were subsequently compared to the projected enrollments, which have been provided by Sundance Associates and the Pennsylvania Department of Education’s Data Quality Office.

Elementary School Catchment Areas



Sundance Associates, Public School Enrollments for Kennett Consolidated School District

Elementary Schools

- 1. Mary D Lang Kindergarten Center**
409 Center Street
Kennett Square, PA 19348
610-444-6260
- 2. Bancroft Elementary School**
181 Bancroft Rd.
Kennett Square, PA 19348
610-925-5711
- 3. Greenwood Elementary School**
420 Greenwood Rd.
Kennett Square, PA 19348
610-388-5990
- 4. New Garden Elementary School**
265 New Garden Road
Toughkenamon, PA 19374
610-268-6900

Middle School

- 5. Kennett Middle School**
195 Sunny Dell Road
Landenberg, PA 19350
610-268-5800

High School

- 6. Kennett High School**
100 East South Street
Kennett Square Pennsylvania, 19348
610-444-6620

District-wide Enrollment Projections

Sundance completed an enrollment projection in September of 2021. Sundance employs the recommended method of PDE to make enrollment projections, called “Cohort Survival” or Grade Level Progression. Excerpts of the Sundance enrollment projection report is included in the appendix of this study.

Below is a comparison of the projections from the Sundance study and the 2021 Pennsylvania Department of Education (PDE) Enrollment Projections. PDE projections are included in the appendix of this study.

Both the Pennsylvania Department of Education (PDE) and the Sundance projections indicate reduced student enrollments through 2031 across all grade levels.

	KINDERGARTEN (K)		ELEMENTARY (1-5)		MIDDLE (6-8)		HIGH (9-12)		TOTAL	
	Sundance	PDE	Sundance	PDE	Sundance	PDE	Sundance	PDE	Sundance	PDE
2021/2022	260	269	1,440	1,697	927	921	1,347	1,338	3,974	4,225
2022/2023	274	284	1,389	1,654	933	926	1,307	1,298	3,903	4,162
2023/2024	247	257	1,369	1,605	939	924	1,263	1,254	3,818	4,040
2024/2025	263	279	1,346	1,597	930	908	1,219	1,207	3,758	3,991
2025/2026	263	273	1,351	1,600	876	848	1,251	1,241	3,741	3,962
5 YEAR CHANGE	3	4	-89	-97	-51	-73	-96	-97	-233	-263
2026/2027	263	268	1,341	1,581	850	829	1,239	1,225	3,693	3,903
2027/2028	263	263	1,342	1,575	832	810	1,221	1,203	3,658	3,851
2028/2029	263	258	1,328	1,550	846	825	1,189	1,165	3,626	3,798
2029-2030	263	253	1,344	1,346	819	794	1,150	1,126	3,576	3,519
2030/2031	263	248	1,338	1,516	826	804	1,112	1,087	3,539	3,655
5-10 YEAR CHANGE	0	-20	-3	-65	-24	-25	-127	-138	-154	-248
10 YEAR CHANGE	3	-21	-102	-181	-101	-117	-235	-251	-435	-570

Elementary School Enrollment and Capacities

The Kennett Consolidated School District presently serves 1,466 students in grades 1 through 5 in 3 elementary schools. The district provides a separate facility for kindergarten, Mary D Lang Kindergarten Center. The current Pennsylvania Department of Education (PDE) capacity of the Elementary Schools is 2,000. The Current Utilization (See note 3) at the Elementary Level is 1,760.

The analysis of enrollment projections prepared by Sundance (Fall 2021) for the Kennett Consolidated School District projects a total elementary enrollment of 1,339 students in 2030/2031, with a maximum projected enrollment of 1,442 students in 2021/2022. PDE enrollment projections indicate 1,268 students in 2030/2031 with a maximum projected enrollment of 1,428 students in 2021/2022.

The previous 5 year enrollment history from 2016 to 2020 saw a decrease of 105 students in grades 1 through 5.

Comparison of Elementary School Capacities to Projected Student Enrollments

ELEMENTARY SCHOOLS (K-5)	CURRENT PDE CAPACITY	CURRENT UTILIZATION	ACTUAL ENROLLMENTS	ACTUAL+ 10%	SUNDANCE PROJECTIONS		PDE PROJECTIONS		PDE BENCH-MARK	CAPACITY DIFFERENCE
			3/1/2022		2021/2022	2030/2031	2021/2022	2030/2031		
BANCROFT	750	660	407	448	403	381	Note 2	Note 2	448	212
GREENWOOD	625	550	552	607	539	504	Note 2	Note 2	607	-57
NEW GARDEN	625	550	507	558	500	454	Note 2	Note 2	558	-8
TOTALS	2,000	1,760	1,466	1,613	1,442	1,339	1,428	1,268	1,613	147
					10 yr high	10 yr end	10 yr high	10 yr end		

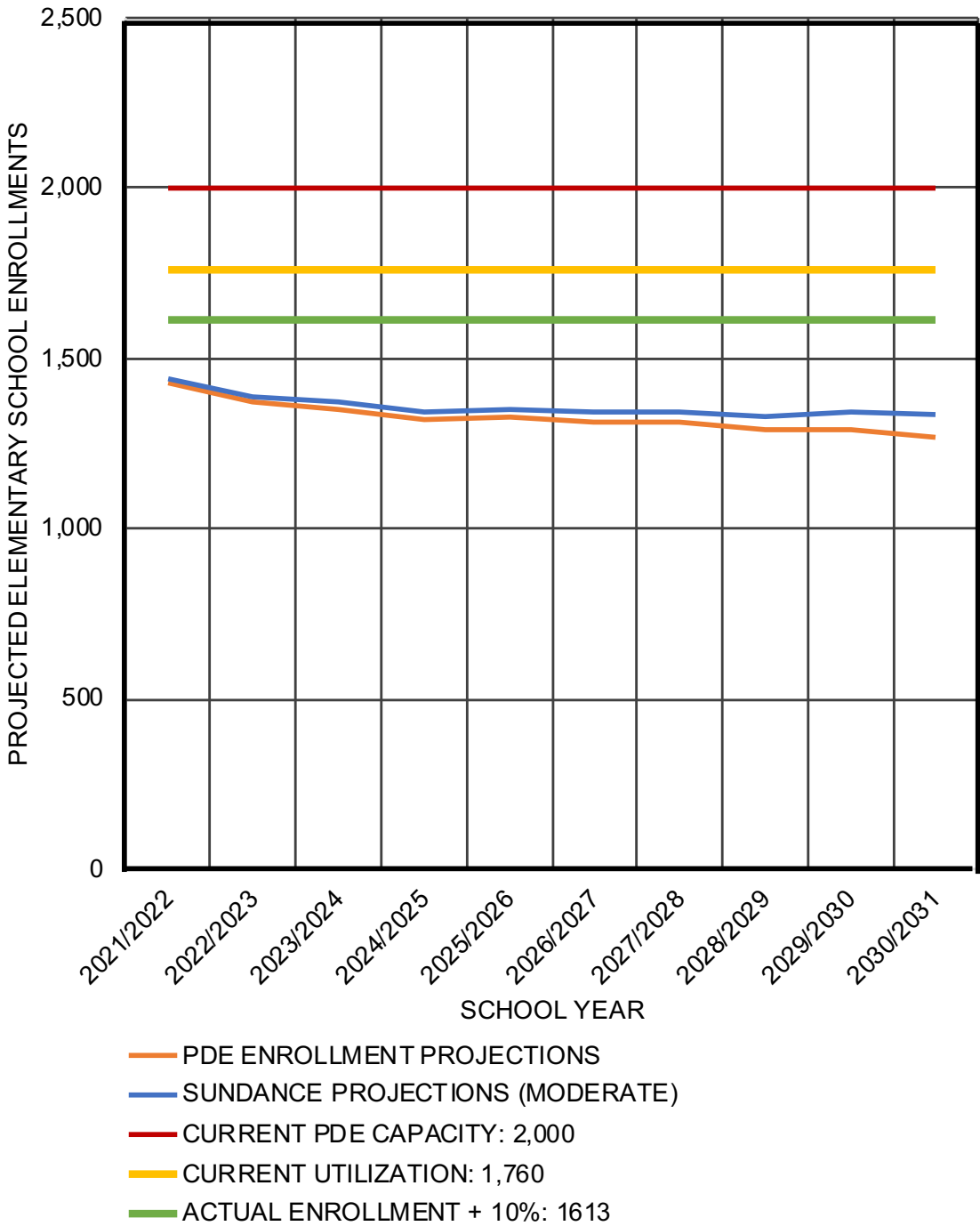
- Notes:
- 1. The PDE Capacity does not include Temporary Classrooms, Special Education Classrooms, or ESOL Classrooms
 - 2. PDE projections are not available for each individual school facility
 - 3. The Current Utilization represents actual 2020-2021 class-sizes. An average class size of 22 was used for the Elementary buildings
 - 4. Capacity Difference compares the PDE benchmark projected enrollment to the current utilization of each individual school and is expressed as either the most students above or the least students below the current utilization capacity
 - 5. Sundance Enrollment Projections include proposed residential developments

This study uses the PDE benchmark projection of actual enrollment plus 10% for planning purposes and for reporting with PDE. Per PlanCon reimbursement requirements, the projected enrollment is the highest of either PDE projections, district projections (Sundance report) or actual enrollment plus 10%. For these projects, actual plus 10% is the highest, which is 1,613 students in grades 1 through 5. The current utilization is 147 students more than the PDE benchmark.

While enrollment is projected to decrease at both Greenwood and New Garden Elementary schools through 2030/2031, the number of sections expected to be offered does not change. Greenwood is expected to consistently provide five sections per grade, requiring twenty-five classrooms. New Garden, having a slightly smaller enrollment, is projected to be able to offer four sections for some

grades during various school years over the next ten years. However, to accommodate the maximum enrollment through the 2030/2031 school year, five sections per grade remains the criteria for planning purposes.

Although current enrollments do not exceed the District's capacity, the PDE benchmark projection of 110% of current enrollment does indicate a capacity deficit at Greenwood and New Garden Elementary schools.





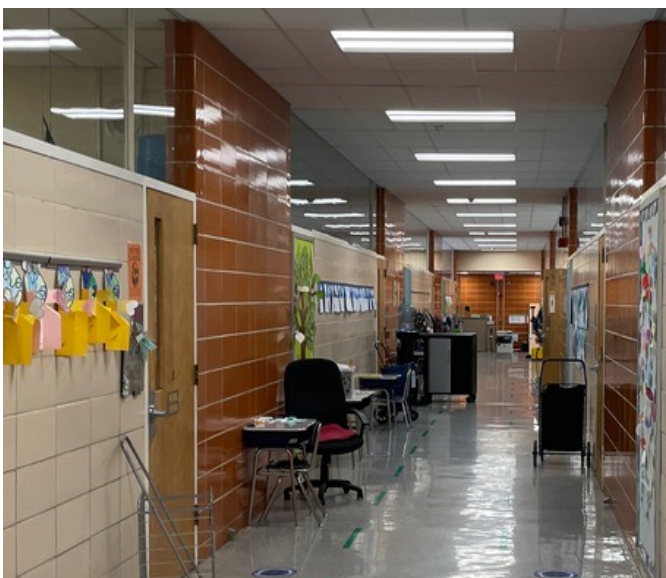
Select Elementary School Facility Assessments

Greenwood Elementary School

Supplementing the previous facilities study, this report's assessment focuses on the condition and suitability of the existing school for current and future educational needs as well as overall spatial functionality and experience. The following points are based on the team's inspection of the buildings and interviews with stakeholders.

Lack of spaces to support 21st century learning

Minimal support and collaboration space leads to co-opting unsuitable spaces to meet needs. The school is over-utilized to meet future educational needs: only 4 functionally-sized small group instruction spaces, only 2 support classrooms, and no defined collaboration spaces.



Undersized auxiliary gym

The 2,000 sf gym does not accommodate regulation court dimensions and provides minimal flexibility for community events



No clear main entrance

The entrance colonnade leads to two separate access points. One clearly defined main entrance is recommended for school security protocols and to avoid confusion for visitors.

Poor access to kitchen and mechanical

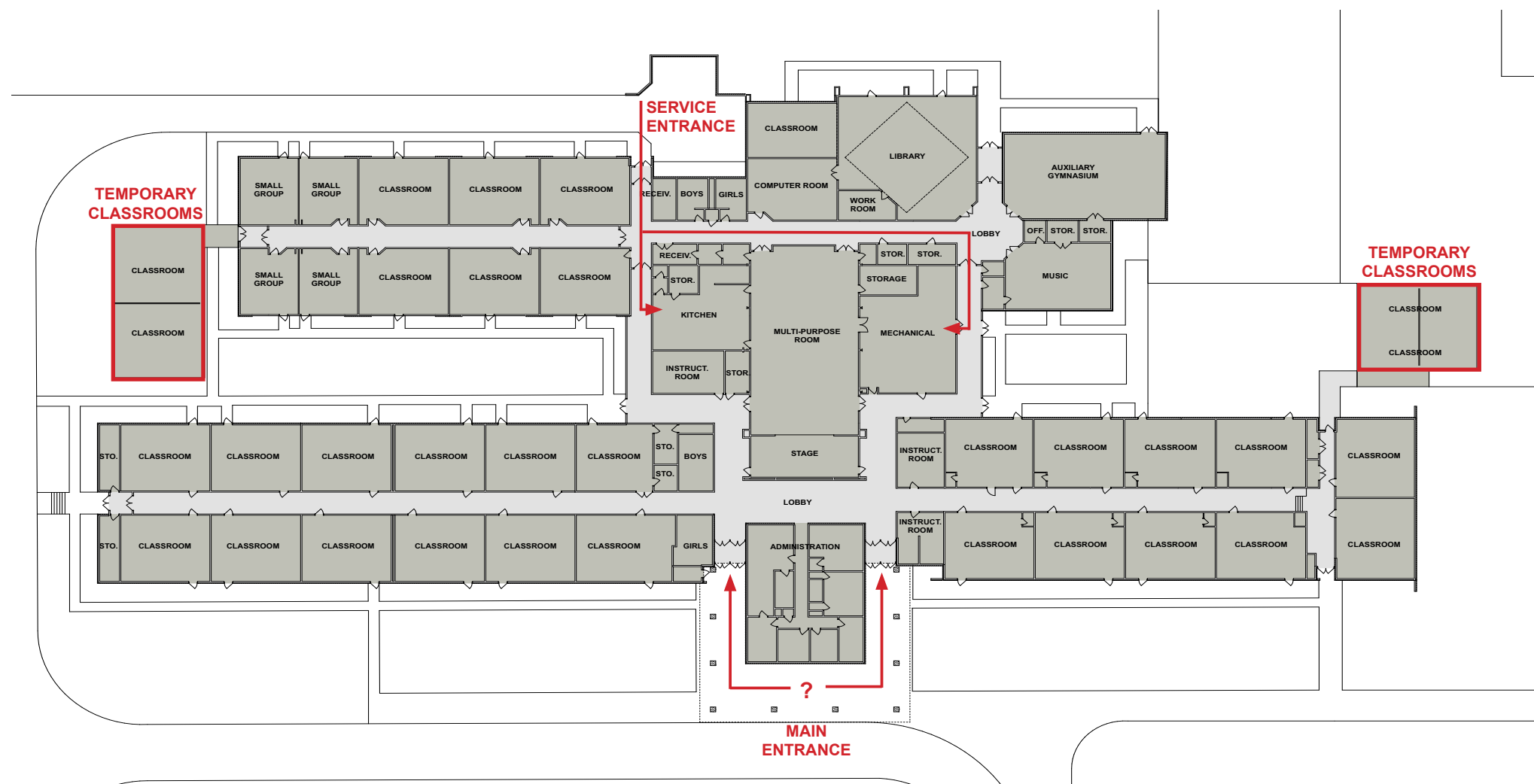
The major addition to the school in 1993 cut off dedicated service access to the kitchen and mechanical spaces. Current access overlaps with student circulation

Temporary classrooms

The existing facility is undersized for current needs and relies on four temporary classrooms

Inefficient corridor system

The circulation within the building lacks a clear, visual connection between the front and back wings. Visual connection creates a safer school environment.



Existing Greenwood floor plan





Greenwood Elementary School

This study assessed the functionality of the existing site and the feasibility to accommodate the proposed construction options.

The 24.4 acre site’s terrain and proximity to wetlands limit the available area for future construction. However, a location for a new school can fit adjacent to the south/southeast of the existing school. The limited area for development and the close proximity between the new and old school will create logistical issues during construction that can be resolved with site phasing and temporary parking and driveway configurations. No currently known constraint would make construction prohibitive on the site.

Zoning
The school is subject to Kennett Township zoning requirements.

Per preliminary site analysis, Greenwood’s existing configuration exceeds the zoning allowance for impervious lot coverage. The project may require a zoning variance to accommodate proposed building and site changes.

The public use of the site is a ‘conditional use’ as it is zoned R-2, low-density residential. Any substantial changes to the building may require a conditional use hearing.

Parking
There is insufficient parking to meet current zoning requirements and parents/guardians and visitors park on the grass for special events

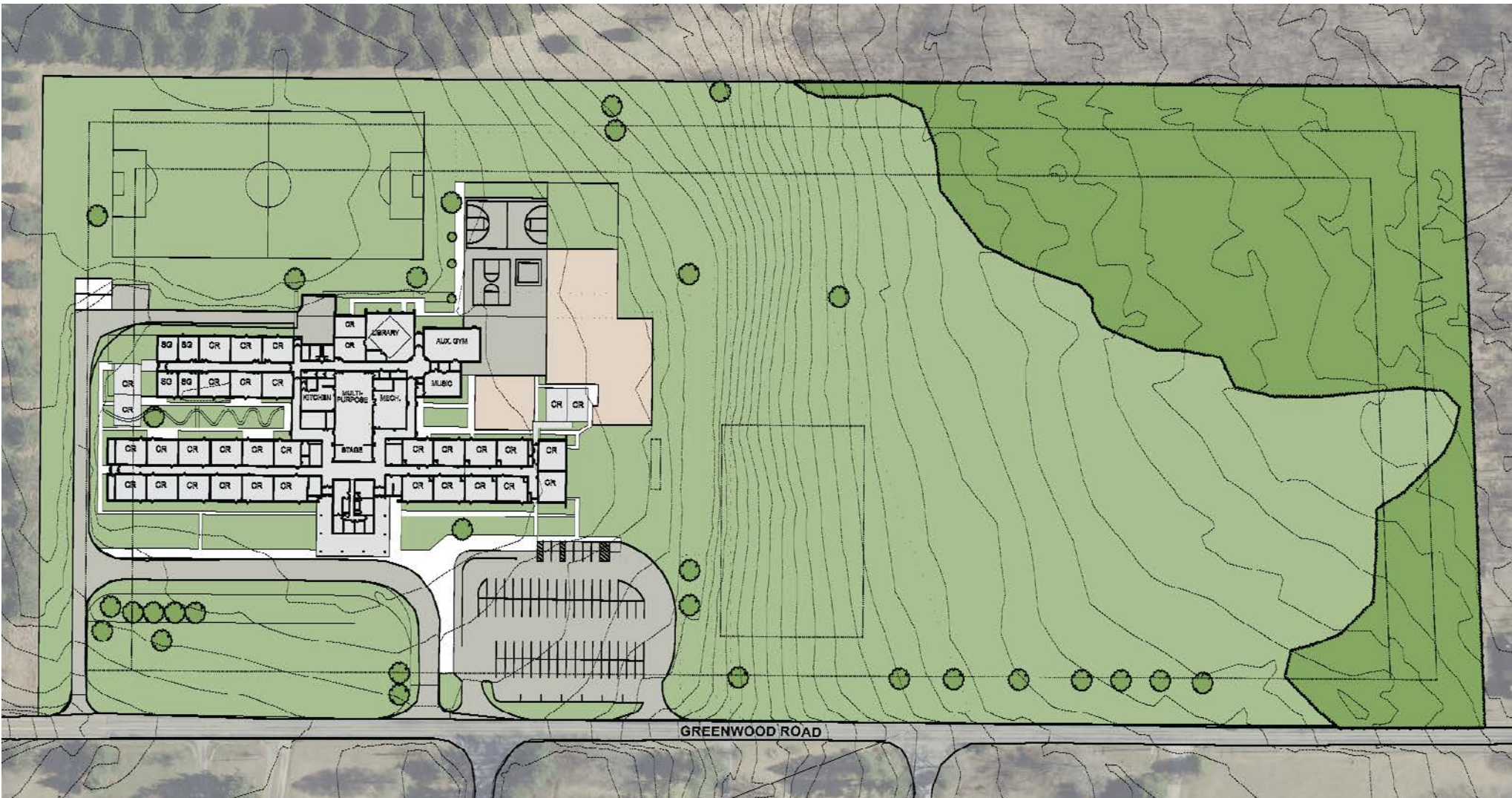
Waste water
Greenwood utilizes an on-site septic system, including septic tank and leach field. The district has previously investigated the feasibility of connecting to the public sewer. A major project may trigger the zoning ordinance that requires educational uses to use public sewage services. This will require further investigation by the district as the project moves forward. This ideally would be addressed prior to construction as the existing leach field overlaps with the proposed construction site.

Potable water
Greenwood recently connected to public water.

Storm water
Greenwood has three storm water outlets directed down the slope of the site to the south-east. All lines cross the proposed location for either an addition or a new building requiring temporary solutions during construction or the implementation of new storm water strategies.

Environmental
Per the Pennsylvania Natural Diversity Inventory (PNDI) search, the site may contain a protected species habitat and requires further investigation to confirm. The search also noted the potential presence of sensitive plant species: Grass-leaved rush and Stiff Cowbane

Topography
A steep drop off occurs across the center of the site, creating a natural divide between developed and undeveloped land. This divide limits the area to position a new building to the north end of the site, as it is recommended to avoid building on the southern end of the site due to proximity to wetlands. The project can take advantage of this sloped area to create a two-story classroom wing (similar to Bancroft Elementary School).



Existing Greenwood site plan



Select Elementary School Facility Assessments

New Garden Elementary School

Supplementing the previous facilities study, this report's assessment focuses on the condition and suitability of the existing school for current and future educational needs as well as overall spatial functionality and experience. The following points are based on the team's inspection of the buildings and interviews with stakeholders.

Lack of spaces to support 21st century learning

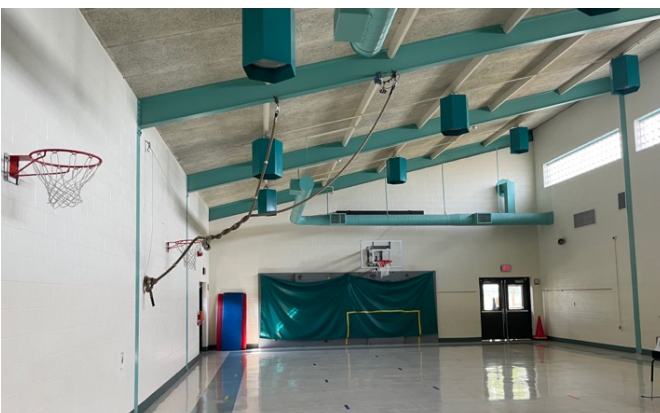
Minimal support and collaboration space leads to co-opting unsuitable spaces to meet needs. The school is not effectively utilized to meet future educational needs: the lack of functionally-sized small group instruction spaces results in utilizing regular classrooms as learning support; no defined collaboration spaces.

Undersized library



Undersized Auxiliary Gym

The 2,300 sf gym does not accommodate regulation court dimensions and provides minimal flexibility for community events

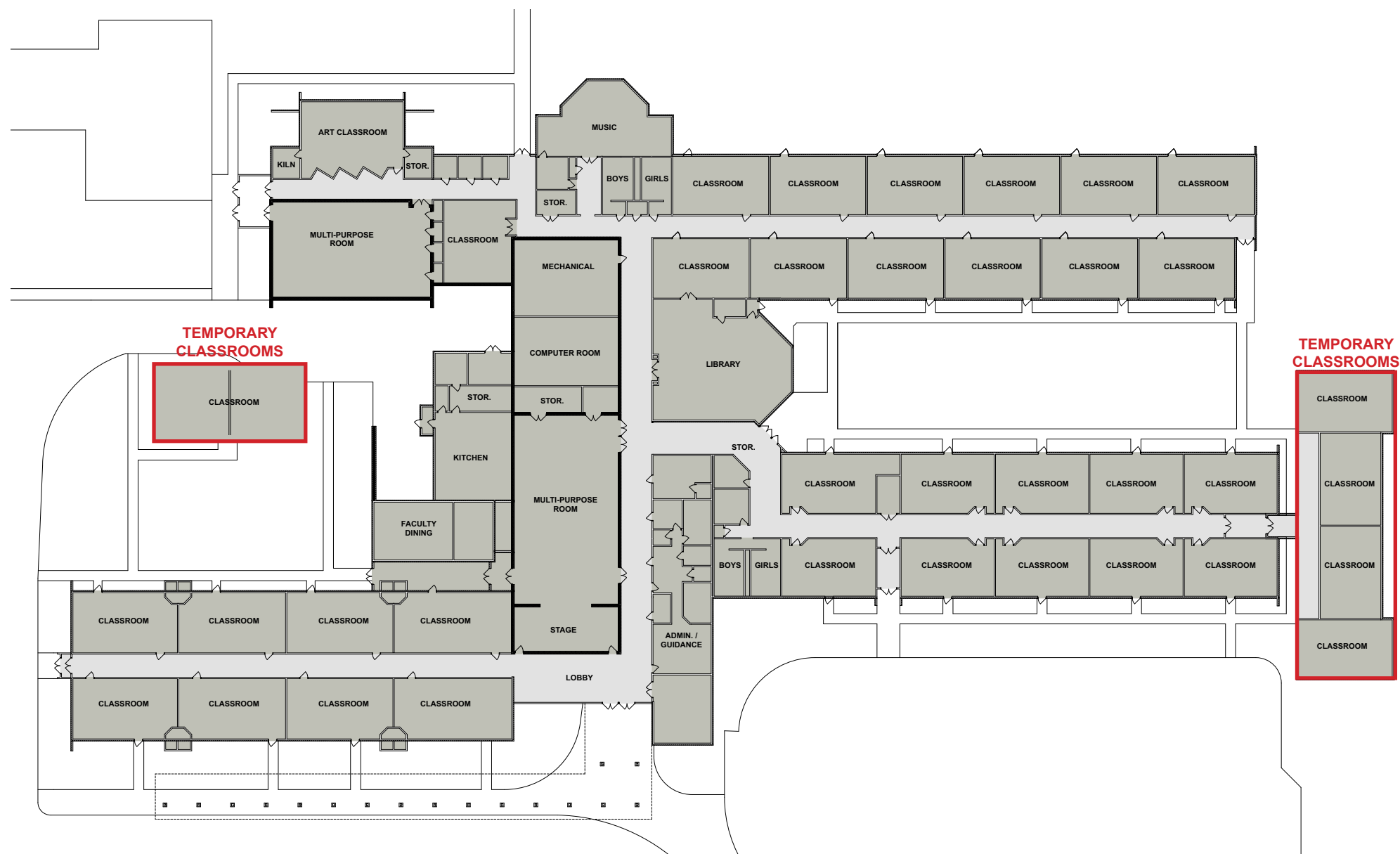


Temporary Classrooms

The existing facility is undersized for current needs and relies on six temporary classrooms. Two rooms lack a covered or enclosed walkway connection to the school.

Inefficient corridor system

The circulation within the building lacks clear, visual connections to the northeast and southwest wings. Visual connection creates a safer school environment.



Existing New Garden floor plan



New Garden Elementary School

This study assessed the functionality of the existing site and the feasibility to accommodate the proposed construction options.

The 25 acre site has ample space to accommodate a new school to the east, behind the existing school. No currently known constraint would make construction prohibitive on the site.

Zoning
The school is subject to New Garden Township zoning requirements.

The public use of the site is a ‘conditional use’ as it is zoned R-1, low-density residential. Any substantial changes to the building may require a conditional use hearing.

Parking
Additional parking may be required with an addition or new building.

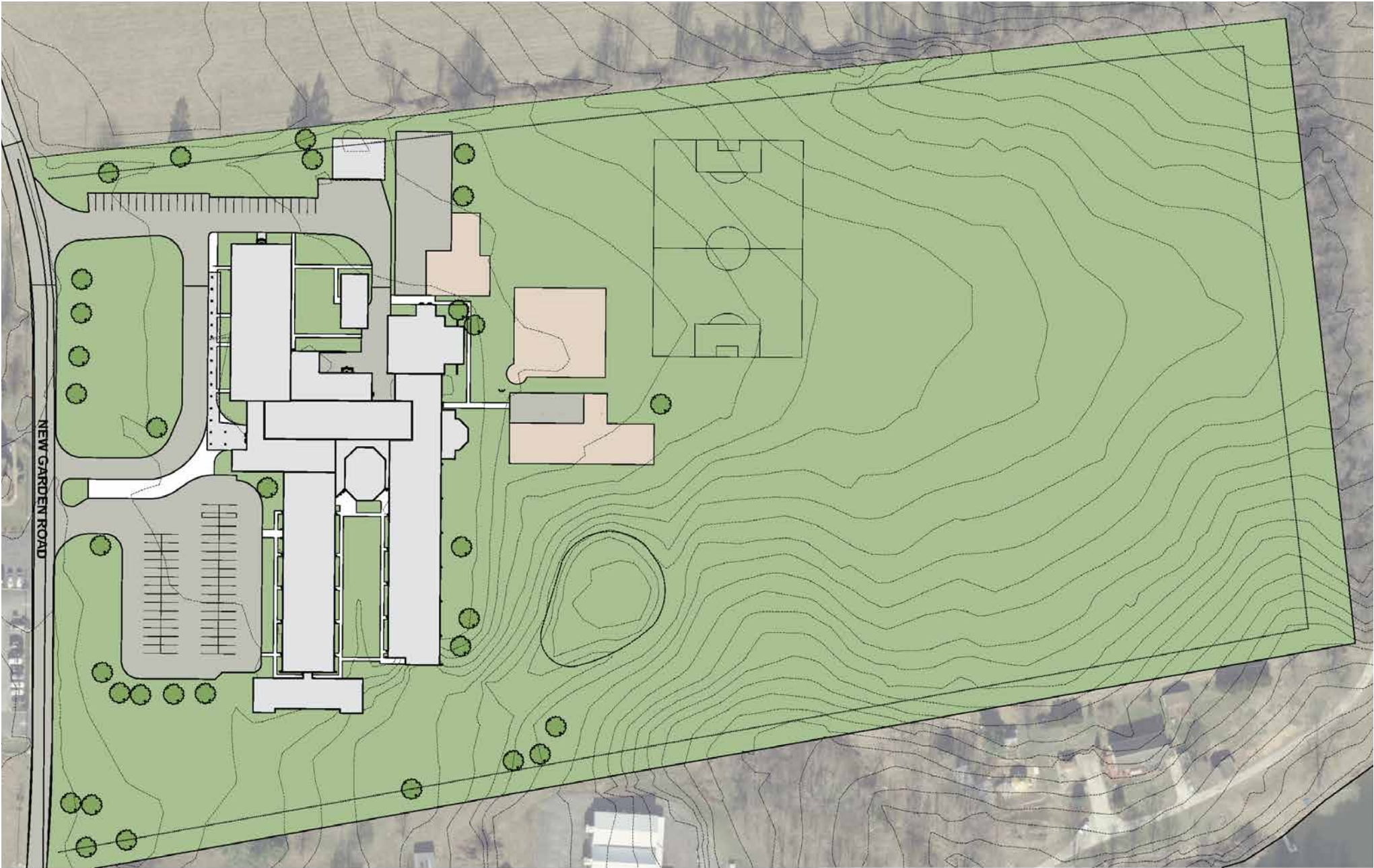
Waste water
New Garden is connected to public sewer

Potable water
New Garden is connected to public water

Storm water
New Garden utilizes a storm water detention basin. Further investigation will be required if the existing basin is expanded or retrofitted, including infiltration testing.

Environmental
Per the Pennsylvania Natural Diversity Inventory (PNDI) search, the site was flagged for further review and may require further investigation.

Topography
The site is clear and mostly available for development and the only obstacle is the existing detention basin. The site slopes down to the south and the north-east. The slope can be utilized to create a two-story classroom wing (similar to Bancroft Elementary School).



Existing New Garden site plan



Construction Options

Option 1: Addition and Renovation of Existing Buildings

Greenwood Elementary School



Existing Greenwood entrance



Proposed Greenwood entrance

Option 1: Addition and Renovation of Existing Buildings

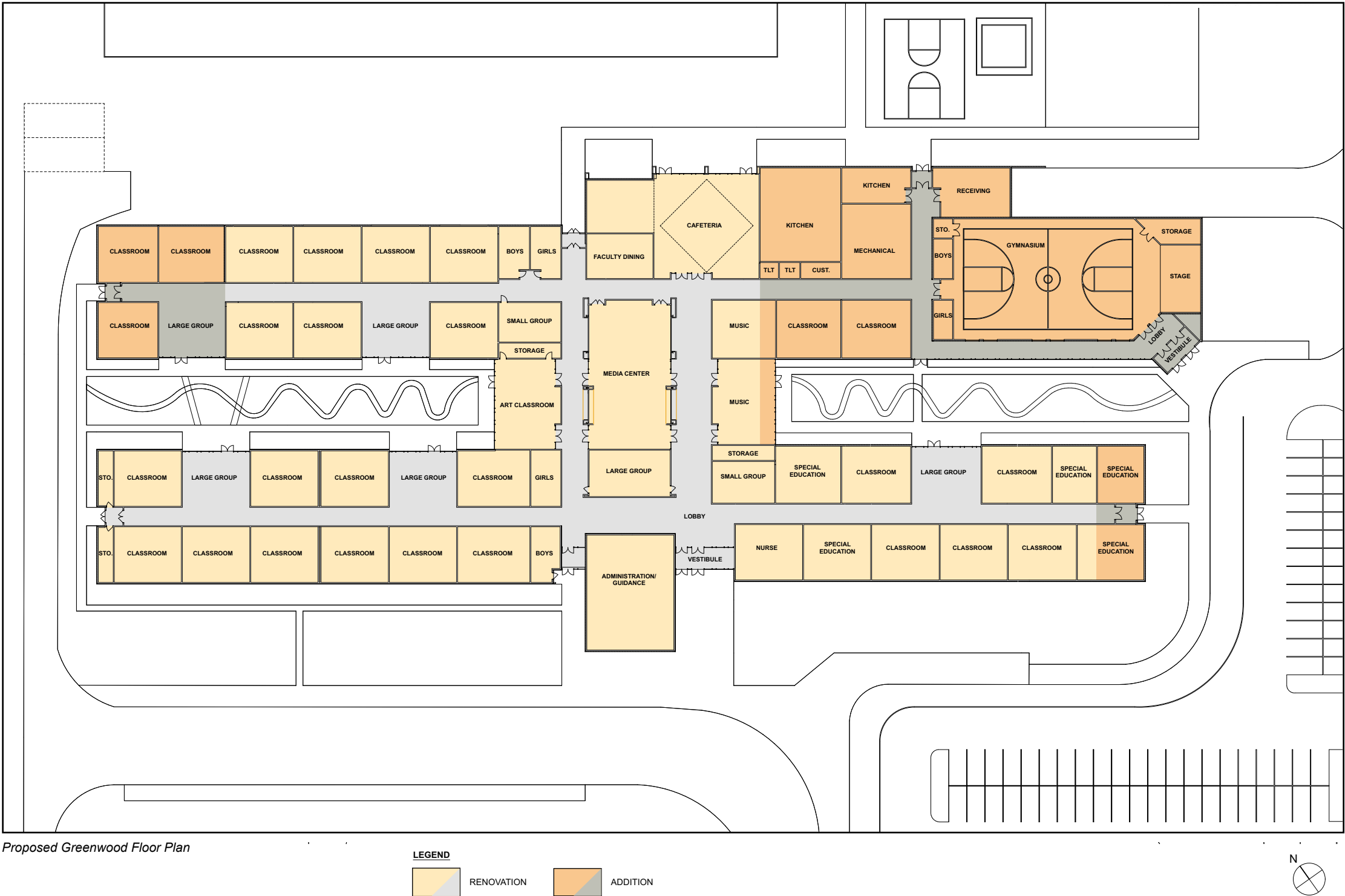
Greenwood Elementary School

- Solutions**
- Fundamental goal to create parity among all of the District’s Elementary Schools
 - Provide Architectural “face-lift” to entire building
 - Create grade level collaborative spaces to support 21st Century Learning
 - New Gymnasium addition to support a regulation sized basketball court
 - Relocate the Kitchen/Cafeteria to the rear of the school for direct access between the loading dock and Kitchen
 - Transform the existing Cafeteria/Multi-Purpose Room to a new Media Center located in the heart of the school for easy access by all students
 - Add additional parking and access to new entrance at the Gymnasium

Capacity	
PLANNED PDE CAPACITY	625
PLANNED UTILIZATION	550
PDE BENCHMARK PROJECTION	607
CAPACITY DIFFERENCE	-57

This study uses actual enrollment plus 10% as the PDE benchmark projection.

Although the planned utilization remains the same as the current utilization, additional spaces are provided in the proposed construction option that do not count towards capacity, such as large group instruction, small group instruction, and learning support spaces. These proposed spaces contribute to satisfying current educational programming needs and provide adaptability for future needs without increasing capacity.





Construction Options

Option 1: Addition and Renovation of Existing Buildings

New Garden Elementary School



Existing New Garden entrance



Proposed New Garden entrance

Option 1: Addition and Renovation of Existing Buildings

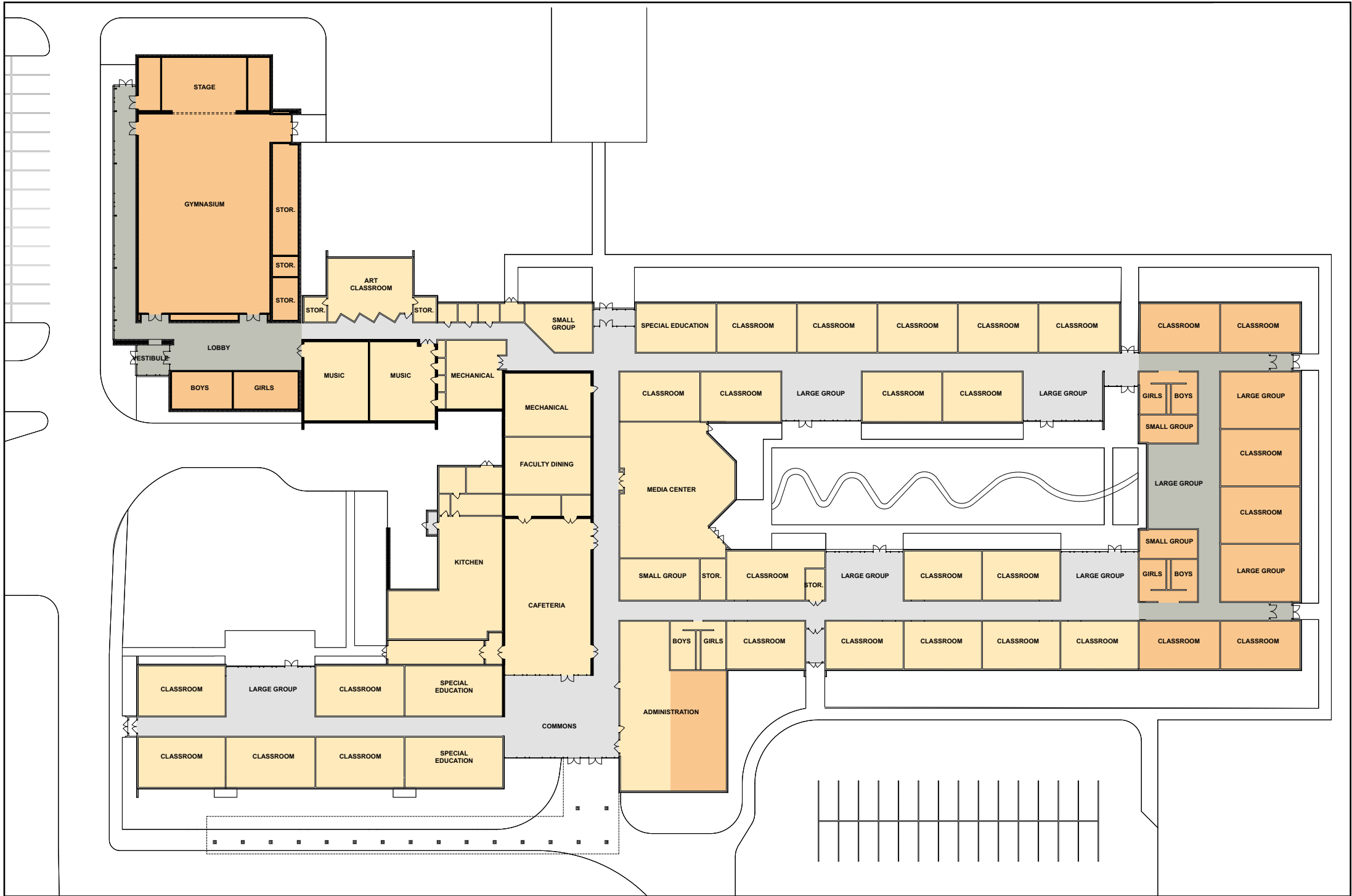
New Garden Elementary School

- Solutions**
- Fundamental goal to create parity among all of the District’s Elementary Schools
 - Provide Architectural “face-lift” to entire building
 - Create grade level collaborative spaces to Support 21st Century Learning
 - New Gymnasium addition to support a regulation sized basketball court
 - Repurpose the Multi-Purpose Room into a dedicated Cafeteria
 - Utilize the volume of the existing Auxiliary Gymnasium for the Music Classrooms to create a related arts wing with the adjacent Art Room
 - Add additional parking and access to the new entrance at the Gymnasium
 - Remove existing parking from Bus Loop to improve safety

Capacity	
PLANNED PDE CAPACITY	625
PLANNED UTILIZATION	550
PDE BENCHMARK PROJECTION	558
CAPACITY DIFFERENCE	-8

This study uses actual enrollment plus 10% as the PDE benchmark projection.

Although the planned utilization remains the same as the current utilization, additional spaces are provided in the proposed construction option that do not count towards capacity, such as large group instruction, small group instruction, and learning support spaces. These proposed spaces contribute to satisfying current educational programming needs and provide adaptability for future needs without increasing capacity.



Proposed New Garden Floor Plan

LEGEND

 RENOVATION

 ADDITION





Construction Options

Option 1: Addition and Renovation of Existing Buildings

Greenwood Elementary School



Proposed main corridor and media center

Option 1: Addition and Renovation of Existing Buildings

New Garden Elementary School



Proposed commons and cafeteria



Construction Options

Option 1: Addition and Renovation of Existing Buildings - Cost

Greenwood Elementary School Addition and Renovation Cost Estimate

Description

Construct an addition on the existing Greenwood Elementary School with a new gymnasium, 6 classrooms, new kitchen, new mechanical room, and associated support facilities. Renovate entire existing school.

Proposed Room Schedule

5	Classrooms	850	sq. ft.	4,250	sq. ft.
1	Special Education Classroom	850	sq. ft.	850	sq. ft.
1	Small Group Room	660	sq. ft.	660	sq. ft.
1	Large Group Room	900	sq. ft.	900	sq. ft.
1	Gymnasium	6,000	sq. ft.	6,000	sq. ft.
1	Stage	660	sq. ft.	660	sq. ft.
1	Office	120	sq. ft.	120	sq. ft.
1	Kitchen	2,400	sq. ft.	2,400	sq. ft.
TOTAL SCHEDULED AREA				15,840	sq. ft.
Total Architectural Area		15,840	sq. ft. x 1.55	24,500	sq. ft.

Summary of Construction Costs

Site Development		\$	3,000,000
New Construction	24,500 sq. ft. x \$350 sq. ft.	\$	8,575,000
Renovations	61,297 sq. ft. x \$250 sq. ft.	\$	15,324,250
Sub-Total		\$	26,899,250

Architectural / Engineering Services	\$	1,412,211
Construction Manager Services	\$	806,978
Land Development Engineering Fees	\$	300,000
Furniture and Equipment	\$	750,000
Sub-Total		\$ 3,269,189

Additional Construction-Related Costs

Permits and Reviews, Geotechnical, Environmental, Construction Testing, etc.	\$	1,344,963
Contingency (12%)	\$	3,227,910
Financing Costs (3%)	\$	1,042,239
Sub-Total		\$ 5,615,112

Estimated Project Cost	TOTAL	\$ 35,783,551
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* NOTE: Site Development Costs are for on-site development only

\$239,170 Over Act 34 Limit
Cost Estimate is based on bidding late 2023

New Garden Elementary School Addition and Renovation Cost Estimate

Description

Construct an addition on the existing New Garden Elementary School with a new gymnasium, 8 classrooms, additional administration space, and associated support facilities. Renovate entire existing school.

Proposed Room Schedule

8	Classrooms	850	sq. ft.	6,800	sq. ft.
1	Small Group Room	660	sq. ft.	660	sq. ft.
1	Large Group Room	900	sq. ft.	900	sq. ft.
1	Gymnasium	6,000	sq. ft.	6,000	sq. ft.
1	Stage	900	sq. ft.	900	sq. ft.
1	Administration	1,500	sq. ft.	1,500	sq. ft.
TOTAL SCHEDULED AREA				16,760	sq. ft.
Total Architectural Area		16,760	sq. ft. x 1.71	28,700	sq. ft.

Summary of Construction Costs

Site Development		\$	3,000,000
New Construction	28,700 sq. ft. x \$350 sq. ft.	\$	10,045,000
Renovations	63,815 sq. ft. x \$250 sq. ft.	\$	15,953,750
Sub-Total		\$	28,998,750

Architectural / Engineering Services	\$	1,522,434
Construction Manager Services	\$	869,963
Land Development Engineering Fees	\$	300,000
Furniture and Equipment	\$	750,000
Sub-Total		\$ 3,442,397

Additional Construction-Related Costs

Permits and Reviews, Geotechnical, Environmental, Construction Testing, etc.	\$	1,449,938
Contingency (12%)	\$	3,479,850
Financing Costs (3%)	\$	1,121,128
Sub-Total		\$ 6,050,916

Estimated Project Cost	TOTAL	\$ 38,492,063
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* NOTE: Site Development Costs are for on-site development only

\$1,269,390 Over Act 34 Limit
Cost Estimate is based on bidding late 2023

Option 1: Addition and Renovation of Existing Buildings - Act 34 Calculation

	Option 1	
	Greenwood ES	New Garden ES
Gross area of Addition	24,500	28,700
Estimated cost per square foot	\$350.00	\$350.00
Estimated construction cost	\$8,575,000.00	\$10,045,000.00
Projected cost allowance per student	\$19,990.00	\$19,990.00
Act 34 total adjusted capacity	417	439
MAX Act 34 construction cost	\$8,335,830.00	\$8,775,610.00
construction cost delta	-\$239,170.00	-\$1,269,390.00

Several variables factor into the impact of Act 34 on future projects:

- Annual increases to the PDE per pupil cost allowance
- Cost per square foot projections in a volatile market
- Building design: meeting the District’s educational needs while minimizing the school’s overall footprint

This report assumes a PDE per pupil cost allowance increase of 3% for 2022 only.

The scope of the law applies to all new buildings and substantial additions to existing buildings. For the purposes of Act 34 calculations, the construction cost only includes the cost of new building work and does not include costs for renovation, site work or other project expenses. Therefore, only the area and cost of the addition is included in the above calculation.

Act 34 capacity is for Act 34 calculations only and does not relate to actual capacity of the proposed school. The adjusted capacity is based on the size of the addition in relationship to the existing school.

Common challenges for elementary school projects under Act 34 include adding gymnasiums/multipurpose rooms to existing schools and building new schools with separate gymnasiums and cafeterias. These programmatic spaces add cost to the project without adding instructional capacity.

To make projects fall under the maximum construction cost, additional building scope may be required, often in the form of additional classrooms, which increases the capacity of the school and therefore increases the maximum construction cost.

Option 1: Addition and Renovation of Existing Buildings - Schedule

This study presents the feasibility of several approaches to project scheduling to inform the construction options; however, the decision on schedule is part of a larger 10-year capital program strategy that is subsequent to the decision on construction approach, which is the focus of this study.

The option to renovate and add-on to the existing elementary schools will require strategic phasing to maintain instructional capacity and a safe environment for the student population during construction. It is anticipated that each school project would include four major phases over three years. Phasing prolongs the schedule of the project.

It is recommended to overlap the design phases for both projects to help streamline the design decision making process and to ensure design parity across the two schools.

This study assessed two scheduling options for the documentation, bidding, and construction phases: overlapping and linear timelines. The overlapping timeline compresses the schedule to deliver the two projects faster. This approach partially offsets the construction phases and allows both projects to progress concurrently. The overlapping approach would see Greenwood completed by June of 2027 and New Garden completed by June of 2028. The linear timeline offsets each construction phase entirely so that the district avoids managing two construction projects simultaneously. This approach would see Greenwood completed by June of 2027 and New Garden completed by June of 2030.

Addition/Renovation Estimated Completion Dates

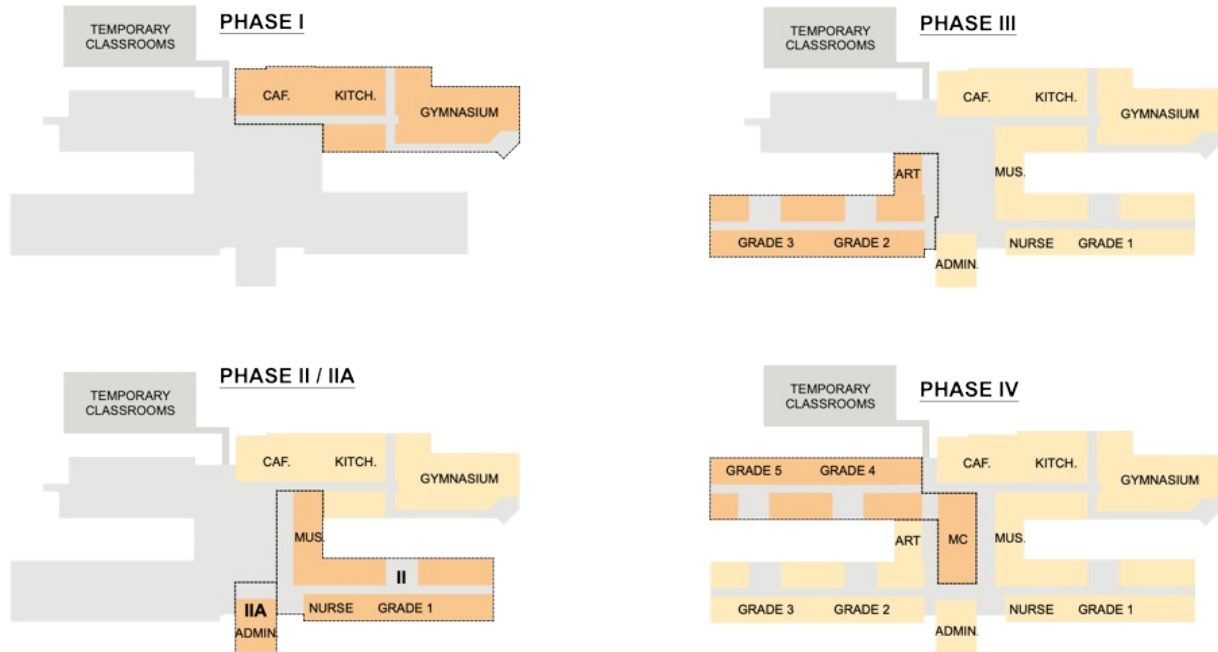
Overlapping Timeline

Greenwood Elementary School	June 2027
New Garden Elementary School	June 2028

Linear Timeline

Greenwood Elementary School	June 2027
New Garden Elementary School	June 2030

Greenwood Elementary School Phasing



New Garden Elementary School Phasing





Construction Options

Option 2: New Building on Existing Sites

This study includes two options for replacing the existing schools with new buildings on the existing sites:

- Option 2A: 625 PDE capacity school
- Option 2B: 750 PDE capacity school

Educational Needs

Option 2A proposes a school building with capacity to satisfy overall district enrollment projections. Option 2B proposes a school that addresses the capacity deficits at Greenwood and New Garden and provides greater adaptability for future educational programming needs.

School Parity

Option 2A maintains the existing capacity of the two elementary schools. Option 2B increases the capacity of the two schools to 750, to match Bancroft Elementary School.

Act 34

A school with more PDE capacity provides a greater buffer below the Act 34 maximum construction cost limit. Option 2A’s estimated construction cost falls under the Act 34 cost limit by a narrow margin. To ensure compliance, programmatic changes may be explored, including a combined gymnasium and cafeteria space. A construction cost buffer of one million dollars below the Act 34 cost limit is recommended for a project of this size. The increased capacity of Option 2B increases the Act 34 construction cost limit and is estimated to exceed the recommended buffer.

The study presents Option 2A buildings for both Greenwood and New Garden Elementary schools. Option 2B is only shown for Greenwood, as it was tested for feasibility against the greater constraints on that site. New Garden’s site currently presents no challenges for the feasibility of an Option 2B school.

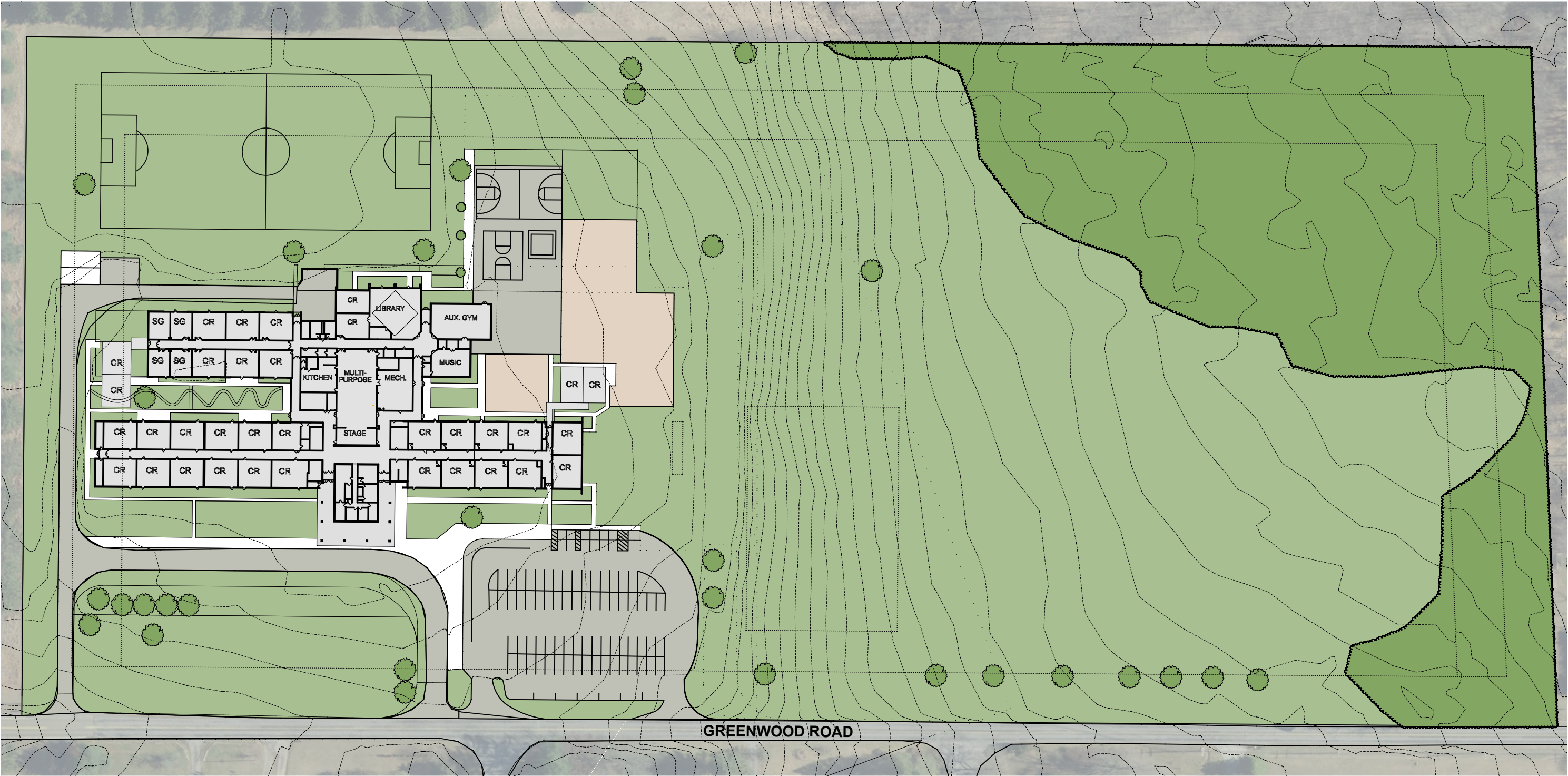
Capacity	Greenwood		New Garden	
	2A	2B	2A	2B
PLANNED PDE CAPACITY	625	750	625	750
PLANNED UTILIZATION	550	660	550	660
PDE BENCHMARK PROJECTION	607	607	558	558
CAPACITY DIFFERENCE	-57	53	-8	102

This study uses actual enrollment plus 10% as the PDE benchmark projection.

Although the planned utilization of option 2A maintains the current utilization, additional spaces are provided in the proposed construction option that do not count towards capacity, such as large group instruction, small group instruction, learning support spaces, special education classrooms, and ESL classrooms. These proposed spaces contribute to satisfying current educational programming needs and provide adaptability for future needs without increasing capacity.

Option 2: New Building on Existing Sites

Greenwood Elementary School - Existing Site Plan





Construction Options

Option 2: New Building on Existing Sites

Greenwood Elementary School - Option 2A Site Plan: Intermediate



Solutions

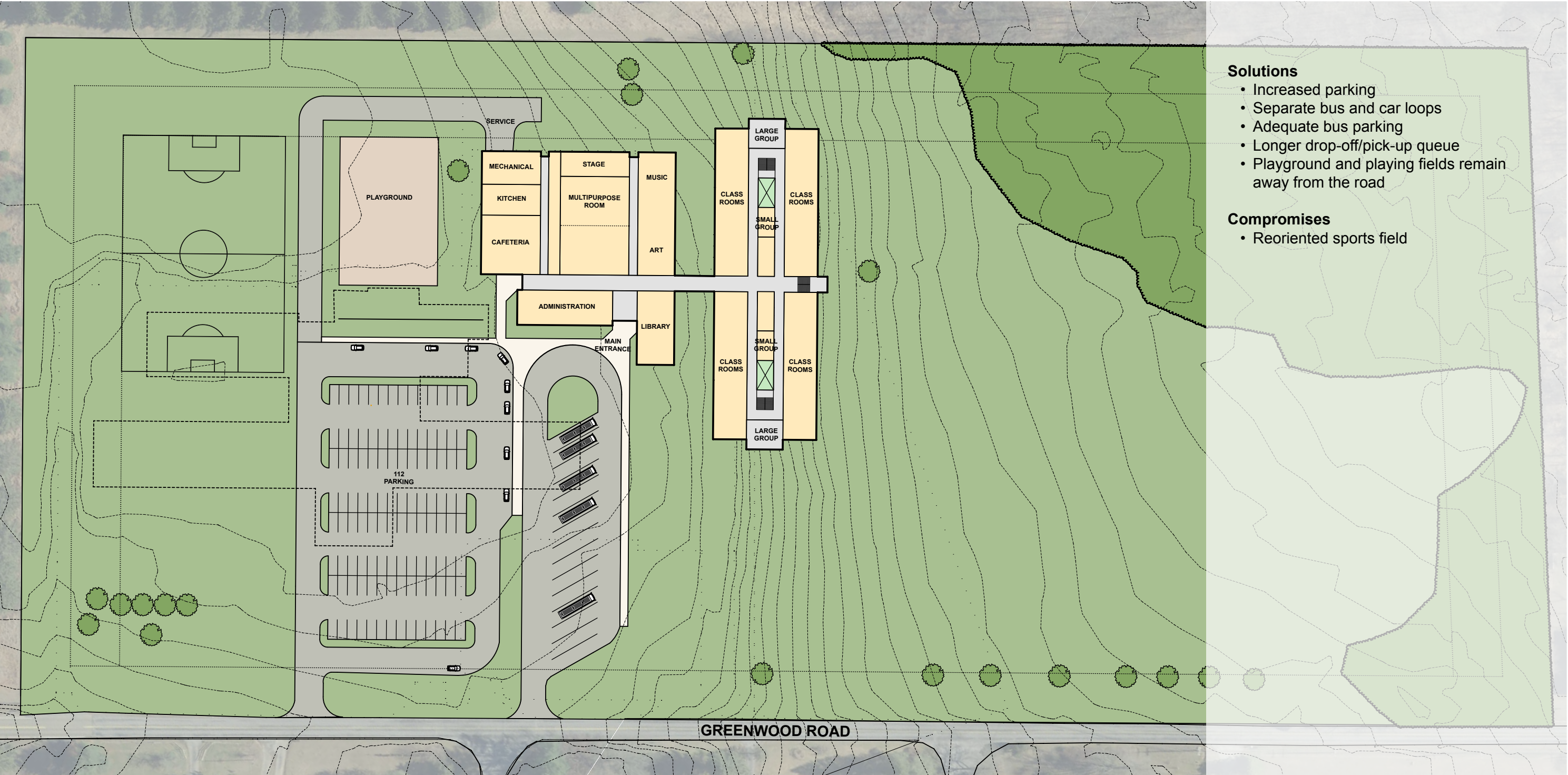
- Existing site can accommodate a new school while existing school still in use
- A partial demolition of the existing school is a potential strategy to provide new site work in time for the opening of the new school
- Utilizes change in topography to provide 2-story classroom wing, minimizes building footprint and allows for an efficient use of the site
- Locating new building to the side of the existing school maintains a connection between main entrance and road, which also provides efficient construction access.

Compromises

- Utilizes temporary parking and drop-off/pick-up zones during demolition of the existing school building

Option 2: New Building on Existing Sites

Greenwood Elementary School - Option 2A Site Plan: Complete

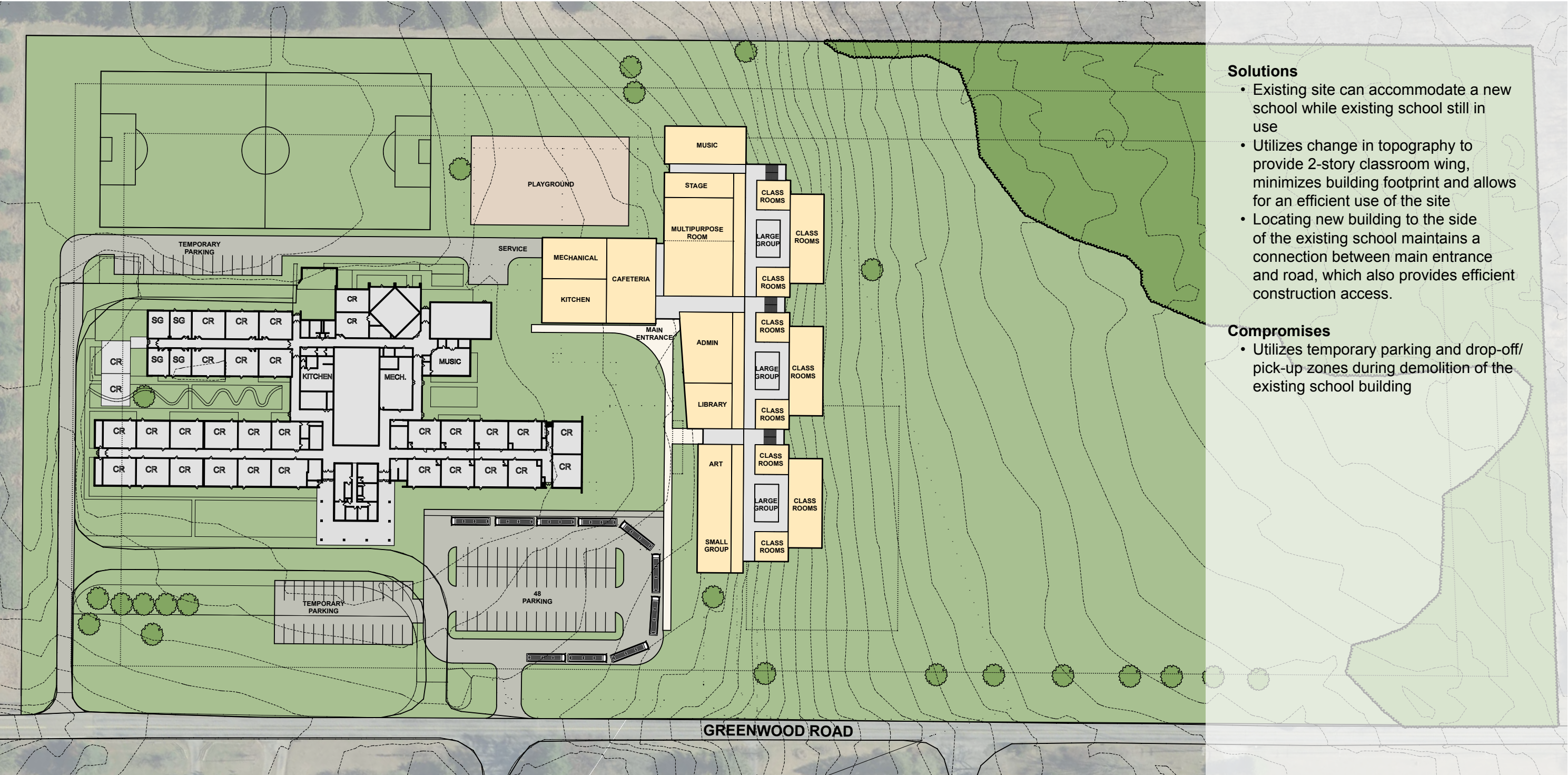




Construction Options

Option 2: New Building on Existing Sites

Greenwood Elementary School - Option 2B Site Plan: Intermediate



Option 2: New Building on Existing Sites

Greenwood Elementary School - Option 2B Site Plan: Complete





Construction Options

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Option 2: New Building on Existing Sites

New Garden Elementary School - Existing Site Plan

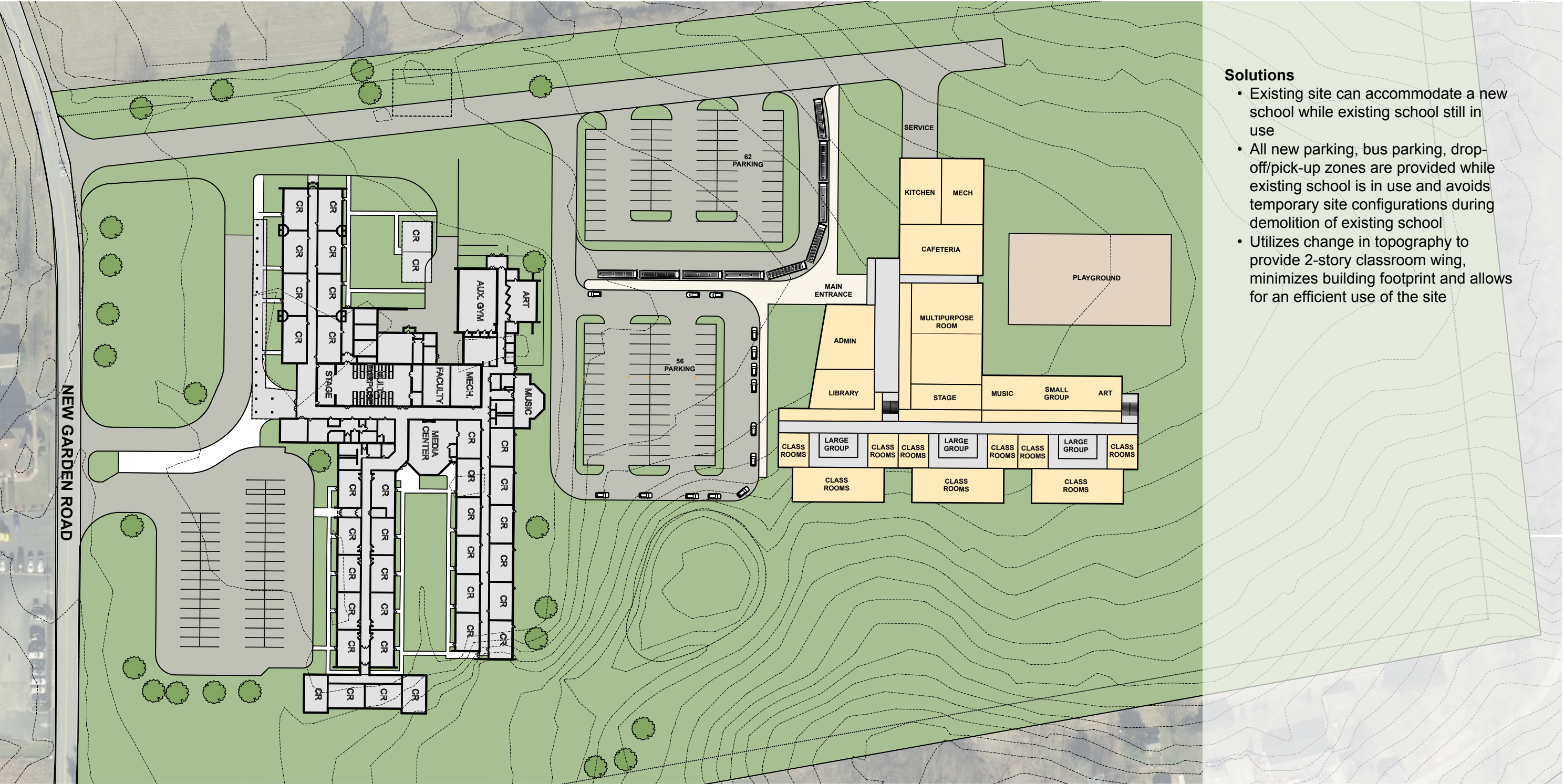




Construction Options

Option 2: New Building on Existing Sites

New Garden Elementary School - Option 2A Site Plan: Intermediate



Option 2: New Building on Existing Sites

New Garden Elementary School - Option 2A Site Plan: Complete





Construction Options

Option 2: New Building on Existing Sites - Cost

Option 2A - 625 PDE Capacity School (Greenwood and New Garden)

Description

Construct new 625 student elementary schools on the existing site. Upon completion of construction, the existing schools would be demolished.

Proposed Room Schedule

1	Media Center	2,400 sq. ft.	2,400 sq. ft.
1	Makerspace	1,000 sq. ft.	1,000 sq. ft.
25	Classrooms	850 sq. ft.	21,250 sq. ft.
3	Special Education Classroom	850 sq. ft.	2,550 sq. ft.
2	Learning Support Rooms	660 sq. ft.	1,320 sq. ft.
5	Collaboration Areas	850 sq. ft.	4,250 sq. ft.
1	Art Room	1,200 sq. ft.	1,200 sq. ft.
2	Music Classrooms	1,000 sq. ft.	2,000 sq. ft.
1	Health Classroom	850 sq. ft.	850 sq. ft.
1	Spanish Classroom	850 sq. ft.	850 sq. ft.
2	English Language Dev. Classrooms	850 sq. ft.	1,700 sq. ft.
1	Stage	900 sq. ft.	900 sq. ft.
1	Multi-Purpose Room	5,600 sq. ft.	5,600 sq. ft.
1	Cafeteria (200 seats)	3,000 sq. ft.	3,000 sq. ft.
1	Kitchen	2,400 sq. ft.	2,400 sq. ft.
1	Faculty Dining Room	660 sq. ft.	660 sq. ft.
2	Faculty Workrooms	660 sq. ft.	1,320 sq. ft.
1	Health Suite	800 sq. ft.	800 sq. ft.
1	Administration/Guidance Suite	2,800 sq. ft.	2,800 sq. ft.
TOTAL SCHEDULED AREA			56,850 sq. ft.
Total Architectural Area		56,850 sq. ft. x 1.68	95,500 sq. ft.

Summary of Construction Costs

Site Development		\$	4,100,000
Demolition		\$	400,000
New Construction	95,500 sq. ft. x \$320 sq. ft.	\$	30,560,000
Sub-Total		\$	35,060,000

Architectural / Engineering Services	\$	1,753,000
Construction Manager Services	\$	1,051,800
Land Development Engineering Fees	\$	350,000
Furniture and Equipment	\$	1,300,000
Sub-Total	\$	4,454,800

Additional Construction-Related Costs

Permits and Reviews, Geotechnical, Environmental, Construction Testing, etc.	\$	1,753,000
Contingency (8%)	\$	2,804,800
Financing Costs (3%)	\$	1,322,178
Sub-Total	\$	5,879,978

Estimated Project Cost	TOTAL	\$	45,394,778
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* NOTE: Site Development Costs are for on-site development only

\$104,660 Under Act 34 Limit
Cost Estimate is based on bidding late 2023

Option 2B - 750 PDE Capacity School (Greenwood and New Garden)

Description

Construct new 750 student elementary schools on the existing site. Upon completion of construction, the existing schools would be demolished.

Proposed Room Schedule

1	Media Center	2,400 sq. ft.	2,400 sq. ft.
1	Makerspace	1,000 sq. ft.	1,000 sq. ft.
30	Classrooms	850 sq. ft.	25,500 sq. ft.
3	Special Education Classroom	850 sq. ft.	2,550 sq. ft.
2	Learning Support Rooms	660 sq. ft.	1,320 sq. ft.
6	Collaboration Areas	850 sq. ft.	5,100 sq. ft.
1	Art Room	1,200 sq. ft.	1,200 sq. ft.
2	Music Classrooms	1,000 sq. ft.	2,000 sq. ft.
1	Health Classroom	850 sq. ft.	850 sq. ft.
1	Spanish Classroom	850 sq. ft.	850 sq. ft.
2	English Language Dev. Classrooms	850 sq. ft.	1,700 sq. ft.
1	Stage	900 sq. ft.	900 sq. ft.
1	Multi-Purpose Room	5,600 sq. ft.	5,600 sq. ft.
1	Cafeteria (200 seats)	3,000 sq. ft.	3,000 sq. ft.
1	Kitchen	2,400 sq. ft.	2,400 sq. ft.
1	Faculty Dining Room	660 sq. ft.	660 sq. ft.
2	Faculty Workrooms	660 sq. ft.	1,320 sq. ft.
1	Health Suite	800 sq. ft.	800 sq. ft.
1	Administration/Guidance Suite	2,800 sq. ft.	2,800 sq. ft.
TOTAL SCHEDULED AREA			61,950 sq. ft.
Total Architectural Area		61,950 sq. ft. x 1.68	104,100 sq. ft.

Summary of Construction Costs

Site Development		\$	4,100,000
Demolition		\$	400,000
New Construction	104,100 sq. ft. x \$320 sq. ft.	\$	33,312,000
Sub-Total		\$	37,812,000

Architectural / Engineering Services	\$	1,890,600
Construction Manager Services	\$	1,134,360
Land Development Engineering Fees	\$	350,000
Furniture and Equipment	\$	1,300,000
Sub-Total	\$	4,674,960

Additional Construction-Related Costs

Permits and Reviews, Geotechnical, Environmental, Construction Testing, etc.	\$	1,890,600
Contingency (8%)	\$	3,024,960
Financing Costs (3%)	\$	1,422,076
Sub-Total	\$	6,337,636

Estimated Project Cost	TOTAL	\$	48,824,596
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* NOTE: Site Development Costs are for on-site development only

\$1,550,560 Under Act 34 Limit
Cost Estimate is based on bidding late 2023

Option 2: New Building on Existing Sites - Act 34 Calculation

	Option 2A 625 PDE Capacity	Option 2B 750 PDE Capacity
Gross area	95,500	104,100
Estimated cost per square foot	\$320.00	\$320.00
Estimated construction cost	\$30,560,000.00	\$33,312,000.00
Projected cost allowance per student	\$19,990.00	\$19,990.00
Act 34 total capacity	1,534	1,744
MAX Act 34 construction cost	\$30,664,660.00	\$34,862,560.00
construction cost delta	\$104,660.00	\$1,550,560.00

Several variables factor into the impact of Act 34 on future projects:

- Annual increases to the PDE per pupil cost allowance
- Cost per square foot projections in a volatile market
- Building design: meeting the District’s educational needs while minimizing the school’s overall footprint

This report assumes a PDE per pupil cost allowance increase of 3% for 2022 only.

The scope of the law applies to all new buildings and substantial additions to existing buildings. For the purposes of Act 34 calculations, the construction cost only includes the cost of new building work and does not include site work or other project expenses.

Act 34 capacity is for Act 34 calculations only and does not relate to actual capacity of the proposed school.

Common challenges for elementary school projects under Act 34 include adding gymnasiums/multipurpose rooms to existing schools and building new schools with separate gymnasiums and cafeterias. These programmatic spaces add cost to the project without adding instructional capacity.

To make projects fall under the maximum construction cost, additional building scope may be required, often in the form of additional classrooms, which increases the capacity of the school and therefore increases the maximum construction cost. The higher capacity of Option 2B in the form of additional instructional spaces increases the Act 34 construction limit for that option.

Option 2: New Building on Existing Sites - Schedule

This study presents the feasibility of several approaches to project scheduling to inform the construction options, however determining schedule is part of a larger 10-year capital program strategy that is subsequent to the decision on construction approach, which is the focus of this study.

The option to replace the elementary schools with new buildings minimizes construction phasing and can meet the district’s original goal to complete both schools by the Fall of 2027.

It is recommended to overlap the design phases for both projects to help streamline the design decision making process and to ensure design parity across the two schools.

This study assessed two scheduling options for the documentation, bidding, and construction phases: overlapping and linear timelines. The overlapping timeline compresses the schedule to deliver the two projects faster. This approach partially offsets the construction phases and allows both projects to progress concurrently. The overlapping approach would see the new Greenwood building completed by June of 2025 and New Garden completed by June of 2027. The linear timeline offsets each construction phase entirely so that the district avoids managing two construction projects simultaneously. This approach would see Greenwood completed by June 2025 and New Garden completed by June of 2027.

The proposed schedule assumes one year for demolition of the existing school and the completion of remaining site work.

New Building Estimated Completion Dates

Overlapping Timeline	New School Open	Project Complete
Greenwood Elementary School New Garden Elementary School	June 2025 June 2026	June 2026 June 2027
Linear Timeline		
Greenwood Elementary School New Garden Elementary School	June 2025 June 2027	June 2026 June 2028



Option 2: New Building on Existing Sites - Schedule

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Option Comparison

Option 1: Addition/Renovation	Option 2A/2B: New Building
<div>Advantages:<ul style="list-style-type: none">Lower construction costsMaintains existing history & character</div> <div>Disadvantages:<ul style="list-style-type: none">Challenge with ADA compliance & AccessibilityHigher maintenance costs of concealed plumbing and electrical infrastructureGreater risk of unforeseen conditions discovered during constructionLonger (phased) construction durationExisting construction limits technology integrationConstraints on learning space configuration</div>	<div>Advantages:<ul style="list-style-type: none">Better use of space & design opportunitiesMaintenance savingsConstruction & material warrantiesShorter construction duration with less disturbances to programAbility to provide green designIncreased energy efficiencyIncreased safety & securityIntegrated technologyFresh “look” & Identity</div> <div>Disadvantages:<ul style="list-style-type: none">Higher construction costsCost to demolish existing structure</div>

Cost Comparison

	CAPITAL MAINTENANCE AND REPAIR *		OPTION 1: ADDITION / RENOVATION		OPTION 2A: NEW BUILDING	OPTION 2B: NEW BUILDING
	Greenwood	New Garden	Greenwood	New Garden	Each school	Each School
TOTAL PROJECT BUDGET	\$20,741,207	\$20,060,370	\$35,783,551	\$38,492,063	\$45,394,778 x2	\$48,824,596 x2
TOTAL	\$40,801,577		\$74,275,614		\$90,789,556	\$97,649,192
BUDGET ABOVE/BELOW ACT 34 LIMIT**	n.a.	n.a.	\$239,170	\$1,269,390	\$104,660	\$1,550,560

* Estimate of school upgrade costs as prepared by ICS in report dated February 2019 with inflation added for escalation to 2022.

** Assumes a PDE per pupil cost allowance increase of 3% for 2022

Recommendation

Option 2B: Construct new 750 capacity buildings on existing sites

- The total cost for the addition/renovation for both schools is 82% of the cost to replace both schools with new buildings. The standard threshold for evaluating the value of renovation versus replacement is between 60% and 70%
 - Due to the existing school’s age and limited adaptability for future learning needs we recommend using a threshold of 60% to compare the costs of addition/renovation to new building.
- With the new buildings, the district can take advantage of latest educational thinking, innovative approaches to technology integration, resilient building practices, and efficient building systems. These advantages come with a higher upfront cost but potential long-term savings.
- The estimated schedule meets the district’s original proposed schedule for both projects to be completed by Fall of 2027
- The Option 1 Addition/Renovation construction costs exceed the Act 34 cost limit, per the current estimates. Additional instructional space could be added to the project scope to potentially bring the costs under the limit, but the added cost brings the budget closer to the cost to replace with new buildings
- The Option 2 New Building construction costs fall under the Act 34 cost limit, per the current estimates. Option 2B provides a greater Act 34 buffer, which is prudent during times of unusual construction cost inflation
- Option 2B’s larger capacity provides flexibility for future district-wide educational strategies at the elementary school level
- Option 2B provides parity among all elementary school facilities
- Option 2B addresses capacity deficits at Greenwood and New Garden



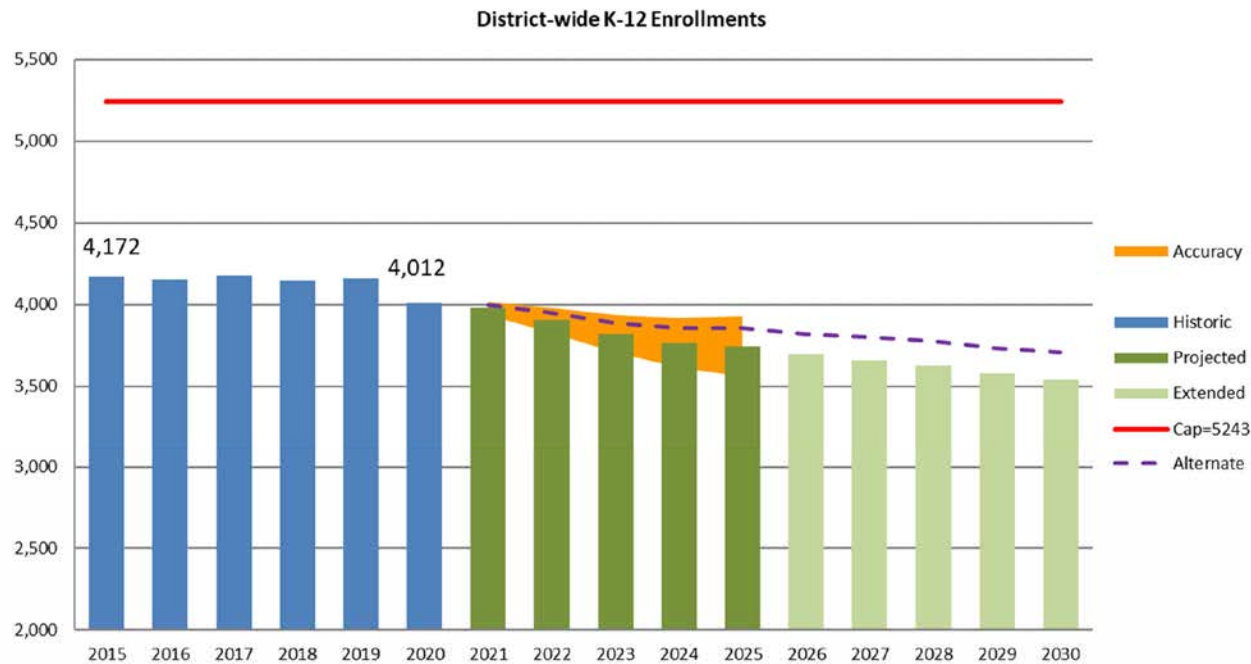
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APPENDIX



Sundance Enrollment Projections

Enrollment Projections
District-wide Projection



The 2020 enrollment is 160 students (3.8%) less than the 2015 enrollments at the beginning of the historic period having decreased to 4,012 students. That is the equivalent of 12 students per grade or about 1/2 classroom per grade decrease in the historic period.

Enrollments are projected to decrease by an additional 269 students to 3,743 students (-6.8%) in year 2025 at the end of the 5-year projection. 70 students (about 5 per grade) have been added to the 5-year projection from new multi-family housing.

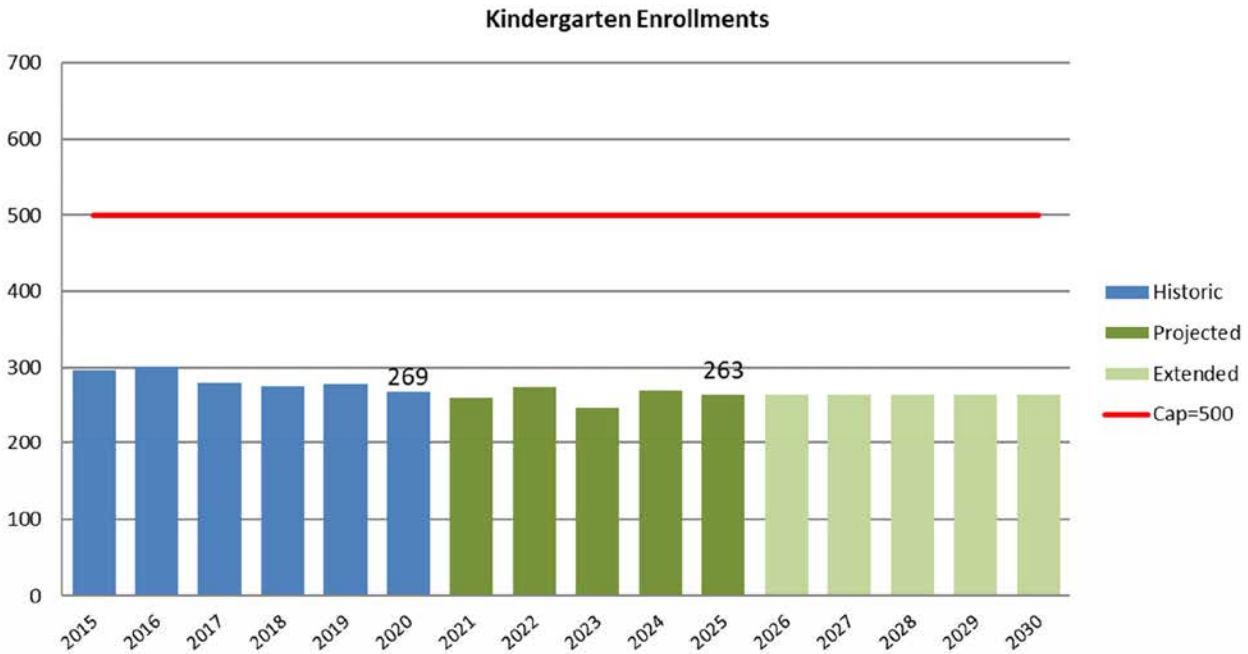
An alternate projection using only the earlier 4 Survival Ratios increases the 5th year projection by 111 students or 8 to 9 students per grade level.

District-wide enrollments do not exceed the District Capacity in any projection year.

Cohort Survival Enrollment Projections have an accuracy of ±1% per year as represented by the golden cone on the chart. Though not shown on every chart, this is also true of the Grade Level and School based projections

Kennett Consolidated		District Wide				
		70 Public School Students from new housing				
		TOTAL	Average	Change	%Chg	Alt
Historic	2015	4,172				
	2016	4,150				
	2017	4,177				
	2018	4,145	4,135			
	2019	4,156				
	2020	4,012		-160	-3.8%	
Projected	2021	3,976				3,997
	2022	3,902				3,946
	2023	3,818	3,841			3,886
	2024	3,764				3,856
	2025	3,743		-269	-6.8%	3,854
	2026	3,693				3,820
Extended	2027	3,658				3,797
	2028	3,627	3,619			3,777
	2029	3,576				3,735
	2030	3,538		-205	-5.5%	3,706

Enrollment Projections
Kindergarten Projection

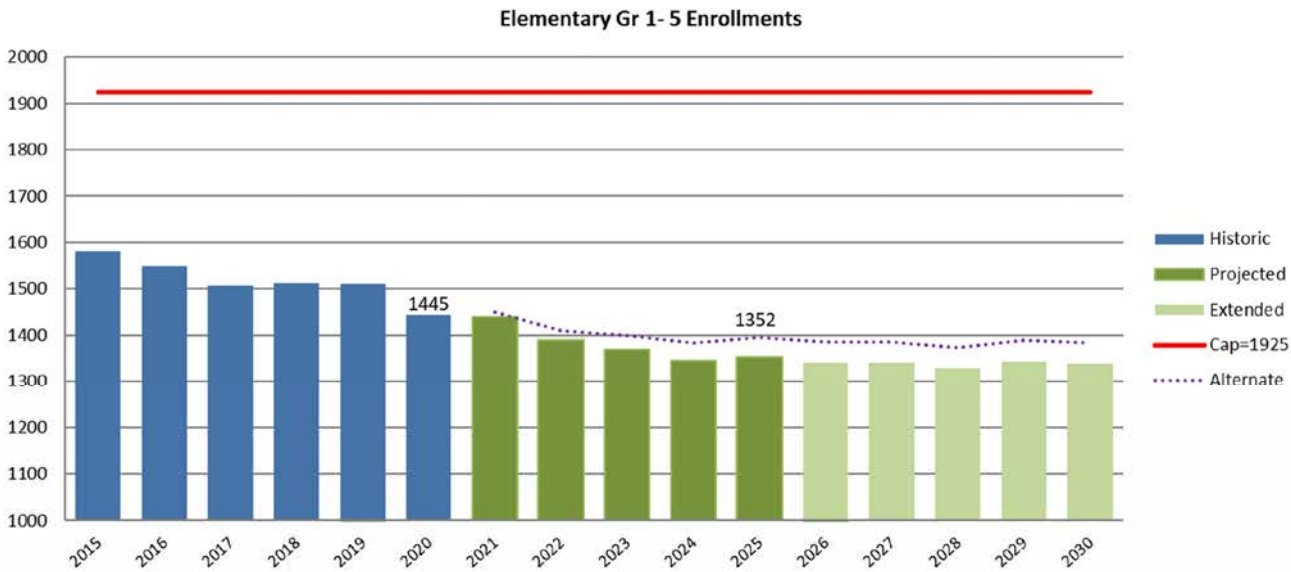


Kindergarten enrollments that have been decreasing in the historical period, by 27 students, will decrease by 6 students in the 5-year projected period. Five Kindergarten students from new housing are added to the projection period.

Kindergarten Enrollments		5 Students from new housing to Public School at the Kindergarten level				
		K			K Period to Period	
		PK	SCSE	K	TOTAL	Average
Historic	2015	0	0	296	296	
	2016	0	0	301	301	
	2017	0	0	280	280	
	2018	0	0	275	275	283
	2019	0	0	278	278	
	2020	0	0	269	269	-27 -9.1%
Projected	2021	0	0	260	260	
	2022	0	0	274	274	
	2023	0	0	247	247	263
	2024	0	0	269	269	
	2025	0	0	263	263	-6 -2.2%
	2026	0	0	263	263	
Extended	2027	0	0	263	263	
	2028	0	0	263	263	263
	2029	0	0	263	263	
	2030	0	0	263	263	0 0.0%

Sundance Enrollment Projections

Enrollment Projections
Elementary Projection



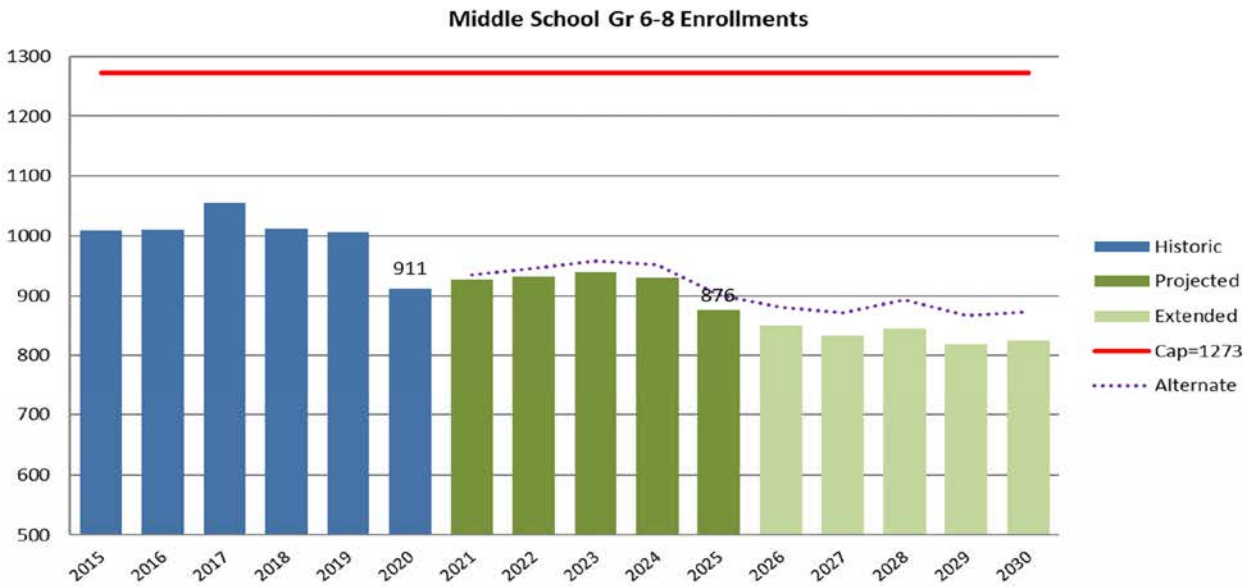
In the historic period enrollments decreased 136 students to a total of 1,445 Grade 1-5 students.

In the projection period enrollments will continue to decrease by 93 students to a new low of 1,352 students at the end of the projection period in year 2023-24. The alternate projection is for 1,396 students. 32 students from new housing were added to the Grade 1-5 projection.

Elementary enrollments are under capacity now and in all projection years.

Kennett Consolidated													
Elementary Grade 1- 5 Enrollments													
32 Students from new housing to Public School at the elementary level													
		PK		K	1	2	3	4	5	SCSE	PK-5 TOTAL	Period to Period	
		PK	SCSE									Average	Change
Historic	2015	0	0	0	295	307	302	351	326	0	1,581		
	2016	0	0	0	304	300	297	298	351	0	1,550		
	2017	0	0	0	314	293	297	310	293	0	1,507		
	2018	0	0	0	292	310	294	304	313	0	1,513	1,518	
	2019	0	0	0	288	302	319	292	309	0	1,510		
	2020	0	0	0	263	278	297	315	292	0	1,445		-136 -8.6%
Projected	2021	0	0	0	277	264	279	302	318	0	1,440		
	2022	0	0	0	266	276	263	281	303	0	1,389		
	2023	0	0	0	280	265	275	266	283	0	1,370	1,379	
	2024	0	0	0	254	280	265	279	268	0	1,346		
	2025	0	0	0	275	252	278	267	279	0	1,352		-93 -6.5%
	2026	0	0	0	269	273	251	280	268	0	1,341		
Extended	2027	0	0	0	269	267	272	253	281	0	1,341		
	2028	0	0	0	269	267	266	273	253	0	1,329	1,339	
	2029	0	0	0	269	267	266	268	274	0	1,344		
	2030	0	0	0	269	267	266	268	268	0	1,338		-14 -1.1%

Enrollment Projections
Middle School Projection



In the historic period enrollments decreased 280 students to a total of 911 students.

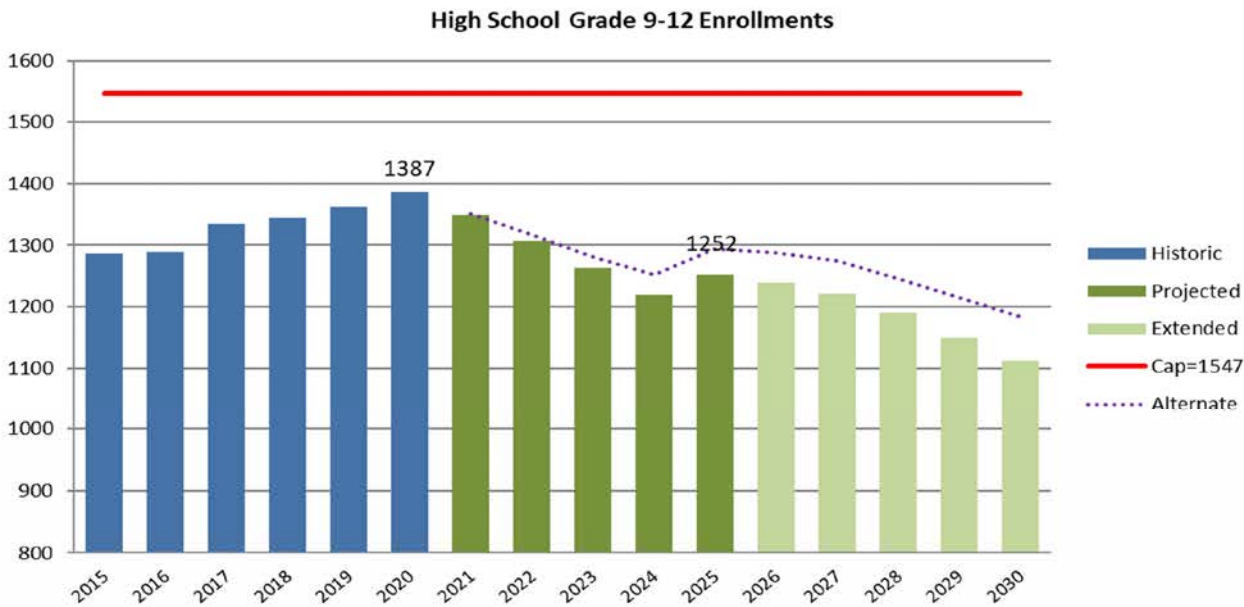
In the projection period enrollments will continue to decrease by an additional 35 students to a low of 876 students at the end of the projection period in year 2025-26. 16 students have been added to these grade Levels. The alternate projection is for 900 students.

Enrollments do not exceed capacity in any years of the 5-year projection.

Middle School Grade 6-8 Enrollments									
16 Students from new housing to Public Schools at the Middle School level.									
		Gr 6-8			TOTAL	Period to Period		Alternate	
		6	7	8		Average	Change		
Historic	2015	350	329	330	1,009				
	2016	330	353	327	1,010				
	2017	359	336	361	1,056				
	2018	300	374	338	1,012	1001			
	2019	324	304	378	1,006				
	2020	300	320	291	911		-98 -9.7%		
Projected	2021	298	307	322	927			935	
	2022	323	303	307	932			946	
	2023	308	328	303	939	921		958	
	2024	288	313	329	930			952	
	2025	271	292	313	876		-35 -3.8%	900	
	2026	283	275	292	849			881	
Extended	2027	271	287	274	832			872	
	2028	285	275	286	846	834		893	
	2029	256	289	274	819			867	
	2030	278	260	288	826		-50 -5.9%	874	

Sundance Enrollment Projections

Enrollment Projections
High School Projection



In the historic period enrollments increased 101 students to a total of 1,387 students.

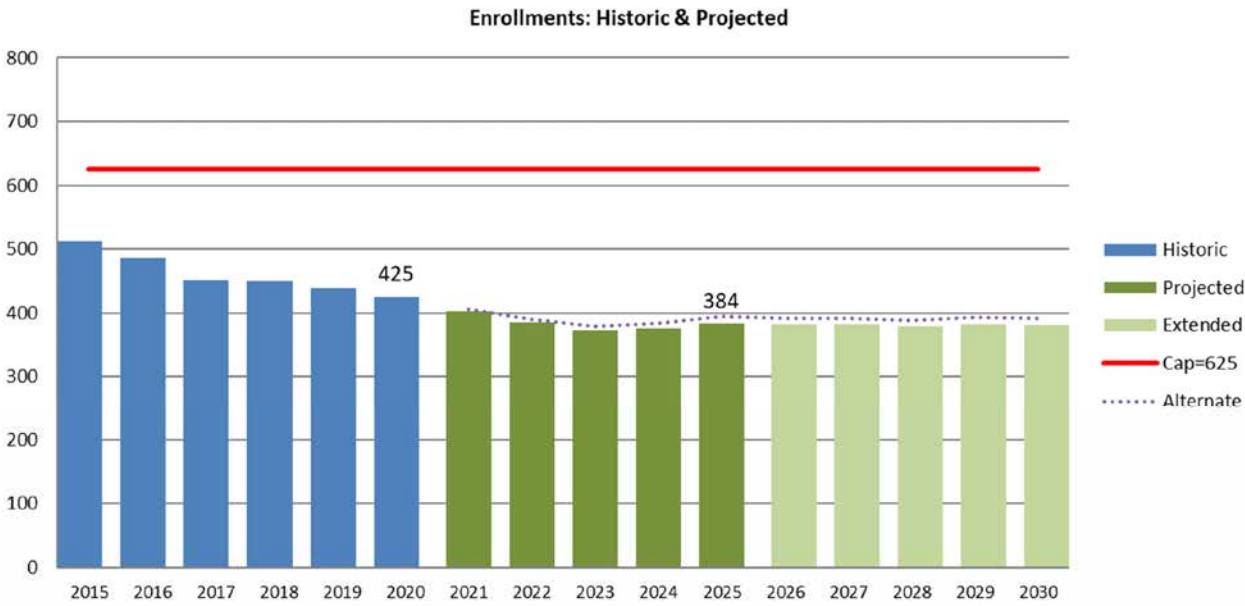
In the projection period enrollments will begin to decrease by 136 students to a low of 1,252 students at the end of the projection period in year 2025-26. The alternate projection is for 1,294 students. 22 students from new housing have been added at the high school level.

Enrollments do not exceed capacity in any years of the 5-year projection.

Kennett Consolidated
High School Grade 9-12 Enrollments
22 Students from new housing at the High School level

		Gr 9-12				Period	Period	Alternate
		9	10	11	12	Average	Change	
Historic	2015	348	340	299	299	1,286		
	2016	348	313	338	290	1,289		
	2017	353	334	316	331	1,334		
	2018	382	335	319	309	1,345	1334	
	2019	362	352	327	321	1,362		
	2020	367	346	354	320	1,387	101	7.9%
Projected	2021	307	346	344	350	1,349		1,351
	2022	337	288	343	339	1,307		1,316
	2023	322	317	286	338	1,263	1278	1,281
	2024	319	303	315	282	1,219		1,251
	2025	344	299	299	309	1,252	-135	1,294
	2026	327	323	295	294	1,240		1,288
Extended	2027	305	307	319	290	1,221		1,274
	2028	287	286	303	313	1,189	1182	1,246
	2029	300	269	283	298	1,149		1,214
	2030	287	281	266	278	1,112	-141	1,184
							-11.3%	

Enrollment Projections
Bancroft Elementary School

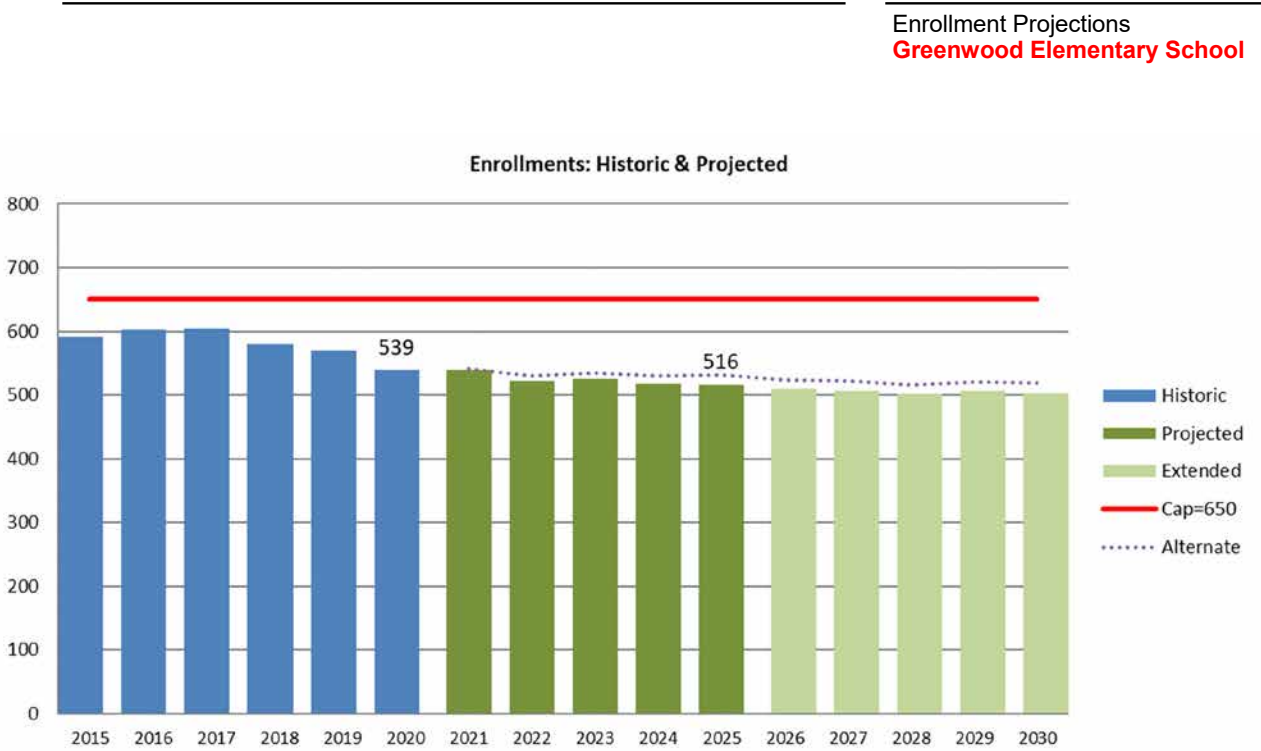


Enrollments which decreased 87 in the historic period, will decrease by 41 in the projection period to a new low of 384 students in year 2025-26. Five students from new housing are added to the Bancroft projection.

Sections increase from a current 22 classrooms to a projection period high of 20 classrooms.

Bancroft Elementary School										Sections						
Enrollments by Year and Grade																
		Gr 1-5														
		1	2	3	4	5	Total	Average Change	% Chg	Alternate	1	2	3	4	5	Total
Historic	2015	94	93	95	118	112	512				5	5	5	5	5	25
	2016	108	84	87	94	113	486				5	4	4	4	5	22
	2017	95	100	75	95	86	451				5	5	4	4	4	22
	2018	88	91	102	77	92	450	460			4	5	5	4	4	22
	2019	72	92	94	97	83	438				4	5	5	5	4	23
	2020	73	72	90	92	98	425	-87	-17.0%		4	4	5	4	5	22
Projected	2021	82	70	70	91	90	403			405	4	4	4	4	4	20
	2022	78	79	68	70	89	385			389	4	4	4	3	4	19
	2023	83	75	77	69	69	373	384		379	4	4	4	3	3	18
	2024	76	81	74	77	68	376			384	4	4	4	4	3	19
	2025	82	73	78	75	76	384	-41	-10.2%	394	4	4	4	4	4	20
	2026	80	79	71	79	73	381			392	4	4	4	4	4	20
Extended	2027	80	77	76	71	77	382			392	4	4	4	3	4	19
	2028	80	77	75	77	70	379	381		389	4	4	4	4	3	19
	2029	80	77	75	75	76	383			393	4	4	4	4	4	20
	2030	80	77	75	75	74	381	-3	-0.7%	392	4	4	4	4	4	20

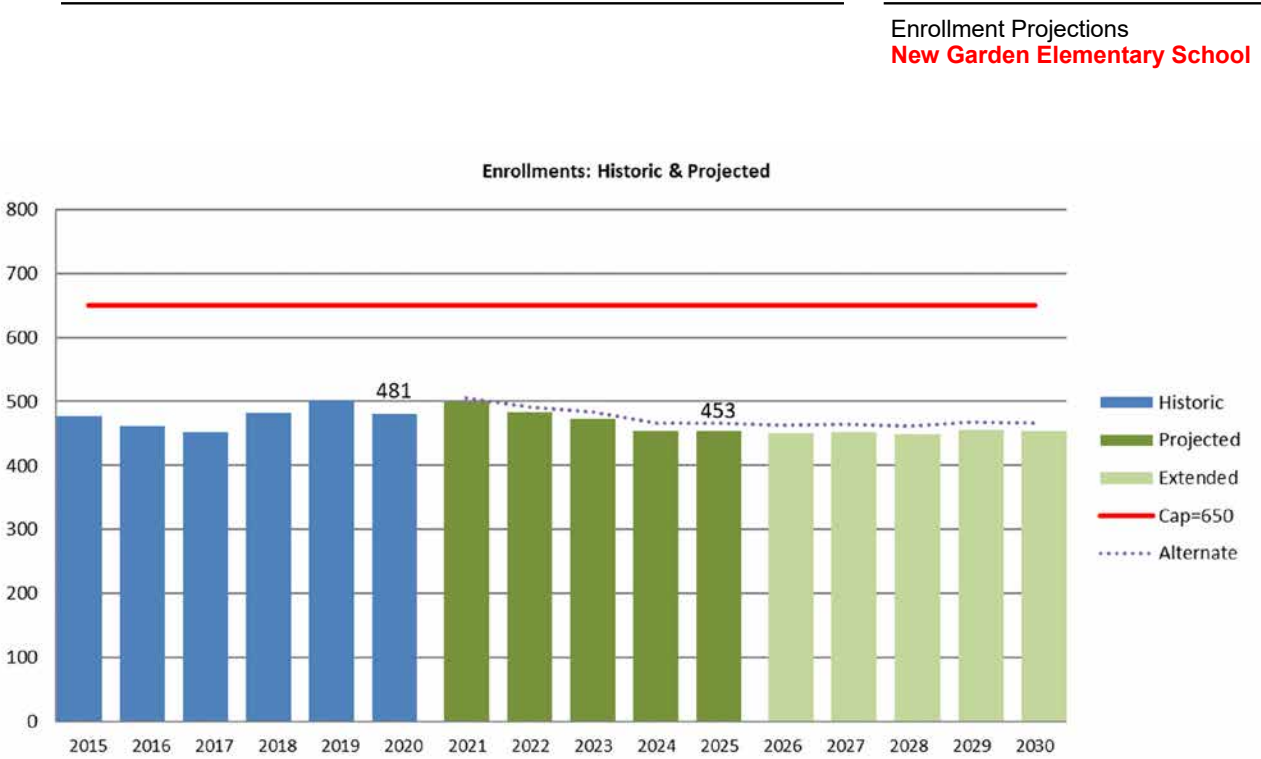
Sundance Enrollment Projections



Enrollments which decreased 53 in the historic period, will decrease by 23 in the projection period to a low of 516 students in year 2025-26. 32 students from new housing are added to the Greenwood projection

Sections stabilize at the current 25.

Greenwood Elementary School										Sections						
Enrollments by Year and Grade																
Gr 1-5																
		1	2	3	4	5	Total	Average Change	% Chg	Alternate	22	22	22	24	24	
Historic	2015	119	122	115	127	109	592				1	2	3	4	5	Total
	2016	114	125	124	113	126	602				6	6	6	6	5	29
	2017	124	115	127	125	113	604				6	6	6	6	5	29
	2018	104	123	111	125	118	581	581			5	6	6	6	5	28
	2019	113	106	116	113	121	569				6	5	6	5	6	28
	2020	101	106	104	115	113	539	-53	-9.0%		5	5	5	5	5	25
Projected	2021	107	104	107	106	115	539			542	5	5	5	5	5	25
	2022	101	108	102	107	104	523			529	5	5	5	5	5	25
	2023	107	103	107	103	105	525	524		535	5	5	5	5	5	25
	2024	97	109	102	107	102	517			531	5	5	5	5	5	25
	2025	105	98	107	102	105	516	-23	-4.2%	531	5	5	5	5	5	25
Extended	2026	102	105	96	106	100	509			524	5	5	5	5	5	25
	2027	102	102	103	95	104	507			522	5	5	5	4	5	24
	2028	102	102	101	103	93	501	505		516	5	5	5	5	4	24
	2029	102	102	101	100	100	506			520	5	5	5	5	5	25
	2030	102	102	101	100	98	504	-13	-2.5%	518	5	5	5	5	5	25



Enrollments which increased 4 in the historic period, will decrease by 28 in the projection period to a low of 453 students in year 2025-26. No students from new housing are added to the New Garden projection.

Sections decrease from the current 25 to 23.

New Garden Elementary School										Sections						
Enrollments by Year and Grade																
		1	2	3	4	5	Total	Average Change	% Chg	Alternate		22	22	22	24	24
Historic	2015	82	92	92	106	105	477				4	5	5	5	5	24
	2016	82	91	86	91	112	462				4	5	4	4	5	22
	2017	95	78	95	90	94	452				5	4	5	4	4	22
	2018	100	96	81	102	103	482	476			5	5	4	5	5	24
	2019	103	104	109	82	105	503				5	5	5	4	5	24
	2020	89	100	103	108	81	481		4	0.8%		5	5	5	5	4
Projected	2021	88	90	103	105	113	500			505	5	5	5	5	5	25
	2022	85	90	93	105	110	483			491	4	5	5	5	5	24
	2023	90	86	92	95	110	473	472		484	5	4	5	4	5	23
	2024	81	91	89	94	99	453			466	4	5	5	4	5	23
	2025	88	82	94	91	98	453		-28	-5.6%	466	5	4	5	4	5
Extended	2026	87	89	84	95	95	451			463	4	5	4	4	4	21
	2027	87	88	92	86	100	453			465	4	4	5	4	5	22
	2028	87	88	90	94	90	449	452		462	4	4	5	4	4	21
	2029	87	88	90	92	98	455			468	4	4	5	4	5	22
	2030	87	88	90	92	97	454		1	0.2%	467	4	4	5	4	5



PDE Enrollment Projections



Enrollment Projections
Prepared by the Pennsylvania Department of Education

Kennett Consolidated SD 124154003

YEAR	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
Actual														
2016 - 2017	301	304	300	297	298	351	330	353	327	348	313	338	290	4150
2017 - 2018	280	314	293	297	310	293	359	336	361	353	334	316	331	4177
2018 - 2019	275	292	310	294	304	313	300	374	338	382	335	319	309	4145
2019 - 2020	278	288	302	319	292	309	324	304	378	362	352	327	321	4156
2020 - 2021	269	263	278	297	315	292	300	320	291	367	346	354	320	4012
Projection														
2021 - 2022	269	281	260	278	293	316	296	305	320	304	347	341	346	3956
2022 - 2023	284	263	278	260	275	294	320	301	305	334	288	342	334	3878
2023 - 2024	257	277	260	278	257	276	298	325	301	319	316	284	335	3783
2024 - 2025	279	251	274	260	275	258	280	303	325	315	302	312	278	3712
2025 - 2026	273	272	248	274	257	276	261	284	303	340	298	298	305	3689
2026 - 2027	268	267	269	248	271	258	280	265	284	317	322	294	292	3635
2027 - 2028	263	262	264	269	245	272	261	284	265	297	300	318	288	3588
2028 - 2029	258	257	259	264	266	246	276	265	284	277	281	296	311	3540
2029 - 2030	253	252	254	259	261	267	249	280	265	297	262	277	290	3466
2030 - 2031	248	247	249	254	256	262	271	253	280	277	281	258	271	3407

PDE Enrollment Projections

Various Grade Groupings of the Enrollment Projections																
<u>YEAR</u>	<u>K-4</u>	<u>K-5</u>	<u>K-6</u>	<u>K-7</u>	<u>K-8</u>	<u>K-9</u>	<u>K-12</u>	<u>5-8</u>	<u>6-8</u>	<u>7-8</u>	<u>6-9</u>	<u>7-9</u>	<u>7-12</u>	<u>8-12</u>	<u>9-12</u>	<u>10-12</u>
2020 - 2021	1422	1714	2014	2334	2625	2992	4012	1203	911	611	1278	978	1998	1678	1387	1020
2025 - 2026	1324	1600	1861	2145	2448	2788	3689	1124	848	587	1188	927	1828	1544	1241	901
2030 - 2031	1254	1516	1787	2040	2320	2597	3407	1066	804	533	1081	810	1620	1367	1087	810
Notes:	<div>1. Excludes students in full-time out-of-district special education, comprehensive AVTSs, charter schools, state-owned schools, consortium-operated alternative high schools, and juvenile correctional institutions.</div> <div>2. Enrollment projections beyond five years are subject to errors in the lower grades resulting from inconsistencies between actual and projected live births and should be reviewed closely.</div> <div>3. Four year old kindergarten students, if any, added to K enrollments.</div> <div>4. Elementary and secondary ungraded students were distributed among the grades. Therefore, enrollments by grade may differ from those reported by the local education agencies.</div>															
Sources:	<div>1. Pennsylvania Information Management System (PIMS)</div> <div>2. Resident Live Birth file supplied by the Division of Health Statistics, Pennsylvania Department of Health. The Department of Health specifically disclaims responsibility for any analyses, interpretations or conclusions.</div>															

Retention Rate by Grade by Year															
	<u>Birth to K</u>	<u>Birth to 1</u>	<u>1 to 2</u>	<u>2 to 3</u>	<u>3 to 4</u>	<u>4 to 5</u>	<u>5 to 6</u>	<u>6 to 7</u>	<u>7 to 8</u>	<u>8 to 9</u>	<u>9 to 10</u>	<u>10 to 11</u>	<u>11 to 12</u>		
2016-17 to 2017-18	0.9589	0.96615	0.96382	0.99	1.04377	0.98322	1.02279	1.01818	1.02266	1.07951	0.95977	1.00958	0.97929		
2017-18 to 2018-19	1.09127	1	0.98726	1.00341	1.02357	1.00968	1.02389	1.04178	1.00595	1.05817	0.94901	0.95509	0.97785		
2018-19 to 2019-20	1.02963	1.14286	1.03425	1.02903	0.9932	1.01645	1.03514	1.01333	1.0107	1.07101	0.92147	0.97612	1.00627		
2019-20 to 2020-21	0.93728	0.97407	0.96528	0.98344	0.98746	1	0.97087	0.98765	0.95724	0.9709	0.9558	1.00568	0.97859		
Average Rate	1.00427	1.02077	0.98765	1.00147	1.012	1.00234	1.01318	1.01524	0.99914	1.0449	0.94651	0.98662	0.9855		
Retention Rate Used	1.00427	0.98008	0.98765	1.00147	0.98746	1.00234	1.01318	1.01524	0.99914	1.0449	0.94651	0.98662	0.97858		
<u>Year</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>
Births	325	292	252	270	287	268	283	256	278	272	267	262	257	252	247
----- Projected Births -----															



Appendix

PlanCon Elementary and Secondary Building Capacities

ELEMENTARY BUILDING CAPACITY											
District/CTC: Kennett Consolidated School District				Project Name:				Grades: - -			
		SCHOOL: Bancroft Elementary						SCHOOL:			
		PRESENT		PLANNED				PRESENT		PLANNED	
#1	#2	#3	#4	#5	#6			#3	#4	#5	#6
	UNIT FTE CAP	NUMBER OF UNITS	TOTAL FTE CAP	NUMBER OF UNITS	TOTAL FTE CAP			NUMBER OF UNITS	TOTAL FTE CAP	NUMBER OF UNITS	TOTAL FTE CAP
NAME OF SPACE											
HALF-TIME KINDRGRTN	50										
FULL-TIME KINDRGRTN	25										
REG CLSRM 660+ SQ FT	25	30	750								
OTHER: _____											
BUILDING TOTAL	XX	XXXXXX	750	XXXXXX				XXXXXX		XXXXXX	
		SCHOOL: Greenwood Elementary						SCHOOL:			
		PRESENT		PLANNED				PRESENT		PLANNED	
#1	#2	#3	#4	#5	#6			#3	#4	#5	#6
	UNIT FTE CAP	NUMBER OF UNITS	TOTAL FTE CAP	NUMBER OF UNITS	TOTAL FTE CAP			NUMBER OF UNITS	TOTAL FTE CAP	NUMBER OF UNITS	TOTAL FTE CAP
NAME OF SPACE											
HALF-TIME KINDRGRTN	50										
FULL-TIME KINDRGRTN	25										
REG CLSRM 660+ SQ FT	25	25	625								
OTHER: _____											
BUILDING TOTAL	XX	XXXXXX	625	XXXXXX				XXXXXX		XXXXXX	
		SCHOOL: _ang Kindergarten Center						SCHOOL:			
		PRESENT		PLANNED				PRESENT		PLANNED	
#1	#2	#3	#4	#5	#6			#3	#4	#5	#6
	UNIT FTE CAP	NUMBER OF UNITS	TOTAL FTE CAP	NUMBER OF UNITS	TOTAL FTE CAP			NUMBER OF UNITS	TOTAL FTE CAP	NUMBER OF UNITS	TOTAL FTE CAP
NAME OF SPACE											
HALF-TIME KINDRGRTN	50										
FULL-TIME KINDRGRTN	25	20	500								
REG CLSRM 660+ SQ FT	25										
OTHER: _____											
BUILDING TOTAL	XX	XXXXXX	500	XXXXXX				XXXXXX		XXXXXX	
		SCHOOL: New Garden Elementary						SCHOOL:			
		PRESENT		PLANNED				PRESENT		PLANNED	
#1	#2	#3	#4	#5	#6			#3	#4	#5	#6
	UNIT FTE CAP	NUMBER OF UNITS	TOTAL FTE CAP	NUMBER OF UNITS	TOTAL FTE CAP			NUMBER OF UNITS	TOTAL FTE CAP	NUMBER OF UNITS	TOTAL FTE CAP
NAME OF SPACE											
HALF-TIME KINDRGRTN	50										
FULL-TIME KINDRGRTN	25										
REG CLSRM 660+ SQ FT	25	25	625								
OTHER: _____											
BUILDING TOTAL	XX	XXXXXX	625	XXXXXX				XXXXXX		XXXXXX	

Only kindergarten and regular classrooms 660 square feet or greater should be reported. Although special education rooms and pre-school rooms may be eligible for capacity, these spaces should not be included in the room counts reported above. The following spaces do not receive reimbursable capacity and therefore should not be included in the capacities for an elementary school building: science labs, computer rooms, art rooms, music rooms, small and large group instruction rooms, and multi-purpose rooms.



MIDDLE/SECONDARY BUILDING CAPACITY											
District/CTC: Kennett Consolidated School District					Project Name:				Grades: _____ - _____		
		SCHOOL Kennett Middle School						SCHOOL:			
		PRESENT			PLANNED			PRESENT		PLANNED	
		#3	#4	#5	#6	#3	#4	#5	#6		
#1	UNIT FTE CAP	NUMBER OF UNITS	TOTAL FTE CAP	R OF UNITS	TOTAL FTE CAP	NUMBER OF UNITS	TOTAL FTE CAP	NUMBER OF UNITS	TOTAL FTE CAP	NUMBER OF UNITS	TOTAL FTE CAP
NAME OF SPACE											
REG CLSRM 660+ SQ FT	25	44	1,100								
SCIENCE CLSRM 660+ SQ FT	25										
SCIENCE LAB 660+ SQ FT	20	9	180								
PLANETARIUM W/CLSRM 660+ SQ FT	20										
ALTERNATIVE ED ROOM 660+ SQ FT	20										
BUSINESS CLSRM 660+ SQ FT	25										
BUSINESS LAB 660+ SQ FT	20										
COMPUTER LAB 660+ SQ FT	20	3	60								
TV INSTRUCTIONAL STUDIO 660+ SQ FT	20	1	20								
ART CLASSROOM 660+ SQ FT	20	2	40								
MUSIC CLASSROOM 660+ SQ FT	25	2	50								
BAND ROOM 660+ SQ FT	25	1	25								
ORCHESTRA ROOM 660+ SQ FT	25										
CHORAL ROOM 660+ SQ FT	25										
FAMILY/CONSMR SCIENCE 660+ SQ FT	20	2	40								
IA/SHOP 1800+ SQ FT	20										
TECH ED 1800+ SQ FT	20	1	20								
VO AG SHOP W/CLSRM 660+ SQ FT	20										
DRIVER'S ED 660+ SQ FT	20										
GYM 6500-7500 SQ FT	66	1.0	66								
AUX GYM 2500 SQ FT	33	1	33								
OTHER: _____											
OTHER: _____											
BUILDING TOTAL	XXX	XXXXXX	1,634	XXXXXX		XXXXX		XXXXX			
MS/SEC UTILIZATION (BLDG TOTAL X .9)	XXX	XXXXXX	1,471	XXXXXX		XXXXX		XXXXX			
		SCHOOL Kennett High School						SCHOOL:			
		PRESENT			PLANNED			PRESENT		PLANNED	
		#3	#4	#5	#6	#3	#4	#5	#6		
#1	UNIT FTE CAP	NUMBER OF UNITS	TOTAL FTE CAP	R OF UNITS	TOTAL FTE CAP	NUMBER OF UNITS	TOTAL FTE CAP	NUMBER OF UNITS	TOTAL FTE CAP	NUMBER OF UNITS	TOTAL FTE CAP
NAME OF SPACE											
REG CLSRM 660+ SQ FT	25	41	1,025								
SCIENCE CLSRM 660+ SQ FT	25										
SCIENCE LAB 660+ SQ FT	20	12	240								
PLANETARIUM W/CLSRM 660+ SQ FT	20										
ALTERNATIVE ED ROOM 660+ SQ FT	20										
BUSINESS CLSRM 660+ SQ FT	25	1	25								
BUSINESS LAB 660+ SQ FT	20	3	60								
COMPUTER LAB 660+ SQ FT	20	1	20								
TV INSTRUCTIONAL STUDIO 660+ SQ FT	20	1	20								
ART CLASSROOM 660+ SQ FT	20	2	40								
MUSIC CLASSROOM 660+ SQ FT	25	1	25								
BAND ROOM 660+ SQ FT	25	1	25								
ORCHESTRA ROOM 660+ SQ FT	25										
CHORAL ROOM 660+ SQ FT	25	1	25								
FAMILY/CONSMR SCIENCE 660+ SQ FT	20	2	40								
IA/SHOP 1800+ SQ FT	20										
TECH ED 1800+ SQ FT	20										
VO AG SHOP W/CLSRM 660+ SQ FT	20										
DRIVER'S ED 660+ SQ FT	20										
GYM 6500-7500 SQ FT	66	1.0	66								
AUX GYM 2500 SQ FT	33	2	66								
OTHER: _____											
OTHER: _____											
BUILDING TOTAL	XXX	XXXXXX	1,677	XXXXXX		XXXXX		XXXXX			
MS/SEC UTILIZATION (BLDG TOTAL X .9)	XXX	XXXXXX	1,509	XXXXXX		XXXXX		XXXXX			

SUMMARY OF OWNED BUILDINGS AND LAND											
District/CTC: Kennett Consolidated School District				Project Name:				Grades: _____ - _____			
		PRESENT			PLANNED						
#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	
NAME OF BUILDING OR SITE (INCLUDING DAO AND VACANT LAND) OWNED BY SCHOOL DISTRICT/CTC	CONSTRUCTION AND/OR RENOVATION DATES (BID OPENING DATES)	SITE SIZE (ACRES)	GRADE LEVELS	BUILDING FTE	CONVERSION / DISPOSITION AND PLANNED COMPLETION DATE BASED ON OPTION CHOSEN	SITE SIZE (ACRES)	GRADE LEVELS	PLANNED BUILDING FTE	FDE PROJECTED GRADE LEVEL ENROLLMENT 10 YEARS INTO THE FUTURE	FTE MINUS ENROLLMENT (#9 - #10)	
Mary D. Lang Kindergarten Center	1970	3.8	K	500					XXXXXXXXXX	XXXXXXXXXX	
Bancroft Elementary School	2008	17	1-5	750					XXXXXXXXXX	XXXXXXXXXX	
Greenwood Elementary School	1962, 65, 93	24	1-5	625					XXXXXXXXXX	XXXXXXXXXX	
New Garden Elementary School	1955, 60, 66, 89, 95	25	1-5	625					XXXXXXXXXX	XXXXXXXXXX	
Subtotal	XXXXXXXXXX	XXX	XXXX	2,500	XXXXXXXXXXXXXXXXXXXXXX	XXX	XXXX		XXXXXXXXXX	XXXXXXXXXX	
Kennett Middle School	2002	79	6-8	1,273					XXXXXXXXXX	XXXXXXXXXX	
Subtotal	XXXXXXXXXX	XXX	XXXX	1,273	XXXXXXXXXXXXXXXXXXXXXX	XXX	XXXX		XXXXXXXXXX	XXXXXXXXXX	
Kennett High School	31, 41, 52, 55, 56, 61, 81, 99	36	9-12	1,545					XXXXXXXXXX	XXXXXXXXXX	
Industrial Arts Building	2000, 04	36 *	9-12						XXXXXXXXXX	XXXXXXXXXX	
Subtotal	XXXXXXXXXX	XXX	XXXX	1,545	XXXXXXXXXXXXXXXXXXXXXX	XXX	XXXX		XXXXXXXXXX	XXXXXXXXXX	
Kennett District Administration	1989	36 *	N/A						XXXXXXXXXX	XXXXXXXXXX	
Bus Depot		36	N/A						XXXXXXXXXX	XXXXXXXXXX	
*Shares campus with high school									XXXXXXXXXX	XXXXXXXXXX	
Subtotal	XXXXXXXXXX	XXX	XXXX		XXXXXXXXXXXXXXXXXXXXXX	XXX	XXXX				
TOTAL	XXXXXXXXXX	XXX	XXXX	5,318	XXXXXXXXXXXXXXXXXXXXXX	XXX	XXXX				
ACTIONS TO BE TAKEN IN THE FUTURE IF PROJECTIONS COME TRUE AND THE SCHOOL DISTRICT EXPERIENCES EXCESS OR INSUFFICIENT CAPACITY (FTE MINUS PROJECTED ENROLLMENT (Col. 11) > + or - 300)											
CHECK IF APPLICABLE:											
						EXPAND PROGRAMS OR COURSE OFFERINGS					
						PROVIDE SPACE FOR USE BY COMMUNITY GROUPS OR SERVICE AGENCIES					
						OFFER FULL-TIME KINDERGARTEN OR PRE-SCHOOL					
						REDUCE CLASS SIZE					
						CLOSE SCHOOL(S)					
						OTHER (DESCRIBE) : _____					



Appendix

Facilities Study: New Garden and Greenwood Elementary School

Greenwood Elementary School Facilities Study - ICS Consulting, 2019

SURVEY DATA			Action Required 1-3 Years	Action Required 4-7 Years	Action Required 8 +Years	Total
Building System	Item / Asset	Description Of Current Condition / Notes	Priority #1	Priority #2 or major renovation	Priority #3 or major renovation	
Site	Bituminous Paving	The drop off loop appeared to have been recently seal coated; the loop paving is in good condition at this time. PARKING IS A BIG ISSUE (not enough, people parking on grass to compensate). There is also a stone area on the East side of the property that could be paved to provide a few more spots. People are currently parking there now on a regular basis. There are some locations that have large fissure cracks and some small paving repair areas in the teacher parking lot area. Recommend implimenting routine seal coating program with annual 5 year rotation after repairs or repaving is made.	\$129,850	\$0	\$0	\$129,850
	Concrete Drives And Walks	Overall sidewalks are in fair condition. While some have been repaired or replaced, there are still many areas that need to be completed. The handicapped access ramps are installed are not in complaince with current ADA standards. Curb and sidewalk have tripping hazard and curb reveal issues. Some were in the process of being redone over the summer, as witnessed during the inspection. Further remediation is recommended. There is also a reduced curb reveal due to multiple layers of paving. Consideration should be given in the future to mill during any paving remediation to increase curb reveal. Reduced curb reveal increases the risk of snow plow windrowing back on sidewalk, possibility of water infiltration on sidewalk, and ability for the public to drive onto sidewalk causing damage.	\$45,000	\$0	\$0	\$45,000
	Landscaping	Overall the grounds are kept in very good condition. Trees need to be trimmed, evergreens are old and overgrown. Butterfly garden has a tree with branches that reach over the roof. Any tree that encroaches in the vicinity of the building, should be trimmed back to avoid deterioration, insect, rubbing, and puncture issues with roof and walls.	\$12,700	\$0	\$0	\$12,700
	Site Drainage	Several site visits during periods of high rainfall did not show any evidence of water collection areas. There were a few spots in the teacher parking lot are. Consider drainage additions when re-paving the area. Playground was having issues with drainage in the past but a new system was just recently put in, seems to be working fine for now.	\$0	\$0	\$0	\$0
	Site Signage	Signage is in fair/good condition. Neither the sign nor the flagpole are illuminated at this time. Recommend illuminating both in the near future.	\$0	\$0	\$10,000	\$10,000
	Site Lighting / Security	Parking lot pole lighting is HPS. Recommend replacing the heads with LED lighting. Better coverage for less wattage and much more neighbor friemdly. Gradually replacing outdoor lights with LED, whole front of the building wall/security lighting is LED currently.	\$6,642	\$0	\$0	\$6,642
	Fencing / Retaining	Chainlink fencing around backside of the school on Longwood Gardens border. Partial fencing exists around the playground. Recommendtaion to increase playground fencing to encase the playground for security purposes.	\$0	\$14,000	\$0	\$14,000
	Site - Other	Site appears to be in overall fair/good condition. Possible consideration to increasing the width of the exit drive to accommodate two turning lanes to increase exit traffic flow from drop off and pick up times.	\$0	\$0	\$0	\$0
Subtotals			\$194,192	\$14,000	\$10,000	\$218,192

Facilities Study: New Garden and Greenwood Elementary School

Greenwood Elementary School Facilities Study - ICS Consulting, 2019

SURVEY DATA			Action Required 1-3 Years	Action Required 4-7 Years	Action Required 8 +Years	Total
Building System	Item / Asset	Description Of Current Condition / Notes	Priority #1	Priority #2 or major renovation	Priority #3 or major renovation	
Building Envelope	Roof - Asphalt Shingles	Some shingle roof areas over library, small gym, and garage. The shingles are showing signs of age and deterioration including cracking. They are nearing the end of the life span and should be replaced in the near future.	\$110,688	\$0	\$0	\$110,688
	Roof - Single Ply BUR	Roof structure is mainly gravel surface, built up roofing. Half of the roof is being replaced Summer 2018. The 2010 roof report indicated and expected life span of 5-8 years, so plans should be in place to replace the remaining roofing systems that have not already been remediated. There are also areas of water ponding that should be addressed at that time of replacement as well. In addition, consideration should be made for drain replacements along with the roofing work. We noticed many locations on our walk through inspections indicating current roof leaks. We also noticed that there were many locations where water was emminating down the masonry or from behind the masonry. These problems need to be addressed in the immediate future to prevent moisture related issues and masonry deterioration.	\$872,610	\$0	\$0	\$872,610
	Flashings	Old flashings are in poor shape. Many of the flasings are coming apart or are worn. In addition, nearly all of the rain gutters are in poor shape and are currently leaking in many locations. Immediate repairs or temporary patching should be done until replacement can be scheduled.	\$0	\$0	\$0	\$0
	Sealants	There are many locations around the building that the control joints and the window/door caulking need to be cut out and replaced. Old sealants are cracked and no longer elastomeric, or missing altogether. Consideration should be given to an annual program of sealant replacement, or a complete building replacement project. Since we are recommending roof, door, and window replacement, sealants should be part of those construction packages. There are also multiple locations where cables and wiring has been removed leaving open voids and open perimeters of HVAC louvers should receive sealant closure as well.	\$0	\$150,000	\$0	\$150,000
	Tuckpointing	The masonry tuckpointing appears to be in good condition at this time except in the rear of the building by the tower area. Given the amount of moisture we had seen during our site visits, it is only a matter of time until re-pointing becomes an issue if not addressed quickly. It is recommended that the roof remediation work and sealant remediation be completed first, then clean and seal any masonry exterior walls to further prevent the deterioration of masonry pointing.	\$0	\$0	\$0	\$0
	Finishes - Brick & Mortar & EFIS	Bricks in the back of the building are starting to crumble/crack. Plaster surfaces are showing routine cracking. Consideration should be given to coating these surfaces with an elastomeric based sealant.	\$0	\$42,500	\$0	\$42,500
	Painting	Portable classroom trailers were recently painted, the rest of the building is in fair paint condition. Fascia at many locations on the original building is transite material board which contains asbestos, as noted in the distrcit AHERA report. It is recommended that the soffits and fascia be replaced with a maintenance free material. There are locations like the APR roof fascia and soffits that are showing signs of sever deterioration. ?	\$0	\$175,000	\$0	\$175,000
	Windows	Majority of windows are single-pane, mostly in the sections that are orginal to the building. Hardware is in fair/good condition. For energy savings, as well as safety and security, it is recommended that all of the existing single pane windows, doors with single pane glazing be replaced with newer insulated safety glazing. Consideration for reduction in visual glass for safety reasons on classrooms should be considered. Some areas such as the 1984 addition area have newer insulated double-pane windows in good condition for the most part. It is recommended that any newer windows that containg comprimised seals be replaced.	\$342,000	\$0	\$0	\$342,000
	Exterior Doors & Hardware	Exterior doors are in fair/moderate condition. Consideration should be given to security upgrades, as well as classroom window wall/door upgrades. Other doors in the rear section of the original wing should be considered for replacement. Newer doors and hardware are in good condition, there is no recommendation for them at this time.	\$0	\$110,000	\$0	\$110,000
	Downspouts	There are exposed downspouts on small gym in the back and on the portables with routine damage. See also in flashings section references to leaking gutters, in addtion it was observed there were multiple locations of ill fitting downspouts and lack of splash blocks under downspouts that discharge onto flat roof areas.	\$18,000	\$0	\$0	\$18,000
Subtotals			\$1,343,298	\$477,500	\$0	\$1,820,798



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Facilities Study: New Garden and Greenwood Elementary School

Greenwood Elementary School Facilities Study - ICS Consulting, 2019

SURVEY DATA			Action Required 1-3 Years	Action Required 4-7 Years	Action Required 8 +Years	Total
Building System	Item / Asset	Description Of Current Condition / Notes	Priority #1	Priority #2 or major renovation	Priority #3 or major renovation	
Building Interior	Wall Finishes	Painted walls are in fair/good condition (drywall and tile). Future consideration should be given to repainting the entire building. Repainting should be scheduled on a ten year, repeat cycle.	\$0	\$0	\$180,933	\$180,933
	Ceiling - Drop	There are currently lay in acoustical drop ceilings in the office and classrooms; classroom drop ceilings are damaged in some areas and should be replaced. Hallway ceilings have been replaced while completing LED upgrades. Consideration should be given to ceiling replacement at all areas outside of hallways, in concurrence with other associated projects such as electrical upgrades, LED improvements, HVAC improvements, etc.	\$0	\$126,653	\$0	\$126,653
	Ceilings - Recessed	There are currently plaster ceilings in the copy room and some foyer areas. No recommendations at this time.	\$0	\$0	\$0	\$0
	Carpet	Carpet currently exists in library, office and music room. It was replaced about 3-4 years ago and is in good condition. Carpet replacement should be considered in long term plan for replacement, at the end of life expectancy of ten years.	\$0	\$27,625	\$0	\$27,625
	Tile / Hard Surface Flooring	There is currently ceramic tile in the bathrooms and the kitchen (Quarry tile), both in fair condition. Recommend heavy cleaning.	\$0	\$10,800	\$0	\$10,800
	Tile / Hard Surface Flooring	Tile/glue in the original sections of the building should be tested for the ability to contain asbestos. Vinyl composition tile considered for near term replacement. While in fair shape it is nearing the end of it's life cycle. The district AHERA Report references the tile and its ability to contain asbestos.	\$170,000	\$0	\$0	\$170,000
	Casework	The classroom closet doors contain pivot hinges and are wearing out in the original building classroom spaces. There have been reports of them becoming dislodged and falling. In addition, the finishes on the classroom closet doors and cabinet work is in poor condition and in need of refinishing. Old metal shelving in classrooms is in poor condition, they should be replaced along with any HVAC upgrades. Office counters/cabinets are in fair condition and showing signs of age and should be considered for refurbishing.	\$0	\$75,000	\$0	\$75,000
	Interior Doors & Hardware	The interior of the building contains all wood doors, some painted some not. Doors and hardware are in fair/decent condition. Interior vestibule doors at the end of the 3rd grade hall are single glazed with wire glass. Wire glass is being replaced throughout the K-12 nationally, due to safety risk of injury when the glass has broken. It is recommended that all original interior doors be considered for replacement.	\$210,000	\$0	\$0	\$210,000
	Interior Signage	Interior signage appears to be in good condition and in compliance with ADA requirements.	\$0	\$0	\$0	\$0
	Interior Sealants / Control Joints	In the office are the transition from carpet to tile is in poor condition and should be replaced. There are also several locations in the building where expansion assemblies were not installed showing cracking. These areas should be addressed as part of any flooring replacement project.	\$25,000	\$0	\$0	\$25,000
Subtotals			\$405,000	\$240,078	\$180,933	\$826,010
Building Interior - Other			\$0	\$0	\$0	\$0

Facilities Study: New Garden and Greenwood Elementary School

Greenwood Elementary School Facilities Study - ICS Consulting, 2019

SURVEY DATA			Action Required 1-3 Years	Action Required 4-7 Years	Action Required 8 +Years	Total
Building System	Item / Asset	Description Of Current Condition / Notes	Priority #1	Priority #2 or major renovation	Priority #3 or major renovation	
Mechanical	Boilers	Qty (2) Burnham hot water boilers, gas only - tubes were replaced recently. Burners are original and rated for 1046-2093 MBH (2:1 turndown). About 24 yrs old, in fair condition but are inefficient and should be considered for replacement.	\$0	\$188,370	\$0	\$188,370
	Heating Pumps	(2) hot water pumps (7.5 HP each) are original to building, have had bearings/seals replaced. (2) condenser water pumps (10 HP each) rated at 290 GPM and 70 Ft. Hd. Recommend replacing HW pumps.	\$0	\$20,000	\$0	\$20,000
	Chillers	No chiller; closed circuit cooling tower is Evapco and in good shape. (installed approx 4 years ago) Chemical treatments done by Proasys. Cooling tower serves heat pump loop.	\$0	\$0	\$0	\$0
	CHW Pumps	N/A	\$0	\$0	\$0	\$0
	HW & CHW Piping	Original to the building (1963), heat pump loop original from '94 addition. Given the age of the existing piping, it is recommended that the mechanical systems be replaced.	\$0	\$434,238	\$0	\$434,238
	Ventilation / Air Handling	Currently window AC units in most areas. AHU for multipurpose room and office is relatively new, original Nesbitt hot water unit ventilators in building are old and in poor condition. Heat pumps were originally Florida Heat Pumps, and are being replaced with Water Furnace Heat Pumps. According to the district personnel, galvanized condensate pans have been failing and about 20 or so have been replaced. NOTE: Small gym mezzanine unit is difficult to maintain (Lift needed). It is recommended that these systems be replaced.	\$0	\$2,171,190	\$0	\$2,171,190
	Ductwork / Air Distribution	Recent installation of Ductsox in multipurpose room and gym. It is recommended that the Library and Auxilliary Gym contain ductwork that should be cleaned.	\$15,000	\$0	\$0	\$15,000
	Temperature Controls	Trane controls in just the office (LON), TAC system newer and elsewhere. The district has expressed interest in unified BAS control systems. It is recommended that new controls be included in any part of a building renovation of the mechanical systems.	\$0	\$289,492	\$0	\$289,492
	Fire Protection	There are currently no sprinklers. Fire extinguisher box in 3rd Grade hallway not up to code, no light above and can not be identified as an extinguisher from the end of the hall. It is recommended that the installation of sprinklers if a public water main can be brought to the building.	\$217,119	\$0	\$0	\$217,119



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Facilities Study: New Garden and Greenwood Elementary School

Greenwood Elementary School Facilities Study - ICS Consulting, 2019

SURVEY DATA			Action Required 1-3 Years	Action Required 4-7 Years	Action Required 8 +Years	Total
Building System	Item / Asset	Description Of Current Condition / Notes	Priority #1	Priority #2 or major renovation	Priority #3 or major renovation	
Mechanical	Plumbing Fixtures	Approximately 75% of plumbing fixtures have been replaced. Drinking fountains are newer. Recommended that remaining fixtures be replaced.	\$0	\$54,300	\$0	\$54,300
	Grease Traps	Both grease traps in the kitchen have recently been replaced. The traps appear to be in good condition. No recommendations at this time, other than routine maintenance as recommended by the manufacturer.	\$0	\$0	\$0	\$0
	Domestic Piping	No known issues. Consideration for replacement should be part of any large scale renovation.	\$0	\$0	\$0	\$0
	Domestic Water Heating	Existing Bradford White installed in 2015, rated at 300,000 BTUH. No recommendations at this time.	\$0	\$0	\$0	\$0
	Sewer	Construction cost represents the conversion to a municipal sewer system. The cost includes the pre-fabricated grinder and lift pumps and installation of a pressure sewer main to a location TBD by the appropriate sewer authority. If municipal sewer is not available, the current septic system should be further evaluated for replacement.	\$780,000	\$0	\$0	\$780,000
	Water Conditioning	This cost represents to conversion to municipal water as detailed by T & M Engineers in a previous study. Additional cost is included to connect into the building from the stopping point of the water authority. Currently, the building is on a well system and is using bottled water.	\$780,000	\$0	\$0	\$780,000
	Mechanical - Other	Galvanized pans on heat pump system; half have been replaced. Replace as needed in case of large scale renovation currently being considered.	\$0	\$0	\$0	\$0
Subtotals			\$1,792,119	\$3,157,590	\$0	\$4,949,709

Facilities Study: New Garden and Greenwood Elementary School

Greenwood Elementary School Facilities Study - ICS Consulting, 2019

SURVEY DATA			Action Required 1-3 Years	Action Required 4-7 Years	Action Required 8 +Years	Total
Building System	Item / Asset	Description Of Current Condition / Notes	Priority #1	Priority #2 or major renovation	Priority #3 or major renovation	
Electrical	Service & Distribution / Panels	Main service to the building is original. padmount XFMR upgraded 1994 (24 yrs). Rest of system is most likely original to the building. However, expected renovations to the building may exceed the size of the current system, due to newer technology and the lack of convenience outlets in most classrooms. It should be expected that any upgrades to the building would include an expansion or increase in the current electrical service. Distribution panels throughout the building are at a variety of ages. Many of the original and older distribution panels should definitely be considered for replacement. Many of these are currently in a hallway and accessible to students and staff. Their location makes any work on them in accordance with NEC/ARC Flash standards impossible during school hours. It would be recommended that during the replacement of these panels that they also be relocated out of the public byway. Additional power requirements will require the addition of distribution panels.	\$0	\$500,000	\$0	\$500,000
	Convenience Outlets	Outlets are lacking; most classrooms only have one in the front of the room and one in the back of the room. It is recommended that additional outlets be added to each room in order to accommodate newer technology, as well as support current classroom usage.	\$0	\$144,746	\$0	\$144,746
	Lighting - Common Areas	Most hallways have been upgraded to LED, as well as the multipurpose room. The hall outside the multipurpose room has compact fluorescents (same wattage as those in New Garden) The auxilliary gym has metal halide fixtures.	\$0	\$63,326	\$0	\$63,326
	Lighting - Rooms	Modular classrooms have 34W T-12 lightng. The library has 8 fixtures of 250 W metal halides, and approx 20 fixtures of 90W fluorescent U-tubes at 2 tubes per fixture. Room 50(approx 1000sqft) off of the library has 12 U-tube fixtures at 90 W, Room 50A (approx 800sqft) has 2-bulb compact fluorescent lighting, 12 fixtures at 90W. Room 35 (approx 1000 sqft) in the new addition hallway has compact fluorescent lighting, 12 fixtures, same wattage as New Garden. 3rd grade classroom (approx 924 sqft) has 8 fixtures w/ 32 W 4-tube T8s.	\$0	\$126,653	\$0	\$126,653
	Lighting - Other	See site for exterior lighting recommendations.	\$0	\$0	\$0	\$0
	AV Wiring in Classrooms	The current AV wiring is fed through walls and is in working condition. The wiring is outdated and new wiring should be considered to maintain pace with cirricular technology.	\$0	\$217,119	\$0	\$217,119
	Phone System	VOIP–Nortel digital phone system. System needs to be evaluated with current technology and associated pricing.	\$0	\$0	\$50,661	\$50,661
	PA System	The current system head end is over 10 years old and volume control is difficult. Classroom end devices appear to be original to the building. Owner has expressed concern that the system should be considered for replacement due to operational difficulties.	\$184,551	\$0	\$0	\$184,551
	Clock System	Clock specifically in the MPR doesn't work. Reported trouble w/ clocks working, owner has indicated preference to move to a newer system.	\$28,949	\$0	\$0	\$28,949
	Generator / Emergency Power	Qty (1) 35 kW emergency generator. This size device is not adequate to maintain a building of this size. Replacement should be considered for multiple reasons. Shelter in place, occupancy during a power outage, food storage preservation, etc.	\$0	\$187,500	\$0	\$187,500
	Electrical - Other	Most classrooms have projectors and/or smartboards. Given the current pathway of cirricular instruction, increase in digital devices is inevitable. Propper infrastructure preparation is necessary to support these functions. Current support methods would be outlets with USB charging, remote outlets to support short throw projectors, dedicated circuit outlets for laptop carts and 1:1 charging stations, outlets to support accessorie devices like document cameras and digital microscopes. Additional consideration to newer IT Technology. Multiple Cat6A wiring and supportive devices(switches, POE switches, patch panels)	\$90,466	\$0	\$0	\$90,466
	Electrical - Other	NOTE: Unit ventilators and classroom outlets are on the same circuit (in third grade hall for sure, not sure about others)	\$0	\$0	\$0	\$0
Subtotals			\$303,967	\$1,239,344	\$50,661	\$1,593,972



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Facilities Study: New Garden and Greenwood Elementary School

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SURVEY DATA			Action Required 1-3 Years	Action Required 4-7 Years	Action Required 8 +Years	Total
Building System	Item / Asset	Description Of Current Condition / Notes	Priority #1	Priority #2 or major renovation	Priority #3 or major renovation	
Commerical Equipment	Kitchen Equipment - Serving	Dishwashers look new and appears to be in good condition. It was observed that Insta-hot in sinks were utilized, instead of feeding from regular hot water system. Existing oven is electric. Both grease traps in kitchen were replaced recently and appear to be in good working condition. District requested new kitchen equipment due to age. A finanacial allotment has been provided for kitchen device replacement.	\$0	\$0	\$100,000	\$100,000
	Kitchen Equipment - Community	The distrctit has indicated the need for bigger freezer capacity, consideration should be given to placing the refrigerator and freezer on a new emergency generator if installed. Kitchen hood used but not much cooking is done (only warming). No recommendation for the kitchen hood at this time.	\$0	\$0	\$15,000	\$15,000
	Laundry Equipment - Community	Washer/dryer in the boiler room for rags. Please see line 95 below.	\$0	\$0	\$0	\$0
	Laundry Equipment - Community	N/A	\$0	\$0	\$0	\$0
	Kitchen Equipment - Residential	N/A	\$0	\$0	\$0	\$0
	Casework - Residential	N/A	\$0	\$0	\$0	\$0
	Laundry Equipment - Residential	Washer and dryer in boiler room is in fair condition. No recommendtaions at this time. Like in kind replacement when devices expire.	\$0	\$0	\$0	\$0
	Commercial Equipment - Other	N/A	\$0	\$0	\$0	\$0
Subtotals			\$0	\$0	\$115,000	\$115,000
Construction Costs:			\$4,114,829	\$8,910,001	\$356,594	\$13,381,424
Soft Costs:			\$1,234,449	\$2,673,000	\$106,978	\$4,014,427
Total Costs:			\$5,349,278	\$11,583,001	\$463,572	\$17,395,851

Facilities Study: New Garden and Greenwood Elementary School

Greenwood Elementary School Facilities Study - ICS Consulting, 2019

SURVEY DATA			Action Required 1-3 Years	Action Required 4-7 Years	Action Required 8 +Years	Total
Building System	Item / Asset	Description Of Current Condition / Notes	Priority #1	Priority #2 or major renovation	Priority #3 or major renovation	
Life Safety / ADA	Accessible Entrances	It was noted in the site review that many of the curb ramps do not have the correct wing slopes that are in the current ADA requirements. In addition there were no door opener devices on any of the exterior doors. Any major building upgrade will require these items to be installed to be compliant.	\$7,500	\$0	\$0	\$7,500
	ADA - Bathrooms	Locker Room/Bathroom off of the kitchen is NOT ADA compliant. Many of the plumbing fixtures do not fully meet current ADA standards. Classroom bathrooms are not currently within ADA standards. Large scale renovations will trigger required ADA upgrades.	\$0	\$3,618,650	\$0	\$3,618,650
	ADA - Other	Currently have a handicap lift in building. The unit appears to be in working order. No recommendations at this time, other than routine maintenance and inspections.	\$0	\$0	\$0	\$0
	Emergency Lighting	The building emergency lighting appears to be in good shape. Expansion of emergency lighting should be considered if a new emergency generator is installed. This enables the building to maintain occupancy during a power outage much easier.	\$0	\$0	\$0	\$0
	Fire Alarm System	Fire alarm system main panel was replaced recently and is in good condition. Since building is not fully sprinklered, an evaluation to full coverage system should be considered, if a fully sprinklered building is not able to be installed due to municipal water restrictions.	\$0	\$162,839	\$0	\$162,839
	Security System	Exterior classroom doors NOT on security system, poses a safety hazard. It is recommended that all exterior doors be installed on the building security system.	\$68,754	\$0	\$0	\$68,754
	Elevator	N/A	\$0	\$0	\$0	\$0
	Nurse Call System	N/A. If not currently,consideration should be given to an building intercom system that allows nurse access to system.	\$0	\$0	\$0	\$0
Subtotals			\$76,254	\$3,781,489	\$0	\$3,857,744



Appendix

Facilities Study: New Garden and Greenwood Elementary School

New Garden Elementary School Facilities Study - ICS Consulting, 2019

SURVEY DATA			Action Required 1-3 Years	Action Required 4-7 Years	Action Required 8 +Years	Total
Building System	Item / Asset	Description Of Current Condition / Notes	Priority #1	Priority #2 or major renovation	Priority #3 or major renovation	
Site	Bituminous Paving	Site paving overall is in relatively good condition. The site for staff paking appears to be recently sealcoated and line striped. There is longitudinal cracking that should be addressed in the near future, along with some spot paving patches that should be completed prior to next scheduled round of sealcoating. Paving areas should be placed on a 5 year rotation for seal coating to preserve bituminous paving.	\$0	\$27,500	\$0	\$27,500
	Concrete Drives And Walks	Concrete sidewalks are also in good condition at this site in the front of the building. Curbs have proper curb reveal, flatwork is in good shape with a few exceptions. These areas could be addressed as part of annual summer contracted work. The one exception is the exterior stairwell at the end of the rear hallway behind the portables. The stairs and retaining wall is in poor shape. While the upper railing appears to be newer, the stair railings are not code compliant and should be replaced along with the concrete. If this is used as an egress location, immediate repairs should be undertaken.	\$0	\$0	\$50,000	\$50,000
	Landscaping	Landscaping appears to be mature and in good condition. Grass is well established and maintained. Ornamental shrubbery is not too invasive and also well maintained. There are a few mature trees in the immediate vicinity of the building exterior walls and roof. Consideration should be given to pruning them back or removing them to avoid issues with the exterior masonry and roofing. If left in place annual or routine maintenace program of pruning should be put into place if not already in action. There were large juniper or yew bushes that were in the courtyard between the two long hallways. While in good shape and neatly pruned, they are in close proximity to the exterior walls and should be trimmed back to allow proper airflow to masonry and EIFS exterior walls.	\$12,500	\$0	\$0	\$12,500
	Site Drainage	Currently there are no major issues with draining. It was reported that there was some leakage near the boiler room that seeps into the garage. Again we were on site during periods of heavy rainfall. Very little visible ponding was evident. Parking areas did not exhibit ponding and the retention basin was not holding much water, indicating the site is draining well. There are no recommendations at this time.	\$0	\$0	\$0	\$0
	Site Signage	Existing sign is in fair shape. Consideration should be given to adding additional directional signage and line striping for public, along with LED exterior illumination.	\$2,500	\$0	\$0	\$2,500
	Site Lighting / Security	New outdoor LED lighting was recently added in some locations, however there are still many older outdoor lights that are not LED. Consideration should be given to replacing the parking lot lighting heads with LED lighting, along with any remaining wall security lights and canopy lights not currently upgraded. LED llighting provides cost saving to fixtures that generally burn 9-14 hours daily, along with less ambient lighting overflow to adjacent areas.	\$11,884	\$0	\$0	\$0
	Fencing / Retaining	Fencing at the site is minimal except a new fence that was added near the playground area by the swings at the rear of the gagrage building. Newer fencing appears to be have been installed at the ballfield backstop and the retainage basin. Framing and fabric appear to be in good shape. There were a few retaining ties that were missing. This is a routine maintenance item. Consideration should be given to fencing in the entire play areas to allow for greater security during recess. No immediate action required.	\$0	\$11,400	\$0	\$11,400
	Site - Other	Consideration should be given to adequate parking at the site. On the times of our visits, the site appeared to have adequate parkng. During large parent events, open house, and parent teacher meetings, there could be times when the site is overflowing for parking and that is generally the times that lawn damage occurs. Overflow parking possible expansion should be considered.	\$0	\$19,500	\$0	\$19,500
Subtotals			\$26,884	\$58,400	\$50,000	\$123,400

Facilities Study: New Garden and Greenwood Elementary School

New Garden Elementary School Facilities Study - ICS Consulting, 2019

SURVEY DATA			Action Required 1-3 Years	Action Required 4-7 Years	Action Required 8 +Years	Total
Building System	Item / Asset	Description Of Current Condition / Notes	Priority #1	Priority #2 or major renovation	Priority #3 or major renovation	
Building Envelope	Roof - Asphalt Shingles	Asphalt shingles occur at the areas listed in the roof report dated 2009. Areas include Auxilliary Gym, Music, Library, Art, and Garage. Some shingle areas appear to be showing their age. There are several areas that asphalt patching has been done to repair leak areas. Some areas are showing signs of cracking and chipping. Replacement recommendations should be in the near future. The 2009 roofing report recommended some areas being replaced in the 2012-2014 time frame, while others being done in the 2017-2020 timeframe.	\$163,188	\$0	\$0	\$163,188
	Roof - Single Ply BUR	Roofing areas at the existing roof drains have leaking issues. Noticable ponding was occurring in flat roof areas over classroom wings 101-108, 121-131, 188-197. There were noticable seam repairs done at many places in the roof. The 100 wing had noticable, visable, deteriorating seams at the coping edges. Roof leaks were also evident in ACT ceilings throughoput the building. Opaque skylights appeared to have been patched multiple times and in overall poor condition. Most of the flat areas are coming due for replacement in the near future and are out of warranty with the exception of the bus canopy and the garage. These roofs still appear to be in good condition and replacment should be considered in the long term for these areas. An annual plan to provide roof and roof drain replacement and keep areas under warranty is recommended for implementation. Consideration should also be given to increasing the insulation value on the roof. The roofing reports indicate an insulation value on most roofs of less than R-5.	\$1,135,430	\$0	\$0	\$1,135,430
	Flashings	Flashings overall are in poor condition. There are multiple rising wall flashing issues, that are causing moisture related issues both inside and outside the building. We identified multiple areas where exterior mansonry was showing signs of water infiltration as well as interior areas that showed evidence of roof leaking at intersecting roof locations, indicating coping issues, expansion joint issues, and rising wall issues. Several areas showed previous leak repair attempts. In many instances, the roof flashings were not installed at the recommended elevations. A minumum of 8 inches of elevation should be at all roof flashings. Many curbs, rising wall, and roof intersection flashings did not have the recommended minumum elevation difference.	\$0	\$0	\$0	\$0
	Sealants	Joint sealants were also in overall poor condition. Many locations were exibiting cracking, shrinkage, and many missing in locations. Cast stone façade areas need to be repointed and caulked. There were locations at the glass block wall elevations at the Auxilliary Gym where large amounts of caulking had been used to stop water infiltration, and make up large gaps of improper masonry and lintel installations. There were several areas that were lacking sealants at all. There were some HVAC exterior louvers that the caulk was completely missing. Some of these were used to fish cable and conduit through. This action could have been the cause or a contributor of these issues.	\$100,000	\$0	\$0	\$100,000
	Tuckpointing	There are numerous locations where the masonry wall sections are exhibiting signs of water infiltration. Efflourescence and mildew are showing up in the mortar joints in many locations. The water infiltration is caused by multiple issues including: flashings, rising wall roof penetrations, improperly secured downspouts, roof seams at exterior wall copings, and failed gutter seams. Resulting water infiltration could be causing humidity issues inside the building as well as tuckpoint damage at masonry surfaces indicated. The corrective roofing actions should be taken to remove the waterflow behind the masonry. Once completed tuckpointing repairs and masonry wall waterproofing are recommended. This work should only take place after the roofing issues are repaired.	\$0	\$150,000	\$0	\$150,000
	Finishes - Brick & Mortar & EFIS	Exterior EFIS appears to be newer and in good condition. Proper sealing and vertical elevations have allowed these to remain in good condition. There appears to be very little physical damage to the finishes. Care needs to be taken to repair any damage immediately to preserve the finish, if it occurs. Brick veneered exterior appear to be in decent shape with the exception of water infiltration noted. The longer this condition exists, the more masonry repair will have to be done. Cast stones also appear in fair condition with the exception of pointing and caulking. Again further deterioration will require more costly repairs. The chimney stack for the boilers is in poor shape and needs to be rebuilt and the cap replaced. The chimney is actually splitting in half. Repairs need to be in the immediate term. There were also multiple locations where it was observed that there was no weep holes in the verticle masonry. These should have been installed to allow any water infiltration to escape. This will certainly cause masonry failure if not corrected.	\$0	\$75,000	\$0	\$75,000
	Painting	Existing exterior paint is in poor condition. While there is little of it, the masonry lintels are spalling and rusting. The lintels should be scraped and painted in the near term along with other associated work.	\$0	\$0	\$25,000	\$25,000
	Windows	Existing windows are mostly double-pane. While being double glazed, many of the glazing's have lost it's seal and are fogging. Many of the windows in the classroom wings were replaced in a more recent renovation/addition. Windows and doors in the common areas in some locations were not included in the replacement, and contain single glazing and should be considered for near term replacement. In addition, any failed seals should be scheduled to be replaced at the same time. There are also multiple locations that stilll contain jalousie type windows, with single pane glazing. These should be considered for replacement in the immedaite future for energy savings and security issues.	\$0	\$175,000	\$0	\$175,000
	Exterior Doors & Hardware	The exterior doors at the classrooms are of a newer style and were installed in a more recent construction project. Modular classroom doors are "light duty" and not secure (by fish wing). Existing original doors at the end of hallways and elsewhere that were not repaced more recently should be considered for replacement in the near term. Many of the hardware devices installed are failing and not in compliance with current ADA and security standards. The Rixson closers at the end of the 120-131 hallway were noted as leaking. Everything is on the same keying system within the building which is a recommended procedure.	\$0	\$80,000	\$0	\$80,000
	Downspouts	Downspouts, scuppers, and gutters were observed throughout the building to be leaking at the joints, sagging, falling apart, disconnected and leaking. These failures are causing issues noted above in masonry, roofing, and finishes. Repairs should be made in the immediate term to the leaking seams and disconnections, with consideration given to replacement in conjunction with roofing replacements. In addition, new roofing should include mats and splash blocks at any location that discharges onto another roofing surface.	\$50,000	\$0	\$0	\$50,000
Subtotals			\$1,448,618	\$480,000	\$25,000	\$1,953,618



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Facilities Study: New Garden and Greenwood Elementary School

New Garden Elementary School Facilities Study - ICS Consulting, 2019

SURVEY DATA			Action Required 1-3 Years	Action Required 4-7 Years	Action Required 8 +Years	Total
Building System	Item / Asset	Description Of Current Condition / Notes	Priority #1	Priority #2 or major renovation	Priority #3 or major renovation	
Building Interior	Wall Finishes	The condition of the wall painting throughout the building is in dated condition and color. Paint is needed pretty much everywhere. Entire building painting project or annual allotments of a painting budget should be considered for proper building upkeep and fresh look.	\$194,810	\$0	\$0	\$194,810
	Ceiling - Drop	Many classrooms throughout the building were observed to have sagging ceiling tiles. This is an indication of excessive humidity. First grade classroom area ACT ceiling tiles need to be replaced. Miscellaneous tiles with stains in the hallways and common areas should be replaced in the immediate future to avoid unwanted continuing moisture. This will be a reoccurrence until the roof leaks have been corrected. Many of the ceilings in the corridors are newer grid and tile with LED lighting installed.	\$0	\$136,367	\$0	\$136,367
	Ceilings - Recessed	Ceiling section with possible transite asbestos in breezeway by storage room, kitchen entry/exit area. There are also sporadic areas of plaster ceilings throughout the building. These all exhibit signs of water damage of varying proportions and peeling paint. These should be tested for asbestos, if not already and considered for demolition and replacement, not only for aesthetics but also MEP access.	\$2,875	\$0	\$0	\$2,875
	Carpet	Office area needs new carpetting, humidity issues in the space could be causing premature degradation. Library carpetting was replaced recently and is in good condition. The stair area in the library needs some of the trim nosing replaced as it is missing. Conference room #187 also has carpetting (in fair condition) however if the replacement of the office area is completed, consideration to do the conference room to match would be recommended at that time.	\$0	\$16,250	\$0	\$16,250
	Tile / Hard Surface Flooring Ceramic	Our inspection found miscellaneous areas with chips and cracks in the floor tile. 4th/5th grade bathroom tile needs to be replaced, kitchen quarry tile is very dirty, possibly replace or acid wash? Much of the ceramic tile is in fair/good shape. The color selection is aged, but the only signs of wear are at the cove base locations where chipping and cracking is prominent. Should renovations yield wall movement for ADA compliance, then the floor/wall tile would need to be replaced and matching colors would be near impossible. Terrazzo flooring in portions of the building is in good condition. No action is required with terrazzo unless affected by renovations.	\$0	\$7,980	\$0	\$7,980
	Tile / Hard Surface Flooring VCT	Portable classroom VCT tiles are in poor shape, if they are district owned, consideration should be given to replacement. If leased, contact the leasing company for possible replacement. Classroom VCT is in good shape in most locations. The corridor VCT is showing heavy wear and cracking. Consideration should be given to replacing corridor VCT during any renovation project. New tile was just put into the fish hallway bathroom and in principal's office.	\$0	\$35,000	\$0	\$35,000
	Casework	Older/original classroom casework is in poor condition. Most classrooms casework is in need of painting, hardware is broken throughout. Sliding cabinet doors are worn. Countertops are in poor condition. Rooms containing the pivot hinge closet doors are experiencing the same issues as Greenwood, doors are falling off of the hinge and creating a dangerous situation. The original design of the door creates the risk of a pinch point or entrapment during normal function.	\$0	\$0	\$75,000	\$75,000
	Interior Doors & Hardware	Modular classroom doors are "light duty" and not secure, most others throughout the building need to be painted/sanded. Many have older hardware and glazing that creates a possible security/safety issue. Consideration should be given during interior renovations to replace interior classroom doors and their associated hardware if required. New doors and hardware should take into account current district approved safety protocol.	\$0	\$0	\$402,500	\$402,500
	Interior Signage	Existing interior room signage are in good shape, brail included, and meet current ADA standards.	\$0	\$0	\$0	\$0
	Interior Sealants / Control Joints	Interior sealant joints appear to be in fair/good condition. However, interior expansion assemblies appear to be lacking or non-existent. There was much evidence of floor VCT cracking at what appeared to be building control and expansion joints. Proper control systems should be installed at these location to allow for expansion and contraction of the building sections during seasonal changes.	\$0	\$0	\$25,000	\$25,000
Subtotals			\$197,685	\$195,597	\$502,500	\$895,782

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SURVEY DATA			Action Required 1-3 Years	Action Required 4-7 Years	Action Required 8 +Years	Total
Building System	Item / Asset	Description Of Current Condition / Notes	Priority #1	Priority #2 or major renovation	Priority #3 or major renovation	
Mechanical	Boilers	Qty (2) Burnham boilers, Model No. 3W-50-50-G0-WEB (2093 MBH input, 1674 MBH output) are dual fuel but run only on gas. Accompanied by Qty (2) Cyclonetic burners Model No. JB1C-07-EP170-M20-IR with minimal turndown (2:1). Existing boilers are from 1991 and are inefficient, burning more fuel than needed. The district has been hiring an outside contractor to perform annual preventative maintenance on the boilers to keep them running. Existing boilers show signs of age but still appear to be operating well. At almost 30 years old, the district should include replacing the boilers in the near future.	\$188,370	\$0	\$0	\$188,370
	Heating Pumps	Qty (2) 7.5 HP hot water pumps rated at 200 GPM @ 70 Ft. Hd., and Qty (2) 10 HP condenser water pumps rated at 300 GPM @ 70 Ft. Hd. The HW pumps, while in working order, are the same age as the boilers and should be replaced along with the boiler renovations. Consideration should be given to installing Variable Speed Drives to provide energy savings.	\$20,000	\$0	\$0	\$20,000
	Chillers	No chiller; Qty (1) Evapco closed circuit cooling tower Model No. ESWB 9-43 I12 (approx 2 yrs old, and in good condition). Chemical treatments handled by Proasys. The cooling tower serves the heat pump loop in the building. No recommendation at this point.	\$0	\$0	\$0	\$0
	CHW Pumps	There are no Chilled Water Pumps present at the site.	\$0	\$0	\$0	\$0
	HW & CHW Piping	HW piping is original to the building. Heat pump loop piping in the boiler room area may be newer. While staff has not reported any ongoing issues with this system in the building, given the age of the system complete replacement of the piping should be considered in any major renovation of the building and heating systems.	\$0	\$467,544	\$0	\$467,544
	Ventilation / Air Handling	The existing building is comprised of a combination of hot water unit ventilators, hot water finned tube radiators, window A/C units, ducted ceiling-mounted heat pump units, and several air-handling units serving multipurpose room, library, auxilliary gym. The units serving the MPR are newer from the most recent renovation. Library and Aux Gym units are older and at the mid point of their life expectancy. Consideration should be given for long term replacent plans. Many classrooms have existing window air conditioners. Any renovations to the building should consider variable air control and A/C for greater efficiency, higher comfort levels, and lower energy usage.	\$0	\$2,337,720	\$0	\$2,337,720
	Ductwork / Air Distribution	The ductwork in the MPR is newer duct sock and appears to be in very good condition. The Library and Auxilliary Gym are newer to a more recent renovation. Staff has not reported any air distribution issues and the distribution appears to be in good condition. Regularly scheduled cleaning is the only recommendation at this time.	\$0	\$15,000	\$0	\$15,000



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Building System	Item / Asset	Description Of Current Condition / Notes	Priority #1	Priority #2 or major renovation	Priority #3 or major renovation	
Mechanical	Temperature Controls	Schneider controls throughout. The district is seeking unified controls BAS. Newer systems should be left for last scheduled replacement. Once a system has been decided on, renovations or long term annual replacement plan should be considered to upgrade controls.	\$0	\$0	\$311,696	\$311,696
	Fire Protection	Currently no sprinklers. Simplex fire alarm panel 4100 newer panel for fire alarm protection in portions of the building. The system is not a full protection system. It is recommended that any renovation include a fully sprinklered building based upon current building codes.	\$272,734	\$0	\$0	\$272,734
	Plumbing Fixtures	Nearly all bathroom fixtures and classroom fixtures are in fair-poor condition, particularly in the 1st grade wing. Many of these are not in compliance with ADA. There are handicapped stalls in some bathrooms, other fixtures in the same area are not in compliance. Considerations should be given to upgrading all fixtures to current building code, ADA, and water conservation standards. Many bathroom doorways will need to be increased along with bathroom footprints to be in compliance. This will require large scale renovations of these areas.	\$233,772	\$0	\$0	\$233,772
	Grease Traps	Located outside the building, and are maintained every year by an outside contractor. District staff has not indicated any ongoing issues with the current system. Routine maintenace will ensure the longevity of these devices. Replacement would only be recommended if there are ongoing issues, or if sewer line replacement is needed.	\$0	\$0	\$0	\$0
	Domestic Piping	Domestic piping appears to be original to the building. There was no indication from staff of ongoing leakage issues. Typically a building of that age, especially on well water, will exhibit signs of pin hole leaks in the domestic systems, especially the HW. Older piping also runs the risk of contamination from older solder brands, older bathroom fixtures and gavanized piping that were commonly used. It is recommended that consideration be given that any large scale renovations include the replacement of the domestic water piping.	\$0	\$389,620	\$0	\$389,620
	Domestic Water Heating	Existing Lochinvar hot water heater from year 2001, rated at 399,999 BTUH input with (2) storage tanks. Hot water heater is older than storage tanks that must have been replaced during post 2001 renovation or repairs. Recommend replacement of existing HW heater with new high efficiency gas unit.	\$30,000	\$0	\$0	\$30,000
	Water Conditioning	Water conditioning is present and currently under contract to Proasys. Good water management is key in the longevity of the piping to all mechanical systems. Digital system are preferred over manual systems such as "shot-feeders" so that over feeding does not occur. It would be recommended to install a digital feed system, for remote monitoring as well as a "feed as need" basis.	\$10,000	\$0	\$0	\$10,000
	Mechanical - Other	The cooling tower for the water source heat pumps appears to be in great shape. Water treatment was present, there was no signs of corrosion or leaking from the pan area. The fan motor shields appear to be in good shape and the system was functioning and cycling during our visits. The staff indicated no issues with the tower during our interview.	\$0	\$0	\$0	\$0
Subtotals			\$754,876	\$3,209,884	\$311,696	\$4,276,456

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Building System	Item / Asset	Description Of Current Condition / Notes	Priority #1	Priority #2 or major renovation	Priority #3 or major renovation	
Electrical	Service & Distribution / Panels	The service to the building is not original (1994-95) and in fair/good condition. However, expected renovations to the building may exceed the size of the current system, due to newer technology and the lack of convenience outlets in most classrooms. It should be expected that any upgrades to the building would include an expansion or increase in the current electrical service. Distribution panels throughout the building are at a variety of ages. Many of the original and older distribution panels should definitely be considered for replacement. Many of these are currently in a hallway and accessible to students and staff. Their location makes any work on them in accordance with NEC/ARC Flash standards impossible during school hours. It would be recommended that during the replacement of these panels that they also be relocated out of the public byway. Additional power requirements will require the addition of distribution panels.	\$0	\$300,000	\$0	\$300,000
	Convenience Outlets	Nearly all of the classrooms are lacking in convenience electrical outlets. Newer curriculum standards such as one/one and devices, require additional outlets and dedicated circuits, which do not exist in the current classroom setup. Additional outlets for laptop charging stations, personal devices, USB devices, teaching technology devices, and other appuratus will be required in the near term.	\$155,848	\$0	\$0	\$155,848
	Lighting - Common Areas	LED lighting has been installed in some hallways, and more energy efficient T-5 VHO in the multipurpose room. Auxilliary Gym has Qty (12) 250W metal halide fixtures which should be replaced with LED. Remaining hallways should all be upgraded to LED fixtures throughout. Any accessory fixture such as wall sconce, display lighting, wall washing fixtures, and high hat fixtures, should all be considered for replacement along with daylight harvesting and occupancy control as required by code and increased energy efficiency.	\$68,184	\$0	\$0	\$68,184
	Lighting - Rooms	2-lamp T-12 pendant lighting fixtures in the 1st grade and 4th/5th grade classrooms, CFL fixtures (biax) in Fish Wing and Modular classrooms, along with T-8 lay in fixtures in remaining classroom and specialty classrooms all should be considered for replacement to LED fixtures along with dimming capability for new curriculum technology, daylight harvesting and occupancy control as required by code should all be considered as part of any project.	\$136,367	\$0	\$0	\$136,367
	Lighting - Other	Music room lighting (perimeter) should be addressed. See above for similar recommendations. Library has newer high bay LED downlighting. No action is required in this location. The Art Room also contains the large quantity metal halide down lights. Consideration should be given to replacement with LED lighting at half the wattage.	\$68,184	\$0	\$0	\$68,184
	AV Wiring in Classrooms	AV wiring in the classroom spaces meets the current needs, but is no longer a modern technology for cirricular devices. Newer devices include digital video and audio technologies and will not work with the current standards of analog wiring that exists. Any large scale renovation should incude the ugrade of AV wiring to current or modern standards to keep pace with the devices the distrct will be purchasing for replacement and upgrading.	\$233,772	\$0	\$0	\$233,772
	Phone System	Phone system is a "Nortel" VOIP system. These newer systems are typically leased which provides flexibility to constantly increasing/changing technology. This system should be considered for integration to the intercom system to avoid redundancy. Distrct policy would have input into which system would work best for KCSD.	\$0	\$0	\$54,547	\$54,547
	PA System	Recently replaced head end in very good condition. End devices in the classroom are older and/or orignal. Unified district wide technology standards are recommended for implimentation. Once the district decided on the systems, the newer head end could be utilized, the wiring should be replaced along with speakers and call buttons, if it was re-used to avoid regular maintenance problem issues. Consideration should be given to an integrated phone/clock/possible FA-mass notification system.	\$0	\$0	\$0	\$0
	Clock System	Clock system "Standard 1460" has a newer head end unit. Existing classroom end device clocks and wiring are at the end of their life expectancy. Parts are becoming difficult to obtain and expensive. We found multiple classrooms where the clocks were non functional and battery clocks were used instead. Consideration should be given to wireless repeater clock systems and a district decision on whether or not, the schools needs a bell schedule for elementary education. This is a long term relacement time frame.	\$0	\$0	\$31,170	\$31,170
	Generator / Emergency Power	Qty (1) 30 kW generator, runs once a week for exercise and testing. Power is lost in the building about twice a year. District should consider adding loads to the generator (i.e. refrigeration equipment, additional emergency lighting for long term occupancy)	\$187,500	\$0	\$0	\$187,500
	Electrical - Other	Most classrooms have projectors and/or smartboards. Given the current pathway of cirricular instruction, increase in digital devices is inevitable. Propper infrastructure preparation is necessary to support these functions. Current support methods would be outlets with USB charging, remote outlets to support short throw projectors, dedicated circuit outlets for laptop carts and 1:1 charging stations, outlets to support accessorie devices like document cameras and digital microscopes. Additional consideration to newer IT Technology. Multiple Cat6A wiring and supportive devices(switches, POE switches, patch panels, WAP)	\$97,405	\$0	\$0	\$97,405
Subtotals			\$947,259	\$300,000	\$85,716	\$1,332,975



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Building System	Item / Asset	Description Of Current Condition / Notes	Priority #1	Priority #2 or major renovation	Priority #3 or major renovation	
Life Safety / ADA	Accessible Entrances	Handicapped access points to the building, for the most part appear to be in good condition and compliant. There are a few exterior classroom doors that have non-compliant egress/access sidewalks. Given the grades, these could easily be converted to ramps to eliminate the step that is present. The exterior doors are also lacking automatic openers. While not required, they are a more ADA friendly device. Consideration should be given during renovation, to include these items during a major renovation.	\$0	\$37,500	\$0	\$37,500
	ADA - Bathrooms	The gang bathrooms in the building all have some type of ADA stall built into them. The sinks and fountains however are not in compliance. While some are at the proper height, they lack the correct insulation protection underneath and the correct associated plumbing fixtures on them. The staff bathrooms for the most part are non-compliant. We observed doorways that were not of a sufficient width, no clearance space for wheel chair turn around, and fixtures that were not in current ADA standards of compliance. Any large scale renovation will require that some modification take place to accomodate handicapped personnel. The classroom bathrooms are also non-complaint based on the same reasons mentioned previously. See line below for cost impact.	\$0	\$0	\$0	\$0
	ADA - Other	Classroom areas will need to be considered for ADA compliance. Proper access to door handle required clearances, handicapped accessible sinks in both elevation, access and fixtures were observed in most locations. At the time of the constructoin of these spaces these types of issues did not have to be addressed. Due to current regulations and building code changes, these will need to be addressed in any renovation of the building.	\$3,896,200	\$0	\$0	\$3,896,200
	Emergency Lighting	Emergency lighting is minimal throughout the building. While the systems in place are complaint with PA L & I, future consideration should be given to increasing the amount of emergency lighting in the building in order to maintain building function during an occupied power outage. While the frequency appears to be minimal. This would avoid having to consider an early dismissal due to lack of lighting and power for cirricular activities. This would require a increased size generator and additional emergency panels. This work should be considered in conjunction with a large renovation project and not as a stand alone project.	\$0	\$0	\$0	\$0
	Fire Alarm System	Newer Simplex 4100 ES. System is a point ID system which is in excellent condition. The building is not fully covered in every location inclusive of plenum spaces and storage areas. Being that the building does not contain a sprinkler system, it would be our recommendation to provide either one complete system or the other at a minimum for building protection. Both systems would be optimal.	\$0	\$0	\$175,329	\$175,329
	Security System	Security system is older and has been subject to occasional false alarms during extreme stormy weather conditions (wind loosens doors and sets off alarm). The recommendation would be a newer system that would employ both PIR motion detection in addition to newer wide gap capable door contacts, to avoid false alarm detetection. Interior camera system would also assist in determining false alarms. Exterior cameras are included in the vestibule security report that is being filed seperately. It is also a recommendation as part of this building analysis.	\$74,028	\$0	\$0	\$74,028
	Elevator	N/A	\$0	\$0	\$0	\$0
	Nurse Call System	N/A	\$0	\$0	\$0	\$0
Subtotals			\$3,970,228	\$37,500	\$175,329	\$4,183,057

Facilities Study: New Garden and Greenwood Elementary School

New Garden Elementary School Facilities Study - ICS Consulting, 2019

SURVEY DATA			Action Required 1-3 Years	Action Required 4-7 Years	Action Required 8 +Years	Total
Building System	Item / Asset	Description Of Current Condition / Notes	Priority #1	Priority #2 or major renovation	Priority #3 or major renovation	
Commerical Equipment	Kitchen Equipment - Serving	Kitchen equipment is very old and should be replaced (Blodgett warming ovens; True refrigerator; Qty (1) Hobart dishwasher; Qty (1) Arctic walk-in), serving lines, etc.. These items can be replaced over time or in conjunction with any renovation project.	\$0	\$100,000	\$0	\$100,000
	Kitchen Equipment - Community	Dishwasher booster heater piping under the dishwasher shows visible rusting and excessive moisture formation on tile below pipes, indicating possible leakage. The grouting in the tile in this area is deteriorated and should be restored.	\$65,000	\$0	\$0	\$0
	Laundry Equipment - Community	One washer and dryer in boiler room for washing rags is present in the boiler room area. These appear to be sufficient for their use.	\$0	\$0	\$0	\$0
	Laundry Equipment - Community	N/A	\$0	\$0	\$0	\$0
	Kitchen Equipment - Residential	N/A	\$0	\$0	\$0	\$0
	Casework - Residential	N/A	\$0	\$0	\$0	\$0
	Laundry Equipment - Residential	N/A	\$0	\$0	\$0	\$0
	Commercial Equipment - Other	N/A	\$0	\$0	\$0	\$0
Subtotals			\$65,000	\$100,000	\$0	\$100,000
Construction Cost:			\$7,410,549	\$4,381,381	\$1,150,241	\$12,865,288
Soft Costs:			\$2,223,165	\$1,314,414	\$345,072	\$3,859,586
Total Costs:			\$9,633,714	\$5,695,795	\$1,495,314	\$16,724,874



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