



CONSULTANTS / SCOPE / SOURCES/ KEY FACTS AND RECOMMENDED IMPROVEMENTS

KG+D Architects

- Full service firm specializing in education facilities planning and design.
- Designed and constructed over \$700M worth of construction in the past 15 years.
- 32 person team including 9 licensed architects, landscape architect, technical support staff and interior design.
- In 2016, the firm will mark its 22nd year as KG+D, building upon a legacy of more than 70 years of services throughout the region.

Damiano Barile Consulting Engineers

- Currently working with Darien Public Schools on generator projects.
- Have worked with KG+D for over 30 years.
- Have worked with Mike Lynch for 20 years.

KG+D Architects was hired by Darien Public Schools through a competitive bid selection process that weighed fee, experience and proposal.

Building Conditions Report

- Buildings and Grounds comprehensive survey (or physical) that addresses:
- Materials and systems conditions
- Approximate year of replacement
- Priority need
- Cost to replace

Master Plan

- Review of how existing campuses are used
- Listing of issues that need to be addressed
- Potential solutions to improve educational and functional deficiencies
- Cost of improvements

A Series of Meetings with:

- Dr. Daniel Brenner
- Michael Feeney
- Michael Lynch

Review of Materials:

- Demographic studies (Milone & MacBroom)
- Planning & Zoning Board Communication - 5.23.16 (Jeremy Ginsberg, Planning & Zoning Director)
- Existing floor plans and survey studies

Consolidated Informational Meetings Based on Discussions with Central Office:

- Building level administrators and staff
- Community members and leaders
- Board of Education

Key Facts and Recommended Improvements:

- Darien Public Schools - 7 Instructional Buildings + 1 Administration Building = 840K SF of space. All Campuses continue to be appropriately located to serve the needs of the community.
- Average Age of the Facilities = 50 years old / Holmes ES is oldest at 85 years. Darien High School and New Tokeneke School are in superior condition being constructed within the past decade.
- 4 of 5 elementary schools utilize modular classroom buildings. The average age of the 'temporary' structures is over 25 years old. These structures pose both weather and security challenges for the District and users.
- Educational categories needing review and discussion district- wide include: Removal of the modular buildings, Location of early learning/ ELP program , Size/adequacy of educational spaces, and General storage needs.
- Site/Campus categories needing review and discussion district-wide include: Traffic issues at drop- off/ pick-up, Insufficient number of parking spaces, and Building security at the main entrances/lobbies

“We are currently preparing students for jobs that don’t yet exist, using technologies that haven’t yet been invented, in order to solve problems we don’t even know are problems yet.”

- Karl Fisch, Educator

This Master Plan for the Darien Public Schools is intended to address both educational and infrastructure issues that have surfaced as a result of interviews with district administrators and survey work at each school campus by architects and engineers. The resulting document provides a consolidated map for planning and procuring funding for future work as well as being an important step in aiding the District in addressing building and campus infrastructure and educational issues that are important to ensuring the continued excellence of Darien Public Schools.

This plan is a template and is scalable and flexible in its ability to be implemented as a whole or in phases over a period of years depending on the priorities and specific funding interests. Ultimately, the goal of this document is to provide a plan that is comprehensive, adjustable and fully addresses the principal issues expressed by the school district and community.

As part of the master Plan, the superintendent, Dr. Daniel Brenner, recommended having the Town undergo a complete Building Conditions Survey (BCS) on all buildings associated with the School District. The survey is intended to be a building ‘physical’ like a person going to the doctor where building and campus structural materials, finishes, and systems are inspected to determine: 1) their condition and expected life, 2) the cost to replace, and 3) the priority order of replacement. The results of the BCS process focuses only on existing conditions. The full master plan report combines the BCS with the planning concepts as developed between the school administrators, community leadership, and consulting professionals.

Some of the key facts and recommended outcomes of this process include:

- Darien Public Schools has seven instructional buildings and one administration building, totaling approximately 840K SF of space. All buildings and campuses continue to be appropriately located to serve the needs of the community.
- The average age of the facilities is 50 years old with the oldest building (Holmes ES) at 85 years old. The age and quality of the buildings in Darien is consistent with (or better than) other districts in the region as Fairfield County experienced significant population growth post World War II. Obviously, Darien High School and the New Tokeneke School are in superior condition being constructed within the past decade.
- Four out of the five elementary schools utilize modular classroom buildings to accommodate the existing educational program. The average age of the ‘temporary’ structures is over 25 years old with each having been partially renovated to extend their useful life. These structures are detached which poses both weather and security challenges for the District and users.

- The educational categories that were most commonly listed as needing further review and discussion district-wide include: removal of the modular buildings, location of early learning/ELP program, size/adequacy of educational spaces, and general storage needs.
- The site logistic categories that were most commonly listed as needing further review and discussion district-wide include: traffic issues at drop-off/pick-up, insufficient number of parking spaces, and building security at main entrances/lobbies.

This report addresses both the educational and site logistic issues noted above.

The most notable educational concern is the continued use of modular classrooms at the elementary schools. Modular buildings typically serve to meet temporary needs during construction projects or short-term ‘bubbles’ in population. As a firm, KG+D avoids including ‘modulars’ in school district temporary planning as most districts spend significant money installing these short-term buildings and often find other useful ways of utilizing the space once the primary purpose of constructing them have been met. Darien’s temporary classrooms on four of the five elementary school campuses have now been on site for approximately 25 years far exceeding their intended timeframe within the District. Their replacement is past due.

Campus security for the students and staff is unfortunately too often in the news today and classroom space not directly connected to the main buildings provides challenges. Review of how each campus and individual buildings are accessed, monitored, and improved to address safety concerns is wide-spread and common at regional conferences to share best practices. Although, there is no fixed solution that works in every situation, there are common practices that have received significant support. One point of entry for all school buildings with key card access to other ingress doorways, secure entry vestibules, appropriately located security/main office, and line of sight design techniques are all commonplace. The elimination of all stand-alone modular buildings is an appropriate security measure.

The greatest site improvement need district-wide is vehicular circulation. Each campus has its individual challenges addressing bus and private vehicle traffic patterns within the existing constraints of the neighborhoods and public road systems adjacent to the schools. Providing additional ‘queuing’ for both buses and cars has been considered within the report. Additional parking has also been reviewed and provided where space is available.

It is often stated that architecture does not make the educational program. However, intelligent design does offer many advantages to improving the environment. For example, there are many studies that address indoor air quality and natural light as critical to improving the academic performance of students. Intelligent planning of buildings also leads to better adjacencies, flexibility, and long term sustainability of the spaces, materials, and systems. Good design also has the ability to inspire and provide community pride in its public facilities. Obviously, the quality education that Darien provides benefits the entire community by maintaining property values and aiding in the development of the next generation of critical thinkers and inspirational leaders.

Darien Public School District
2016 Building Conditions Survey
(BCS)-Five Year Plan

Building Condition Survey Summary

The Educational Buildings and Campus infrastructure of the Darien Public Schools are generally in very good condition. KG+D Architects and our consulting engineers have conducted building condition surveys on each campus that included interviews with DPS Facilities staff & visual inspections to create a list of recommended improvements to bring the facilities into excellent condition. Each line item improvement on the following spreadsheets was assigned a unit cost (based on a regularly updated regional construction cost data base) and a priority number.

There is approximately \$25mm worth of recommended improvements listed within this building condition report. To the credit of the District and staff, no individual item has been listed as a Priority 1. The buildings have been well maintained and planned cost expenditures relate to the building systems that are at the end of their ‘useful life’ and will require phased replacement. By dividing the BCS total of \$25mm into the 840,000sf total of district wide building area, the average cost per square foot is approximately \$30 or a little over \$1/sf per year base on a 25 to 30 year average life.

It is recommended that the District review the survey results and include infrastructure upgrades at the same time as addressing master plan improvements. A combined capital improvement project will ensure that both educational and building stewardship goals are met for the future success of Darien Public Schools.

BCS-FIVE YEAR PLAN

Darien Public School District
2016 BCS-Five Year Plan

Type/Location	Cat.	Description	Quantity	Unit	Unit Cost	Direct Cost	Escalation	Soft Cost	Total Cost	*P1+2	Priority	Project	Build Year
		HINDLEY ES											
Room 101 107 108		Replace single glazed windows with new insulated windows	3	ea	\$ 7,500	\$ 22,500	\$ 1,836	\$ 8,644	\$ 32,980	\$ 32,980	2	2	2017
1947 building		Replace all First/Second floor classroom entry doors & hardware-similar to room 141	23	ea	\$ 2,000	\$ 46,000	\$ 3,754	\$ 17,672	\$ 67,426	\$ 67,426	2	2	2017
1947 building		Replace all First/Second floor classroom windows with true insulated windows	61	ea	\$ 7,500	\$ 457,500	\$ 37,332	\$ 175,764	\$ 670,596	\$ 670,596	2	2	2017
Room 101 107 108		Install ACT ceiling	2750	sf	\$ 7	\$ 19,250	\$ 1,571	\$ 7,396	\$ 28,216	\$ 28,216	2	2	2017
Stair A		Repair ceiling plaster/paint	1	allow	\$ 2,000	\$ 2,000	\$ 433	\$ 864	\$ 3,298		3	3	2020
Roof access room		Repair plaster wall under roof access door	1	allow	\$ 750	\$ 750	\$ 162	\$ 324	\$ 1,237		3	3	2020
Room 143		Concrete slab/floor tile cracked along window	30	Lin. Ft.	\$ 75	\$ 2,250	\$ 487	\$ 972	\$ 3,710		3	3	2020
Room147		Crack in wall CMU	1	allow	\$ 700	\$ 700	\$ 152	\$ 303	\$ 1,154		3	3	2020
Cafeteria		Change Exit door back stage to insulated glazing-center weatherstrip missing	1	allow	\$ 1,000	\$ 1,000	\$ 82	\$ 384	\$ 1,466	\$ 1,466	2	2	2017
Cafeteria		Exterior window wood sills are rotten	2	allow	\$ 1,250	\$ 2,500	\$ 542	\$ 1,080	\$ 4,122		3	3	2020
Library		Replace all windows with insulated windows	26	ea	\$ 2,000	\$ 52,000	\$ 4,243	\$ 19,978	\$ 76,221	\$ 76,221	2	2	2017
Stair A& B		Exterior window frames rusted/paint	12	allow	\$ 2,500	\$ 30,000	\$ 2,448	\$ 11,526	\$ 43,974	\$ 43,974	2	2	2017
Gym Storage room		Exterior brick repair/pointing	1	allow	\$ 4,500	\$ 4,500	\$ 367	\$ 1,729	\$ 6,596	\$ 6,596	2	2	2017
Roof penthouse		Replace windows with insulated windows	2	ea	\$ 3,500	\$ 7,000	\$ 1,517	\$ 3,025	\$ 11,542		3	3	2020
Chimney		Repoint & repair brick	400	sf	\$ 20	\$ 8,000	\$ 1,733	\$ 3,457	\$ 13,190		3	3	2020
1947 building & Library		Replace roof and parapet flashing	15000	sf	\$ 25	\$ 375,000	\$ 30,600	\$ 144,069	\$ 549,669	\$ 549,669	2	2	2017
		HINDLEY ES SUBTOTAL				\$ 1,030,950	\$ 87,259	\$ 397,188	\$ 1,515,396	\$ 1,477,144			
		HVAC											
Boiler Room	89	Provide combustion air system for boilers	1	allow	\$ 25,000	\$ 25,000	\$ 5,416	\$ 10,804	\$ 41,220		3	3	2020
Boiler Room	93	Replace boiler vacuum pump	1	allow	\$ 20,000	\$ 20,000	\$ 4,333	\$ 8,643	\$ 32,976		3	3	2020
Boiler Room	89	Provide emergency boilers shutoff switches.	1	allow	\$ 10,000	\$ 10,000	\$ 816	\$ 3,842	\$ 14,658	\$ 14,658	2	2	2017
First Floor	92	Provide new powered ventilation (energy recovery unit) for the main office and classrooms(16 classrooms)	1	allow	\$ 800,000	\$ 800,000	\$ 65,280	\$ 307,347	\$ 1,172,627	\$ 1,172,627	2	2	2017
All Floors	92	Provide new powered ventilation (unit ventilators) for the 1940's wing's classrooms (16 classrooms)	1	allow	\$ 320,000	\$ 320,000	\$ 69,329	\$ 138,290	\$ 527,619		3	3	2020
Gym	92	Provide new air handling unit with coils	1	allow	\$ 350,000	\$ 350,000	\$ 75,829	\$ 151,254	\$ 577,083		3	3	2020
Cafeteria	92	Provide new air handling unit with coils	1	allow	\$ 350,000	\$ 350,000	\$ 75,829	\$ 151,254	\$ 577,083		3	3	2020
Library	92	Replace ceiling mounted unit ventilators	1	allow	\$ 40,000	\$ 40,000	\$ 8,666	\$ 17,286	\$ 65,952		3	3	2020
All Floors	92	Provide corridor ventilation (Qty.3)	1	allow	\$ 150,000	\$ 150,000	\$ 32,498	\$ 64,823	\$ 247,321		3	3	2020
All Floors	92	Upgrade original building pneumatic control to digital	1	allow	\$ 150,000	\$ 150,000	\$ 12,240	\$ 57,628	\$ 219,868	\$ 219,868	2	2	2017
		HVAC TOTAL				\$ 2,215,000	\$ 350,235	\$ 911,172	\$ 3,476,407	\$ 1,407,153			
		PLUMBING											
Boiler Room	84	Provide Backflow Preventer for domestic water main(Above Grade)	1	allow	\$ 30,000	\$ 30,000	\$ 2,448	\$ 11,526	\$ 43,974	\$ 43,974	2	2	2017
Toilet Rooms	87	Replace plumbing fixtures in the original building (Qty.20)	1	allow	\$ 100,000	\$ 100,000	\$ 21,665	\$ 43,216	\$ 164,881		4	4	2021
Boiler Room	87	Replace sump pump	1	allow	\$ 30,000	\$ 30,000	\$ 2,448	\$ 11,526	\$ 43,974	\$ 43,974	2	2	2017
		PLUMBING TOTAL				\$ 160,000	\$ 26,561	\$ 66,267	\$ 252,828	\$ 87,947			
		ELECTRICAL											
Elec Room	80	Replace 1940's main distribution board with new; use existing board as splice box. Include temp generator for shutdown	1	allow	\$ 70,000	\$ 70,000	\$ 15,166	\$ 30,251	\$ 115,417		3	3	2020
All Floors	80	Thermal Test existing switchboard and panelboards and Megger Test primary and secondary feeders including existing feeders from MDB to all downstream panelboards.	1	allow	\$ 18,000	\$ 18,000	\$ 3,900	\$ 7,779	\$ 29,679		3	3	2020
All Floors	81	Upgrade Corridor lighting (exclude ceiling)	1	allow	\$ 50,000	\$ 50,000	\$ 10,833	\$ 21,608	\$ 82,440		3	3	2020
Cafeteria	81/108	Upgrade Cafetorium lighting (exclude ceiling), install new border lights + dimmers	1	allow	\$ 100,000	\$ 100,000	\$ 21,665	\$ 43,216	\$ 164,881		4	4	2021
Class/Office	99	Add occupancy sensors in all classrooms and offices that currently do not have automatic shut off control	1	allow	\$ 15,000	\$ 15,000	\$ 3,250	\$ 6,482	\$ 24,732		3	3	2020
Exterior	80	Provide new emergency lighting at each egress doors	1	allow	\$ 30,000	\$ 30,000	\$ 2,448	\$ 11,526	\$ 43,974	\$ 43,974	2	2	2017
Classrooms	96	Add 6 convenient and 4 quad receptacles/room in 27 classrooms	1	allow	\$ 130,000	\$ 130,000	\$ 28,165	\$ 56,180	\$ 214,345		4	4	2021
All Floors	82	Provide new corridor and classroom PA speakers and PA wiring to Amp at server room.	1	allow	\$ 65,000	\$ 65,000	\$ 5,304	\$ 24,972	\$ 95,276	\$ 95,276	2	2	2017
All Floors		Provide new wireless clock system.	1	allow	\$ 30,000	\$ 30,000	\$ 6,500	\$ 12,965	\$ 49,464		4	4	2021
		ELECTRICAL TOTAL				\$ 508,000	\$ 97,230	\$ 214,978	\$ 820,207	\$ 139,250			
		HINDLEY ES TOTAL				\$ 3,913,950	\$ 561,285	\$ 1,589,603	\$ 6,064,839	\$ 3,111,494			

Priorities: 1- Requires immediate attention (Life safety or building damage) 2- Health and safety related 3- Age related or to meet current code 4- Desirable upgrade

Darien Public School District
2016 BCS-Five Year Plan

Type/Location	Cat.	Description	Quantity	Unit	Unit Cost	Direct Cost	Escalation	Soft Cost	Total Cost	*P1+2	Priority	Project	Build Year
		HOLMES ES											
Outside room 121		Area way grate leaks into basement/needs bulk head and egress ladder	1	allow	\$ 9,000	\$ 9,000	\$ 734	\$ 3,458	\$ 13,192	\$ 13,192	2	2	2017
Exit door 12		Right side of door brick wall have vertical crack/repair	1	allow	\$ 1,000	\$ 1,000	\$ 82	\$ 384	\$ 1,466	\$ 1,466	2	2	2017
Exit door 12		Left side of door Drain floods basement	1	allow	\$ 2,000	\$ 2,000	\$ 163	\$ 768	\$ 2,932	\$ 2,932	2	2	2017
Front of building		Exterior Cornice rotten	1	allow	\$ 2,500	\$ 2,500	\$ 204	\$ 960	\$ 3,664	\$ 3,664	2	2	2017
Front of building		Left corner of building/mold behind leader	1	allow	\$ 750	\$ 750	\$ 162	\$ 324	\$ 1,237		3	3	2020
Front of building		Left side of building quoin cracked/repair	1	allow	\$ 7,200	\$ 7,200	\$ 588	\$ 2,766	\$ 10,554	\$ 10,554	2	2	2017
Exit door 2		Right side cracked cast stone band	1	allow	\$ 1,200	\$ 1,200	\$ 98	\$ 461	\$ 1,759	\$ 1,759	2	2	2017
Out side Classroom 106		Exterior brick along base of building needs repair/pointing	200	sf	\$ 20	\$ 4,000	\$ 326	\$ 1,537	\$ 5,863	\$ 5,863	2	2	2017
South side of building		Bay window sill joints need grout	1	allow	\$ 500	\$ 500	\$ 41	\$ 192	\$ 733	\$ 733	2	2	2017
Exit door 6		Exterior door Repair plaster stucco at both sides of door	1	allow	\$ 700	\$ 700	\$ 57	\$ 269	\$ 1,026	\$ 1,026	2	2	2017
Exit door 7		Interior left side of door CMU vertical crack/repair	1	allow	\$ 1,000	\$ 1,000	\$ 82	\$ 384	\$ 1,466	\$ 1,466	2	2	2017
Exit door 4		Interior left side of window second floor CMU vertical crack/repair	1	allow	\$ 1,000	\$ 1,000	\$ 82	\$ 384	\$ 1,466	\$ 1,466	2	2	2017
Gymnasium		Replace skylight	1	allow	\$ 85,000	\$ 85,000	\$ 6,936	\$ 32,656	\$ 124,592	\$ 124,592	2	2	2017
Roof		Replace roof shingles and EPDM roof	1	allow	\$ 600,000	\$ 600,000	\$ 48,960	\$ 230,511	\$ 879,471	\$ 879,471	2	2	2017
		HOLMES SUBTOTAL				\$ 715,850	\$ 58,515	\$ 275,054	\$ 1,049,419	\$ 1,048,182			
		HVAC											
Boiler Room		Convert Existing Boilers from Steam to Hot Water	1	allow	\$ 100,000	\$ 100,000	\$ 21,665	\$ 43,216	\$ 164,881		4	4	2021
Boiler Room		Add Hot Water Pumps for 1930's Wing	1	allow	\$ 40,000	\$ 40,000	\$ 8,666	\$ 17,286	\$ 65,952		4	4	2021
1930's Wing		Replace 1930's Wing Classroom Unit Ventilators- abatement not included	1	allow	\$ 240,000	\$ 240,000	\$ 19,584	\$ 92,204	\$ 351,788	\$ 351,788	2	2	2017
1930's Wing		Replace 1930's Wing Classroom Unit Ventilators with Energy Recovery Units in Attic	1	allow	\$ 420,000	\$ 420,000	\$ 34,272	\$ 161,357	\$ 615,629	\$ 615,629	2	2	2017
1930's Wing		Provide Ventilation for Staff Rooms and Offices in 1930's Wing	1	allow	\$ 200,000	\$ 200,000	\$ 16,320	\$ 76,837	\$ 293,157	\$ 293,157	2	2	2017
Library/ Comp. Room		Upgrade Library Ventilation and Interior Computer Room	1	allow	\$ 250,000	\$ 250,000	\$ 54,163	\$ 108,039	\$ 412,202		3	3	2020
Gym		Upgrade Gym Ventilation	1	allow	\$ 250,000	\$ 250,000	\$ 54,163	\$ 108,039	\$ 412,202		3	3	2020
1930's Wing		Change All 1930's Wing to Hot Water - New Piping Mains	1	allow	\$ 750,000	\$ 750,000	\$ 162,490	\$ 324,116	\$ 1,236,606		4	4	2021
		HVAC TOTAL				\$ 2,250,000	\$ 371,324	\$ 931,094	\$ 3,552,418	\$ 1,260,575			
		PLUMBING											
Bathrooms		Replace 1930's Wing Toilet Room Fixtures	1	allow	\$ 175,000	\$ 175,000	\$ 37,914	\$ 75,627	\$ 288,541		3	3	2020
		Provide Backflow Preventer on Domestic Water Service	1	allow	\$ 30,000	\$ 30,000	\$ 2,448	\$ 11,526	\$ 43,974	\$ 43,974	2	2	2017
		PLUMBING TOTAL				\$ 205,000	\$ 2,448	\$ 11,526	\$ 332,515	\$ 43,974			
		ELECTRICAL											
Elec Room		Replace 1970's main distribution board with new; use existing board as splice box. Include temp generator for shutdown	1	allow	\$ 70,000	\$ 70,000	\$ 15,166	\$ 30,251	\$ 115,417		3	3	2020
All Floors		Thermal Test existing switchboard and panelboards and Megger Test primary and secondary feeders including existing feeders from MDB to all downstream panelboards.	1	allow	\$ 18,000	\$ 18,000	\$ 3,900	\$ 7,779	\$ 29,679		3	3	2020
Exterior		Provide new emergency lighting at each egress doors	1	allow	\$ 35,000	\$ 35,000	\$ 2,856	\$ 13,446	\$ 51,302	\$ 51,302	2	2	2017
Classrooms		Add 6 convenient and 4 quad receptacles/room in 20 original classrooms	1	allow	\$ 100,000	\$ 100,000	\$ 21,665	\$ 43,216	\$ 164,881		4	4	2021
All Floors		Provide new corridor and classroom PA speakers and PA wiring to Amp at server room.	1	allow	\$ 70,000	\$ 70,000	\$ 5,712	\$ 26,893	\$ 102,605	\$ 102,605	2	2	2017
All Floors		Provide new wireless clock system.	1	allow	\$ 30,000	\$ 30,000	\$ 6,500	\$ 12,965	\$ 49,464		4	4	2021
		ELECTRICAL TOTAL				\$ 323,000	\$ 55,798	\$ 134,549	\$ 513,348	\$ 153,907			
		HOLMES ES TOTAL				\$ 3,493,850	\$ 488,085	\$ 1,352,223	\$ 5,447,699	\$ 2,506,638			

Priorities: 1- Requires immediate attention (Life safety or building damage) 2- Health and safety related 3- Age related or to meet current code 4- Desirable upgrade

Darien Public School District
2016 BCS-Five Year Plan

Type/Location	Cat.	Description	Quantity	Unit	Unit Cost	Direct Cost	Escalation	Soft Cost	Total Cost	*P1+2	Priority	Project	Build Year
		OX RIDGE ES											
Throughout building		Replace single glazed windows with insulated glass	71	ea.	\$ 8,500	\$ 603,500	\$ 49,246	\$ 231,855	\$ 884,601	\$ 884,601	2	2	2017
Corridor outside back stage dr		Concrete slab and VAT cracked	1	allow	\$ 1,500	\$ 1,500	\$ 122	\$ 576	\$ 2,199	\$ 2,199	2	2	2017
Exit door 10		Both side lites at this door are cracked/repair	2	allow	\$ 1,000	\$ 2,000	\$ 163	\$ 768	\$ 2,932	\$ 2,932	2	2	2017
Library/classroom 106		Repair cracked exterior masonry block	1	allow	\$ 2,000	\$ 2,000	\$ 163	\$ 768	\$ 2,932	\$ 2,932	2	2	2017
Roof		Repair roof shingles	1	allow	\$ 1,500	\$ 1,500	\$ 122	\$ 576	\$ 2,199	\$ 2,199	2	2	2017
Parking lot		Repair concrete curb/patch holes	100	Lin. Ft.	\$ 30	\$ 3,000	\$ 245	\$ 1,153	\$ 4,397	\$ 4,397	2	2	2017
		OX RIDGE SUBTOTAL				\$ 613,500	\$ 50,062	\$ 235,697	\$ 899,259	\$ 899,259			
		HVAC											
Boiler Room		Replace 1996 Steam Boiler Plant with Hot Water	1	Allow	\$ 500,000	\$ 500,000	\$ 40,800	\$ 192,092	\$ 732,892	\$ 732,892	2	2	2017
Classrooms		Replace 1966 Classroom Unit Ventilators	1	Allow	\$ 200,000	\$ 200,000	\$ 16,320	\$ 76,837	\$ 293,157	\$ 293,157	2	2	2017
Classrooms		Replace 1966 Classroom Unit Ventilators with Energy Recover Units	1	Allow	\$ 450,000	\$ 450,000	\$ 36,720	\$ 172,883	\$ 659,603	\$ 659,603	2	2	2017
Library		Replace Library Unit Ventilators with Energy Recovery Units	1	Allow	\$ 125,000	\$ 125,000	\$ 10,200	\$ 48,023	\$ 183,223	\$ 183,223	2	2	2017
1966 Wing		Provide Ventilation and AC to Interior Student Occupied Areas in 1966 Wing	1	Allow	\$ 75,000	\$ 75,000	\$ 6,120	\$ 28,814	\$ 109,934	\$ 109,934	2	2	2017
1966 Wing		Replace 1966 Wing Classroom Exhaust Fans	1	Allow	\$ 100,000	\$ 100,000	\$ 8,160	\$ 38,418	\$ 146,578	\$ 146,578	2	2	2017
1966 Wing		Replace 1966 Wing Toilet Exhaust Fans	1	Allow	\$ 50,000	\$ 50,000	\$ 4,080	\$ 19,209	\$ 73,289	\$ 73,289	2	2	2017
Gym		Replace Gym Ventilation System	1	Allow	\$ 250,000	\$ 250,000	\$ 20,400	\$ 96,046	\$ 366,446	\$ 366,446	2	2	2017
Gym		Provide Fire Damper in Gym Return Duct	1	Allow	\$ 25,000	\$ 25,000	\$ 2,040	\$ 9,605	\$ 36,645	\$ 36,645	2	2	2017
Cafeteria		Replace Cafeteria Ventilation System	1	Allow	\$ 350,000	\$ 350,000	\$ 28,560	\$ 134,465	\$ 513,025	\$ 513,025	2	2	2017
		HVAC TOTAL				\$ 2,125,000	\$ 173,400	\$ 816,392	\$ 3,114,792	\$ 3,114,792			
		PLUMBING											
		Provide Backflow Preventer on Domestic Water Service	1	Allow	\$ 30,000	\$ 30,000	\$ 2,448	\$ 11,526	\$ 43,974	\$ 43,974	2	2	2017
Bathroom		Replace 1966 Wing Toilet Fixtures	1	Allow	\$ 175,000	\$ 175,000	\$ 14,280	\$ 67,232	\$ 256,512	\$ 256,512	2	2	2017
		PLUMBING TOTAL				\$ 205,000	\$ 16,728	\$ 78,758	\$ 300,486	\$ 300,486			
		ELECTRICAL											
Elec Room		Replace main distribution board with new, including new service and primary/secondary feeder work and pad mount transformer.	1	Allow	\$ 200,000	\$ 200,000	\$ 16,320	\$ 76,837	\$ 293,157	\$ 293,157	2	2	2017
All Floors		Thermal Test existing switchboard and panelboards and Megger Test primary and secondary feeders including existing feeders from MDB to all downstream panelboards.	1	Allow	\$ 18,000	\$ 18,000	\$ 1,469	\$ 6,915	\$ 26,384	\$ 26,384	2	2	2017
All Floors		Replace and/or retrofit panels that are original to the building construction.	1	Allow	\$ 25,000	\$ 25,000	\$ 2,040	\$ 9,605	\$ 36,645	\$ 36,645	2	2	2017
All Floors		Upgrade Corridor Lighting (original building)	1	Allow	\$ 55,000	\$ 55,000	\$ 4,488	\$ 21,130	\$ 80,618	\$ 80,618	2	2	2017
All Floors		Add occupancy sensors in classrooms and offices	1	Allow	\$ 15,000	\$ 15,000	\$ 1,224	\$ 5,763	\$ 21,987	\$ 21,987	2	2	2017
Cafeteria		Upgrade Cafetorium lighting (exclude ceiling), install new border lights + dimmers	1	Allow	\$ 100,000	\$ 100,000	\$ 8,160	\$ 38,418	\$ 146,578	\$ 146,578	2	2	2017
Exterior		Provide new emergency lighting at each egress doors	1	Allow	\$ 60,000	\$ 60,000	\$ 4,896	\$ 23,051	\$ 87,947	\$ 87,947	2	2	2017
Classrooms		Add 6 convenient and 4 quad receptacles/room in 22 original classrooms	1	Allow	\$ 110,000	\$ 110,000	\$ 8,976	\$ 42,260	\$ 161,236	\$ 161,236	2	2	2017
All Floors		Provide new corridor and classroom PA speakers and PA wiring to Amp at server room.	1	Allow	\$ 65,000	\$ 65,000	\$ 5,304	\$ 24,972	\$ 95,276	\$ 95,276	2	2	2017
All Floors		Provide new wireless clock system.	1	Allow	\$ 30,000	\$ 30,000	\$ 2,448	\$ 11,526	\$ 43,974	\$ 43,974	2	2	2017
		ELECTRICAL TOTAL				\$ 678,000	\$ 55,325	\$ 260,477	\$ 993,802	\$ 993,802			
		OX RIDGE TOTAL				\$ 3,621,500	\$ 295,514	\$ 1,391,324	\$ 5,308,338	\$ 5,308,338			

Priorities: 1- Requires immediate attention (Life safety or building damage) 2- Health and safety related 3- Age related or to meet current code 4- Desirable upgrade

Darien Public School District
2016 BCS-Five Year Plan

Type/Location	Cat.	Description	Quantity	Unit	Unit Cost	Direct Cost	Escalation	Soft Cost	Total Cost	*P1+2	Priority	Project	Build Year
		ROYLE ES											
Library room		Replace all single glazed windows with insulated glazed windows	30	ea	\$ 7,500	\$ 225,000	\$ 18,360	\$ 86,441	\$ 329,801	\$ 329,801	2	2	2017
Auditorium		South and east upper face brick of building is spalling/repair	300	sf	\$ 40	\$ 12,000	\$ 979	\$ 4,610	\$ 17,589	\$ 17,589	2	2	2017
West face of building		Entire brick face above window is spalling/repair	700	sf	\$ 40	\$ 28,000	\$ 2,285	\$ 10,757	\$ 41,042	\$ 41,042	2	2	2017
Roof		Replace parapet wall flashing/replace roof	9000	sf	\$ 25	\$ 225,000	\$ 18,360	\$ 86,441	\$ 329,801	\$ 329,801	2	2	2017
Library room		South east exterior corner brick has vertical cracks	1	allow	\$ 850	\$ 850	\$ 69	\$ 327	\$ 1,246	\$ 1,246	2	2	2017
		ROYLE ES SUBTOTAL				\$ 490,850	\$ 40,053	\$ 188,577	\$ 719,480	\$ 719,480			
		HVAC											
Boiler Rm.		Convert Existing Boilers from Steam to Hot Water	1	allow	\$ 100,000	\$ 100,000	\$ 21,665	\$ 43,216	\$ 164,881		4	4	2021
Boiler Rm.		Add Hot Water Pumps	1	allow	\$ 40,000	\$ 40,000	\$ 8,666	\$ 17,286	\$ 65,952		4	4	2021
1950s wing		Provide Powered Ventilation to 1950's Classroom with Roof Energy Recovery Units	1	allow	\$ 600,000	\$ 600,000	\$ 48,960	\$ 230,511	\$ 879,471	\$ 879,471	2	2	2017
1950s wing		Provide Powered Ventilation to 1950's Classroom with Unit Ventilators	1	allow	\$ 360,000	\$ 360,000	\$ 77,995	\$ 155,576	\$ 593,571		3	3	2020
1950s wing		Upgrade Gym Ventilation (+ Hot Water)	1	allow	\$ 250,000	\$ 250,000	\$ 54,163	\$ 108,039	\$ 412,202		3	3	2020
1950s wing		Upgrade Cafeteria Ventilation (+ Hot Water)	1	allow	\$ 250,000	\$ 250,000	\$ 54,163	\$ 108,039	\$ 412,202		3	3	2020
1950s wing		Upgrade Common Room Ventilation (+ Hot Water)	1	allow	\$ 250,000	\$ 250,000	\$ 54,163	\$ 108,039	\$ 412,202		3	3	2020
1950s wing		Change All 1950's to Hot Water - New Piping Mains	1	allow	\$ 750,000	\$ 750,000	\$ 162,490	\$ 324,116	\$ 1,236,606		4	4	2021
1950s wing		Replace 1950's Wing Classroom Exhaust and Toilet Exhaust	1	allow	\$ 125,000	\$ 125,000	\$ 27,082	\$ 54,019	\$ 206,101		3	3	2020
1950s wing		Convert 1950's Wing from Pneumatic to Digital Controls	1	allow	\$ 150,000	\$ 150,000	\$ 12,240	\$ 57,628	\$ 219,868	\$ 219,868	2	2	2017
		HVAC TOTAL				\$ 2,875,000	\$ 521,587	\$ 1,206,468	\$ 4,603,055	\$ 1,099,338			
		PLUMBING											
Crawl Space		Add Backflow Preventers on Water Mains	1	allow	\$ 75,000	\$ 75,000	\$ 6,120	\$ 28,814	\$ 109,934	\$ 109,934	2	2	2017
Boiler Rm.		Replace Boiler Room Sump Pump	1	allow	\$ 35,000	\$ 35,000	\$ 2,856	\$ 13,446	\$ 51,302	\$ 51,302	2	2	2017
1950's Wing		Replace 1950's Wing Toilet Room Fixtures	1	allow	\$ 175,000	\$ 175,000	\$ 14,280	\$ 67,232	\$ 256,512	\$ 256,512	2	2	2017
		PLUMBING TOTAL				\$ 285,000	\$ 23,256	\$ 109,493	\$ 417,749	\$ 417,749			
		ELECTRICAL											
All Floors		Thermal Test existing switchboard and panelboards and Megger Test primary and secondary feeders including existing feeders from MDB to all downstream panelboards.	1	allow	\$ 18,000	\$ 18,000	\$ 3,900	\$ 7,779	\$ 29,679		3	3	2020
All Floors		Upgrade Corridor lighting in original building (exclude ceiling)	1	allow	\$ 35,000	\$ 35,000	\$ 2,856	\$ 13,446	\$ 51,302	\$ 51,302	2	2	2017
Cafeteria		Upgrade Cafeteria lighting (exclude ceiling)	1	allow	\$ 30,000	\$ 30,000	\$ 2,448	\$ 11,526	\$ 43,974	\$ 43,974	2	2	2017
Exterior		Provide new emergency lighting at each egress doors	1	allow	\$ 25,000	\$ 25,000	\$ 2,040	\$ 9,605	\$ 36,645	\$ 36,645	2	2	2017
Classrooms		Add 6 convenient and 4 quad receptacles/room in 20 original classrooms	1	allow	\$ 100,000	\$ 100,000	\$ 21,665	\$ 43,216	\$ 164,881		4	4	2021
All Floors		Replace existing Fire Alarm system in its entirety with new, including demolition work	1	allow	\$ 140,000	\$ 140,000	\$ 30,331	\$ 60,502	\$ 230,833		3	3	2020
All Floors		Provide new corridor and classroom PA speakers and PA wiring to Amp at server room.	1	allow	\$ 60,000	\$ 60,000	\$ 4,896	\$ 23,051	\$ 87,947	\$ 87,947	2	2	2017
All Floors		Provide new wireless clock system.	1	allow	\$ 30,000	\$ 30,000	\$ 6,500	\$ 12,965	\$ 49,464		4	4	2021
		ELECTRICAL TOTAL				\$ 438,000	\$ 74,636	\$ 182,088	\$ 694,724	\$ 219,868			
		ROYLE ES TOTAL				\$ 4,088,850	\$ 659,533	\$ 1,686,626	\$ 6,435,008	\$ 2,456,435			

Priorities: 1- Requires immediate attention (Life safety or building damage) 2- Health and safety related 3- Age related or to meet current code 4- Desirable upgrade

Darien Public School District
2016 BCS-Five Year Plan

Type/Location	Cat.	Description	Quantity	Unit	Unit Cost	Direct Cost	Escalation	Soft Cost	Total Cost	*P1+2	Priority	Project	Build Year
		TOKENEKE ES											
Gymnasium		One long floor crack	1	allow	\$ 5,000	\$ 5,000	\$ 1,083	\$ 2,161	\$ 8,244		3	3	2020
Main Corridor		Install expansion joint	1	allow	\$ 7,000	\$ 7,000	\$ 1,517	\$ 3,025	\$ 11,542		3	3	2020
		TOKENEKE ES SUBTOTAL				\$ 12,000	\$ 2,600	\$ 5,186	\$ 19,786	\$ -			
		HVAC				\$ -	\$ -	\$ -	\$ -		3	3	2020
						\$ -	\$ -	\$ -	\$ -		3	3	2020
		No recommendations				\$ -	\$ -	\$ -	\$ -		3	3	2020
		HVAC TOTAL				\$ -	\$ -	\$ -	\$ -	\$ -	3	3	2020
						\$ -	\$ -	\$ -	\$ -		3	3	2020
		PLUMBING				\$ -	\$ -	\$ -	\$ -		3	3	2020
		No recommendations				\$ -	\$ -	\$ -	\$ -		3	3	2020
		PLUMBING TOTAL				\$ -	\$ -	\$ -	\$ -	\$ -			
		ELECTRICAL				\$ -	\$ -	\$ -	\$ -		3	3	2020
		No recommendations				\$ -	\$ -	\$ -	\$ -		3	3	2020
		ELECTRICAL TOTAL				\$ -	\$ -	\$ -	\$ -	\$ -			
		TOKENEKE ES TOTAL				\$ 12,000	\$ 2,600	\$ 5,186	\$ 19,786	\$ -			

Darien Public School District
2016 BCS-Five Year Plan

Type/Location	Cat.	Description	Quantity	Unit	Unit Cost	Direct Cost	Escalation	Soft Cost	Total Cost	*P1+2	Priority	Project	Build Year
		MIDDLESEX MS											
Building wide		Classrooms no self closures installed on doors	82	ea	\$ 350	\$ 28,700	\$ 2,342	\$ 11,026	\$ 42,068	\$ 42,068	2	2	2017
Auditorium		Entry doors to auditorium at corridor 1115 currently does not close properly/repair	1	allow	\$ 750	\$ 750	\$ 162	\$ 324	\$ 1,237		3	3	2020
Bathroom 1122		Replace rusted Toilet partitions	1	allow	\$ 3,500	\$ 3,500	\$ 286	\$ 1,345	\$ 5,130	\$ 5,130	2	2	2017
Gymnasium		Replace broken glass block	300	sq	\$ 75	\$ 22,500	\$ 4,875	\$ 9,723	\$ 37,098		3	3	2020
Chimney		Repoint/repair brick	150	sq	\$ 20	\$ 3,000	\$ 650	\$ 1,296	\$ 4,946		3	3	2020
Cupola		Repair/paint	1	allow	\$ 1,200	\$ 1,200	\$ 260	\$ 519	\$ 1,979		3	3	2020
Parking lot		Concrete curb/side walks needs replacement	1	allow	\$ 5,000	\$ 5,000	\$ 408	\$ 1,921	\$ 7,329	\$ 7,329	2	2	2017
Class rooms 2236 & 2232		Repair many holes in floor/Replace VCT	1500	sq	\$ 12	\$ 18,000	\$ 1,469	\$ 6,915	\$ 26,384	\$ 26,384	2	2	2017
Corridor		Install floor expansion joints	1	allow	\$ 10,000	\$ 10,000	\$ 2,167	\$ 4,322	\$ 16,488		3	3	2020
		MIDDLESEX SUBTOTAL				\$ 92,650	\$ 12,618	\$ 37,391	\$ 142,659	\$ 80,911			
		HVAC											
Electric Room		Provide Cooling for Overheating Electric Rooms (main switchgear room and original building elec room)	1	allow	\$ 50,000	\$ 50,000	\$ 4,080	\$ 19,209	\$ 73,289	\$ 73,289	2	2	2017
		HVAC TOTAL				\$ 50,000	\$ 4,080	\$ 19,209	\$ 73,289	\$ 73,289			
		PLUMBING											
Basement		Provide Backflow Preventer on Domestic Water Service	1	allow	\$ 30,000	\$ 30,000	\$ 2,448	\$ 11,526	\$ 43,974	\$ 43,974	2	2	2017
Basement		Replace Fire Pump	1	allow	\$ 65,000	\$ 65,000	\$ 5,304	\$ 24,972	\$ 95,276	\$ 95,276	2	2	2017
		PLUMBING TOTAL				\$ 95,000	\$ 7,752	\$ 36,498	\$ 139,250	\$ 139,250			
		ELECTRICAL											
All Floors		Upgrade Corridor and Classroom lighting (exclude ceiling) in 5-10 years	1	allow	\$ 425,000	\$ 425,000	\$ 34,680	\$ 163,278	\$ 622,958	\$ 622,958	2	2	2017
Auditorium		Install new auditorium lighting, border lights & Flood Lights controlled via dimming system	1	allow	\$ 300,000	\$ 300,000	\$ 24,480	\$ 115,255	\$ 439,735	\$ 439,735	2	2	2017
Exterior		Provide new emergency lighting at each egress doors	1	allow	\$ 40,000	\$ 40,000	\$ 3,264	\$ 15,367	\$ 58,631	\$ 58,631	2	2	2017
Classrooms		Add fire alarm visual strobes to all classrooms	1	allow	\$ 45,000	\$ 45,000	\$ 9,749	\$ 19,447	\$ 74,196		3	3	2020
		ELECTRICAL TOTAL				\$ 810,000	\$ 72,173	\$ 313,348	\$ 1,195,521	\$ 1,121,325			
		MIDDLESEX TOTAL				\$ 1,047,650	\$ 96,623	\$ 406,446	\$ 1,550,719	\$ 1,414,775			

Priorities: 1- Requires immediate attention (Life safety or building damage) 2- Health and safety related 3- Age related or to meet current code 4- Desirable upgrade

Darien Public School District
2016 BCS-Five Year Plan

Type/Location	Cat.	Description	Quantity	Unit	Unit Cost	Direct Cost	Escalation	Soft Cost	Total Cost	*P1+2	Priority	Project	Build Year
		DARIEN HS											
Exterior Main Entry		Front stair concrete repair	1	allow	\$ 5,000	\$ 5,000	\$ 408	\$ 1,921	\$ 7,329	\$ 7,329	2	2	2017
		DARIEN HS SUBTOTAL				\$ 5,000	\$ 408	\$ 1,921	\$ 7,329	\$ 7,329			
		HVAC											
Chiller Room		Provide Sound Attention in Chiller Room (Allowance)	1	allow	\$ 100,000	\$ 100,000	\$ 8,160	\$ 38,418	\$ 146,578	\$ 146,578	2	2	2017
		Replace Oil Pumps	1	allow	\$ 30,000	\$ 30,000	\$ 2,448	\$ 11,526	\$ 43,974	\$ 43,974	2	2	2017
		Provide Access Doors for VAV Boxes, Valves, etc. (Allowance)	1	allow	\$ 50,000	\$ 50,000	\$ 10,833	\$ 21,608	\$ 82,440		4	4	2021
		HVAC TOTAL				\$ 180,000	\$ 21,441	\$ 71,552	\$ 272,992	\$ 190,552			
		PLUMBING											
		Provide Bollards Around Propane Tank	1	allow	\$ 20,000	\$ 20,000	\$ 1,632	\$ 7,684	\$ 29,316	\$ 29,316	2	2	2017
		PLUMBING TOTAL				\$ 20,000	\$ 1,632	\$ 7,684	\$ 29,316	\$ 29,316			
		ELECTRICAL											
Cafeteria		Upgrade Cafeteria lighting (exclude ceiling)	1	allow	\$ 40,000	\$ 40,000	\$ 3,264	\$ 15,367	\$ 58,631	\$ 58,631	2	2	2017
Site		Replace failed site lighting fixtures (pole heads only)	1	allow	\$ 15,000	\$ 15,000	\$ 1,224	\$ 5,763	\$ 21,987	\$ 21,987	2	2	2017
All Floors		Provide new wireless clock system.	1	allow	\$ 65,000	\$ 65,000	\$ 5,304	\$ 24,972	\$ 95,276	\$ 95,276	2	2	2017
		ELECTRICAL TOTAL				\$ 120,000	\$ 9,792	\$ 46,102	\$ 175,894	\$ 175,894			
		DARIEN HS TOTAL				\$ 325,000	\$ 33,273	\$ 127,258	\$ 485,531	\$ 403,091			
		ALL DARIEN PS - PRIORITY 1							\$ -		1		2016
		ALL DARIEN PS - PRIORITY 2							\$ 15,200,770		2		2017
		ALL DARIEN PS - PRIORITY 3							\$ 6,071,571		3		2020
		ALL DARIEN PS - PRIORITY 4							\$ 4,039,580		4		2021
		ALL DARIEN PS TOTAL				\$ 16,502,800	\$ 2,136,913	\$ 6,558,666	\$ 25,311,920	\$ 15,200,770			

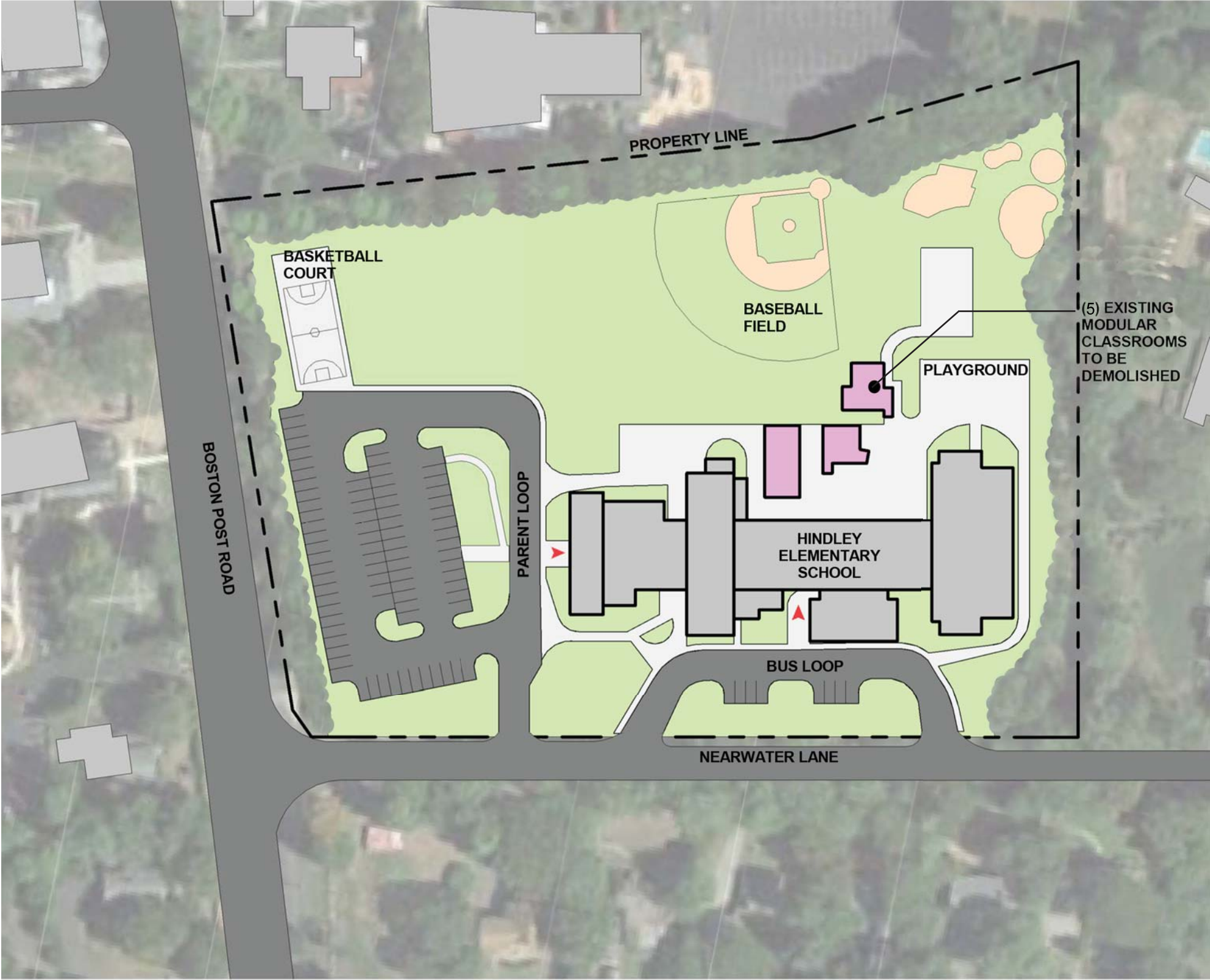
Priorities: 1- Requires immediate attention (Life safety or building damage) 2- Health and safety related 3- Age related or to meet current code 4- Desirable upgrade

Darien Public School
District-Wide Master Plan
Additions and Alterations To School Campuses

DARIEN PUBLIC SCHOOLS
BUILDING INFORMATION CHART

	HINDLEY ES		HOLMES ES		OX RIDGE ES		ROYLE ES		TOKENEKE ES		MIDDLESEX MS		DARIEN HS	
	CURRENT	PLANNED	CURRENT	PLANNED	CURRENT	PLANNED	CURRENT	PLANNED	CURRENT	PLANNED	CURRENT	PLANNED	CURRENT	PLANNED
BUILDING AREA (SF)	56,495	58,500+/-	63,266	66,250+/-	58,344	87,500+/-	57,450	n/c	66,714	n/c	193,200	tbd	316,953	320,000+/-
YEAR BUILT / LAST RENOVATION	1947/1996	-	1931 / 1996	-	1966 / 1996	-	1948 / 1996	-	2008	-	1937 / 2000	-	2005	-
SITE ACRES	8	n/c	8	n/c	10	n/c	8	n/c	12	n/c	15	n/c	56	n/c
GRADE CONFIGURATION	K-5	n/c	K-5	n/c	ELP, K-5	ELP, K-5	ELP, K-5	K-5 (ELP consolidated on Ox Ridge Campus)	ELP, K-5	K-5 (ELP consolidated on Ox Ridge Campus)	6-8	n/c	9-12	n/c
# OF GENERAL CLASSROOMS	24 (MAX)	24 (Option-1) or 26 (Option-2)	23 (MAX)	23 (Option-1) or 25 (Option-2)	24 (MAX)	27 (Option-1) or 24 (Option-2)	20	23	22	23	53	n/c	32	n/c
# OF ELP CLASSROOMS	0	0	0	0	2	10	3	0	3	0				
MODULAR CLASSROOMS	5	0	2	0	4	0	3	0	0	0	0	0	0	0
GENERAL CLASSROOM AVG. SIZE (SF)	858	n/c	800	n/c	825	n/c	698	TBD	868	n/c				
FUNCTIONAL CAPACITY (22 students/general classroom)	528	528 / 572	506	506 / 550	528	528 / 594	440	506	484	506				
CURRENT ENROLLMENT (2016)	491		472		451		414		475		1133		1356	
PARKING SPACES	82	95+	77	95+	91	115+	77	85+	77	77	150	150	372	422

* INCLUDES ELP CLASSROOMS



CAMPUS STATISTICS	CURRENT	PLANNED
BUILDING AREA (GROSS)	56,495 SF	58,500+/- SF
YEAR BUILT / LAST RENOVATION	1947 / 1996	-
SITE AREA	8.0 ACRES	8.0
GRADE CONFIGURATION	K – 5	K - 5
# OF GENERAL CLASSROOMS	24	24 or 26
MODULAR CLASSROOMS (TO BE REMOVED)	5	0
FUNCTIONAL CAPACITY (CURRENT / PROPOSED W/O MODULARS)	528	528/572
CURRENT ENROLLMENT	491	-
BUS QUEUING	300 Linear Feet	400LF
PARENT QUEUING	250 Linear Feet	600LF
PARKING SPACES (PROVIDED / PLANNED)	82	95+
PLAYING FIELDS	1 MULTI-PURPOSE	1

Legend

- Existing building
- Modular classrooms to be removed

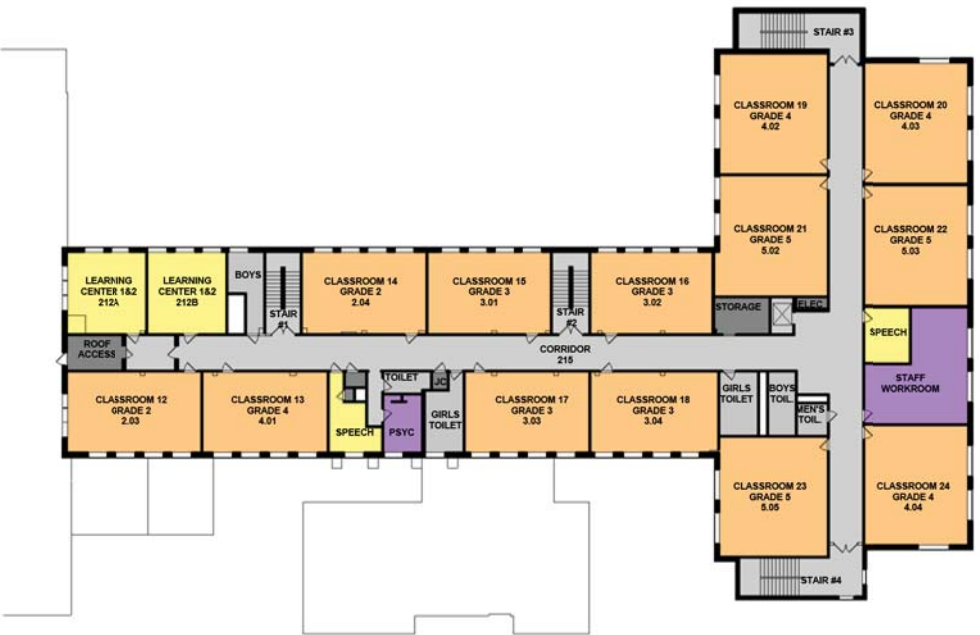


Site Plan
1" = 100'-0"

Campus Aerial



FIRST FLOOR
1" = 50'-0"



SECOND FLOOR
1" = 50'-0"

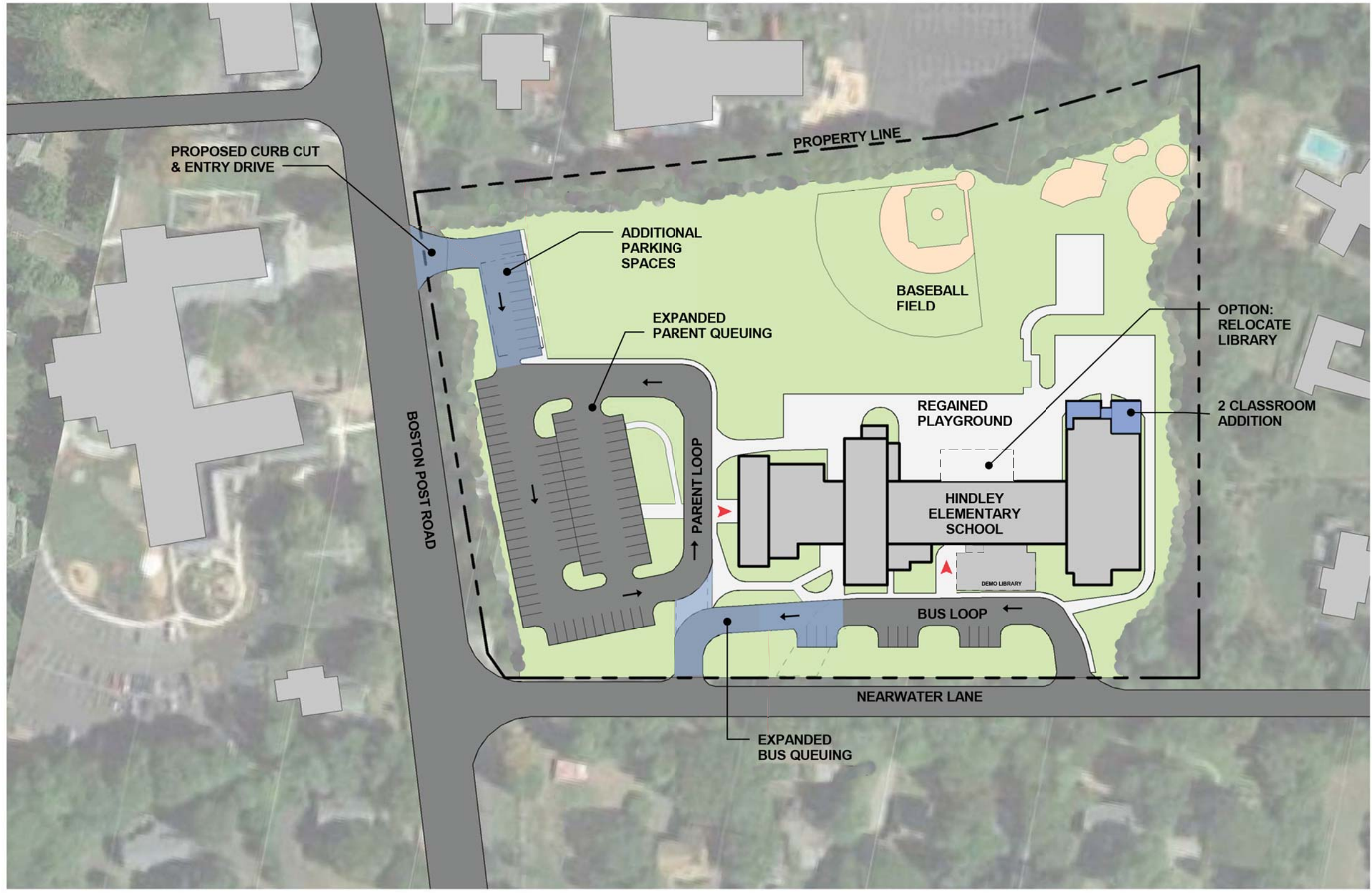
BUILDING PROGRAM	# OF ROOMS	SIZE (AVG)
GENERAL CLASSROOMS (3 OR 4 ROOMS PER GRADE)	24	858 sf
SPECIAL EDUCATION	1	1099 sf
ART / MUSIC / PROJECT	12	659 sf
LIBRARY	1	3,347 sf
GYMNASIUM	1	2,395 sf
CAFETERIA	1	2,000 sf

CAMPUS MASTER PLAN SUMMARY

The Hindley Elementary School was originally constructed in 1947 and last renovated twenty years ago in 1996. During the last renovation and additions project, a new entrance was created on the west end of the building adjacent to the main parking lot. The west end entrance does not include a security vestibule and the main office was not relocated during the project. This security issue needs to be addressed in the capital improvement project. Other improvements should include: 1) Removal of the five modular classrooms; 2) Construction of a 2-4 classroom addition plus storage space; 3) Consideration for removing the library and constructing a new 21st Century media/learning center; 4) Alterations to the drop-off loops, vehicular circulation and parking to improve flow during peak campus traffic times.

Legend

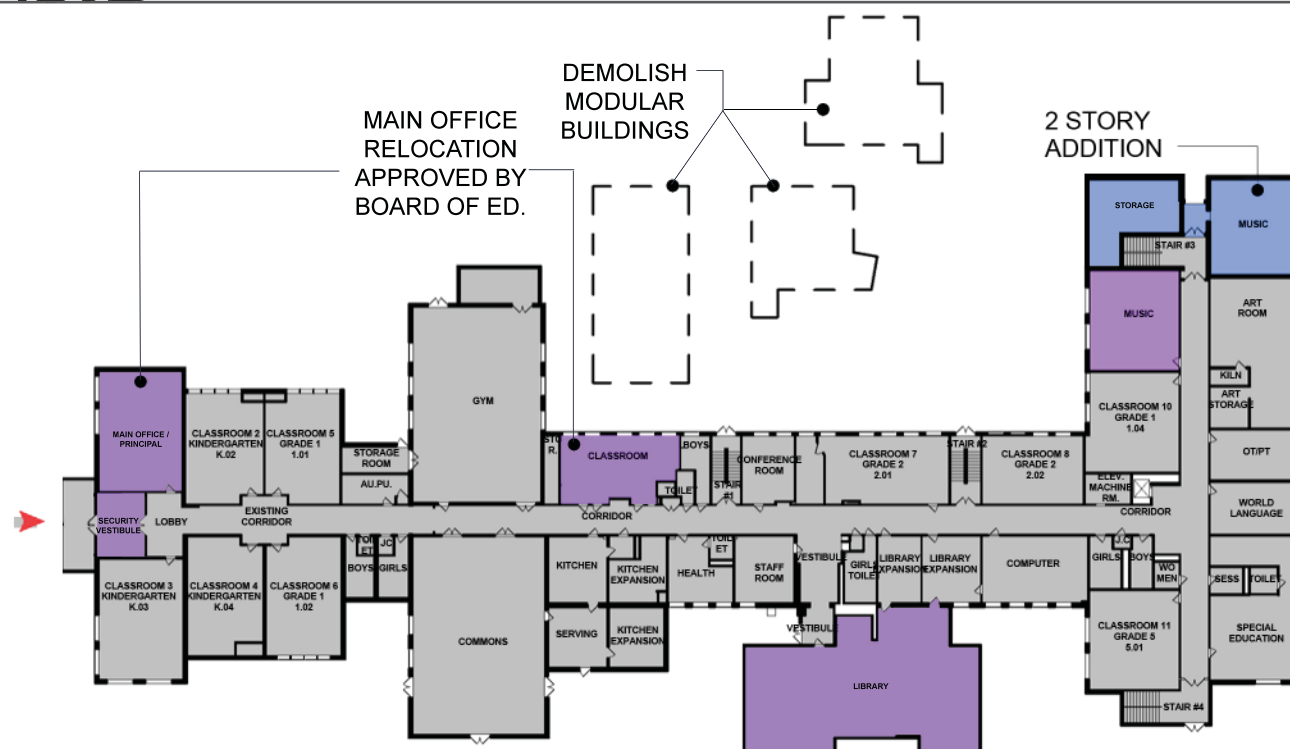
- Classroom
- Special Subjects
- Administration
- Public
- Service



Legend
Existing
Proposed

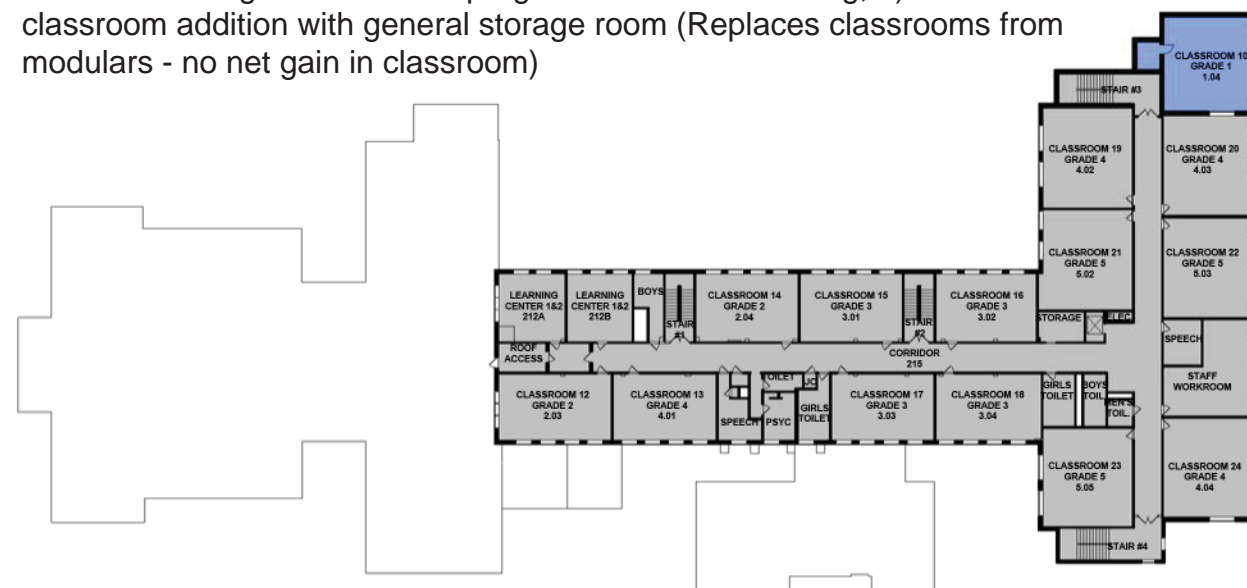
SITE PLAN ALTERATIONS

Site Plan Option 1
1" = 100'-0"

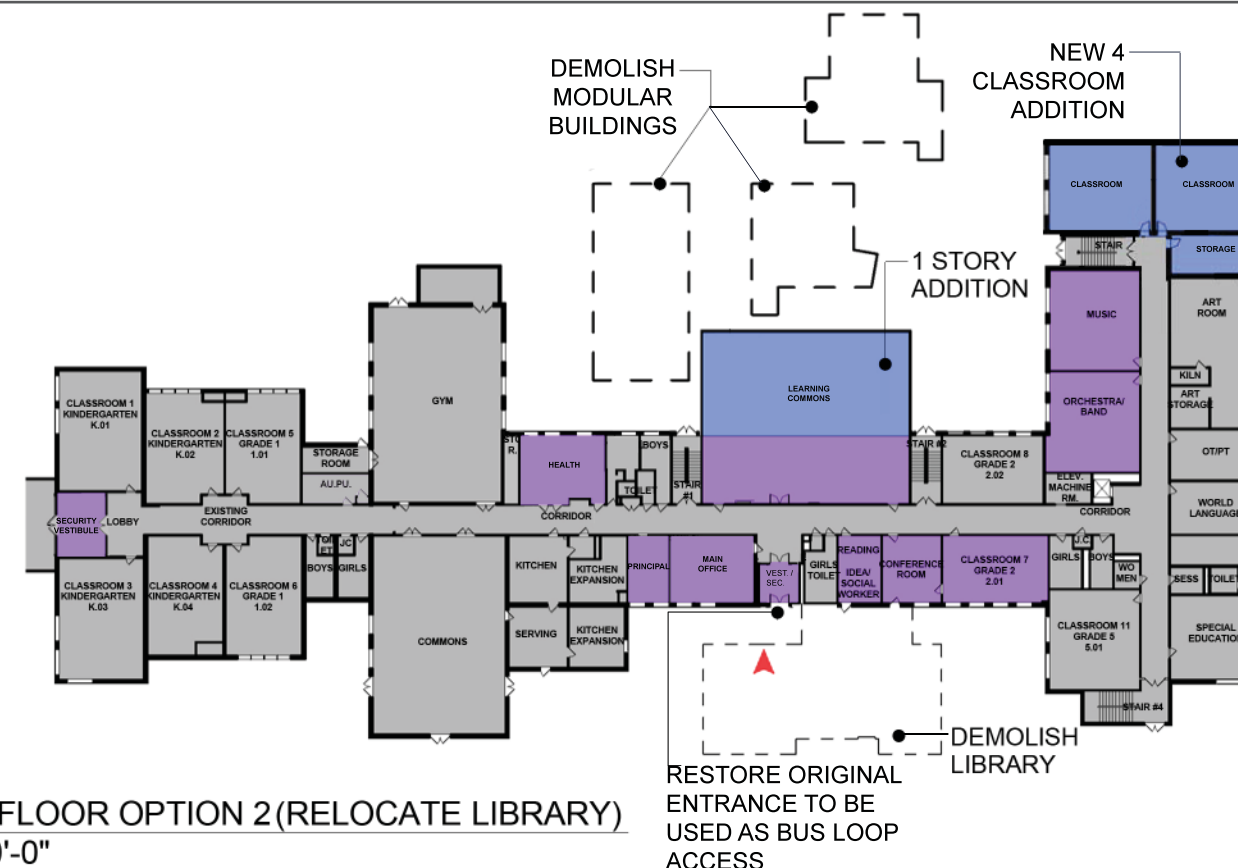


FIRST FLOOR OPTION 1 (EXISTING LIBRARY TO REMAIN)
1" = 60'-0"

Features include: 1) Convert one kindergarten classroom into main office and convert principal/main office into kindergarten classroom; 2) Demolish modular buildings and relocate programs into main building; 3) Construct 2 classroom addition with general storage room (Replaces classrooms from modulares - no net gain in classroom)

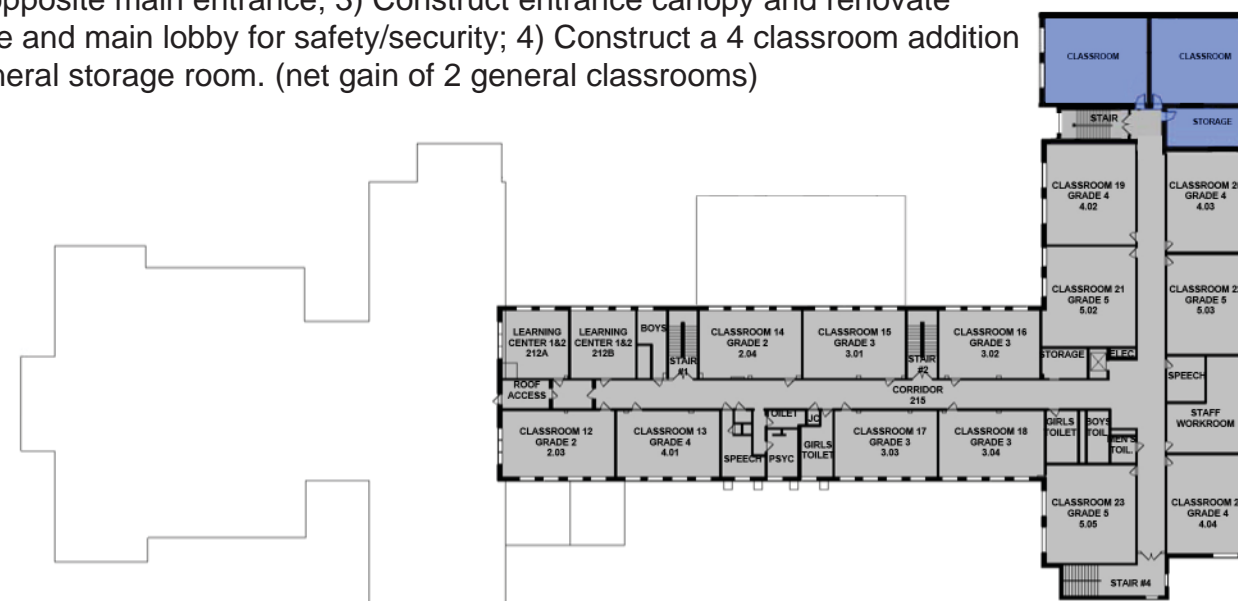


SECOND FLOOR OPTION 1
1" = 60'-0"



FIRST FLOOR OPTION 2 (RELOCATE LIBRARY)
1" = 60'-0"

Features include: 1) Demolish of modular buildings and relocate programs into main building; 2) Demolish library and construct new 21st Century media/learning center opposite main entrance; 3) Construct entrance canopy and renovate vestibule and main lobby for safety/security; 4) Construct a 4 classroom addition with general storage room. (net gain of 2 general classrooms)



SECOND FLOOR OPTION 2
1" = 60'-0"

Legend

- Existing building
- Renovated
- New Construction

BUILDING ALTERATIONS

ADDITIONS AND ALTERATIONS TO HINDLEY ES

CAMPUS - Description	Quantity	Unit	Unit cost *	Extended Cost
Hindley Elementary School - Option 1 (24 General Classrooms)				
Two-Classroom Addition	2,090	SF	\$425	\$888,250
Renovated office / classroom area	1,840	SF	\$125	\$230,000
Renovate Classroom + Library	4,000	SF	\$175	\$700,000
Site work - Paving+	14,000	SF	\$25	\$350,000
Site work - Remove Modulares	1	EA	\$200,000	\$200,000
Construction Sub-Total				\$2,368,250
General Conditions + O&P			17.00%	\$402,603
Contingency			10.00%	\$277,085
Project Costs - 12%			12.00%	\$365,753
HES - Option 1 Total				\$3,413,690
Hindley Elementary School - Option 2 (26 General Classrooms - Net gain of 2)				
Four-Classroom Addition	3,890	SF	\$425	\$1,653,250
Library/Learning Commons Relocation	2,350	SF	\$400	\$940,000
Renovated classroom areas	1,600	SF	\$125	\$200,000
Renovated library/office areas	4,855	SF	\$175	\$849,625
Site work - Paving+	14,000	SF	\$25	\$350,000
Site work - Remove Modulares + Library	1	EA	\$400,000	\$400,000
Construction Sub-Total				\$4,392,875
General Conditions + O&P			17.00%	\$746,789
Contingency			10.00%	\$513,966
Project Costs - 12%			12.00%	\$678,436
HES - Option 2 Total				\$6,332,066

Hindley Elementary School - Infrastruct./BCS				Priority 1 + 2
Architectural/Structural	1	EA		\$1,477,144
Mechanical	1	EA		\$1,407,153
Plumbing	1	EA		\$87,947
Electrical	1	EA		\$139,250
HES - INFRASTRUCTURE/BCS Total				\$3,111,494

Hindley Elementary School - Infrastruct./BCS (Priorities 1 - 4)	\$6,064,839
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* - Construction unit costs based on 2017 public vote and bidding construction commencing 2018. The school district should build in 4 - 5% escalation per year if the schedule is extended.

OPTION 1 - RENOVATIONS AND A TWO CLASSROOM ADDITION:

- 1) CREATE A SECURED ENTRANCE AT THE WEST END OF THE BUILDING INCLUDING ADDING A SECURITY VESTIBULE AND RENOVATING ONE KINDERGARTEN CLASSROOM INTO THE MAIN OFFICE. CONVERT THE MAIN OFFICE/PRINCIPAL'S OFFICE INTO A KINDERGARTEN CLASSROOM.
- 2) DEMOLISH THE MODULE BUILDINGS (5) AND RELOCATE EXISTING PROGRAMS INTO RENOVATED AND NEW CONSTRUCTION SPACE. THE TWO-CLASSROOM ADDITION PROVIDES NO NET GAIN IN GENERAL CLASSROOMS.
- 3) RENOVATE LIBRARY INTO A 21ST CENTURY LEARNING COMMONS.

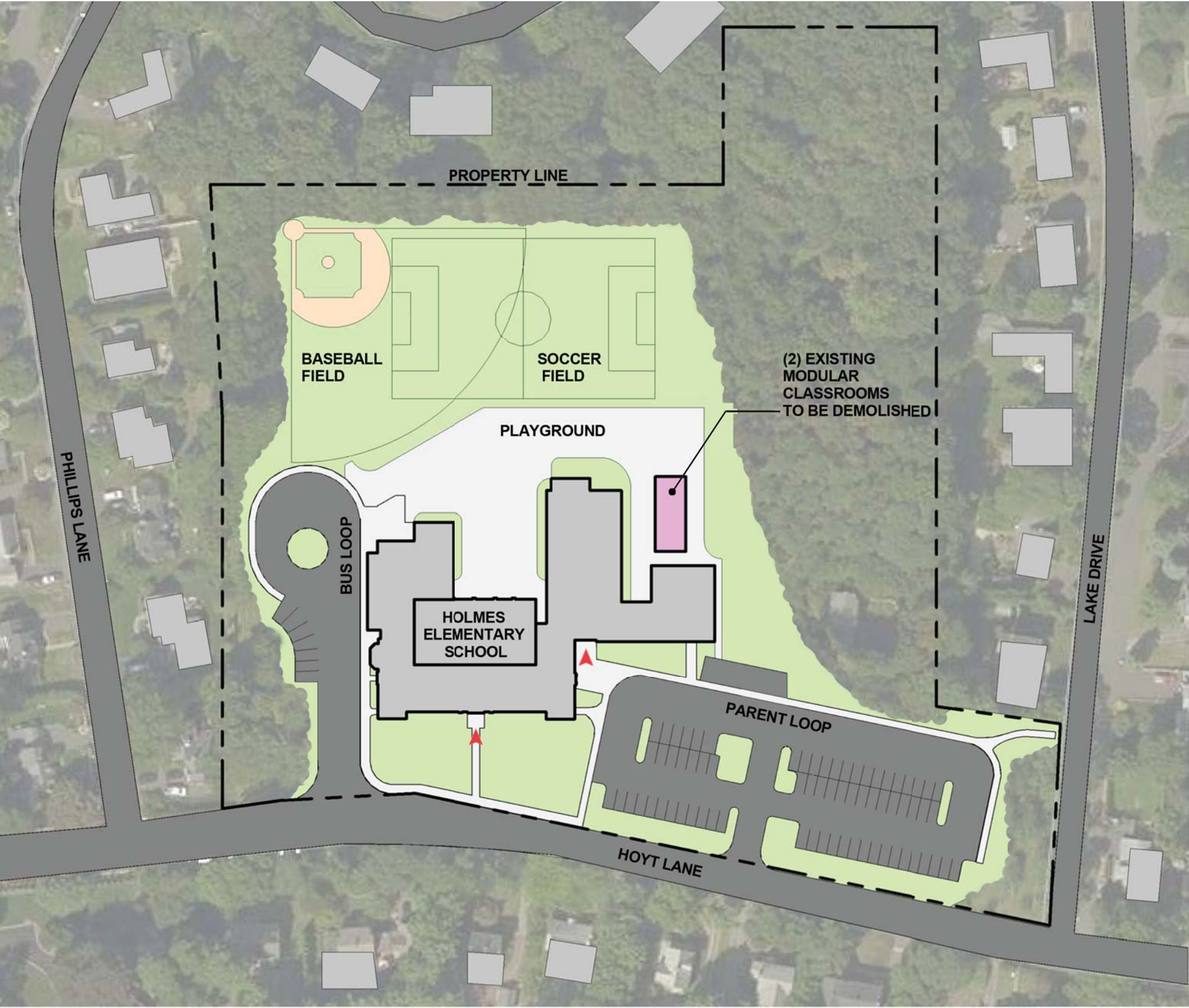
OPTION 2 - RENOVATIONS AND A FOUR CLASSROOM ADDITION:

- 1) CREATE SECURE ENTRANCES AT THE WEST END AND MIDDLE OF THE BUILDING. MAIN / PRINCIPAL'S OFFICE TO REMAIN IN EXISTING LOCATION.
- 2) DEMOLISH THE MODULE BUILDINGS (5) AND RELOCATE EXISTING PROGRAMS INTO RENOVATED AND NEW CONSTRUCTION SPACE. THE FOUR-CLASSROOM ADDITION PROVIDES A NET GAIN OF 2 GENERAL CLASSROOMS.
- 3) DEMOLISH LIBRARY AND CONSTRUCT NEW 21ST CENTURY LEARNING CENTER OPPOSITE MAIN ENTRANCE.

PRIMARY INFRASTRUCTURE IMPROVEMENTS:

- 1) WINDOW REPLACEMENT\$820K
- 2) INTERIOR DOOR REPLACEMENT\$70K
- 3) ROOF REPLACEMENT\$550K
- 4) HVAC DIGITAL CONTROLS\$220K
- 5) PLUMBING - BACKFLOW PREVENTER & SUMP PUMP\$90K
- 6) ELECTRICAL - EMERGENCY LIGHTING & PA SYSTEM\$140K

K-5 HOLMES ELEMENTARY SCHOOL



Site Plan
1" = 100'-0"

CAMPUS STATISTICS	CURRENT	PLANNED
BUILDING AREA (GROSS)	63,266 SF	66,250 SF
YEAR BUILT / LAST RENOVATION	1931 / 1996	-
SITE AREA	8.0 ACRES	8.0
GRADE CONFIGURATION	K – 5	K - 5
# OF GENERAL CLASSROOMS	23	23 or 25
MODULAR CLASSROOMS (TO BE REMOVED)	2	0
FUNCTIONAL CAPACITY (CURRENT / PROPOSED W/O MODULARS)	506	506/550
CURRENT ENROLLMENT	472	-
BUS QUEUING	400 Linear Feet	N/C
PARENT QUEUING	600 Linear Feet	N/C
PARKING SPACES (PROVIDED / PLANNED)	77	95+
PLAYING FIELDS	1 MULTI-PURPOSE	1

Legend

- Existing building
- Modular classrooms to be removed



Campus Aerial



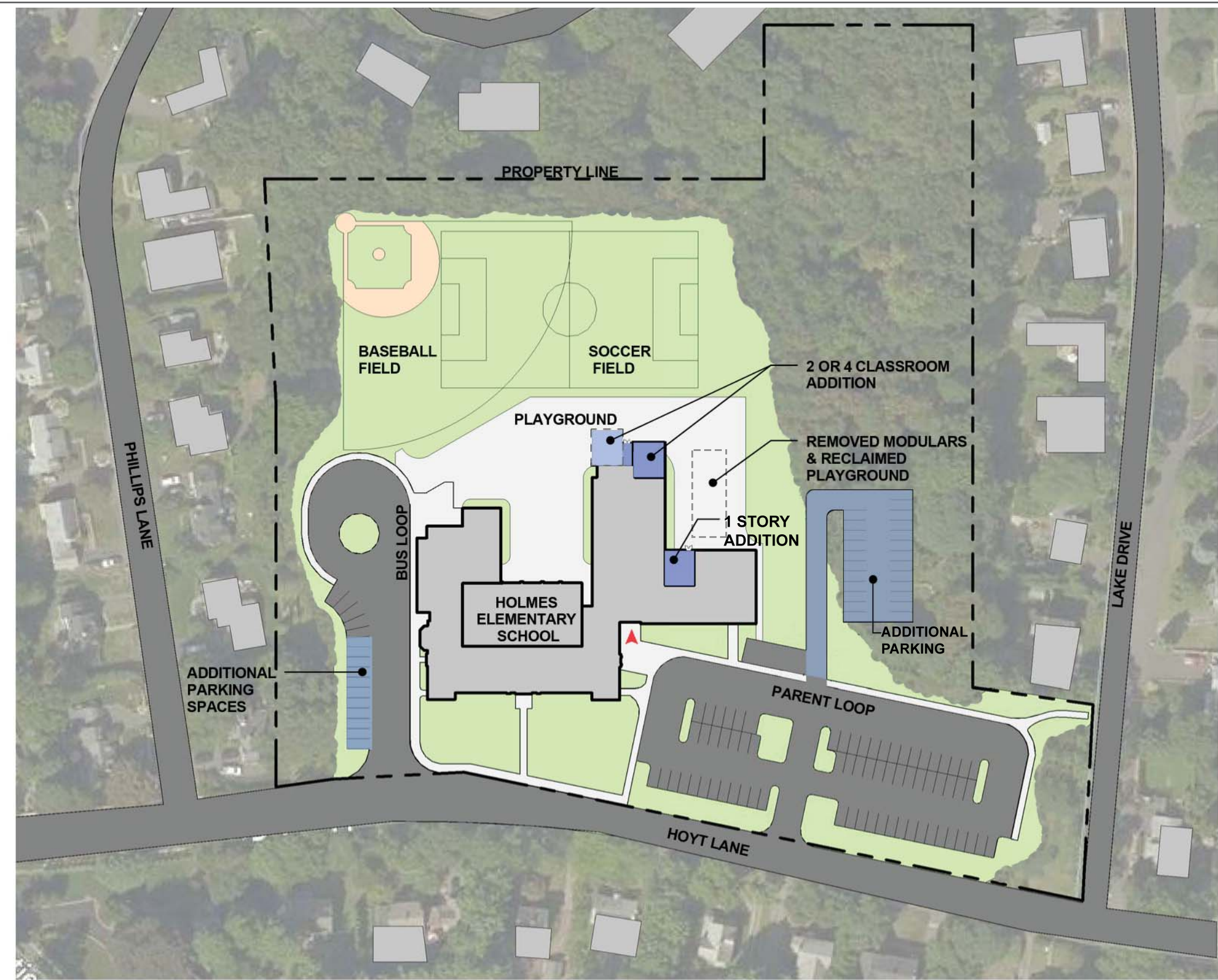
CAMPUS MASTER PLAN SUMMARY

The Holmes Elementary School was originally constructed in 1931 and last renovated twenty years ago in 1996. During the last renovation, an additional entrance was created allowing for a direct, accessible entry from the parking lot/ drop-off area. A security vestibule adjacent to the main office should be added as part of a renovation project. The two modular classrooms should be removed and the music program moved into the main building so that all educational spaces are internally accessible. A 2-4 classroom addition should be added to maintain classroom count (2 rooms) or increased general classrooms on this campus.



BUILDING PROGRAM	# OF ROOMS	SIZE (AVG)
GENERAL CLASSROOMS (3 OR 4 ROOMS PER GRADE)	23	800 sf
SPECIAL EDUCATION	1	600 sf
ART / MUSIC / PROJECT	8	612 sf
LIBRARY	1	2,611 sf
GYMNASIUM	1	2,679 sf
CAFETERIA	1	2,198 sf

K - 5 HOLMES ELEMENTARY SCHOOL



- Legend**
- Existing
 - Proposed

SITE PLAN ALTERATIONS

Site Plan Option 1
1" = 100'-0"



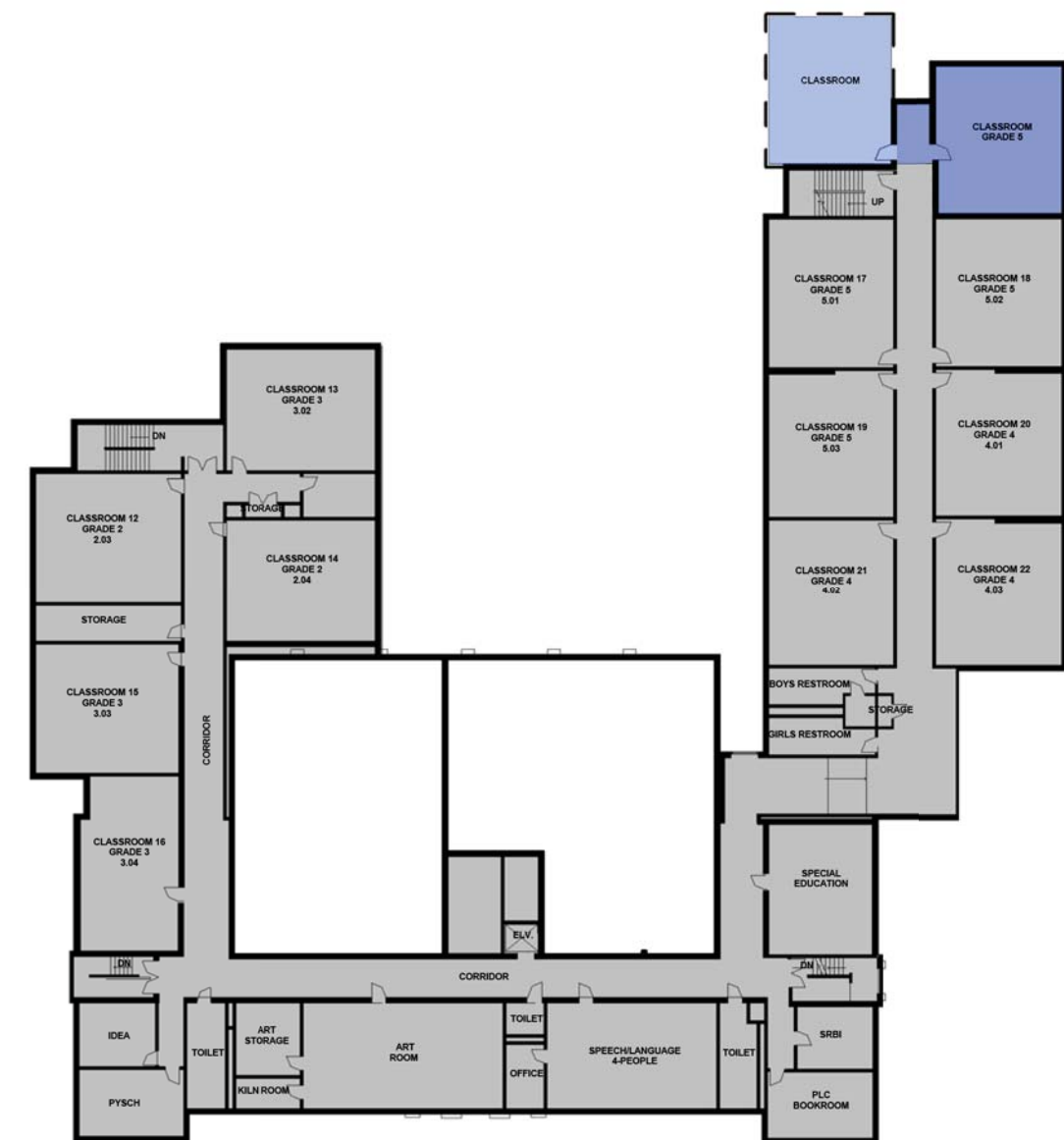
FIRST FLOOR OPTION (1 & 2)
1" = 40'-0"

Features include: 1) Renovate lobby/create security vestibule;
2) Demolish modular buildings and relocate music program into main building 3) Construct a 2-4 classroom addition. (2 classrooms maintain general classroom count and 4 classroom addition creates 2 classroom net gain)



BASEMENT OPTION (1 & 2)

BUILDING ALTERATIONS



SECOND FLOOR OPTION (1 & 2)
1" = 40'-0"

Legend

- Existing building
- Renovated
- New Construction

ADDITIONS AND ALTERATIONS TO HOLMES ES

CAMPUS - Description	Quantity	Unit	Unit cost ×	Extended Cost
Holmes Elementary School - Option 1 (23 General Classrooms)				
Two-Classroom Addition	2,090	SF	\$425	\$888,250
Renovated office / classroom area	980	SF	\$175	\$171,500
Renovate Library	4,980	SF	\$175	\$871,500
Site work - Paving+	9,800	SF	\$25	\$245,000
Site work - Remove Modulares	1	EA	\$200,000	\$200,000
Construction Sub-Total				\$2,376,250
General Conditions + O&P			17.00%	\$403,963
Contingency			10.00%	\$278,021
Project Costs - 12%			12.00%	\$366,988
HES - Option 1 Total				\$3,425,222
Holmes Elementary School - Option 2 (25 General Classrooms - Net gain of 2)				
Four-Classroom Addition	3,890	SF	\$425	\$1,653,250
Music Room Addition	980	SF	\$425	\$416,500
Renovated library / classroom areas	4,980	SF	\$175	\$871,500
Site work - Paving+	9,800	SF	\$25	\$245,000
Site work - Remove Modulares	1	EA	\$200,000	\$200,000
Construction Sub-Total				\$3,386,250
General Conditions + O&P			17.00%	\$575,663
Contingency			10.00%	\$396,191
Project Costs - 12%			12.00%	\$522,972
HES - Option 2 Total				\$4,881,076
Holmes Elementary School - Infrastruct./BCS				Priority 1 + 2
Architectural/Structural	1	EA		\$1,048,182
Mechanical	1	EA		\$1,260,575
Plumbing	1	EA		\$43,974
Electrical	1	EA		\$153,907
HES - INFRASTRUCTURE/BCS Total				\$2,506,638
Holmes Elementary School - Infrastruct./BCS (Priorities 1 - 4)				\$5,447,699

× - Construction unit costs based on 2017 public vote and bidding construction commencing 2018. The school district should build in 4 - 5% escalation per year if the schedule is extended.

OPTION 1 - RENOVATIONS AND A TWO CLASSROOM ADDITION:

- 1) CREATE A SECURED ENTRANCE ADJACENT TO THE MAIN OFFICE.
- 2) DEMOLISH THE MODULE BUILDINGS (2) AND RELOCATE EXISTING MUSIC PROGRAM INTO RENOVATED SPACE.
- 3) CONSTRUCT A 2-STORY/TWO-CLASSROOM ADDITION. THE ADDITION PROVIDES NO NET GAIN IN GENERAL CLASSROOMS.
- 4) RENOVATE LIBRARY INTO A 21ST CENTURY LEARNING COMMONS.

OPTION 2 - RENOVATIONS AND A FOUR CLASSROOM ADDITION:

- 1) CREATE A SECURED ENTRANCE ADJACENT TO THE MAIN OFFICE.
- 2) DEMOLISH THE MODULE BUILDINGS (2) AND RELOCATE EXISTING MUSIC PROGRAM INTO RENOVATED SPACE.
- 3) CONSTRUCT A 2-STORY/FOUR-CLASSROOM ADDITION. THE ADDITION PROVIDES A NET GAIN OF 2 GENERAL CLASSROOMS.
- 4) RENOVATE LIBRARY INTO A 21ST CENTURY LEARNING COMMONS.

PRIMARY INFRASTRUCTURE IMPROVEMENTS:

- 1) ROOF REPLACEMENT / GYM SKYLIGHT REPLACEMENT\$1,000K
- 2) HVAC UNIT VENTILATOR REPLACEMENT / OFFICE VENTILATION\$1,260K
- 3) PLUMBING - BACKFLOW PREVENTER\$45K
- 4) ELECTRICAL - EMERGENCY LIGHTING & PA SYSTEM\$150K



Legend

- Existing building
- Modular classrooms to be removed

Site Plan
1" = 100'-0"

CAMPUS STATISTICS	CURRENT	PLANNED
BUILDING AREA (GROSS)	58,344 SF	+/- 87,500 SF
YEAR BUILT / LAST RENOVATION	1966 / 1996	-
SITE AREA	10.0 ACRES	10.0
GRADE CONFIGURATION	ELP, K – 5	ELP, K - 5
# OF GENERAL CLASSROOMS	24	27/24+10 ELP
MODULAR CLASSROOMS (TO BE REMOVED)	4	0
FUNCTIONAL CAPACITY (CURRENT / PROPOSED W/O MODULARS)	528	528/594
CURRENT ENROLLMENT	451	-
BUS QUEUING	300 Linear Feet	500
PARENT QUEUING	300 Linear Feet	600
PARKING SPACES (PROVIDED / PLANNED)	91	115
PLAYING FIELDS	2 MULTI-PURPOSE	2



Campus Aerial



FIRST FLOOR
1" = 50'-0"

BUILDING PROGRAM	# OF ROOMS	SIZE (AVG)
GENERAL CLASSROOMS (3 OR 4 ROOMS PER GRADE)	22	825 sf
ELP	2	523 sf
ART / MUSIC / PROJECT	6	919 sf
LIBRARY	1	2,981 sf
GYMNASIUM	1	2,925 sf
CAFETERIA	1	2,025 sf

CAMPUS MASTER PLAN SUMMARY

The Ox Ridge Elementary School was originally constructed in 1966 and last renovated twenty years ago in 1996. Although, it represents the newest of the 'old' elementary schools, similar to the recent replacement of Tokeneke ES, Ox Ridge's original buildings were constructed during an age where energy efficiency and construction materials were lower priorities. Where buildings of the 1930's are worth renovating due to their structural integrity, similar structures from the 1950's and 60's are often more cost effective to replace once all renovation costs are factored including code upgrades for energy, accessibility, end of life system replacement, and hazardous materials abatement. During the last capital improvement project in the 90's, a new wing and main entrance was constructed allowing for direct accessible entry from the parking lot/drop-off area. This wing continues to be in good condition and should be maintained. This wing is planned to be repurposed for the District wide ELP Program - there are 8-10 educational spaces available plus a main office suite. There are two alternates to the balance of the building: 1) Renovate the buildings by replacing end of life materials and systems and construct a new classroom and media/ learning center on playing field at west end; and 2) Demolish original building and construct a new classroom building as well as shared educational/community use building for cafe, gym and theater.

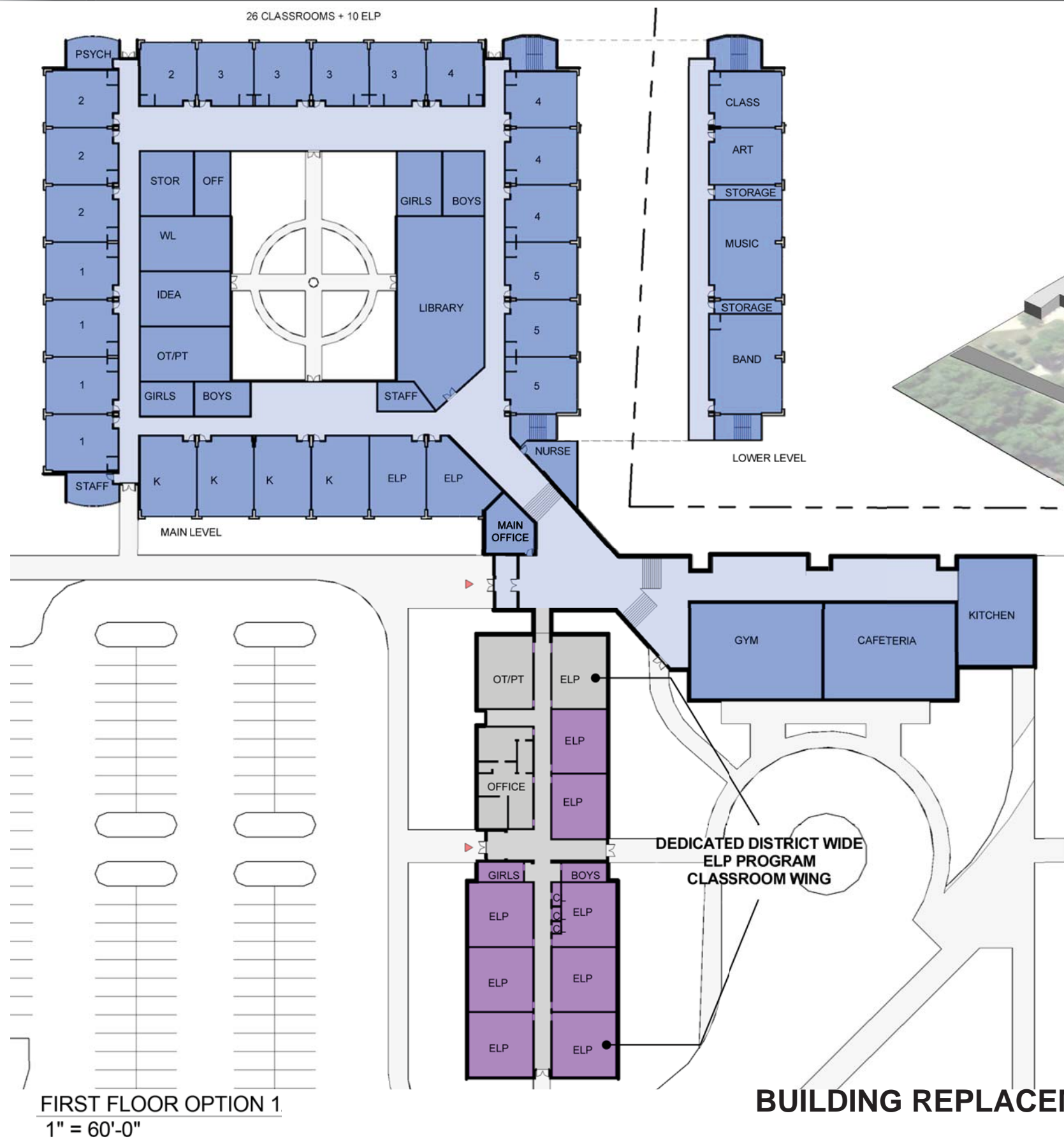


Legend

- Existing
- Proposed

Site Plan Option 1
1" = 100'-0"

SITE PLAN ALTERATIONS



1990 Wing - 10 ELP Classrooms
New Building - 25 General
Classrooms
(Creates net gain of up to 3 general
classrooms)

Legend

- Existing building
- Renovated
- New Construction



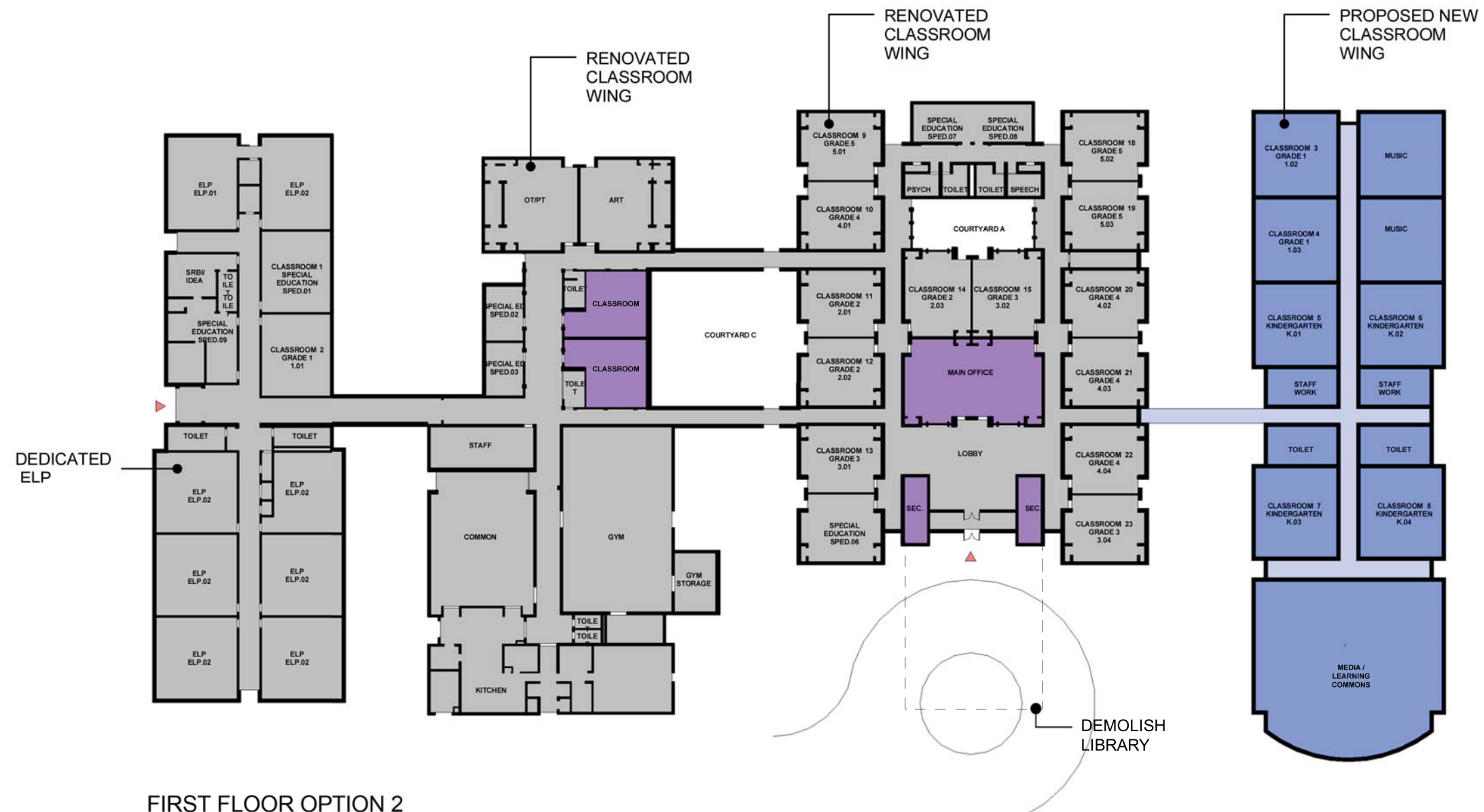
Legend

- Existing building
- Renovated
- New Construction

Site Plan Option 2
1" = 100'-0"

SITE PLAN ALTERATIONS

Features include: 1) Repurpose 1990 addition for dedicated ELP classroom wing (all ELP classrooms on Ox Ridge Campus); 2) Demolish library and create new secured lobby/main office for building; 3) Demolish modular buildings and construct 8 classroom and media/learning commons addition (maintains general classroom count)



FIRST FLOOR OPTION 2
1" = 50'-0"

BUILDING ALTERATIONS / ADDITION

Legend

- Existing building
- Renovated
- New Construction

ADDITIONS AND ALTERATIONS TO OX RIDGE ES

CAMPUS - Description	Quantity	Unit	Unit cost *	Extended Cost
Ox Ridge Elementary School - Option 1 (25 General Classrooms + 10 ELP)				
New Construction	75,000	SF	\$375	\$28,125,000
Renovated classroom area	8,830	SF	\$175	\$1,545,250
Site work - Paving + Building Demolition	435,600	SF	\$10	\$4,356,000
Site work - Remove Modulares	1	EA	\$200,000	\$200,000
Construction Sub-Total				\$34,226,250
General Conditions + O&P			17.00%	\$5,818,463
Contingency			5.00%	\$2,002,236
Project Costs - 12%			12.00%	\$5,045,634
ORES - Option 1 Total				\$47,092,582
Ox Ridge Elementary School - Option 2 (23 General Classrooms + 9 ELP)				
Eight-Classroom + Library Addition	18,900	SF	\$425	\$8,032,500
Music Room Addition	980	SF	\$425	\$416,500
Renovated library / classroom areas	4,980	SF	\$175	\$871,500
Site work - Paving+	9,800	SF	\$25	\$245,000
Site work - Remove Modulares	1	EA	\$200,000	\$200,000
Construction Sub-Total				\$9,765,500
General Conditions + O&P			17.00%	\$1,660,135
Contingency			10.00%	\$1,142,564
Project Costs - 12%			12.00%	\$1,508,184
ORES - Option 2 subtotal				\$14,076,382
Ox Ridge Elementary School - Infrastruct./BCS				Priority 1 + 2
General Renovations to 1966 Bldg	45000	SF	\$175	\$7,875,000
Architectural/Structural	1	EA		\$899,259
Mechanical	1	EA		\$3,114,792
Plumbing	1	EA		\$300,486
Electrical	1	EA		\$993,802
ORES - INFRASTRUCTURE/BCS Total				\$13,183,339
ORES - Option 2 Total				\$27,259,721

* - Construction unit costs based on 2017 public vote and bidding construction commencing 2018. The school district should build in 4 - 5% escalation per year if the schedule is extended.

OPTION 1 - NEW CONSTRUCTION + RENOVATION OF 1990 WING:

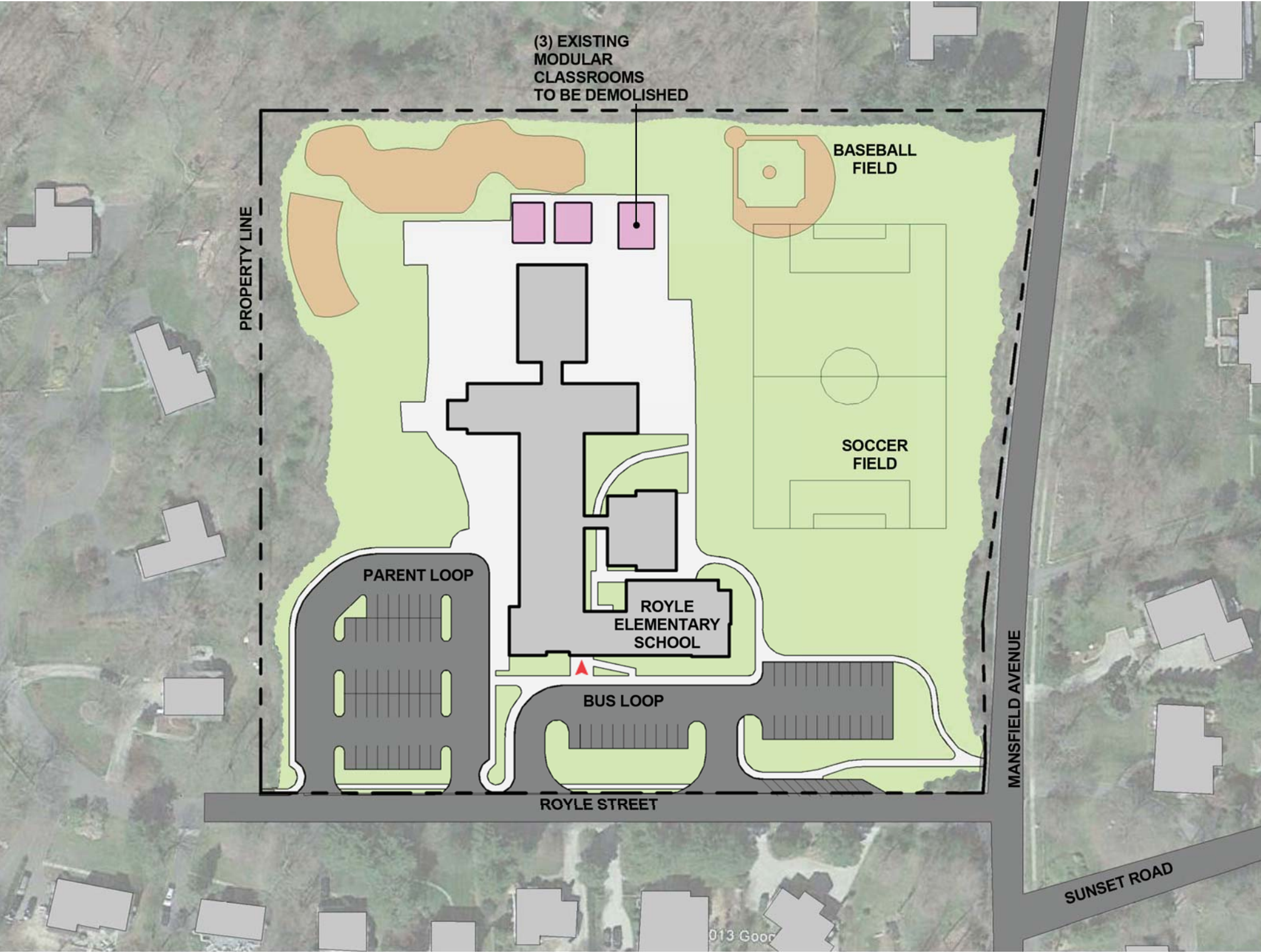
- 1) RENOVATE THE 1990 WING INTO THE DISTRICT-WIDE ELP PROGRAM BUILDING.
- 2) DEMOLISH THE MODULE BUILDINGS (4) AND RELOCATE EXISTING PROGRAMS INTO NEW CONSTRUCTION SPACE.
- 3) CONSTRUCT A NEW CLASSROOM BUILDING ON THE FRONT PLAYING FIELD SITE AND A COMMON (GYM/AUDITORIUM/CAFE) SPACE BUILDING WITH DEDICATED SEPARATE ENTRY.
- 4) CONSTRUCT PLAYING FIELDS & PLAYGROUNDS AT WESTERN SECTION OF CAMPUS.

OPTION 2 - RENOVATIONS AND AN 8 CLASSROOM ADDITION:

- 1) RENOVATE THE 1990 WING INTO THE DISTRICT-WIDE ELP PROGRAM BUILDING.
- 2) DEMOLISH THE MODULE BUILDINGS (4) AND RELOCATE EXISTING PROGRAMS INTO NEW CONSTRUCTION SPACE.
- 3) CONSTRUCT A NEW CLASSROOM + LIBRARY/LEARNING COMMONS BUILDING ON THE REAR PLAYING FIELD SITE.
- 4) RELOCATE MAIN OFFICE + DROP-OFF AREA TO BE MORE CENTRAL. PROVIDE SECURE LOBBY.

PRIMARY INFRASTRUCTURE IMPROVEMENTS:

- | | |
|---|----------|
| 1) WINDOW REPLACEMENT | \$880K |
| 2) HVAC UNIT VENTILATOR REPLACEMENT | \$1,140K |
| 3) HVAC REPLACE VENTILATION SYSTEM | \$990K |
| 4) HVAC REPLACE EXHAUST FANS | \$2200K |
| 5) HVAC REPLACE STEAM W/HOT WATER PLANT | \$730K |
| 6) PLUMBING - BACKFLOW PREVENTER | \$45K |
| 7) PLUMBING - REPLACE TOILET FIXTURES | \$260K |
| 8) ELECTRICAL - EMERGENCY LIGHTING, CLOCK & PA SYSTEM | \$230K |
| 9) ELECTRICAL - REPLACE MAIN ELECTRIC SERVICE /PANELBOARDS | \$350K |
| 10) ELECTRICAL - ADD OCCUPANCY SENSORS AND ADDITIONAL OUTLETS | \$180K |
| 11) ELECTRICAL - CAFETORIUM & CORRIDOR LIGHTING | \$230K |



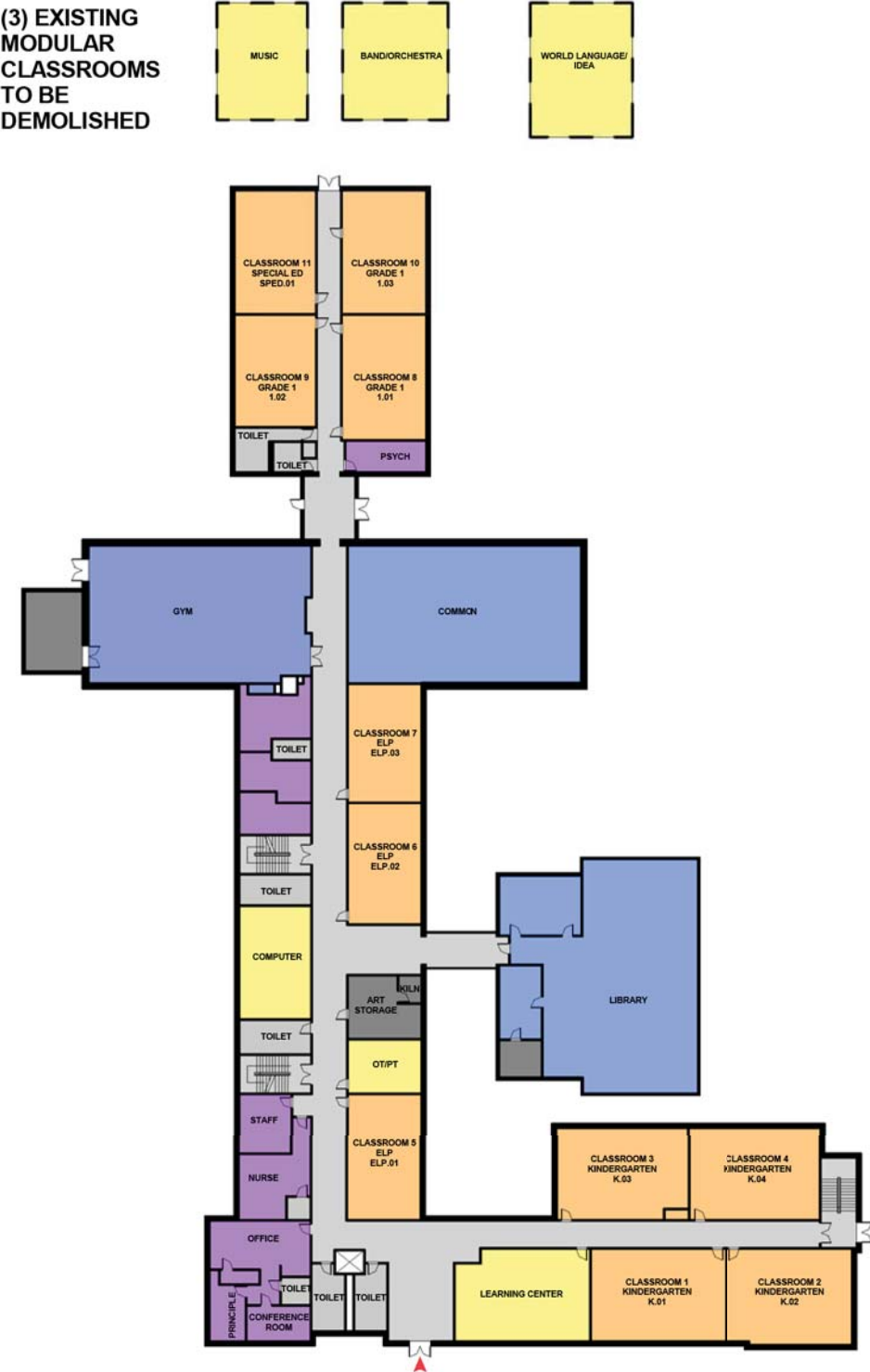
- Legend**
- Existing building
 - Modular classroom to be removed

Site Plan
1" = 100'-0"

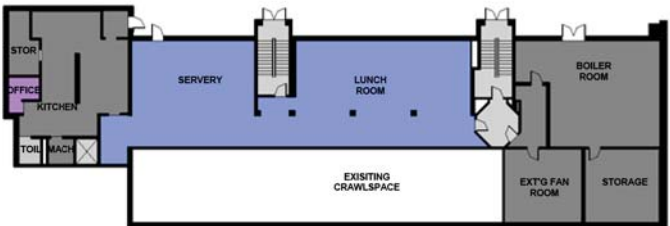
CAMPUS STATISTICS	CURRENT	PLANNED
BUILDING AREA (GROSS)	57,450 SF	-
YEAR BUILT / LAST RENOVATION	1948 / 1996	-
SITE AREA	8.0 ACRES	8.0
GRADE CONFIGURATION	ELP, K - 5	K - 5
# OF GENERAL CLASSROOMS	20	23
MODULAR CLASSROOMS (TO BE REMOVED)	3	0
FUNCTIONAL CAPACITY (CURRENT / PROPOSED W/O MODULARS)	440	506
CURRENT ENROLLMENT	414	-
BUS QUEUING	300 Linear Feet	400
PARENT QUEUING	300 Linear Feet	400
PARKING SPACES (PROVIDED / PLANNED)	78	95
PLAYING FIELDS	1 MULTI-PURPOSE	1



Campus Aerial



FIRST FLOOR
1" = 50'-0"



BASEMENT
1" = 50'-0"



SECOND FLOOR
1" = 50'-0"

BUILDING PROGRAM

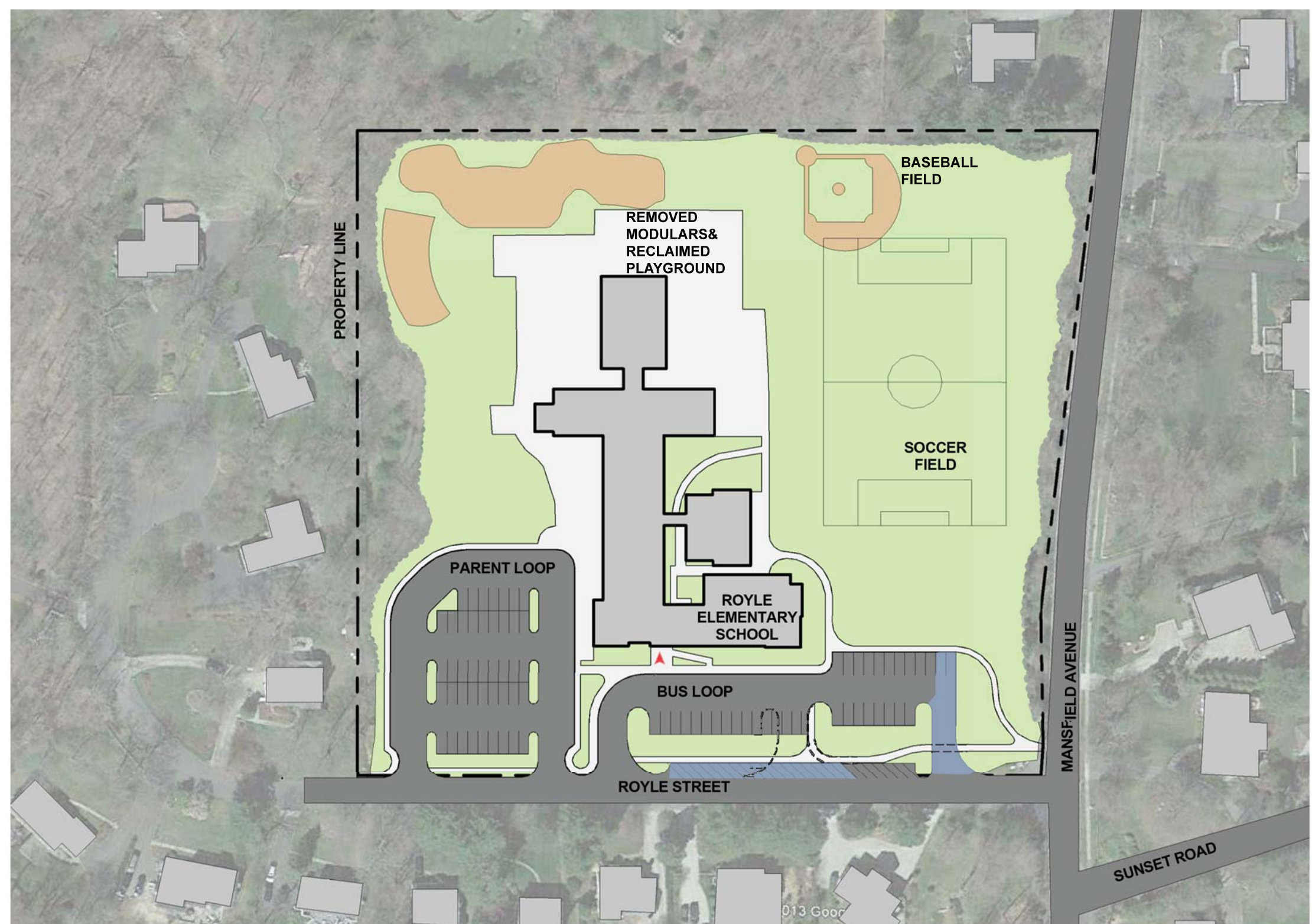
	# OF ROOMS	SIZE (AVG)
GENERAL CLASSROOMS (3 OR 4 ROOMS PER GRADE)	23	698 sf
ELP	3	709 sf
ART / MUSIC / PROJECT	11	616 sf
LIBRARY	1	3,255 sf
GYMNASIUM	1	2,327 sf
CAFETERIA	1	1,500 sf

CAMPUS MASTER PLAN SUMMARY

The Royle Elementary School was originally constructed in 1948 and last renovated twenty years ago in 1996. During the last capital improvement project, a new classroom wing was constructed and the main entrance was shifted to face Royle Street. The current entrance does not include a security vestibule which should be addressed in capital improvement project. The three modular classrooms should be removed, so that all classrooms are accessed from one point of entry. If the ELP program is consolidated on another campus, the full K-5 program can be housed within the main building. The average classroom size at Royle is below the other elementary schools. Consideration of renovating / enlarging classrooms in the original wing as well as relocating the library and cafeteria into a new addition should be considered.

Legend

- Classroom
- Special Subjects
- Administration
- Public
- Service

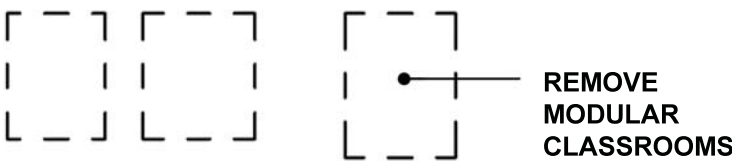


Legend

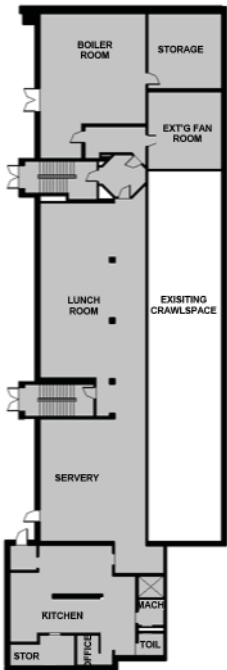
- Existing
- Proposed

SITE PLAN ALTERATIONS

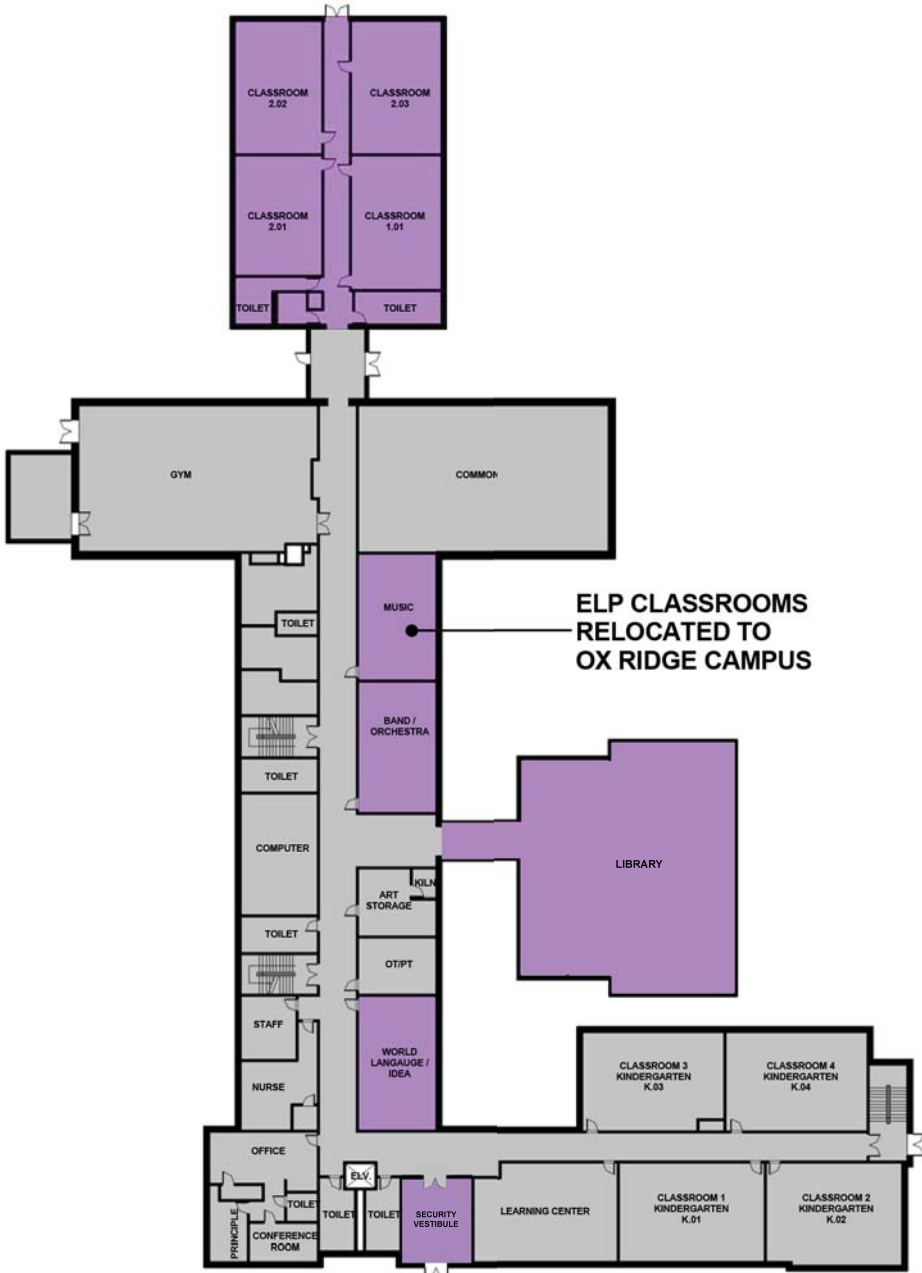
Site Plan Option 1
1" = 100'-0"



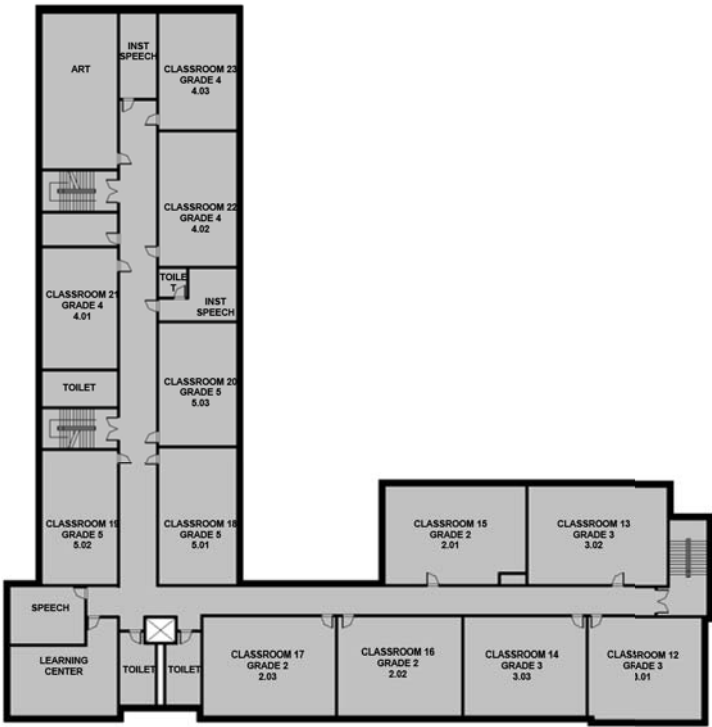
Features include: 1) Removing modular classroom buildings and relocating programs within main building; 2) Relocating the ELP Program to the Ox Ridge campus. 3) Renovate 1st grade classroom wing.



BASEMENT OPTION 1
1" = 50'-0"



FIRST FLOOR OPTION 1
1" = 50'-0"

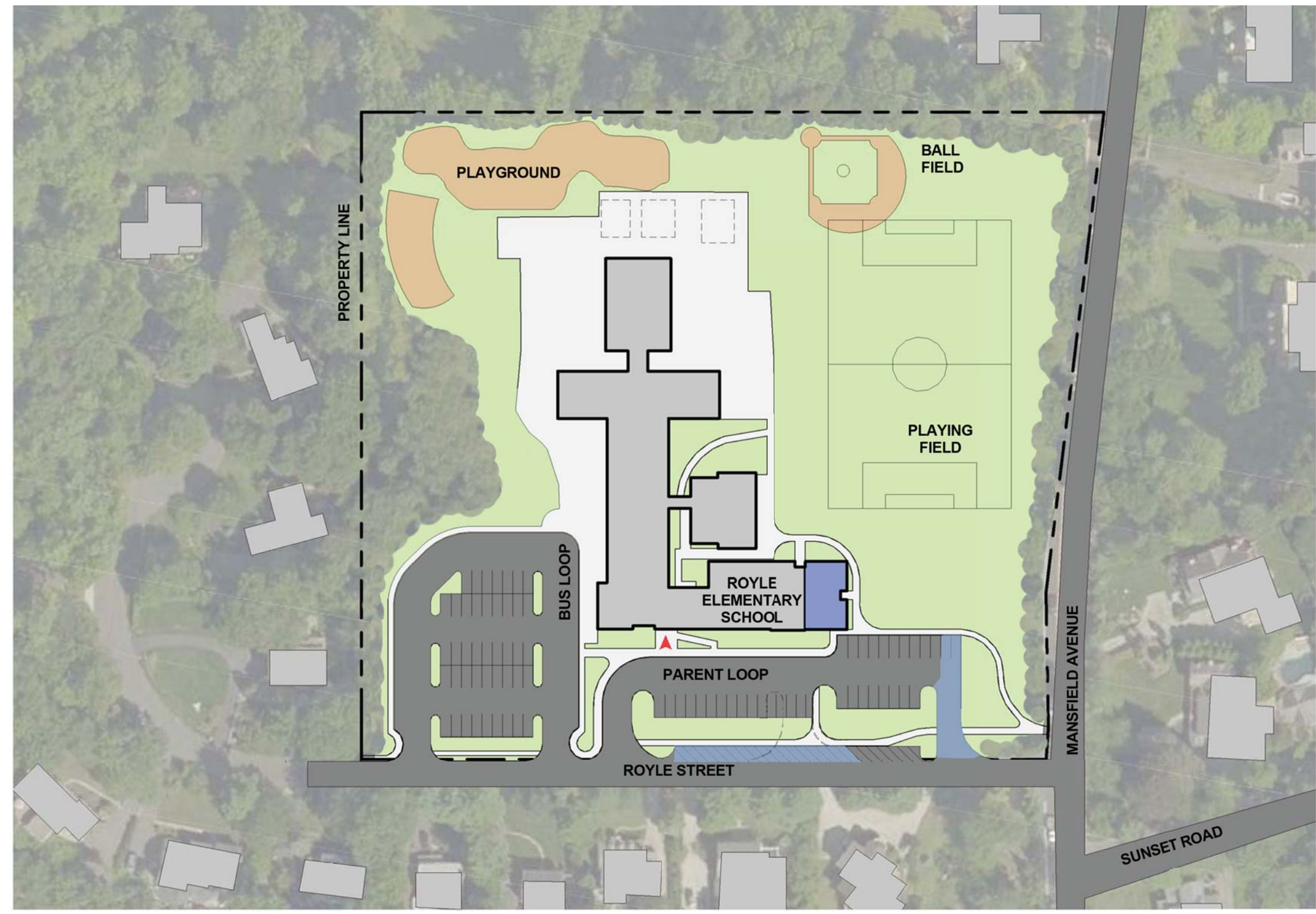


SECOND FLOOR OPTION 1
1" = 50'-0"

Legend

- Existing building
- Renovated

BUILDING ALTERATIONS

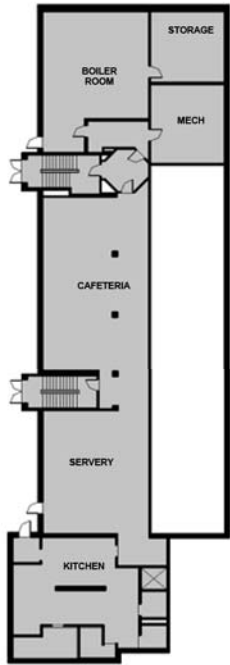


- Legend**
- Existing
 - Proposed

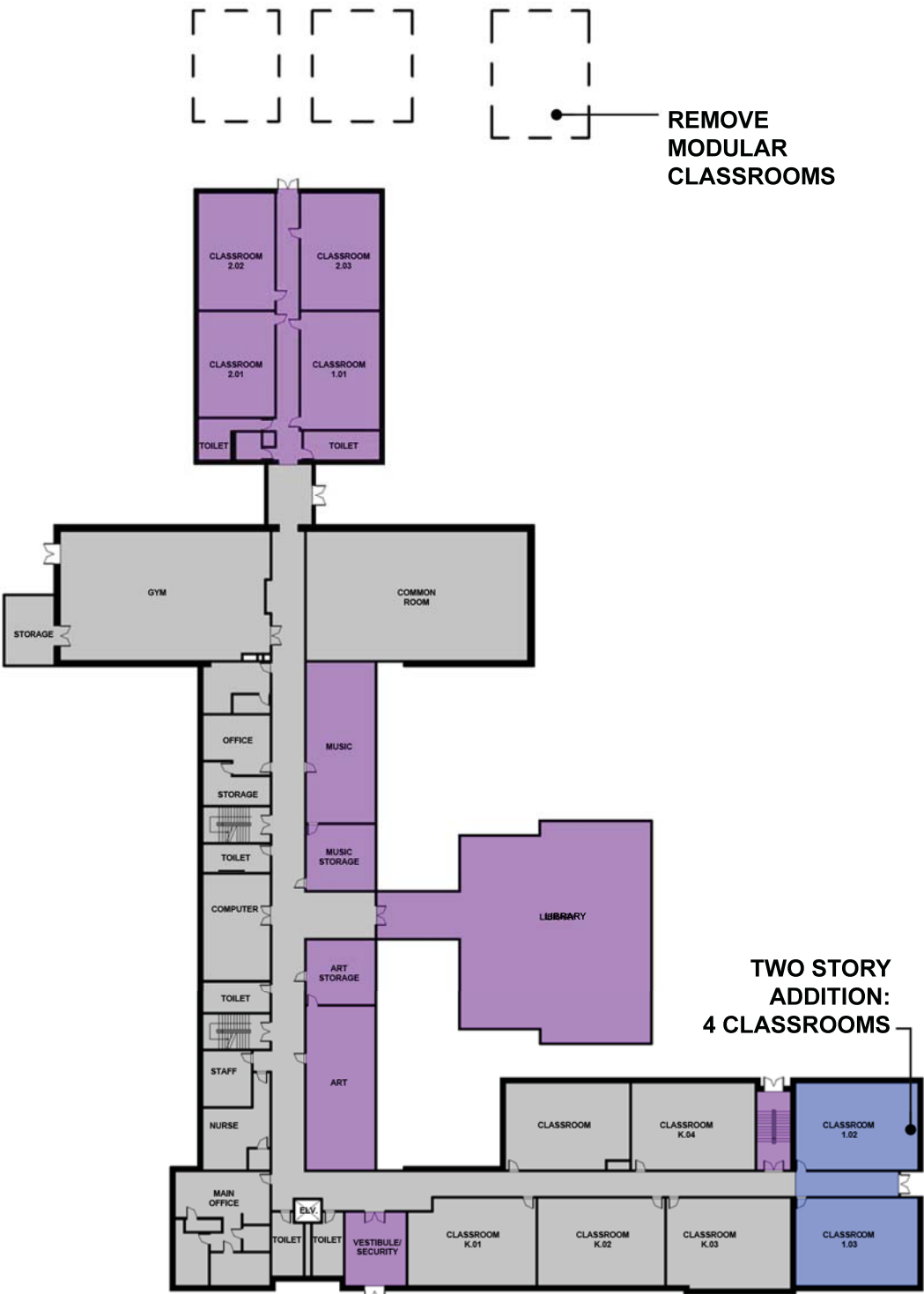
Site Plan Option 2
1" = 100'-0"

SITE PLAN ALTERATIONS

Brief Summary:
This option explores constructing a two story addition to increase the cafeteria seating area and addresses classroom size by adding a classroom wing that provides "Right-Sized" rooms to replace the undersized classrooms that exist within the original section of the school.



BASEMENT OPTION 2
1" = 50'-0"



FIRST FLOOR OPTION 2
1" = 50'-0"



SECOND FLOOR OPTION 2
1" = 50'-0"

- Legend
- Existing building
 - Renovated
 - New Construction

BUILDING ALTERATIONS

ADDITIONS AND ALTERATIONS TO ROYLE ES

CAMPUS - Description	Quantity	Unit	Unit cost *	Extended Cost
Royle Elementary School - Option 1 (23 General Classrooms)				
Renovate ELP Classroom + Library areas	5,600	SF	\$175	\$980,000
Renovate 1st grade classroom wing	4,350	SF	\$175	\$761,250
Site work - Paving+	8,000	SF	\$25	\$200,000
Site work - Remove Modulares	1	EA	\$200,000	\$200,000
Construction Sub-Total				\$2,141,250
General Conditions + O&P			17.00%	\$364,013
Contingency			10.00%	\$250,526
Project Costs - 12%			12.00%	\$330,695
RES - Option 1 Total				\$3,086,483
Royle Elementary School - Option 2 (23 General Classrooms w/ Addition)				
Four-Classroom Addition	4,250	SF	\$425	\$1,806,250
Library/Learning Commons Renovation	3,550	SF	\$175	\$621,250
Renovated ELP classroom areas	6,600	SF	\$175	\$1,155,000
Renovate 1st grade classroom wing	4,350	SF	\$175	\$761,250
Site work - Paving+	8,000	SF	\$25	\$200,000
Site work - Remove Modulares	1	EA	\$200,000	\$200,000
Construction Sub-Total				\$4,743,750
General Conditions + O&P			17.00%	\$806,438
Contingency			10.00%	\$555,019
Project Costs - 12%			12.00%	\$732,625
RES - Option 2 Total				\$6,837,831
Royle Elementary School - Infrastruct./BCS				Priority 1 + 2
Architectural/Structural	1	EA		\$719,480
Mechanical	1	EA		\$1,099,338
Plumbing	1	EA		\$417,749
Electrical	1	EA		\$219,868
RES - INFRASTRUCTURE/BCS Total				\$2,456,435
Royle Elementary School - Infrastruct./BCS (Priorities 1 - 4)				\$6,435,008

OPTION 1 - RENOVATIONS AND REMOVAL OF MODULAR CLASSROOMS:

- 1) CREATE A SECURED VESTIBULE AT THE MAIN ENTRANCE TO THE BUILDING.
- 2) DEMOLISH THE MODULE BUILDINGS (3) AND RELOCATE EXISTING PROGRAMS INTO RENOVATED SPACE.
- 3) RENOVATE LIBRARY INTO A 21ST CENTURY LEARNING COMMONS.
- 4) RENOVATE 1ST GRADE CLASSROOM WING

OPTION 2 - RENOVATIONS AND A FOUR CLASSROOM ADDITION:

- 1) CREATE A SECURED VESTIBULE AT THE MAIN ENTRANCE TO THE BUILDING.
- 2) DEMOLISH THE MODULE BUILDINGS (3) AND RELOCATE EXISTING PROGRAMS INTO RENOVATED SPACE.
- 3) CONSTRUCT A 2-STORY FOUR CLASSROOM ADDITION AND RENOVATE UNDERSIZED EXISTING CLASSROOMS.
- 4) RENOVATE LIBRARY INTO A 21ST CENTURY LEARNING COMMONS.
- 5) RENOVATE 1ST GRADE CLASSROOM WING

PRIMARY INFRASTRUCTURE IMPROVEMENTS:

- 1) LIBRARY WINDOW REPLACEMENT\$330K
- 2) EXTERIOR MASONRY REPAIR\$390K
- 3) HVAC POWERED VENTILATION IN 1950 BLDG\$880K
- 4) PLUMBING - BACKFLOW PREVENTER & SUMP PUMP\$160K
- 5) PLUMBING - REPLACE TOILET ROOM FIXTURES\$260K
- 6) ELECTRICAL - EMERGENCY LIGHTING & PA SYSTEM\$120K
- 7) ELECTRICAL - REPLACE CAFETERIA AND CORRIDOR LIGHTING\$100K

* - Construction unit costs based on 2017 public vote and bidding construction commencing 2018. The school district should build in 4 - 5% escalation per year if the schedule is extended.

K-5 TOKENEKE ELEMENTARY SCHOOL



CAMPUS STATISTICS	CURRENT	PLANNED
BUILDING AREA (GROSS)	66,714 SF	
YEAR BUILT	2008	-
SITE AREA	12.0 ACRES	12.0
GRADE CONFIGURATION	ELP, K - 5	K - 5
#OF GENERAL CLASSROOMS	19-3 ELP	23
MODULAR CLASSROOMS (TO BE REMOVED)	0	0
FUNCTIONAL CAPACITY (CURRENT / PROPOSED W/O MODULARS)	484	506
CURRENT ENROLLMENT	475	-
BUS QUEUING	400 Linear Feet	400
PARENT QUEUING	500 Linear Feet	500
PARKING SPACES (PROVIDED / PLANNED)	77	77
PLAYING FIELDS	1-2	1-2 MULTI-PURPOSE

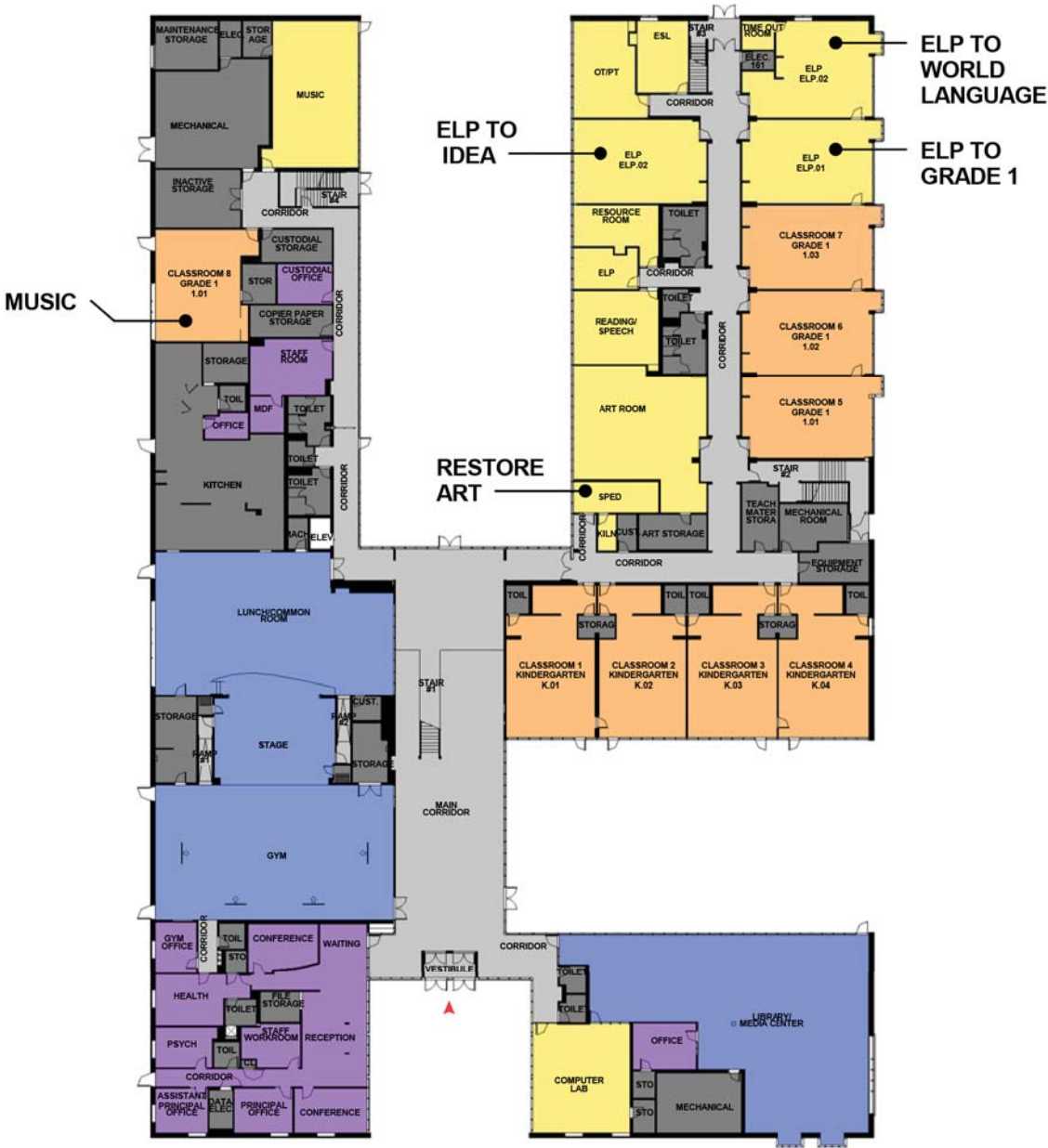
Legend

Existing building

Site Plan
1" = 100'-0"



Campus Aerial



FIRST FLOOR
1" = 50'-0"

Features include: 1) Relocating ELP Program to the Ox Ridge campus;
2) Restoring special subject spaces to original design layout.



SECOND FLOOR
1" = 50'-0"

BUILDING PROGRAM	# OF ROOMS	SIZE (AVG)
GENERAL CLASSROOMS (3 OR 4 ROOMS PER GRADE)	22	868 sf
SPECIAL EDUCATION / ELP	6	709 sf
ART / MUSIC / PROJECT	7	685 sf
LIBRARY	1	3,289 sf
GYMNASIUM	1	2,517 sf
CAFETERIA	1	2,370 sf

CAMPUS MASTER PLAN SUMMARY

The Tokeneke Elementary School was a replacement school project in 2008. The building's functional program was designed to match the other four elementary school buildings in number and size of classrooms and other educational spaces. If the 3 ELP program classrooms are relocated onto another campus, the full K-5 program can be housed within the main building without adding space.

Legend

- Classroom
- Special Subjects
- Administration
- Public
- Service



Legend

- Existing
- Proposed

Middlesex Middle School was originally constructed in 1937 and last renovated and significantly expanded in 2000. There are two primary focuses:

- 1) Additional education spaces
- 2) Vehicular (car) circulation during peak hours. Along with a classroom addition concept shown above, The Milone and Mac Broom report (2014) describe and depict options for additions. Regarding car congestion, a traffic engineer should be retained to review existing conditions and options prior to final plan determination.

SITE PLAN OPTION 1
1" = 160'-0"

SITE PLAN ALTERATIONS

CAMPUS STATISTICS	CURRENT	PLANNED
BUILDING AREA	193,200 SF	tbd
YEAR BUILT / LAST RENOVATION	1937/2000	-
SITE AREA	15 acres	-
GRADE CONFIGURATION	6-8	6-8
# OF GENERAL CLASSROOMS	53	60
MODULAR CLASSROOMS (TO BE REMOVED)	0	0
FUNCTIONAL CAPACITY (CURRENT / PROPOSED W/O MODULARS)	-	-
CURRENT ENROLLMENT	1,133	-
BUS QUEUING	400 Linear Feet	-
PARENT QUEUING	600 Linear Feet	-
PARKING SPACES (PROVIDED / PLANNED)	150	150
PLAYING FIELDS	1 MULTI-PURPOSE	1



Campus Aerial

ADDITIONS AND ALTERATIONS TO MIDDLESEX MS

CAMPUS - Description	Quantity	Unit	Unit cost ✕	Extended Cost
Middlesex Middle School - Option 1 (SITEWORK ONLY)				
Site work - Paving+	20,000	SF	\$25	\$500,000
Construction Sub-Total				\$500,000
General Conditions + O&P			17.00%	\$85,000
Contingency			10.00%	\$58,500
Project Costs - 12%			12.00%	\$77,220
MMS - Option 1 Total				\$720,720
Middlesex Middle School - Option 2 (7 Classrooms Addition + Sitework)				
Seven-Classroom Addition	9,670	SF	\$400	\$3,868,000
Renovated classroom areas	2,500	SF	\$175	\$437,500
Site work - Paving+	20,000	SF	\$25	\$500,000
Construction Sub-Total				\$4,805,500
General Conditions + O&P			17.00%	\$816,935
Contingency			10.00%	\$562,244
Project Costs - 12%			12.00%	\$742,161
MMS - Option 2 Total				\$6,926,840

Middlesex Middle School - Infrastruct./BCS				Priority 1 + 2
Architectural/Structural	1	EA		\$80,911
Mechanical	1	EA		\$73,289
Plumbing	1	EA		\$139,250
Electrical	1	EA		\$1,121,325
MMS - INFRASTRUCTURE/BCS Total				\$1,414,775

Middlesex Middle School - Infrastruct./BCS (Priorities 1 - 4)				\$1,550,719
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OPTION 1 - SITE MODIFICATIONS TO IMPROVE EGRESS DURING PEAK PERIODS:

1) MODIFY VEHICULAR EGRESS CIRCULATION TO REDUCE TRAFFIC CONGESTION.

OPTION 2 - RENOVATIONS AND A FOUR CLASSROOM ADDITION:

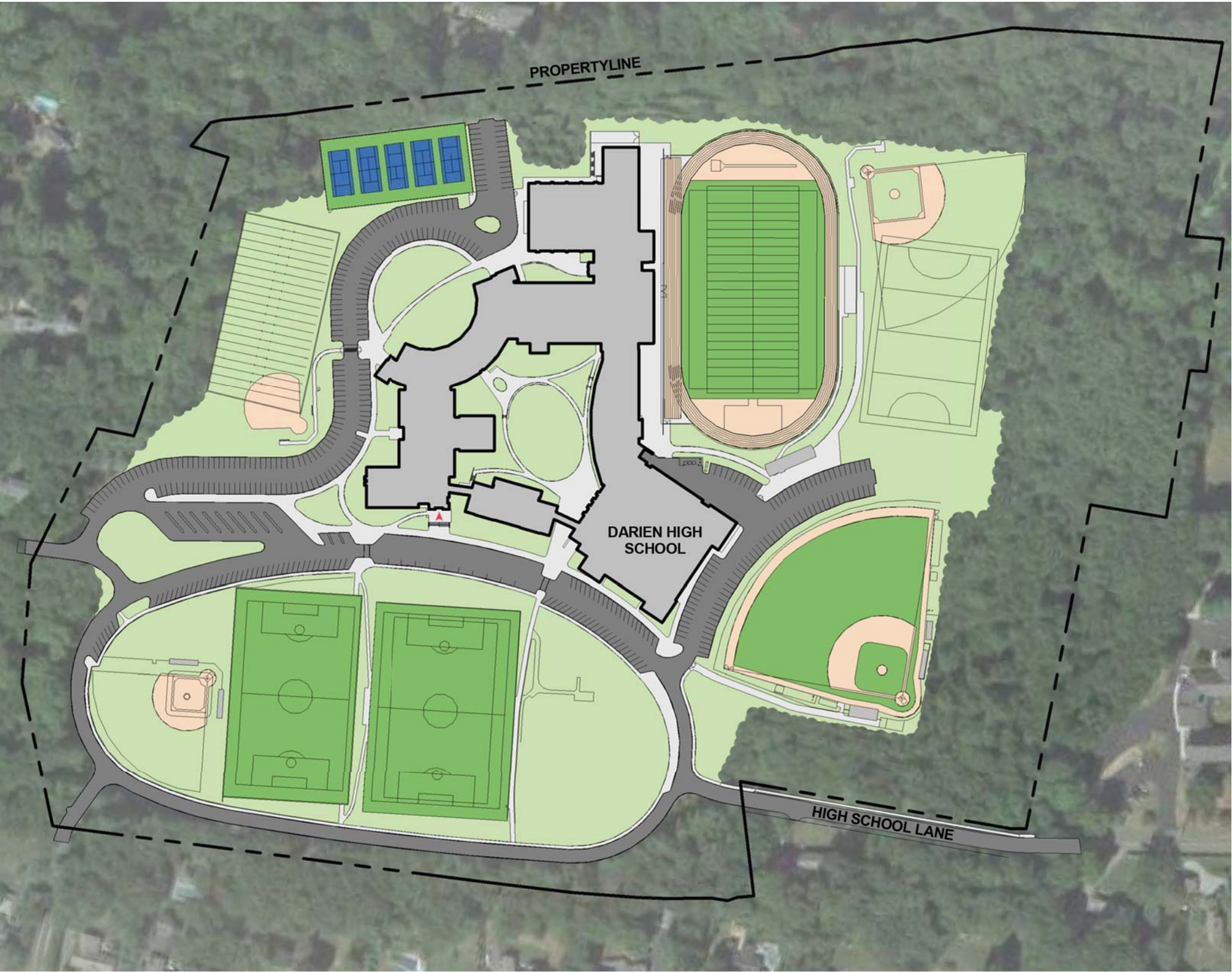
1) MODIFY VEHICULAR EGRESS CIRCULATION TO REDUCE TRAFFIC CONGESTION.

2) CONSTRUCT A 7-CLASSROOM ADDITION TO ALEVIATE CURRENT SCHEDULING CHALLENGES AND FUTURE PROJECTED ENROLLMENT GROWTH.

PRIMARY INFRASTRUCTURE IMPROVEMENTS:

1) CLASSROOM DOOR HARDWARE REPLACEMENT	\$40K
2) VINYL TILE FLOOR REPLACEMENT - SPECIFIC AREAS	\$30K
3) HVAC ELECTRICAL ROOM COOLING	\$70K
4) PLUMBING - BACKFLOW PREVENTER & FIRE PUMP	\$140K
5) ELECTRICAL - CLASSROOM & CORRIDOR LIGHTING	\$620K
6) ELECTRICAL - AUDITORIUM LIGHTING	\$440K
7) ELECTRICAL - EMERGENCY LIGHTING	\$440K

✕ - Construction unit costs based on 2017 public vote and bidding construction commencing 2018. The school district should build in 4 - 5% escalation per year if the schedule is extended.



CAMPUS STATISTICS	CURRENT	PLANNED
BUILDING AREA	316,953SF	320,000SF+/-
YEAR BUILT / LAST RENOVATION	2005	-
SITE AREA	56	
GRADE CONFIGURATION	9-12	9-12
# OF GENERAL CLASSROOMS	32	-
MODULAR CLASSROOMS (TO BE REMOVED)	0	0
FUNCTIONAL CAPACITY	1,360	1,360
CURRENT ENROLLMENT	1,356	-
BUS QUEUING	-	-
PARENT QUEUING	-	-
PARKING SPACES (PROVIDED / PLANNED)	372	422
PLAYING FIELDS	8 MULTI-PURPOSE	8



Legend

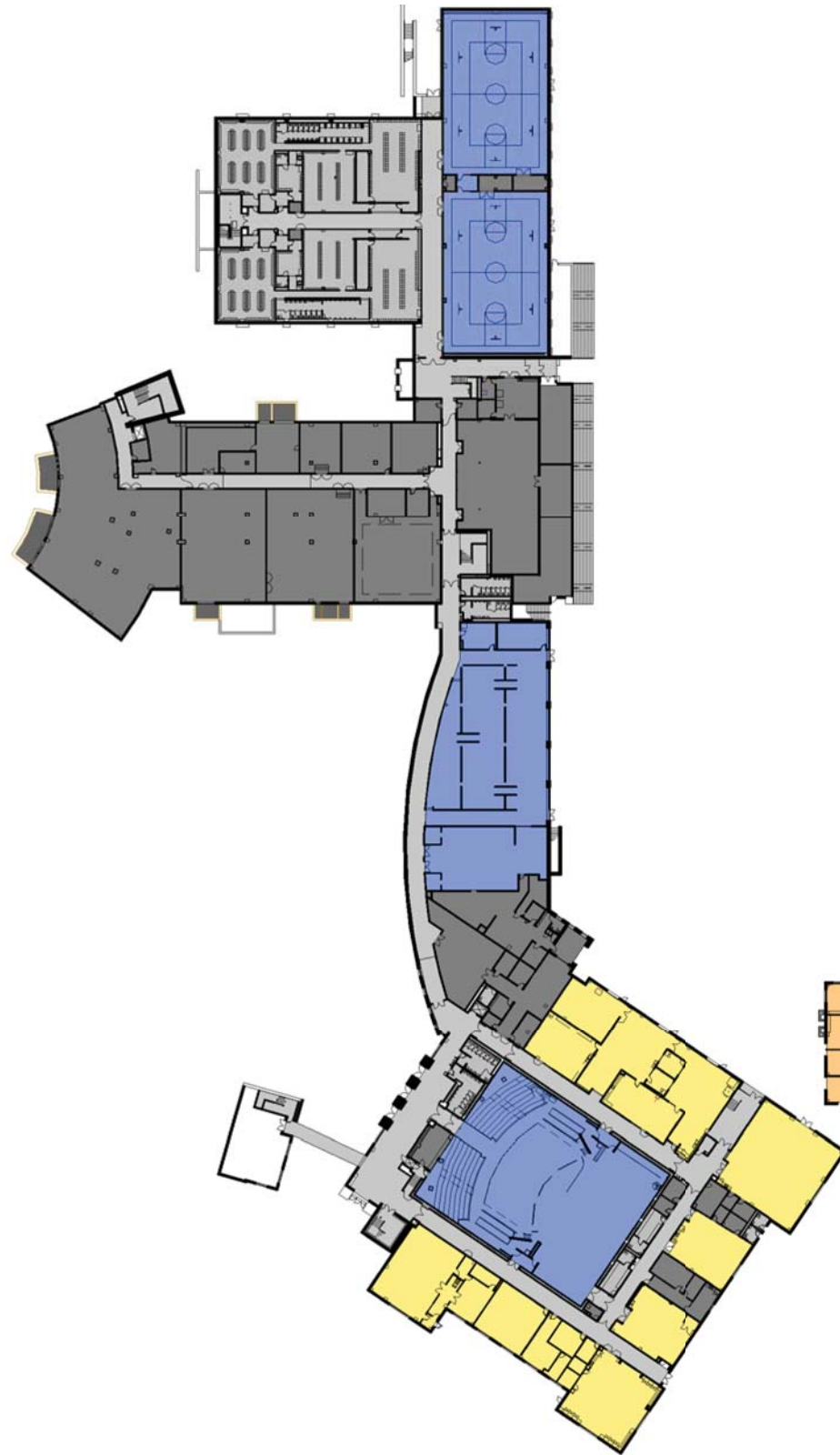
Existing building

Site Plan
1" = 200'-0"

Campus Aerial

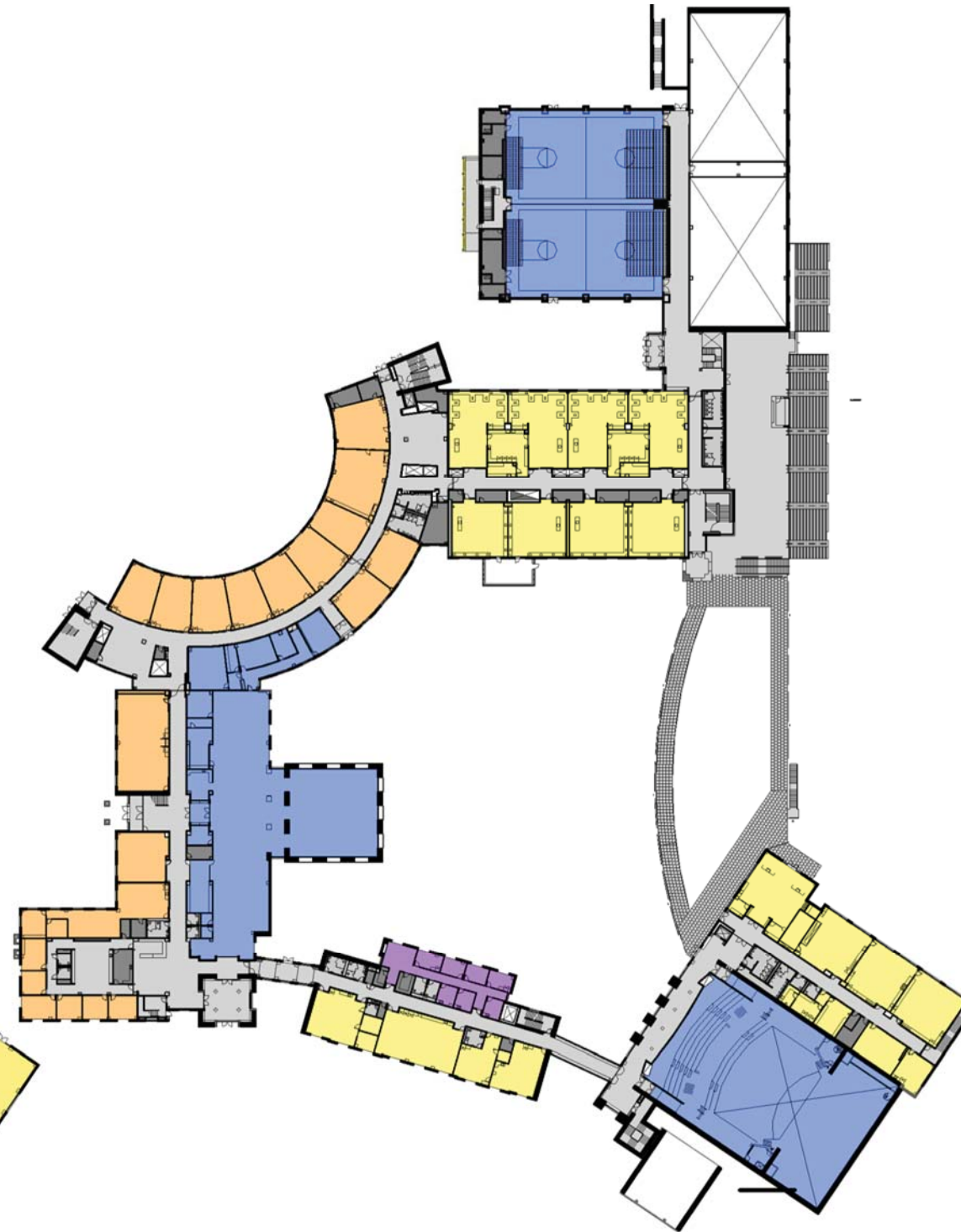
Legend

- Classroom
- Special Subjects
- Administration
- Public
- Service



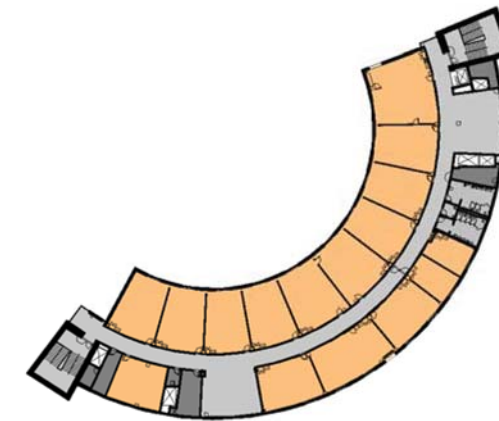
LOWER LEVEL

1" = 100'-0"



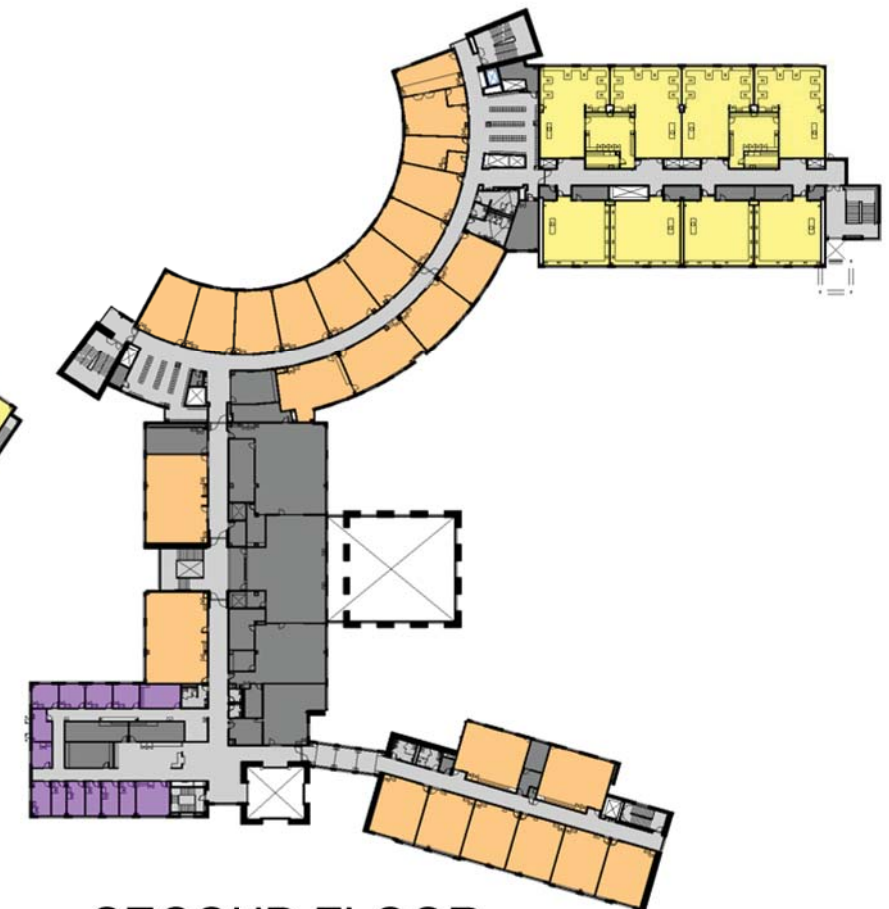
FIRST FLOOR

1" = 100'-0"



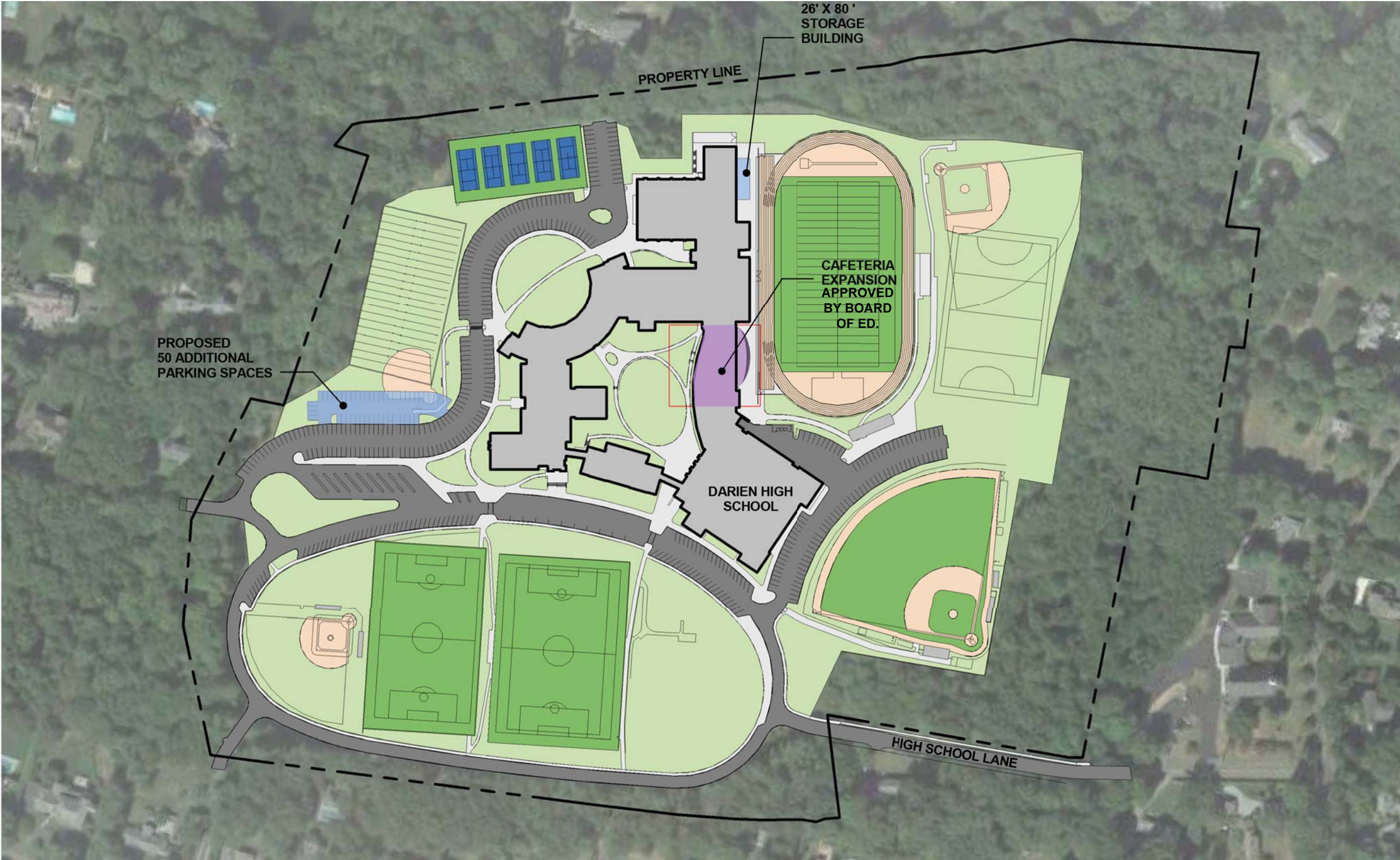
THIRD FLOOR

1" = 100'-0"



SECOND FLOOR

1" = 100'-0"



Legend

- Existing
- Proposed

SITE PLAN ALTERATIONS

Site Plan
1" = 200'-0"

ADDITIONS AND ALTERATIONS TO DARIEN HIGH SCHOOL

CAMPUS - Description	Quantity	Unit	Unit cost *	Extended Cost
Darien High School				
Cafeteria Addition	1,800	SF	\$425	\$765,000
Renovated Cafeteria area	7,600	SF	\$125	\$950,000
Site work - Cafeteria	2,000	SF	\$25	\$50,000
Storage Building	2,080	SF	\$150	\$312,000
Student Parking Lot	15,600	SF	\$25	\$390,000
Construction Sub-Total				\$2,467,000
General Conditions			10.00%	\$246,700
Contractor O&P			7.00%	\$189,959
Contingency			10.00%	\$290,366
Project Costs - 12%			12.00%	\$383,283
DHS - Option 1 Total				\$3,577,308
Darien High School - Infrastruct./BCS				Priority 1+2
Architectural/Structural	1	EA		\$7,329
Mechanical	1	EA		\$190,552
Plumbing	1	EA		\$29,316
Electrical	1	EA		\$175,894
DHS - INFRASTRUCTURE/BCS Total				\$403,091

DISTRICT-WIDE AIR CONDITIONING *

HINDLEY ELEMENTARY SCHOOL	56,495	60	\$3,389,700
HOLMES ELEMENTARY SCHOOL	55,112	60	\$3,306,720
ROYLE ELEMENTARY SCHOOL	57,450	60	\$3,447,000
OX RIDGE ELEMENTARY SCHOOL (1990 bldg. only)	15,400	60	\$924,000
MIDDLESEX MIDDLE SCHOOL	193,200	60	\$11,592,000
SUBTOTAL			\$22,659,420
OX RIDGE ELEMENTARY SCHOOL (original bldg. only)	42,944	60	\$2,576,640
TOTAL			\$25,236,060

* - DARIEN HS & TOKENEKE ELEMENTARY SCHOOLS ARE AIR CONDITIONED BUILDINGS.

* - Construction unit costs based on 2017 public vote and bidding construction commencing 2018. The school district should build in 4 - 5% escalation per year if the schedule is extended.

ALTERATIONS TO THE HIGH SCHOOL CAMPUS:

- 1) RENOVATE AND EXPAND CAFETERIA TO ACCOMMODATE STUDENT NEED.
- 2) CONSTRUCT STORAGE BUILDING FOR ATHLETIC AND GENERAL USE.
- 3) CREATE NEW PARKING LOT ON EXISTING PRACTICE SOFTBALL FIELD.

PRIMARY INFRASTRUCTURE IMPROVEMENTS:

- 1) HVAC REPLACE OIL PUMPS AND CHILLER ROOM WORK \$190K
- 4) PLUMBING - PROVIDE BOLLARDS AROUND PROPANE TANK \$30K
- 5) ELECTRICAL - CLASSROOM & CORRIDOR LIGHTING \$620K
- 6) ELECTRICAL - REPLACE FAILED SITE LIGHTING \$20K
- 7) ELECTRICAL - NEW WIRELESS CLOCK SYSTEM \$90K

GENERAL NOTES

Construction Unit Costs based on utilizing Industry standard - Turner Construction Cost Index. <http://www.turnerconstruction.com/cost-index>

Darien HS - \$65,700,000 construction cost/ 317,000sf = \$207/sf when bid in 2003. Escalation based on index* is 73.9% or equates to \$360/sf project in 2018 yr bid.
Tokeneke ES - \$18,060,000 construction cost/ 65,500sf = \$275/sf when bid in 2006. Escalation based on index* is 36.2% or equates to \$375/sf project in 2018 year bid.

Assumptions - New Construction for replacement buildings utilize \$375/sf, but for small additions gets increased to \$400-450/sf. Renovations are based on \$175/sf.

*TCCI: 2003 = 621; 2006 = 793; 2016 = 983 (4.8% YOY increase); 2017 = 1030 (Projected); 2018 = 1080 (Projected)

Darien Public School
District Master Plan Cost Options Summary

Master Plan Summary

Master plan estimating is a combination of art and science. Developing budgets for construction projects that are not fully designed requires an understanding of current regional construction costs, knowledge of community's expectation regarding building systems, materials & finishes, and clarity on project timeframe in which the District will proceed with the planned work.

The cost estimate, as provided, is intended to aid the Board of Education and Town of Darien community in understanding the area of magnitude costs based on the knowledge at hand. Prior to public vote, the plan will require refinement through a collaborative effort between town/school district administrative staff, community members and a professional team of consultants to refine the master plan into a set of schematic designs that can be more accurately estimated and discussed in public prior to vote.

For the sake of the master plan budget, the design team included the recommended educational & infrastructure improvements at the elementary, middle, high school levels. At the elementary schools the plan includes: 1) removal of the modular buildings, 2) reorganization of the ELP program, 3) review of size/adequacy of classroom spaces, 4) study of building/campus security, and 5) improvement to vehicular/pedestrian circulation on campus. The Middle School and High School have specific building & campus improvements that address over crowding, parking, storage, and circulation. Based on the results of the planning exercise, all campuses have some educational & infrastructure improvements listed with the majority of the capital improvement cost and focus on a building replacement project at Ox Ridge Elementary School.

COST OPTION SUMMARY

Master Plan Package A: THIS PLAN ADDS 5 ELEMENTARY + 7 MIDDLE SCHOOL CLASSROOMS 1) Remove all modular buildings; 2) Site improvements district-wide; 3) Hindley & Holmes ES Option 2 Classroom Additions (Net Gain of 4 Classrooms); 4) Ox Ridge ES New Construction (Net Gain of 3 Classrooms), 5) Royle Option 2 -Classroom Addition to 'right-size" classrooms; 6) Renovate Elementary School Libraries; 7) Middle School Option 2 (7 Classroom Addition); 8) Building Condition Survey -All Priorities; 9) add Air Conditioning at non-A/C bldg.

HINDLEY ELEMENTARY SCHOOL - OPTION 2	\$6,332,066
HOLMES ELEMENTARY SCHOOL - OPTION 2	\$4,881,076
OX RIDGE ELEMENTARY SCHOOL - OPTION 1	\$47,092,582
ROYLE ELEMENTARY SCHOOL - OPTION 2	\$6,837,831
MIDDLESEX MIDDLE SCHOOL - OPTION 2	\$6,926,840
DARIEN HIGH SCHOOL	\$3,577,308
INFRASTRUCTURE BCS - PRIORITIES 1, 2, 3 + 4	\$25,209,695
AIR CONDITIONING - ADD AT ALL NON-A/C BUILDINGS	\$22,659,420
TOTAL	\$123,516,818

Master Plan Package B: THIS PLAN ADDS 7 ELEMENTARY + 7 MIDDLE SCHOOL CLASSROOMS 1) Remove all modular buildings; 2) Site improvements district-wide; 3) Hindley & Holmes ES Option 2 Classroom Additions (Net Gain of 4 Classrooms); 4) Ox Ridge ES New Construction (Net Gain of 3 Classrooms), 5) Royle Option 2 - Classroom Addition to 'right-size" classrooms; 6) Renovate Elementary School Libraries; 7) Middle School Option 2 (7 Classroom Addition); 8) Building Condition Survey - Priority 1-2 Only; and 9) no added air conditioning.

HINDLEY ELEMENTARY SCHOOL - OPTION 2	\$6,332,066
HOLMES ELEMENTARY SCHOOL - OPTION 2	\$4,881,076
OX RIDGE ELEMENTARY SCHOOL - OPTION 1	\$47,092,582
ROYLE ELEMENTARY SCHOOL - OPTION 2	\$6,837,831
MIDDLESEX MIDDLE SCHOOL - OPTION 2	\$6,926,840
DARIEN HIGH SCHOOL	\$3,577,308
INFRASTRUCTURE BCS - PRIORITIES 1 + 2	\$9,892,433
TOTAL	\$85,540,136

Master Plan Package C: THIS PLAN ADDS 4 ELEMENTARY + 7 MIDDLE SCHOOL CLASSROOMS 1) Remove all modular buildings; 2) Site improvements district-wide; 3) Hindley ES & Holmes ES Option 2 Classroom Additions (Net Gain of 4 Classrooms); 4) Ox Ridge ES 8-Classroom Addition (No Net Gain Classrooms), 5) Royle Option 1; 6) Renovate Elementary School Libraries; 7) Middle School Option 2 (7 Classroom Addition); 8) Building Condition Survey - Priority 1-2 Only; and 9) no added air conditioning.

HINDLEY ELEMENTARY SCHOOL - OPTION 2	\$6,332,066
HOLMES ELEMENTARY SCHOOL - OPTION 2	\$4,881,076
OX RIDGE ELEMENTARY SCHOOL - OPTION 2	\$27,259,721
ROYLE ELEMENTARY SCHOOL - OPTION 1	\$3,086,483
MIDDLESEX MIDDLE SCHOOL - OPTION 2	\$6,926,840
DARIEN HIGH SCHOOL	\$3,577,308
INFRASTRUCTURE BCS - PRIORITIES 1 + 2	\$9,892,433
TOTAL	\$61,955,927