ON-SITE INSIGHT
A RECAP REAL ESTATE ADVISORS COMPANY

Capital Needs Assessment

Prepared for:

SAU-39
1 School Street
Amherst, NH 03031

Wilkins Elementary School

Amherst, NH

June 1, 2017

Preliminary Report

RECAP
REAL ESTATE ADVISORS
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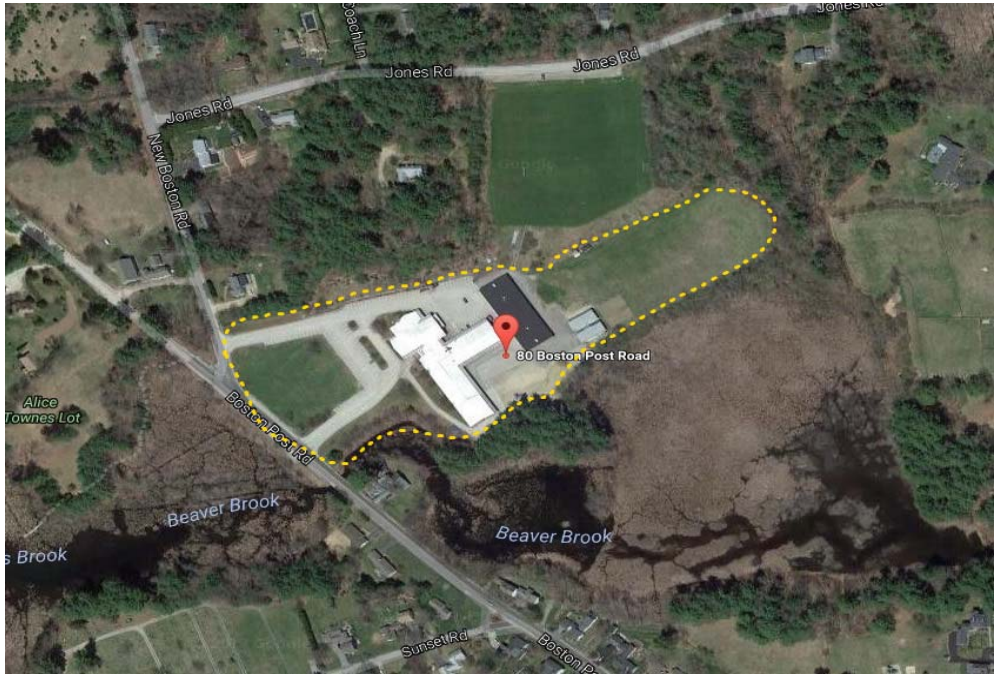
Wilkins Elementary School: Property Overview

Total Buildings: 3

Total Area (sf) 55,242

Building Type	# Bldgs
Elevator	1
Walk-up	
Townhouse	-
Totals:	**1**



Occupancy: School
Financing: Municipal
Property/Development Age: 50 years
Year of Construction: 1967
Year of Most Recent Rehab: 2008

City & State: Amherst, NH 03031
Addresses: 80 Boston Post Road

OSI Project Number: 17256
Assessment Date: May 9, 2017
Assessment Conditions: Cloudy, 50°F
Assessor: David Jackson

Property Description:

This single level elementary school was built in 1967 and expanded in 2008. There are also a pair of portable buildings that provide four additional classrooms. The main building is clad with brick,has double glazed metal framed windows, a rubber membrane over the flat roof section and PVC membrane on the pitched roof section. The portables have vinyl clad exterior walls, vinyl framed double glazed windows; their roofs are pitched and covered with architectural shingles. This school is also served by municipal water and has a gravity-fed leaching field.

Executive Summary

Wilkins School

Amherst, NH

Wilkins School is a low-rise building that serves over 600 students in grades 1 through 4. The original building was built in 1967 and expanded most recently in 2008. Remarkable and excellent maintenance and service has helped to extend the useful life of many building systems and components. There are however several key needs that should be addressed in the near-term including repairing and re-grading the eroded area near the playground, replacing an existing FPE circuit breaker panel, and replacing the caulking at all exterior wall penetrations and at exterior wall control joints. Future capital actions are based on useful life expectations and assume continued effective maintenance and physical management. Costs for the twenty-year plan total $3,015,378 or $54.58 per square feet in in inflated dollars.

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Site

The site, located on a large relatively flat parcel of land, features extensive asphalt paving (parking, driveways, walkways, and outdoor courts), a play area with a pea-stone base, surrounding landscaping, landscape timber retaining wall, and a gravity fed leaching field.

1. **Costs for the development's site related elements total $743,358 or $13.46 per square foot in inflated dollars.**

2. There is significant erosion at the play area that has destabilized a retaining wall and has covered the majority of a surrounding chain link fence. The plan includes an allowance in Year 1 to address the erosion, including re-grading the land, and possibly using open grid pavers to improve and control drainage in this area. This cost also includes repairing the retaining wall. The chain link fence repair is shown concurrent to this landscaping effort.
3. The parking lots, driveways, and walkways have areas that are isolated cracks. The cost to repair these surfaces (crack-fill, sealcoat, and re-stripe) is shown in Years 2, 7, and 12; resurfacing is shown in Year 17.
4. The play equipment is to be replaced in Year 10. The plan also includes the cost for future servicing to the septic system and leaching field, in Year 10.

Mechanical Room

There are two mechanical rooms, each contains an oil-fired hydronic heat boiler and in-line circulating pumps. The boilers are controlled by a Johnson Controls (JCI) Metasys energy management system (EMS), which also controls the rooftop equipment (discussed in the Building Mechanical and Electrical report section), and monitors and controls space temperature throughout the building. Domestic hot water (DHW) is produced by several electric-heated DHW tanks located throughout the facility.

5. **Costs related to the development's boilers and boiler room systems total $115,063 or $2.08 per square foot in inflated dollars.**
6. The cost to upgrade the EMS is shown in Years 7 and 14. The boilers are to be serviced in Year 10. The DHW tanks are to be replaced every 12 years starting in Year 4.

7. The electric heat and the electric-heated point-of-use (POU) DHW in the portable buildings are to be maintained as operating concerns.

Building Mechanical and Electrical Systems

Major building systems include the fire sprinkler system, distribution piping for hydronic heat, domestic hot and cold water, sanitary wastewater, and natural gas services, heating, ventilation and air conditioning (HVAC) services, electrical, fire detection, and security.

8. **Costs related to the development's mechanical and electrical systems total $163,515 or $2.96 per square foot in inflated dollars.**
9. A recent air quality study performed by a third party, showed several areas where carbon dioxide (CO_2) readings exceeded the desired level of 1,000 ppm (the maximum level for acceptable ventilation), indicating a need to provide reliable ventilation throughout the facility. The highest readings were recorded in the portable buildings, indicating a need to improve ventilation in these two buildings. Currently, fresh air for the portable buildings is provided through the operable windows. Adding a make-up source to these buildings could provide a reliable source of fresh air, however this item should be discussed at the client review meeting to determine the future need and use of these buildings, and cost-effective ways of providing adequate ventilation throughout the entire school.
10. The ceiling mounted air handler that serves the Multipurpose Room is to be upgraded (heating coil, controls, blower motor, etc.) in Year 5. The split direct expansion (DX) air conditioners are to be replaced in Year 10. The plan also anticipates replacing damaged finned tube radiation starting in Year 10. The exhaust fans are to be upgraded in Year 12.
11. An original Federal Pacific circuit breaker panel (Stab-Lok model) is to be replaced in the first year of the plan. This type of

circuit breaker panel is a safety concern in that it has a history not reliably reacting to an electric overload condition. An allowance to upgrade the video monitoring system, public address system, and the central clock is Years 2, 9, and 16. The battery powered emergency lights are to be replaced in Years 7 and 17. The fire alarm system is to be upgraded in the second half of the plan in Year 12.

Building Architectural Systems and Program Areas

This campus features the main building, which contains most of the classrooms, and all of the support activities, and a pair of portable buildings, each with two classrooms and two restrooms. The main building has brick exterior walls, a PVC membrane on the pitched roofs, and a rubber membrane on the flat roofs. The windows are metal framed double glazed models. The portable buildings are vinyl clad, their roofs are pitched and covered with architectural shingles, and their windows are vinyl framed double glazed models.

Interior common areas include the classrooms, music and arts, a multipurpose room, hallways, and restrooms. The support areas feature the library, administration/support offices, and the central kitchen.

12. Costs related to the development's architectural systems total $1,784,340 or $32.30 per square foot in inflated dollars.

13. The cost to replace the caulking, in which there were sections found to be dried, cracked, and in some isolated areas voids were also noted, is shown in Years 1 and 16. The wood trim (fascia boards and soffits) are to be repaired and repainted in Years 1, 8, and 15. The shed that is attached to the main building clad with plywood, which is starting to deteriorate. The plan includes the cost to replace the plywood with a cementitious fiberboard product in Year 1. The brickwork appears to be in good condition and future repointing is shown in Year 16. The vinyl siding is to be power washed every six years starting in Year 4.
14. An allowance for anticipated failed window glazing replacement is shown starting in Year 12. Replacement of the secondary and

service doors is shown in Year 18.

15. Maintenance reported that the roof drain downspouts will occasionally freeze, which limits the effectiveness for snow melt drainage. The plan to add a snow-melt function (i.e. electric heat trace, etc.) is shown in Year 1; this item should be discussed at the client review meeting.
16. Overall, the roof coverings appear to be in good condition. The PVC membrane is to be replaced over a two-year period starting in Year 12. The rubber membrane is to be replaced in Year 14 preferably with a PVC membrane, which will provide a cooling benefit to the building during the summer months. The architectural shingles are to be replaced in Year 15.
17. Wall repainting and ceiling tile and carpet replacement is shown every ten years starting in Year 8. Replacement of the vinyl composite tile (VCT) flooring is shown in Year 18.
18. An annual allowance to repair the student storage areas starts in Year 10. Also, allowances to replace classroom furnishings and equipment start in Year 5. The Multipurpose Room furnishings are to be replaced starting in Year 10. Replacement of the fixtures and accessories in the restrooms is shown in Years 10 and 20.
19. **Costs related to the school's support areas total $209,102 or $3.79 per square foot in inflated dollars.**
20. Future replacement of ceiling panels and repainting in the other program areas is shown in Years 8 and 18. The VCT is to be replaced in Year 18. The Library furnishing and equipment replacement is shown in Years 9 and 19. In the central kitchen, the ceiling tiles are to be replaced and the walls repainted in Years 8 and 18. An allowance to replace the appliances is shown starting in Year 10.

Additional Notes:

1. The Physical Assessment of the property was conducted on May 9, 2017. Additional information was provided to ON-SITE INSIGHT by site staff and others. OSI was represented on this assignment by David Jackson. We would like to thank site staff for their assistance.

2. Regular updates of this plan are recommended to ensure careful monitoring of major building systems and to adjust the program to accommodate unanticipated circumstances surrounding the buildings, operations, and/or occupants.

3. This report is delivered subject to the conditions on Appendix A, *Statement of Delivery*.

A pair of designated parking spaces near the front entrance of the school.

A view of cracks in the asphalt paving.

The open playing field. To the right is one of the portable buildings.

The height of the perimeter fence has been reduced by almost 50% due to the erosion at the playground.

This retaining wall is no longer upright and needs to be addressed in the near term.

An eroded area at the edge of the playground.

The main building is clad with brick. The storage shed (arrow) is located at the rear of the building.

There is also a pair of vinyl clad portable buildings that add an additional four classrooms to this campus.

A building control joint that has dried and open caulking.

On the main building, the flat roof is covered with a rubber membrane and the pitched roof is covered with a PVC membrane.

The portable building roofs are covered with architectural shingles.

A close-up of damage at the top of a fascia board (wood trim near the roof line of the main building).

An exterior door on one of the portable buildings; note the rust at the bottom of the door.

A view of the common hallway.

Classrooms have ceiling tiles, painted walls and VCT flooring.

A partial view of the Multipurpose Room. The curtain on the left is used to section off this space.

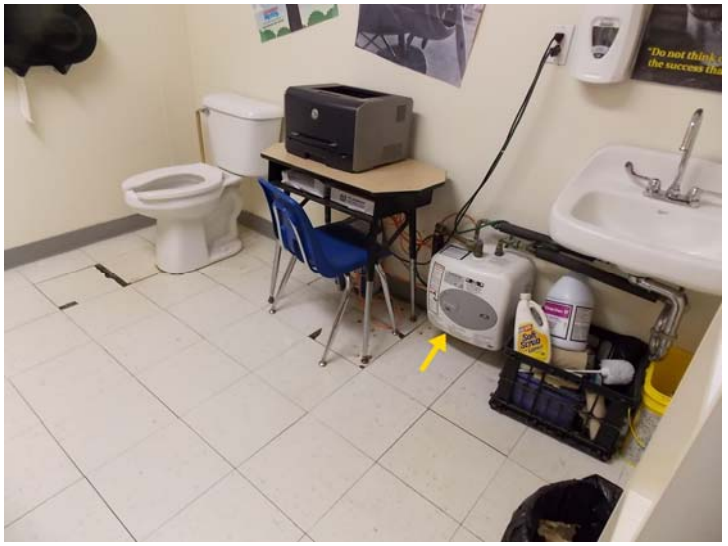
A close-up of previous termite damage. Maintenance continues to monitor the building any signs of reoccurrence.

Another view of Multipurpose Room with this section setup for lunch.

A view of the kitchen.

The pair of air-cooled refrigerator condensers for the walk-in refrigerator and freezer.

A classroom in a portable building.



A bathroom in one of the portable buildings. It includes a point-of-use (POU) DHW unit.

One of the 2 oil-fired hydronic heat boilers.

One of the electric-heated DHW tanks.

Rooftop equipment includes air-cooled condensers (lower arrow) that are part of split DX air conditioning systems, heat recovering make-up air units (upper arrow), and rooftop exhaust fans.

This air handler serves the Multipurpose Room.

This is the fire alarm control panel.

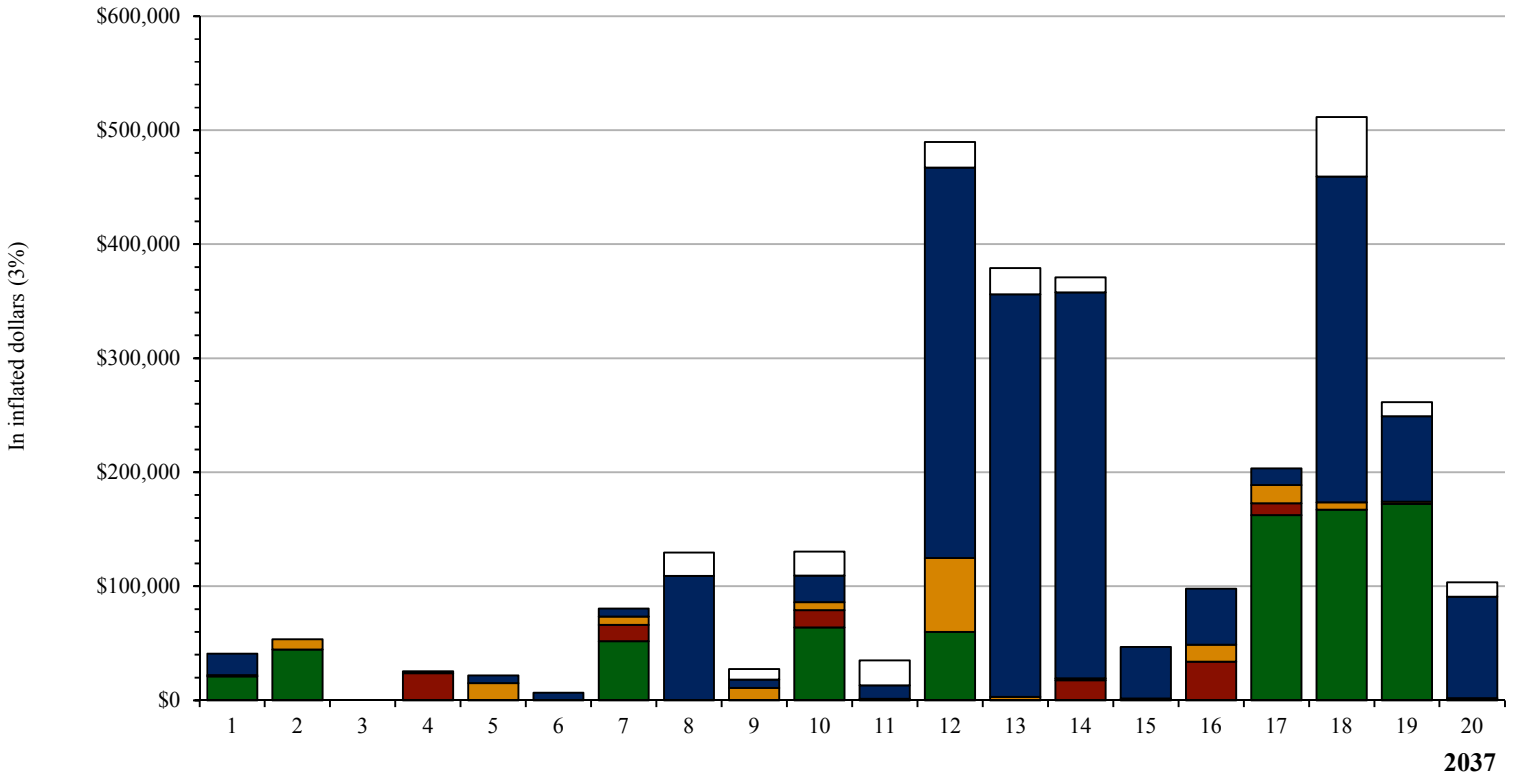
The fire sprinkler connection with a backflow preventer.

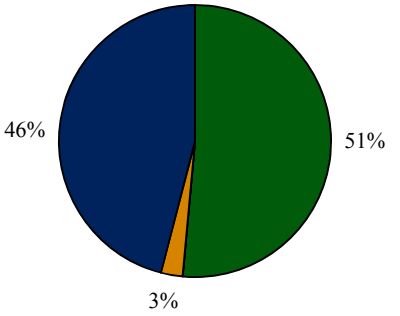
The leakage detection system for the underground storage tank.

A propane storage tank that is no longer in use.

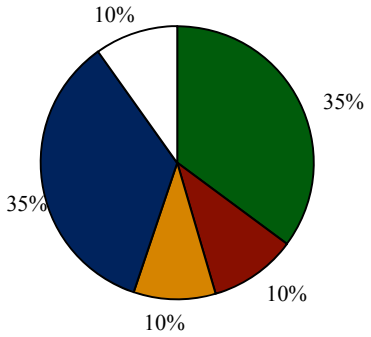
One of several electric transformers used to augment the electric service.

This FPE circuit breaker panel should be replaced in the near-term. These panels do not reliably react to electric overload conditions.





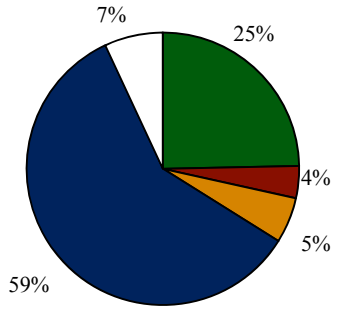
Year One Distribution



Ten Year Distribution

Total Costs by Building System (inflated dollars)

	In Year 1	In Years 1-10	In Years 1-20
Site Systems	$21,000 or $.38 / SF	$181,391 or $3.28 / SF	$743,358 or $13.46 / SF
Mechanical Room		$53,202 or $.96 / SF	$115,063 or $2.08 / SF
Building Mech. & Elec.	$1,050 or $.02 / SF	$50,094 or $.91 / SF	$163,515 or $2.96 / SF
Building Architectural	$18,764 or $.34 / SF	$180,629 or $3.27 / SF	$1,784,340 or $32.30 / SF
Program Areas		$50,877 or $.92/SF	$209,102 or $3.79/SF
In inflated dollars:	**$40,814 or $.74/SF**	**$516,193 or $9.34/SF**	**$3,015,378 or $54.58/SF**
In current dollars:	$40,814 or $.74/SF	$435,560 or $7.88/SF	$2,076,394 or $37.59/SF



Twenty Year Distribution

Capital Needs Summary

Wilkins Elementary School
Amherst, NH 03031

OSI Ref:	**17256**	Number of Buildings:	**3**
Property Age:	**50 Years**	Total Number of Units:	**55242**
Financing:	**Municipal**	Occupancy:	**School**

	2018 Year 1	2019 Year 2	2020 Year 3	2021 Year 4	2022 Year 5	2023 Year 6	2024 Year 7	2025 Year 8	2026 Year 9	2027 Year 10
Site Systems										
Surface	$21,000	$44,671	$0	$0	$0	$0	$51,786	$0	$0	$50,234
Site Distribution Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$13,700
Site Sub-Total	**$21,000**	**$44,671**	**$0**	**$0**	**$0**	**$0**	**$51,786**	**$0**	**$0**	**$63,934**
Mechanical Room										
Boilers	$0	$0	$0	$0	$0	$0	$14,329	$0	$0	$15,161
Boiler Room Systems	$0	$0	$0	$23,712	$0	$0	$0	$0	$0	$0
Mechanical Sub-Total	**$0**	**$0**	**$0**	**$23,712**	**$0**	**$0**	**$14,329**	**$0**	**$0**	**$15,161**
Building Mech. & Electrical										
Mechanical	$0	$0	$0	$0	$15,194	$0	$0	$0	$0	$7,020
Electrical	$1,050	$8,755	$0	$0	$0	$0	$7,308	$0	$10,768	$0
Elevators	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Mechanical & Electrical Sub-Total	**$1,050**	**$8,755**	**$0**	**$0**	**$15,194**	**$0**	**$7,308**	**$0**	**$10,768**	**$7,020**
Building Architectural										
Structural and Exterior	$17,264	$0	$0	$1,661	$0	$0	$0	$4,305	$0	$1,983
Roof Systems	$1,500	$0	$0	$0	$0	$0	$0	$0	$0	$0
Classrooms/Halls/Stairs	$0	$0	$0	$0	$6,612	$6,811	$7,015	$64,737	$7,442	$7,666
Gym/Restrooms/Locker Rms	$0	$0	$0	$0	$0	$0	$0	$40,129	$0	$13,504
Building Architectural Sub-Total	**$18,764**	**$0**	**$0**	**$1,661**	**$6,612**	**$6,811**	**$7,015**	**$109,170**	**$7,442**	**$23,153**
Support Areas										
Cafeteria/Stage	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Library	$0	$0	$0	$0	$0	$0	$0	$7,670	$9,247	$9,525
Admin Offices	$0	$0	$0	$0	$0	$0	$0	$7,145	$0	$0
Kitchen	$0	$0	$0	$0	$0	$0	$0	$5,547	$0	$11,743
Program Areas Sub-Total	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$20,361**	**$9,247**	**$21,268**
Total Capital Costs	**$40,814**	**$53,426**	**$0**	**$25,373**	**$21,807**	**$6,811**	**$80,437**	**$129,532**	**$27,457**	**$130,536**

Costs on these two pages are aggregated by category from the Capital Needs worksheets which follow. Total capital costs on these two pages are carried forward to line F of the Replacement Reserve Analysis(es) that follow.

2028 Year 11	**2029** Year 12	**2030** Year 13	**2031** Year 14	**2032** Year 15	**2033** Year 16	**2034** Year 17	**2035** Year 18	**2036** Year 19	**2037** Year 20	
										Site Systems
$0	$60,034	$0	$0	$0	$0	$162,391	$167,262	$172,280	$0	Surface
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	Site Distribution Systems
$0	**$60,034**	**$0**	**$0**	**$0**	**$0**	**$162,391**	**$167,262**	**$172,280**	**$0**	Site Sub-Total
										Mechanical Room
$0	$0	$0	$17,622	$0	$0	$10,431	$0	$0	$0	Boilers
$0	$0	$0	$0	$0	$33,808	$0	$0	$0	$0	Boiler Room Systems
$0	**$0**	**$0**	**$17,622**	**$0**	**$33,808**	**$10,431**	**$0**	**$0**	**$0**	Mechanical Sub-Total
										Building Mech. & Electrical
$1,451	$3,052	$3,144	$1,586	$1,634	$1,683	$6,146	$6,330	$1,839	$1,894	Mechanical
$0	$61,598	$0	$0	$0	$13,243	$9,821	$0	$0	$0	Electrical
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	Elevators
$1,451	**$64,651**	**$3,144**	**$1,586**	**$1,634**	**$14,925**	**$15,967**	**$6,330**	**$1,839**	**$1,894**	Mechanical & Electrical Sub-Total
										Building Architectural
$0	$500	$515	$530	$5,840	$35,422	$579	$45,885	$615	$633	Structural and Exterior
$0	$329,921	$339,819	$325,066	$26,090	$0	$0	$0	$0	$0	Roof Systems
$7,896	$8,132	$8,376	$8,628	$8,886	$9,153	$9,428	$144,747	$69,480	$71,565	Classrooms/Halls/Stairs
$3,830	$3,945	$4,063	$4,185	$4,311	$4,440	$4,573	$95,146	$4,852	$16,658	Gym/Restrooms/Locker Rms
$11,726	**$342,498**	**$352,773**	**$338,409**	**$45,128**	**$49,015**	**$14,580**	**$285,778**	**$74,947**	**$88,856**	Building Architectural Sub-Total
										Support Areas
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	Cafeteria/Stage
$9,811	$10,105	$10,408	$0	$0	$0	$0	$10,308	$12,428	$12,801	Library
$0	$0	$0	$0	$0	$0	$0	$34,310	$0	$0	Admin Offices
$12,095	$12,458	$12,832	$13,217	$0	$0	$0	$7,454	$0	$0	Kitchen
$21,906	**$22,563**	**$23,240**	**$13,217**	**$0**	**$0**	**$0**	**$52,072**	**$12,428**	**$12,801**	Program Areas Sub-Total
$35,083	**$489,746**	**$379,157**	**$370,834**	**$46,761**	**$97,748**	**$203,368**	**$511,443**	**$261,494**	**$103,551**	**Total Capital Costs**

Wilkins Elementary School

SITE SYSTEMS

(Expected Useful life)

Replacement Items	Quantity		Cost per unit in 2018 $$	Total Cost in 2018 $$	AGE (Years)	EUL (Years)	Replacement Schedule Year of action AND duration of project	Notes
SURFACE								
Parking/Driveways/Courtyards	123,914	sf	2.45	$303,589	8	20	17 over 3 Years	Asphalt paved; depressed area near catch basin Resurfacing starts in Year 17; see crack-fill/sealcoat for repairs
Crack-Fill and Sealcoat	123,914	sf	0.35	$43,370	8	5	2 /7 /12 in 1 Year	Allowance to crack-fill, sealcoat, and re-stripe in Years 2, 7, and 12
Sidewalks		sf						
Outdoor Courts		sf						
Retaining Walls	200	lf		$0	10	40		Landscape timbers leaning over, related to erosion? Included in Landscaping upgrade cost to repair & re-install
Retaining Walls		lf						
Fencing - Chain Link	300 1	lf ls	3500.00	$3,500	10	30	1 in 1 Year	Fence impacted by erosion; some sections 50% covered Allowance to repair or replace damaged sections in Yr 1
Dumpsters & Enclosures		ls						
Play Equipment	1	ls	38500.00	$38,500	10	20	10 in 1 Year	Metal and high impact plastic equipment. Replace in Yr 10, consider interlocking rubber mat base.
Site Lighting		ls						
Site Lighting		ea						
Landscaping	1	ls	17500.00	$17,500	50	60	1 in 1 Year	Significant erosion at edge of playground, impacting fencing. Upgrade allowance in Yr 1; consider open pavers. **Discuss**
Entry Signage		ea						
Storage Shed		ls						
Concession Stand Building		ls						
SITE DISTRIBUTION SYSTEMS								
Gas Lines		ls						
Sanitary Lines	1	ls		$0	50	60		Maintain out of Operating
Cold Water Lines	1	ls		$0	50	60		Maintain out of Operating
Electric Distribution	1	ls		$0	50	60		Maintain out of Operating
Sanitary Leach fields	1	ls	10500.00	$10,500	50	60	10 in 1 Year	Gravity-fed, recent sewer line repair Service allowance
Miscellaneous		lf						

Costs projected at 3%

SITE SYSTEMS

Replacement Items	Year 1 2018	Year 2 2019	Year 3 2020	Year 4 2021	Year 5 2022	Year 6 2023	Year 7 2024	Year 8 2025	Year 9 2026	Year 10 2027	Year 11 2028	Year 12 2029	Year 13 2030	Year 14 2031	Year 15 2032	Year 16 2033	Year 17 2034	Year 18 2035	Year 19 2036	Year 20 2037
SURFACE																				
Parking/Driveways/Courtyards	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$162,391	$167,262	$172,280	$0
Crack-Fill and Sealcoat	$0	$44,671	$0	$0	$0	$0	$51,786	$0	$0	$0	$0	$60,034	$0	$0	$0	$0	$0	$0	$0	$0
Sidewalks	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Outdoor Courts	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Retaining Walls	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Retaining Walls	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Fencing - Chain Link	$3,500	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Dumpsters & Enclosures	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Play Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$50,234	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Site Lighting	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Site Lighting	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Landscaping	$17,500	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Entry Signage	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Storage Shed	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Concession Stand Building	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
SITE DISTRIBUTION SYSTEMS																				
Gas Lines	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Sanitary Lines	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Cold Water Lines	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Electric Distribution	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Sanitary Leach fields	$0	$0	$0	$0	$0	$0	$0	$0	$0	$13,700	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Miscellaneous	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Wilkins Elementary School

MECHANICAL ROOM

(Expected Useful life)

Replacement Items	Quantity	Cost per unit in 2018 $$	Total Cost in 2018 $$	AGE (Years)	EUL (Years)	Replacement Schedule Year of action AND duration of project	Notes
BOILERS							
Boilers	2 ea	5810.00	$11,620	8	30	10 in 1 Year	Buderus oil-fired boilers (1660 MBH input each) Service allowance in Year 10
Controls - EMS	1 ea	12000.00	$12,000	8	15	7 /14 in 1 Year	JCI Metasys, governs boiler plant and rooftop equipment Allowance to upgrade in Years 7 and 14
Circulating Pumps	2 ea	3250.00	$6,500	8	25	17 in 1 Year	In-line 2 hp pumps Replace in Year 17
Boiler Secondary Pumps	ea						
Chilled Water Pumps	ls						
Cooling Water Pumps	ls						
Condensate & Feed Water	ea						
Variable Frequency Drives	ls						
Miscellaneous	ls						
Combustion Air	1 ls		$0	8	30		Louvered air source Maintain out of Operating
Flue Exhaust	1 ls		$0	8	30		Metal flues, no loose or damaged sections observed Maintain out of Operating
BOILER ROOM SYSTEMS							
Boiler Room Piping/Valves	1 ls		$0	Varies	25		No observed leaks or pipe corrosion Maintain out of Operating
Heat Exchanger	ea						
DHW Generation - Large	1 ea	9700.00	$9,700	8	12	4 /16 in 1 Year	Electric-heated 120-gallon tank Replace in Years 4 and 16
DHW Generation - Small	2 ea	6000.00	$12,000	8	12	4 /16 in 1 Year	Electric-heated 60-gallon tank Replace in Years 4 and 16
DHW Pumps	ls						
DHW Pumps	ea						
Boiler Room Piping Insulation	1 ls		$0	50	30		Maintain out of Operating
Fuel Oil Storage	1 ea		$0	50	25		Double-wall underground storage tank (4,000 gal cap) with leakage monitor. Maintain out of Operating
Fuel Oil Transfer System	ls						
Sump Pumps	ea						

Costs projected at 3%

Replacement Items	Year 1 2018	Year 2 2019	Year 3 2020	Year 4 2021	Year 5 2022	Year 6 2023	Year 7 2024	Year 8 2025	Year 9 2026	Year 10 2027	Year 11 2028	Year 12 2029	Year 13 2030	Year 14 2031	Year 15 2032	Year 16 2033	Year 17 2034	Year 18 2035	Year 19 2036	Year 20 2037
BOILERS																				
Boilers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$15,161	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Controls - EMS	$0	$0	$0	$0	$0	$0	$14,329	$0	$0	$0	$0	$0	$0	$17,622	$0	$0	$0	$0	$0	$0
Circulating Pumps	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$10,431	$0	$0	$0
Boiler Secondary Pumps	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Chilled Water Pumps	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Cooling Water Pumps	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Condensate & Feed Water	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Variable Frequency Drives	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Miscellaneous	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Combustion Air	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Flue Exhaust	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
BOILER ROOM SYSTEMS																				
Boiler Room Piping/Valves	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Heat Exchanger	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
DHW Generation - Large	$0	$0	$0	$10,599	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$15,112	$0	$0	$0	$0
DHW Generation - Small	$0	$0	$0	$13,113	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$18,696	$0	$0	$0	$0
DHW Pumps	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
DHW Pumps	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Boiler Room Piping Insulation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Fuel Oil Storage	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Fuel Oil Transfer System	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Sump Pumps	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Wilkins Elementary School

BUILDING MECHANICAL AND ELECTRICAL

(Expected Useful life)

Replacement Items	Quantity	Cost per unit in 2018 $$	Total Cost in 2018 $$	AGE (Years)	EUL (Years)	Replacement Schedule Year of action AND duration of project	Notes
BUILDING MECHANICAL							
Building Fire Suppression	1 ls		$0	50	50		Connected to water main Backflow preventer in place; maintain out of Operating
Hydronic Heat Distribution	1 ls		$0	50	50		No observed or reported systemic problems Maintain out of Operating
Domestic Hot/Cold Water Dist.	1 ls		$0	50	50		No observed or reported systemic problems Maintain out of Operating
Building Sanitary Waste & Vent. Dist.	1 ls		$0	50	40		No observed or reported systemic problems Maintain out of Operating
Building Gas Distribution	ea						
Building Air Conditioing	2 ea	2150.00	$4,300	Varies	20	10 in 1 Year	Split DX units w/rooftop mounted condensers (1-ton cooling each). Replace
Air Handler Unit -HVAC	ea						
Air Handler Unit - HV	1 ea	13500.00	$13,500	20	25	5 in 1 Year	Ceiling mounted AHU in Multipurpose Room Upgrade in Year 5
Rooftop EV Units	2 ea	2750.00	$5,500	8	25	17 over 2 Years	Heat reclaim/exchanger units, one with noisy operation Replace in Year 17
Exhaust Fans	3 ea	750.00	$2,250	8	20	12 over 2 Years	Rooftop mounted Upgrade in Year 12
Convectors	ls			Varies			
Finned Tube Radiation	1 ls	16200.00	$16,200	Varies	35	10 over 15 Years	Hydronic finned tube, in good condition Repair allowance starts in Year 10
BUILDING ELECTRICAL							
Building Power Wiring	1 ls	1050.00	$1,050	50	99	1 in 1 Year	Main switchgear, panels, and transformers Replace FPE circuit beaker panel in Year 1
Emergency Generator	ls						
Emergency Lights	1 ls	6120.00	$6,120	Varies	10	7 /17 in 1 Year	Battery powered emergency fixtures in common area Replace in Years 7 and 17
Smoke / Fire Detection	1 ls	44500.00	$44,500	8	20	12 in 1 Year	Notifier FACP w/hardwired detection and alarm devices Upgrade in Year 12
Signaling / Communication	1 ls	8500.00	$8,500	Varies	20	2 /9 /16 in 1 Year	Video monitoring, central clock, P/A system Upgrade allowance
BUILDING ELEVATORS							
Shafts and Doorways	ea						n/a: No elevators at this school
Cabs	ea						
Machine Room Equipment	ls						
Service Lift	ls						

Costs projected at 3%

Replacement Items	Year 1 2018	Year 2 2019	Year 3 2020	Year 4 2021	Year 5 2022	Year 6 2023	Year 7 2024	Year 8 2025	Year 9 2026	Year 10 2027	Year 11 2028	Year 12 2029	Year 13 2030	Year 14 2031	Year 15 2032	Year 16 2033	Year 17 2034	Year 18 2035	Year 19 2036	Year 20 2037
BUILDING MECHANICAL																				
Building Fire Suppression	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Hydronic Heat Distribution	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Domestic Hot/Cold Water Dist.	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Building Sanitary Waste & Vent. Dist.	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Building Gas Distribution	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Building Air Conditioing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$5,611	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Air Handler Unit -HVAC	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Air Handler Unit - HV	$0	$0	$0	$0	$15,194	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Rooftop EV Units	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$4,413	$4,545	$0	$0
Exhaust Fans	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,557	$1,604	$0	$0	$0	$0	$0	$0	$0
Convectors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Finned Tube Radiation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,409	$1,451	$1,495	$1,540	$1,586	$1,634	$1,683	$1,733	$1,785	$1,839	$1,894
BUILDING ELECTRICAL																				
Building Power Wiring	$1,050	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Emergency Generator	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Emergency Lights	$0	$0	$0	$0	$0	$0	$7,308	$0	$0	$0	$0	$0	$0	$0	$0	$0	$9,821	$0	$0	$0
Smoke / Fire Detection	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$61,598	$0	$0	$0	$0	$0	$0	$0	$0
Signaling / Communication	$0	$8,755	$0	$0	$0	$0	$0	$0	$10,768	$0	$0	$0	$0	$0	$0	$13,243	$0	$0	$0	$0
BUILDING ELEVATORS																				
Shafts and Doorways	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Cabs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Machine Room Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Service Lift	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Wilkins Elementary School

BUILDING ARCHITECTURE

(Expected Useful life)

Replacement Items	Quantity		Cost per unit in 2018 $$	Total Cost in 2018 $$	AGE (Years)	EUL (Years)	Replacement Schedule Year of action AND duration of project	Notes
STRUCTURE								
Foundation	1,990	lf		$0	50	50		Concrete slab Monitor
Framing		ls						
Slab		sf						
Miscellaneous		ls						
BUILDING EXTERIOR								Metal framed glass storefront type
Exterior Common Doors	1	ea		$0	Varies	35		Maintain out of Operating
Automatic Door Openers		ea						
Secondary Doors	21	ea	1200.00	$25,200	Varies	35	18 in 1 Year	Solid core metal doors with glass insert, some rust observed Repaint from Operating. Replace in Year 18
Service Doors	2	ea	1100.00	$2,200	12	30	18 in 1 Year	Metal doors, in good condition Replace
Storm Doors		ea						
Exterior Walls - Brick	22,540 1,127	sf sf	11.85	$13,355	50	60	16 in 1 Year	In good condition, no signs of cracks or deterioration Allowance for repointing in Year 16
Exterior Walls - Vinyl	3,800	sf	0.40	$1,520	8	40	4 /10 /16 in 1 Year	Vinyl on portable bldgs, in good condition Power wash in Years 4, 10, and 16
Exterior Walls - Ribbed Plywood	720	sf	8.70	$6,264	8	50	1 in 1 Year	Shed enclosure deteriorating Replace in Yr 1 w/cementitious fiberboard material. **Discuss**
Trim, Soffit & Fascia	1	ls	3500.00	$3,500	Varies	10	1 /8 /15 in 1 Year	Wood fascia and soffits, peeling paint, areas of deterioration Repair and repaint in Yrs 1, 8, and 15
Caulking	1	ls	7500.00	$7,500	50	60	1 /16 in 1 Year	Areas of dried, cracked, caulking, with some openings Allowance to replace caulking in Years 1 and 16
Window Frames - Metal Frame	166	ea		$0	8	35		Metal framed double glazed Maintain out of Operating
Window Frames - Vinyl Frame	24	ea		$0	8	35		Vinyl framed double glazed Maintain out of Operating
Window Frames		ea						
Window Glass	57	ea	95.00	$5,415	8	20	12 over 15 Years	Allowance for glazing damage (breaks and fogging) starts in Year 12
Storm / Screen Windows		ls						
Balcony Railings		ea						
Fire Escapes		ea						
Bldg Mounted Lighting	1	ls		$0	50	15		LED wall-mounted Maintain out of Operating

Costs projected at 3%

Replacement Items	Year 1 2018	Year 2 2019	Year 3 2020	Year 4 2021	Year 5 2022	Year 6 2023	Year 7 2024	Year 8 2025	Year 9 2026	Year 10 2027	Year 11 2028	Year 12 2029	Year 13 2030	Year 14 2031	Year 15 2032	Year 16 2033	Year 17 2034	Year 18 2035	Year 19 2036	Year 20 2037
STRUCTURE																				
Foundation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Framing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Slab	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Miscellaneous	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
BUILDING EXTERIOR																				
Exterior Common Doors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Automatic Door Openers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Secondary Doors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$41,652	$0	$0
Service Doors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$3,636	$0	$0
Storm Doors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Exterior Walls - Brick	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$20,807	$0	$0	$0	$0
Exterior Walls - Vinyl	$0	$0	$0	$1,661	$0	$0	$0	$0	$0	$1,983	$0	$0	$0	$0	$0	$2,368	$0	$0	$0	$0
Exterior Walls - Ribbed Plywood	$6,264	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Trim, Soffit & Fascia	$3,500	$0	$0	$0	$0	$0	$0	$4,305	$0	$0	$0	$0	$0	$0	$5,294	$0	$0	$0	$0	$0
Caulking	$7,500	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$11,685	$0	$0	$0	$0
Window Frames - Metal Frame	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Window Frames - Vinyl Frame	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Window Frames	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Window Glass	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$500	$515	$530	$546	$562	$579	$597	$615	$633
Storm / Screen Windows	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Balcony Railings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Fire Escapes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Bldg Mounted Lighting	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

BUILDING ARCHITECTURE--*continued*

(Expected Useful life)

Replacement Items	Quantity		Cost per unit in 2018 $$	Total Cost in 2018 $$	AGE (Years)	EUL (Years)	Replacement Schedule Year of action AND duration of project	Notes
ROOF SYSTEMS								
Structure	51,359	sf		$0	50	40		Wood framed, wood decking Monitor
Roof - PVC Membrane	32,100	sf	14.85	$476,684	8	20	12 over 2 Years	Original, good maintenance and repairs Replace starting in Year 2
Roof - Rubber Membrane	14,906	sf	14.85	$221,354	8	20	14 in 1 Year	In good condition Replace in Year 14, consider PVC membrane
Roof - Asphalt Shingles	3,920	sf	4.40	$17,249	8	23	15 in 1 Year	In good condition Replace in Year 15
Roof-Corrugated Metal	433	sf		$0	8	40		Maintain out of Operating
Roof Drainage	1	ls	1500.00	$1,500	Varies	40	1 in 1 Year	Mix of Interior drains, and gutters and downspouts Allowance to add ice-melt system in Yr 1
Skylights		ea						
Penthouses		ea						
Chimney		ls						
CLASSROOMS								
Walls	26,631	sf	0.70	$18,642	Varies	10	8 /18 in 1 Year	Painted Repaint in Years 8 and 18
Ceilings	25,564	sf	1.10	$28,120	Varies	10	8 /18 in 1 Year	Suspended ceiling tiles Replace
Floors	25,564	sf	4.10	$104,812	Varies	20	18 over 3 Years	VCT, in good condition Replace starting in Year 18
Movable Partitions		ea			Varies			
Lighting	1	ls		$0	Varies	25		Fluorescent fixtures Maintain out of Operating; consider LEDs -**Discuss**
Furniture	1	ls	87500.00	$87,500	Varies	20	5 over 20 Years	Desks, chairs, tables, etc. Replacement allowance
Equipment	1	ls	30000.00	$30,000	Varies	25	5 over 20 Years	Computers, projectors, screens, whiteboards, etc. Replacement allowance
Miscellaneous		ls						
HALLS/LOBBY								
Walls	13,980	sf	0.70	$9,786	2	10	8 /18 in 1 Year	Painted Repaint in Years 8 and 18
Ceilings	5,387	sf	1.10	$5,926	2	10	8 /18 in 1 Year	Suspended ceiling tiles Replace
Floors	5,387	sf	4.10	$22,087	Varies	20	18 in 1 Year	VCT, in good condition Replace in Year 18
Student Storage	1	ls	8500.00	$8,500	Varies	30	10 over 10 Year	Storage areas at end of corridors Repair allowance
Lighting	1	ls		$0	50	20		Fluorescent fixtures Maintain out of Operating; consider LEDs -**Discuss**
Miscellaneous		ls						

Costs projected at 3%

Replacement Items	Year 1 2018	Year 2 2019	Year 3 2020	Year 4 2021	Year 5 2022	Year 6 2023	Year 7 2024	Year 8 2025	Year 9 2026	Year 10 2027	Year 11 2028	Year 12 2029	Year 13 2030	Year 14 2031	Year 15 2032	Year 16 2033	Year 17 2034	Year 18 2035	Year 19 2036	Year 20 2037
ROOF SYSTEMS																				
Structure	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Roof - PVC Membrane	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$329,921	$339,819	$0	$0	$0	$0	$0	$0	$0
Roof - Rubber Membrane	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$325,066	$0	$0	$0	$0	$0	$0
Roof - Asphalt Shingles	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$26,090	$0	$0	$0	$0	$0
Roof-Corrugated Metal	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Roof Drainage	$1,500	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Skylights	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Penthouses	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Chimney	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
CLASSROOMS																				
Walls	$0	$0	$0	$0	$0	$0	$0	$22,927	$0	$0	$0	$0	$0	$0	$0	$0	$0	$30,812	$0	$0
Ceilings	$0	$0	$0	$0	$0	$0	$0	$34,585	$0	$0	$0	$0	$0	$0	$0	$0	$0	$46,479	$0	$0
Floors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$57,746	$59,479	$61,263
Movable Partitions	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Furniture	$0	$0	$0	$0	$4,924	$5,072	$5,224	$5,381	$5,542	$5,708	$5,880	$6,056	$6,238	$6,425	$6,618	$6,816	$7,021	$7,231	$7,448	$7,672
Equipment	$0	$0	$0	$0	$1,688	$1,739	$1,791	$1,845	$1,900	$1,957	$2,016	$2,076	$2,139	$2,203	$2,269	$2,337	$2,407	$2,479	$2,554	$2,630
Miscellaneous	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
HALLS/LOBBY																				
Walls	$0	$0	$0	$0	$0	$0	$0	$12,036	$0	$0	$0	$0	$0	$0	$0	$0	$0	$16,175	$0	$0
Ceilings	$0	$0	$0	$0	$0	$0	$0	$7,288	$0	$0	$0	$0	$0	$0	$0	$0	$0	$9,794	$0	$0
Floors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$36,506	$0	$0
Student Storage	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,109	$1,142	$1,177	$1,212	$1,248	$1,286	$1,324	$1,364	$1,405	$1,447	$0
Lighting	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Miscellaneous	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

BUILDING ARCHITECTURE--*continued*

(Expected Useful life)

Replacement Items	Quantity	Cost per unit in 2018 $$	Total Cost in 2018 $$	AGE (Years)	EUL (Years)	Replacement Schedule Year of action AND duration of project	Notes
MULTIPURPOSE/RESTROOMS							
Walls	11,250 sf	0.85	$9,563	2	10	8 /18 in 1 Year	Painted Repaint. Continue to monitor for any new insect activity
Ceilings	8,652 sf	0.85	$7,354	2	10	8 /18 in 1 Year	Painted Repaint
Floors	8,652 sf		$0	8	30		Ceramic tile in restrooms, linoleum in Multipurpose Rm Maintain out of Operating
Furnishings/Equipment	1 ls	30000.00	$30,000	Varies	25	10 over 15 Years	Benches, stage equipment Replacement allowance
Restroom Fixtures/Accessories	1 ls	7500.00	$7,500	Varies	20	10 /20 in 1 Year	Wall-hung sinks and countertops w/sinks, toilets, urinals, mirrors, light fixtures, etc. Replacement allowance
SUPPORT AREAS							
CAFETERIA							
Walls	sf						
Ceilings	sf						
Floors	sf						
Furnishings	ls						
Equipment	ls						
LIBRARY							
Walls/Ceilings	4,936 sf	0.84	$4,146	2	10	8 /18 in 1 Year	Ceiling tiles, painted walls Replace tiles, repaint walls
Floors	760 sf	2.75	$2,090	2	10	8 /18 in 1 Year	Carpet Replace, consider carpet tiles
Furnishing	1 ls	11500.00	$11,500	Varies	10	9 /19 over 5 Years	Tables, chairs, shelving, etc. Replacement allowance
Equipment	1 ls	25000.00	$25,000	Varies	10	9 /19 over 5 Years	Computers Replacement allowance
Miscellaneous							
ADMIN/SUPPORT OFFICES							
Walls/Ceilings	6,916 sf	0.84	$5,809	2	10	8 /18 in 1 Year	Ceiling tiles, painted walls Replace tiles, repaint walls
Floor Covering	3,646 sf	4.10	$14,949	Varies	20	18 in 1 Year	VCT Replace
Equipment	1 ls		$0	Varies	10		Desks, chairs, cabinets, computers, copier, etc. Maintain out of Operating
KITCHEN							
Walls/Ceilings	5,369 sf	0.84	$4,510	2	10	8 /18 in 1 Year	Ceiling tiles, painted walls Replace tiles, repaint walls
Floors	1,739 sf		$0	15	35		Quarry tile, in good condition Maintain out of Operating
Cabinets/Countertops	1 ls		$0	15	35		Stainless steel cabinets and countertops Maintain out of Operating
Appliances	1 ls	45000.00	$45,000	Varies	25	10 over 5 Years	Walk-in refrig/freezer, gas range, dishwasher, comm equip. Future replacements starts in Year 10

Costs projected at 3%

Replacement Items	Year 1 2018	Year 2 2019	Year 3 2020	Year 4 2021	Year 5 2022	Year 6 2023	Year 7 2024	Year 8 2025	Year 9 2026	Year 10 2027	Year 11 2028	Year 12 2029	Year 13 2030	Year 14 2031	Year 15 2032	Year 16 2033	Year 17 2034	Year 18 2035	Year 19 2036	Year 20 2037
MULTIPURPOSE/RESTROOMS																				
Walls	$0	$0	$0	$0	$0	$0	$0	$11,761	$0	$0	$0	$0	$0	$0	$0	$0	$0	$15,805	$0	$0
Ceilings	$0	$0	$0	$0	$0	$0	$0	$9,045	$0	$0	$0	$0	$0	$0	$0	$0	$0	$12,155	$0	$0
Floors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Furnishings/Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,610	$2,688	$2,768	$2,852	$2,937	$3,025	$3,116	$3,209	$3,306	$3,405	$3,507
Restroom Fixtures/Accessories	$0	$0	$0	$0	$0	$0	$0	$0	$0	$9,786	$0	$0	$0	$0	$0	$0	$0	$0	$0	$13,151
CAFETERIA																				
Walls	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Ceilings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Floors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
LIBRARY																				
Walls/Ceilings	$0	$0	$0	$0	$0	$0	$0	$5,099	$0	$0	$0	$0	$0	$0	$0	$0	$0	$6,853	$0	$0
Floors	$0	$0	$0	$0	$0	$0	$0	$2,570	$0	$0	$0	$0	$0	$0	$0	$0	$0	$3,454	$0	$0
Furnishing	$0	$0	$0	$0	$0	$0	$0	$0	$2,914	$3,001	$3,091	$3,184	$3,279	$0	$0	$0	$0	$0	$3,916	$4,033
Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$6,334	$6,524	$6,720	$6,921	$7,129	$0	$0	$0	$0	$0	$8,512	$8,768
Miscellaneous	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
ADMIN/SUPPORT OFFICES																				
Walls/Ceilings	$0	$0	$0	$0	$0	$0	$0	$7,145	$0	$0	$0	$0	$0	$0	$0	$0	$0	$9,602	$0	$0
Floor Covering	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$24,708	$0	$0
Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
KITCHEN																				
Walls/Ceilings	$0	$0	$0	$0	$0	$0	$0	$5,547	$0	$0	$0	$0	$0	$0	$0	$0	$0	$7,454	$0	$0
Floors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Cabinets/Countertops	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Appliances	$0	$0	$0	$0	$0	$0	$0	$0	$0	$11,743	$12,095	$12,458	$12,832	$13,217	$0	$0	$0	$0	$0	$0

Appendix A: Statement of Delivery

Our Capital Needs Assessment (the "CNA" or the "Report") on the subject property is delivered subject to the following terms and conditions:

1. The report and analysis may be relied upon by you as a description of the observed current conditions of the building and site improvements, only as of the date of this report, and with the knowledge that certain limitations and exceptions within the report that are the reflective of the scope of services as defined in our contract. Although care has been taken in the performance of this assessment, ON-SITE INSIGHT, Inc. (and/or its representatives) makes no representations regarding latent or concealed defects that may exist and no warranty or guarantee is expressed or implied. This report is made only in the best exercise of our ability and judgment. Conclusions reached in this report assume current and continuing responsible ownership and competent property management.

2. We have undertaken no formal evaluation of environmental concerns, including but not limited to asbestos containing materials (ACMs), lead-based paint, chlorofluorocarbons (CFCs), polychlorinated biphenyls (PCBs), and mildew/mold.

3. Conclusions in this report are based on estimates of the age and normal working life of various items of equipment and/or statistical comparisons. Actual conditions can alter the useful life of any item. When an item needs immediate replacement depends on many factors, including previous use/misuse, irregularity of servicing, faulty manufacture, unfavorable conditions, Acts of God and unforeseen circumstances. Certain components that may be working when we made our inspection might deteriorate or break in the future without notice.

4. To prepare this report, we used historic data on capital activities and costs, blueprints (when available), and current prices for capital actions. We have not independently verified this information, have assumed that it is reliable, but assume no responsibility for its accuracy.

5. Unless otherwise noted in the report, we assume that all building components meet code requirements in force when the property was built.

6. If accessibility issues are referenced in the report, the site elements, common areas, and dwelling units at the development were examined for compliance with the requirements of the Uniform Federal Accessibility Standards (UFAS), and for Massachusetts properties, the Massachusetts Architectural Accessibility Board (AAB). The methodology employed in undertaking this examination is adapted from a Technical Assistance Guide (TAG-88-11) titled "Supplemental Information About the Section 504 Transition Plan Requirements" published by the Coordination and Review section of the U.S. Department of Justice Civil Rights Division, and the AAB Rules and Regulations, 521 CMR effective July 10, 1987. The Guide also incorporates the requirements of UFAS, published April 1, 1988 by the General Services Administration, the Department of Defense, the Department of Housing and Urban Development, and the U.S. Postal Service. Changes in legislation and/or regulations may make some observations moot.

7. Response Actions and estimated costs of responses were developed by ON-SITE INSIGHT, Inc. If additional structural work is necessary, costs for some Response Actions may exceed estimates. Whenever the Response Action is to remove, reposition, or modify walls, a competent structural engineer should be retained before any work is done, because such investigation may disclose that a Response Action is either more costly than estimated, or is not possible.

8. Conclusions reached in this report assume current and continuing responsible ownership and competent property management. Any unauthorized reliance on or use of the report, including any of its information or conclusions, will be at the third party's sole risk. For the same reasons, no warranties or representation, express or implied in this report, are made to any such third party. Reliance on the report by the client and all authorized parties will be subject to the terms, conditions and limitations stated in the contract Terms and Conditions. The limitation of liability defined in the Terms and Conditions is the aggregate limit of ON-SITE INSIGHT's liability to the client and all relying parties.

9. Regular updates of this plan are recommended to ensure careful monitoring of major building systems and to adjust the program to accommodate unanticipated circumstances surrounding the buildings, operations, and/or occupants.