

# Municipal Capital Needs Assessment and Replacement Reserve Analysis

Prepared for:

**Town of Westwood** 50 Carby Street Westwood, MA 02090





# Islington Branch Library

Westwood, MA

December 20, 2016

Final Report

# **Islington Branch Library: Property Overview**

Number of Buildings: 1

**Total Square Footage:** 1,962

On-Site
Insight
A RECAP REAL ESTATE ADVISORS COMPANY

Building Type	# of Buildings
Elevator	1
Walk-up	-
Totals:	1

Occupancy: Library

Property/Development Age: 58 years

Year of Construction: 1884
Converted to current use: 1959
Last major renovation: 1996

City & State: Westwood, MA

Address: 280 Washington Street

OSI Project Number: 16569

Assessment Date: December 6, 2016

Assessment Conditions: Clear, Dry, 40° F

Assessor: Steve Ninos



#### ${\it Property Description:}$

The Islington Branch Library is a 1,962 square foot municipal building located on Washington Street in the town of Westwood, Massachusetts. The pitched-roof, wood-framed, vinyl-clad building was originally constructed in 1884 as a one-room schoolhouse and converted to its current use in 1959. A significant interior renovation was completed in 1996 which included the installation of a new heating, ventilation, and air conditioning system; new lighting, carpeting, and paint; and construction of a rear-elevation multi-level deck and stairs, a small kitchenette, and a fully accessible bathroom.



## **Executive Summary**

## **Islington Branch Library**

Westwood, MA

The Islington Branch Library is a 1,962 square foot municipal building located on Washington Street in the town of Westwood, Massachusetts. The pitched-roof, wood-framed, vinyl-clad building was originally constructed in 1884 as a one-room schoolhouse, then subsequently converted to a community center in 1910. A garage was added to the rear elevation in 1911, and the building was further expanded in 1929. The building was first converted to its current use as the Islington Branch Library in 1959; and a significant interior renovation was completed in 1996 including the installation of a new heating, ventilation, and air conditioning system; new lighting, carpeting, and paint; construction of a rear-elevation multi-level deck and stairs; and a small kitchenette and fully accessible bathroom were installed at the northeast corner of the building.

Overall the property is in generally good condition. The building envelope, interior spaces, and various building systems are adequately appointed and maintained with evidence of timely maintenance and capital expenditures noted during the course of the assessment. That said, the property does have substantive capital needs anticipated in the coming years as a number of systems and components are at or approaching the end of their expected useful service lives. Anticipated near-term needs include parking lot and walkway/apron asphalt resurfacing; electrical system testing and maintained; modernization of the aging fire alarm system; roof

replacement and localized foundation repairs; upcoming siding, window, door, and deck replacements; as well as interior wall repairs, painting, and carpet replacement.

Future capital actions are based on useful life expectations and assume continued effective maintenance and physical management. In compiling this report, the assessor has used the RSMeans building construction costs database as a starting point for cost estimation with adjustments made up or down based on the current age and condition of each element; historical and local pricing data accumulated from previous projects completed by On-Site Insight; as well as additional pricing data and property-related information provided by management. The costs are then presented in the twenty-year replacement plan as estimated repair and replacement hard costs inflated at 3% per year to account for inflation. The costs shown do not include typical soft costs such as architectural, engineering, or legal fees, if contracted, financing, permits, or taxes; however some costs have been elevated to account for possible unforeseen underlying age-related structural, framing, or decking issues that could not be determined during the visual physical assessment of the property.

Costs for the twenty-year plan total \$258,042, or \$132 per square foot of building floor space in current dollars (\$293,340 or \$150 per square foot in inflated dollars at 3% per year). Currently there is no reported replacement reserve fund for this property. To help meet all of the property's anticipated capital needs, repairs, and replacements occurring throughout the twenty-year plan, a suggested annual funding amount of \$6 per square foot (\$11,772) is shown in Year 1. This is then reduced by \$2 per square foot (\$3,924) in Years 5, 9, and 14. These contributions are also shown being indexed at 3% per year to account for inflation. Additionally, in order help meet all anticipated near-term capital needs, a one-time capital infusion of \$160,000 is shown in Year 1.

#### Site

The Islington Branch Library building abuts the town sidewalk along its entire front (west) elevation. A concrete pad and bench are set at the front of the building; and a concrete ramp with painted wood steel-tube railings (added during the 1996 renovations) provides handicap accessible entry into the building. Concrete steps at both (north and south) ends of the building lead down to asphalt walkway/aprons running along the ends of the building and out to an asphalt-paved parking lot. Remaining concrete at the site is limited to a concrete housekeeping pad located at the southeast corner of the building that was installed in 1996 to hold the building's HVAC unit. A multi-level wood-framed deck (discussed in the Building Architectural section of this report) was constructed in 1996 to provide a rear-elevation entry into the building as well as an inviting outdoor space for members to sit and read. Landscaping surrounding the building is limited to narrow shrub and planting beds at the front elevation, and two rear-elevation planting beds adjacent to the deck and bordered by aging/rotting landscaping timbers in need of replacement.

#### 1. Costs for the development's site related elements total \$43,035 or \$22 per square foot in inflated dollars.

2. The current age of the parking lot and end-elevation apron/walkway asphalt is unknown; however it appears have surpassed its twenty-year expected useful service life with significant visible age, weather, and use-related cracking, alligatoring, and surface deterioration noted during the assessment. Cost to scarify and resurface all asphalt paving at the site are shown in Year 1; and future periodic allowances for asphalt maintenance and repairs in the form of crack-filling, sealcoating, and re-striping are shown in Years 6, 11, and 16.

- 3. Replacement of the front entrance painted-wood accessible ramp railings are shown in Year 9, based on a thirty-year expected useful life.
- 4. A six-foot high chain-link fence with one hinged side encloses the exterior pad-mounting packaged HVAC unit located at the southeast corner of the building. All four posts have been pushed out of plumb presumably from past snow removal efforts or vehicle impact. An allowance to repair/replace the enclosure is shown in Year 1.
- 5. A landscaping refurbishment allowance is also shown in Year 1 to trim or remove the overgrown shrubs adjacent to the rear-elevation deck, replace the rear-elevation landscaping timbers; and install new shrubs and plantings at the front and rear of the building. A future as-needed landscaping refurbishment allowance is shown in Year 11.
- 6. The site is serviced by a full complement of utility and municipal provided services including natural gas, electricity, domestic cold water, and sanitary waste lines. No issues were reported during the assessment; and no capital costs related to these typically long-lived systems are anticipated to be necessary during the twenty-year timeframe of the plan.

## **Building Mechanical and Electrical Systems**

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

- 7. Costs related to the development's mechanical and electrical systems total \$36,416 or \$19 per S.F. in inflated dollars.
- 8. The building's HVAC system was modernized in 1996 with an exterior pad-mounted packaged heating/cooling unit providing ducted forced warm air and cooled conditioned air to all interior spaces within the building. The 1996 unit was recently replaced

- in 2016 with a Trane YHC060, 130-MBH natural gas heating, 5-ton electric cooling unit. No operating issues were reported; and future replacement of this unit is shown in Year 20, after twenty-years of use.
- 9. Domestic hot water for the kitchen and bathroom sinks is produced by a small point-of-use hot water heater located under the kitchen sink in a locked cabinet. Visual inspected of the unit was not possible during the assessment; however based on a fifteen-year expected useful life, future replacements are shown in Years 5 and 20.
- 10. The building contains older electrical wiring and distribution equipment; and as a precautionary measure, periodic allowances for professional infrared testing, maintenance, and as-needed repairs to the building's electrical systems are shown every five years throughout the plan.
- 11. An aging zone-type fire alarm control panel monitors hardwired end-devices (smoke detectors, heat detectors, pull stations, and audio-visual horn/strobe warning devices) located throughout the building. Although the exact age is unknown, the system appears to have surpassed its twenty-year expected useful service life. Costs to replace the panel and all peripherals with a modern fully-addressable system are shown in Year 1.

### **Building Architectural Systems**

The Islington Branch Library property consists of a single, one-story, wood-framed, vinyl-clad building set on a mix of original mortared fieldstone and brick and newer reinforced poured concrete foundations. The building features a pitched wood-truss roof with majority three-tab asphalt shingles and a small section of asphalt roll roofing over the attached garage structure. Aluminum gutters and downspouts provide directed roof drainage at all elevations of the building. The front and rear entrances feature half-lite

solid-wood entry doors; and windows all around are a mix of large and small vinyl replacement frames with insulating glass units (IGU's). The exact age of the siding, windows, and doors is not currently known; however based on discussions with management they are all presumed to have been installed sometime in the early 1990's. The rear-elevation attached garage (currently utilized as storage space) features an older painted-wood segmented-panel overhead door with two rows of glazing panels. The rear-elevation deck features two levels and stairs with painted-wood framework, lattice, decking, and railings, providing access from the parking lot up to the rear entrance door.

Interior spaces are limited to a large vaulted-ceiling library/reading room occupying the majority of the floor with multiple book shelves, racks, display cases, reading tables, chairs, and librarian's desk; the front-elevation entrance vestibule; and a kitchenette and fully accessible bathroom that were both installed during the 1996 renovations. Finishes include painted walls and ceilings; carpet throughout the entire reading room; and newly installed vinyl sheet flooring in the kitchenette and bathroom. A set of painted wood stairs leads down to the building basement with various storage rooms and an unused bathroom. Based on discussions with management the basement is used for storage purposes only, and the limited painting needs within the space are handled from operating accounts.

#### 12. Costs related to the development's architectural systems total \$213,888 or \$109 per square foot in inflated dollars.

13. The exterior parging at the south-elevation foundation is aging, delaminating, and in need of removal and re-parging. The delaminated parging has also exposed a section of original brick foundation at ground level that exhibits complete mortar loss,

- providing an avenue of entry for damaging rainwater runoff and snowmelt. An allowance to remove the parging, repair/repoint the foundation brick where needed, and re-parge the foundation wall are shown in Year 1.
- 14. The vinyl siding appears to be in generally good condition; although dirt-covered and in need of cleaning. Future costs to remove and replace the siding are shown in Year 5, based on a thirty-year expected useful service life; and interim periodic allowances for professional power-washing and as-needed localized repairs are shown in Years 1, 10, 15, and 20.
- 15. Replacement of the windows and doors is shown concurrent with the vinyl siding replacement in Year 5.
- 16. Replacement of the aging overhead garage door is shown in Year 1.
- 17. Although well-maintained, the rear-elevation wood deck has surpassed its twenty-year expected useful life with age, weather, salt/snow melt-related decking board deterioration noted during the assessment. Costs to rebuild the deck are shown in Year 2.
- 18. The current age of the asphalt-shingle roof covering is unknown; however it appears to have surpassed its twenty-year expected useful life with visible lifting, damaged shingles, and organic growth noted during the assessment. Interior pealing wall paint and moisture-related staining is assumed to be related to the poor condition of the roof. Replacement is shown in Year 1.
- 19. Replacement of the aging aluminum gutter and downspout system is shown in Year 1 as well.
- 20. The chimney flashing is visibly damaged and lifting providing an access for wind-driven rain and snow melt. Adjacent bricks appear to be cracked and spot mortar loss is visible as well. An allowance to repair, repoint, and re-flash the chimney is shown in Year 1, with a future as-needed repair allowance shown in Year 11.

#### **Interiors**

- 21. Interior painted wall and ceiling surfaces vary in condition with localized sections of peeling paint and cracked plaster noted in spots (presumably related to the exterior roof and chimney flashing issues discussed above). Interior painting and as-needed spot repairs are shown on ten-year repeating cycles in Years 1 and 11.
- 22. The carpet is presumed to date to the 1996 renovations and has surpassed its ten-year expected useful life with visible staining and wear noted throughout the room. Replacement is shown in Years 1 and 11 as well, concurrent with each painting cycle.
- 23. Future replacement of the newly installed vinyl sheet flooring is shown in Year 15.
- 24. Future replacement of the kitchenette cabinets is shown in Year 9, after thirty years of use; and future replacement of the bathroom fixtures is shown in Year 19, after forty years of use.
- 25. It should be noted that the bathroom side grab bar is currently positioned much too far from the toilet. A shorter bar, able to be securely attached to the short chase wall directly adjacent to the toilet should be installed as soon as possible.
- 26. Periodic allowances for as-needed furniture, shelving, and casework replacements, upgrades, and additions are shown every five years starting in Year 2.

Additional Notes:
1. The Physical Assessment of the property was conducted on December 6 <sup>th</sup> , 2016. Additional information was provided to ON-SITE INSIGHT by site staff and others. OSI was represented on this assignment by Steve Ninos. 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.



View of the ageing, deteriorating parking lot and fire-lane asphalt surface conditions.



Concrete surfaces are limited to the front entrance ramp, two side elevation steps, and the exterior heating/cooling unit housekeeping pad. All in generally good observable condition.



Significant cracking and alligatoring of the entire asphalt surface is beyond repair. Near term complete resurfacing is recommended.



Fencing is limited to the chain link enclosure at the exterior pad-mounted heating/cooling unit. The posts are out of plumb due to vehicle impact and/or snow removal efforts and are in need of repair/re-setting.



The aging, rotting, damaged rear-elevation landscaping timbers are in need of replacement.



Overgrown shrubs adjacent to the rear-elevation deck are in need of trimming or removal.



A Trane packaged 130-MBH natural gas heating, 5-ton electric cooling unit was newly installed in 2016 and provides heating and cooling for the entire building.



The aging zone-type fire alarm control panel has surpassed its twenty-year expected useful service life and is in need of near-term replacement.



View of the building front (west) elevation with clapboard-profile vinyl siding and aging three-tab asphalt-shingle roof.



View of the building north end-elevation.



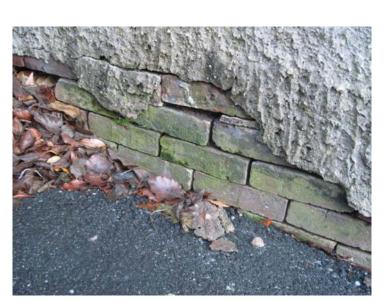
View of the rear (east) elevation with wood deck and stairs providing access to the rear entrance door.



View of the south end-elevation



An attached garage with aging wood segmented-panel overhead door is currently being used for storage



Close-up of complete mortar loss visible at the exposed brick foundation at the south end-elevation. In need of near-term removal, repointing, and re-parging.



View of the aging, delaminating parging over the original brick foundation at the south end-elevation of the building. In need of near-term removal, as-needed repointing, and complete re-parging.



View of aging wood decking boards at the rear-elevation entrance deck structure.



The ageing roof shingles are lifting in several spots providing an access for wind driven rain which has resulted in visible interior moisture damage.



View of significant organic growth and shingle damage at the garage extension roof.



A small section of asphalt roll roofing over the garage structure is also ageing, deteriorating and in need of near-term replacement.



Close-up of deteriorating flashing, cracked bricks, mortar loss, and lifting shingles at the north and east sides of the chimney providing access for wind-driven rain and moisture damage.



View of visible mortar loss at the chimney's south side.



Age and use-related carpet staining and wear is visible throughout the room. Presumed to date to the 1996 renovations and in need of near term full replacement.



View of the interior space with painted plaster walls and vaulted ceiling, carpeted floors, book stacks, and various reading tables and chairs.

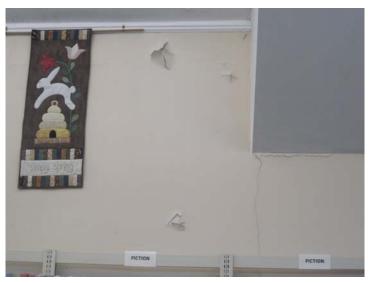
Last remodeled/refurbished in 1996.



View of the librarian's desk and front entrance vestibule just beyond.



View of cracking wall plaster visible above the rear entrance door.



View of moisture-related paint failure and cracking visible along the east-elevation wall.



View of wall cracking and paint failure visible at the south-elevation wall.



Diffused lighting fixtures were installed during the 1996 renovations.



View of the computer station available to members.



A fully-accessible bathroom is located just through the kitchen area. New vinyl sheet flooring was recently installed throughout the kitchen and bathroom in 2016.

Side grab bar needs to be placed adjacent to the toilet.



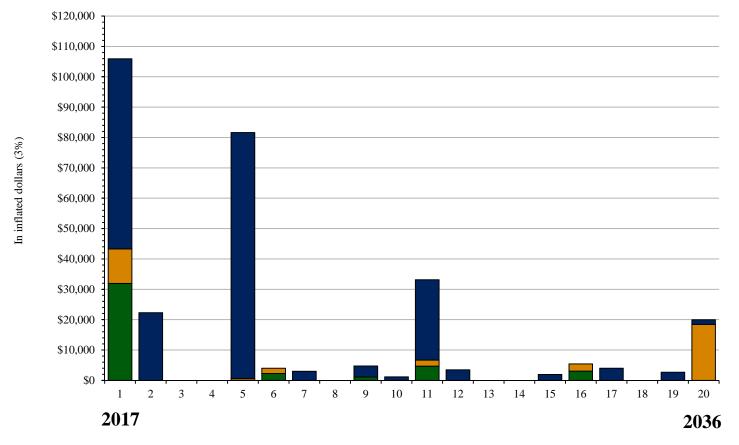
A small kitchenette with wood cabinets, plasticlaminate countertop, inset stainless-steel sink, mini-refrigerator, and small point-of-use water heater, is located at the northeast corner.

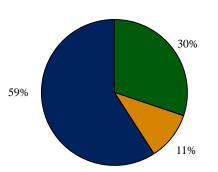


Painted wood stairs lead to the basement which houses several storage rooms and an unused bathroom.

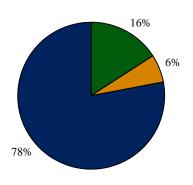
# Capital Needs Summary

# **Islington Branch Library**





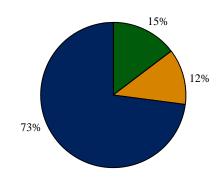
**Year One Distribution** 



**Ten Year Distribution** 

**Total Costs by Building System (inflated dollars)** 

	In Year 1	In Years 1-10	In Years 1-20
Site Systems	\$31,945 or \$16 / S.F.	\$35,327 or \$18 / S.F.	\$43,035 or \$22 / S.F.
Mechanical Room			
Building Mech. & Elec.	\$11,350 or \$6 / S.F.	\$13,652 or \$7 / S.F.	\$36,416 or \$19 / S.F.
Building Architectural	\$62,628 or \$32 / S.F.	\$173,722 or \$89 / S.F.	\$213,888 or \$109 / S.F.
In inflated dollars:	\$105.032 - # \$54./C.E.	\$222.701 - # \$114 / C.F.	\$202.240 \$150 / S.E.
in infrated dollars:	\$105,923 or \$54 / S.F.	\$222,701 or \$114 / S.F.	\$293,340 or \$150 / S.F.
In current dollars:	\$105,923 or \$54 / S.F.	\$210,647 or \$107 / S.F.	<b>\$258,042</b> or \$132 / S.F.



Twenty Year Distribution

Islington Branch Library ● Capital Needs Assessment ● © On-Site Insight

Page 20

# Capital Needs Summary

## **Islington Branch Library**

Westwood, MA

OSI Ref: 16569
Property Age: 58 Years

Number of Buildings:

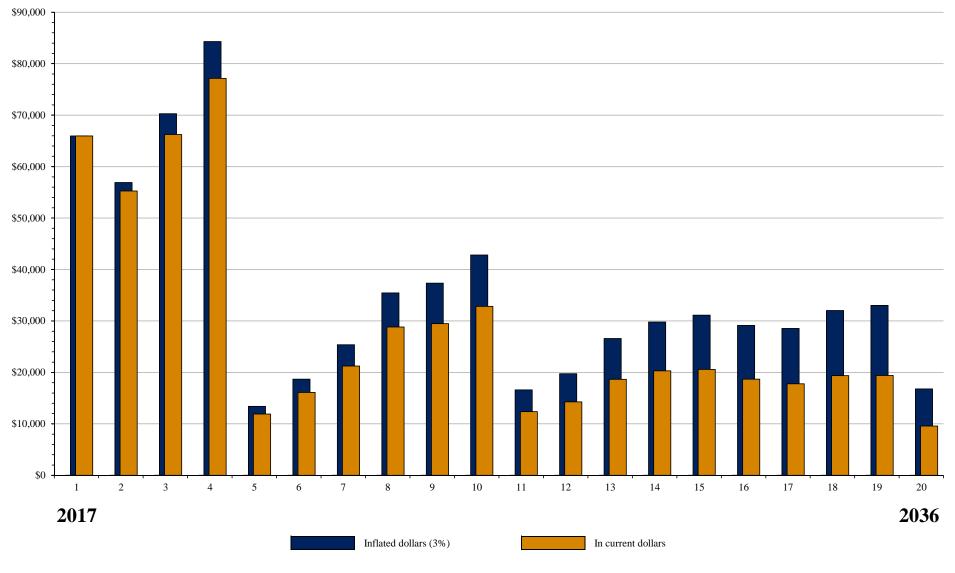
Total Square Footage:

1,962

	<b>2017</b> Year 1	<b>2018</b> Year 2	<b>2019</b> Year 3	<b>2020</b> Year 4	<b>2021</b> Year 5	<b>2022</b> Year 6	<b>2023</b> Year 7	<b>2024</b> Year 8	<b>2025</b> Year 9	<b>2026</b> Year 10
Site Systems										
Surface	\$31,945	\$0	\$0	\$0	\$0	\$2,274	\$0	\$0	\$1,108	\$0
Site Distribution Systems	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Site Sub-Total	\$31,945	\$0	\$0	\$0	\$0	\$2,274	\$0	\$0	\$1,108	\$0
Mechanical Room										
Boilers	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Boiler Room Systems	\$0 \$0									
Mechanical Sub-Total	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Building Mech. & Electrical										
Mechanical	\$0	\$0	\$0	\$0	\$563	\$0	\$0	\$0	\$0	\$0
Electrical	\$11,350	\$0	\$0	\$0	\$0	\$1,739	\$0	\$0	\$0	\$0
Elevators	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Mechanical & Electrical Sub-Total	\$11,350	\$0	\$0	\$0	\$563	\$1,739	\$0	\$0	\$0	\$0
<b>5.4.4</b>										
Building Architectural										
Structural and Exterior	\$5,458	\$19,699	\$0	\$0	\$81,054	\$0	\$0	\$0	\$0	\$1,171
Roof Systems	\$40,375	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Interior Main Floor/Reading Room	\$16,392	\$2,575	\$0	\$0	\$0	\$0	\$2,985	\$0	\$0	\$0
Bathroom and Kitchen	\$404	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,610	\$0
Building Architectural Sub-Total	\$62,628	\$22,274	\$0	\$0	\$81,054	\$0	\$2,985	\$0	\$3,610	\$1,171
Total Capital Costs	\$105,923	\$22,274	\$0	<b>\$0</b>	\$81,616	\$4,013	\$2,985	\$0	\$4,719	\$1,171

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.

2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	
Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	
										Site Systems
\$4,652	\$0	\$0	\$0	\$0	\$3,056	\$0	\$0	\$0	\$0	Surface
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	Site Distribution Systems
\$4,652	\$0	\$0	\$0	\$0	\$3,056	\$0	\$0	\$0	\$0	Site Sub-Total
										Mechanical Room
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	Boilers
\$0 \$0	Boiler Room Systems									
						ΦU				Bollet Roolli Systems
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	Mechanical Sub-Total
										Building Mech. & Electrical
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$18,412	Mechanical
\$2,016	\$0	\$0	\$0	\$0	\$2,337	\$0	\$0	\$0	\$0	Electrical
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	Elevators
\$2,016	\$0	\$0	\$0	\$0	\$2,337	\$0	\$0	\$0	\$18,412	Mechanical & Electrical Sub-Total
										Building Architectural
\$0	\$0	\$0	\$0	\$1,358	\$0	\$0	\$0	\$0	\$1,574	Structural and Exterior
\$4,032	\$0 \$0	Roof Systems								
\$22,030	\$3,461	\$0	\$0	\$0	\$0	\$4,012	\$0	\$0 \$0	\$0	Interior Main Floor/Reading Room
\$430	\$0	\$0	\$0	\$590	\$0	\$0	\$0	\$2,681	\$0	Bathroom and Kitchen
\$26,492	\$3,461	<b>\$0</b>	<b>\$0</b>	\$1,947	<b>\$0</b>	\$4,012	<b>\$0</b>	\$2,681	\$1,574	Building Architectural Sub-Total
\$33,159	\$3,461	\$0	\$0	\$1,947	\$5,393	\$4,012	\$0	\$2,681	\$19,986	Total Capital Costs



Reported Reserve Balance as of 12/08/2016: \$0
Estimated Reserve Balance as of 01/01/2017: \$0
Current annual contributions to reserves: \$0

At the end of Year One, Reserve Balances are projected to be: \$65,966

At the end of Year 20, Reserve Balances are projected to be: \$16,799

All projected capital needs are met throughout the plan

1. No current replacement reserve account, and no current annual contributions.

2. Establish an annual capital needs funding of \$6 per square foot (\$11,772) in Year 1; then reduced by \$2 per square foot (\$3,924) in Years 5, 9, and 14.

3. Outside capital infusion of \$160,000 Year 1 to help meet anticipated near term needs.

			ement reserve balance: stributions to Reserves:	•	or \$00 / S.F. or \$00 / S.F.	Reserve Funding In Year 1 Replacement Reserve (RR) analysis starts here with the starting RR balance reported, or imputed, to have been on hand at the start of Year 1, and current annual RR contributions. The projections below reflect Starting RR Balance (Line A), plus the Total Annual RR Contributions (Line D) and Interest Earnings on RR (Line E), minus Total Annual Capital Costs (Line F), taken from the CNS above. This is expressed arithmetically as (A+D+E)-F=G, Year-End Balances, then carries forward to Line A of the following Year.										
		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026					
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10					
(A) <b>I</b>	Reserve Balances															
	Starting Replacement Reserves	\$0	\$65,966	\$56,902	\$70,286	\$84,306	\$13,405	\$18,689	\$25,377	\$35,464	\$37,357					
<b>(B)</b> A	Annual Funding															
	Contributions Indexed at 3%	\$0	\$6	\$6	\$6	\$7	\$5	\$5	\$5	\$5	\$3					
(C)	Additional Contributions	\$6				(\$2)				(\$2)						
		6	6	6	6	5	5	5	5	3	3					
<b>(D)</b>	Total Annual Reserve Funding	\$11,772	\$11,772	\$12,125	\$12,489	\$8,940	\$8,940	\$9,208	\$9,484	\$5,845	\$5,845					
<b>(E)</b>	Interest on Reserves at 2%	\$118	\$1,437	\$1,259	\$1,531	\$1,776	\$357	\$466	\$602	\$768	\$806					
	Total Funds Available	\$11,890	\$79,176	\$70,286	\$84,306	\$95,021	\$22,702	\$28,363	\$35,464	\$42,076	\$44,007					
<b>(F)</b>	Total Capital Cost	\$105,923	\$22,274	\$0	\$0	\$81,616	\$4,013	\$2,985	\$0	\$4,719	\$1,171					
(G)	Reserve Balances	(\$94,034)	\$56,902	\$70,286	\$84,306	\$13,405	\$18,689	\$25,377	\$35,464	\$37,357	\$42,836					
	Outside Capital:	\$160,000														
	Adjusted Reserve Balances	\$65,966	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0					

#### **Notes:**

- 1. No current replacement reserve account, and no current annual contributions.
- 2. Establish an annual capital needs funding of \$6 per square foot (\$11,772) in Year 1; then reduced by \$2 per square foot (\$3,924) in Years 5, 9, and 14.
- 3. Outside capital infusion of \$160,000 Year 1 to help meet anticipated near term needs.

Line C, Additional Contributions allows for material adjustments in annual RR funding that would enable the property to meet all projected needs out of reserves through Year 20.

<sup>\*</sup>ANNUAL RR CONTRIBUTIONS are shown being indexed for inflation at the % specified above except when Additional Contributions are called for.

<sup>\*\*</sup>INTEREST EARNINGS ON RESERVES are calculated on 100% of starting balances and on 50% of the total annual contribution for the year at the rate shown

				Reserve Fund	ing In Year 2	0					
	Projected replaces	ment reserve balance is	\$16,799		This is \$9 per S	.F. in inflated dollars or	\$5 per S.F. in uninflate	ed dollars			
	Projected annua	al funding to reserves is	\$3,077		This is \$2 per S	.F. in inflated dollars or	\$1 per S.F. in uninflate	ed dollars			
<b>2027</b> Year 11	<b>2028</b> Year 12	<b>2029</b> Year 13	<b>2030</b> Year 14	<b>2031</b> Year 15	<b>2032</b> Year 16	<b>2033</b> Year 17	<b>2034</b> Year 18	<b>2035</b> Year 19	<b>2036</b> Year 20		
										Reserve Balance	s (A)
\$42,836	\$16,614	\$19,748	\$26,593	\$29,806	\$31,135	\$29,126	\$28,541	\$32,041	\$33,017	Starting Replacement Reserves	
										Annual Fundin	<b>g</b> ( <b>B</b> )
\$3	\$3	\$3	\$3	\$1	\$1	\$1	\$1	\$2	\$2	Contributions Indexed at 3%	
			(\$2)							Additional Contributions	(C)
3	3	3	1	1	1	1	1	2	2		
\$6,020	\$6,200	\$6,386	\$2,654	\$2,654	\$2,734	\$2,816	\$2,900	\$2,987	\$3,077	Total Annual Reserve Funding	( <b>D</b> )
\$917	\$394	\$459	\$558	\$623	\$650	\$611	\$600	\$671	\$691	Interest on Reserves at 2%	( <b>E</b> )
\$49,773	\$23,209	\$26,593	\$29,806	\$33,083	\$34,519	\$32,552	\$32,041	\$35,698	\$36,785	Total Funds Available	
\$33,159	\$3,461	\$0	\$0	\$1,947	\$5,393	\$4,012	\$0	\$2,681	\$19,986	Total Capital Cost	<b>(F)</b>
\$16,614	\$19,748	\$26,593	\$29,806	\$31,135	\$29,126	\$28,541	\$32,041	\$33,017	\$16,799	Reserve Balances	(G)
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		

SITE SYSTEMS

(Expected Useful life)

Replacement Items	Quantity	Cost per unit in 2017 \$\$	Total Cost in 2017 \$\$	AGE (Years)	EUL (Years)	Replacement Schedule Year of action AND duration of project	Notes
SURFACE							
Roadways	sf						
Parking	9,807 sf	3.00	\$29,421	58	20	1 in 1 Year	Asphalt-paved rear-elevation parking lot and side-elevation walkway/aprons.  Aging, cracking, alligatoring. Surpassed EUL. Costs to scarify and resurface.
Crack-Fill and Sealcoat	9,807 sf	0.20	\$1,961	58	5	6 /11 /16 in 1 Year	Future periodic allowances for asphalt maintenance and repairs.  Crack-filling, sealcoating, and re-striping.
Walkways/Steps (Concrete)	133_ sf		\$0	21	40		Concrete front entrance ramp, bench pad, and side-elevation access steps.  Installed 1996. Good observable conditions. Future repair as-needed from Operating.
Walkways (Brick)	141 sf		\$0	21	40		Brick walkway/apron at rear-elevation entrance deck.  Good conditions. Monitor, maintain, repair/reset as needed from Operating.
Railings (Metal)	88 lf		\$0	21	15		Painted steel tube railings at front entrance ramp, rear entrance deck, and side elevation concrete steps. Good conditions. Monitor, maintain, repaint as-needed from Operating.
Railings (Wood)	35 lf	25.00	\$875	21	30	9 in 1 Year	Painted wood railings at front entrance ramp. Good conditions. Future replacement based on 30-year EUL.
Retaining Walls	lf						
Fencing	if						
Enclosures (Chain Link)	32 If	32.00	\$1,024	21	20	1 in 1 Year	6-foot high heating/cooling unit enclosure with one hinged side for access. Posts out of plumb from vehicle impact/snow removal. Replacement costs.
Play Equipment	ea						
Site Lighting	ea						
Landscaping	1 ls	1500.00	\$1,500	58	10	1 /11 in 1 Year	Aging, rotting, damage landscaping timbers. Overgrown shrubbery.  Periodic landscaping refurbishment allowances.
SITE DISTRIBUTION SYST	EMS						
							Utility provided service.
Gas Lines	1 ls		\$0	58	60+		No observed or reported issues. Monitor.
			**	•0			Municipal provided service
Sanitary Lines	1 ls		\$0	58	60+		No observed or reported issues. Monitor.  Municipal provided service
Cold Water Lines	1 ls		\$0	58	60+		No observed or reported issues. Monitor.
							Utility provided service.
Electric Distribution	1 ls		\$0	58	60+		No observed or reported issues. Monitor.
Telephone and Internet	1 ls		\$0	58	60+		Utility provided service.  No observed or reported issues. Monitor.

Costs inflated at 3%

SITE SYSTEMS

Replacement Items	Year 1 2017	Year 2 2018	Year 3 2019	Year 4 2020	Year 5 2021	Year 6 2022	Year 7 2023	Year 8 2024	Year 9 2025	Year 10 2026	Year 11 2027	Year 12 2028	Year 13 2029	Year 14 2030	Year 15 2031	Year 16 2032	Year 17 2033	Year 18 2034	Year 19 2035	Year 20 2036
																			SUI	RFACE
Roadways	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Parking	\$29,421	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Crack-Fill and Sealcoat	\$0	\$0	\$0	\$0	\$0	\$2,274	\$0	\$0	\$0	\$0	\$2,636	\$0	\$0	\$0	\$0	\$3,056	\$0	\$0	\$0	\$0
Walkways/Steps (Concrete)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Walkways (Brick)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Railings (Metal)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Railings (Wood)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,108	\$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	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Enclosures (Chain Link)	\$1,024	\$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	\$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	\$1,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,016	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
																SIT	E DIST	RIBUTI	ON SYS	STEMS
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
Telephone and Internet	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

#### BUILDING MECHANICAL AND ELECTRICAL

(Expected Useful life)

Replacement Items	Quantity	Cost per unit in 2017 \$\$	Total Cost in 2017 \$\$	AGE (Years)	EUL (Years)	Replacement Schedule Year of action AND duration of project	Notes
BUILDING MECHANICAL							
Building Fire Suppression	ls						
Building Heating Distribution	1 ls		\$0	1	50		Sheet metal forced air ducting.  No observed or reported issues. Monitor and maintain from Operating.
Domestic Hot/Cold Water Dist.	1 ls		\$0	Varies	40		Copper piping.  No observed or reported issues. Monitor and maintain from Operating.
Building Sanitary & Vent.	1 ls		\$0	Varies	75		No observed or reported issues. Monitor and maintain from Operating.
Building Gas Distribution	1 ls		\$0	58	75		No observed or reported issues. Monitor and maintain from Operating.
Building Air Conditioning	1 ea	10000.00	\$10,000	1	20	20 in 1 Year	Trane YHC060, 130-MBH natural gas heating, 5-ton electric cooling packaged heating/cooling unit. Newly installed in 2016. Future replacement based on 20-year EUL.  Iron bathroom and sink vent stack piping.
Ventilation & Exhaust	1 ea		\$0	58	100		No observed or reported issues. Monitor and maintain from Operating.
Domestic Hot Water Generation	1 ea	500.00	\$500	??	15	5 /20 in 1 Year	Small point-of-use domestic hot water heater under kitchen sink serving kitchen sink and adjacent bathroom sink. Unknown age. Periodic replacement allowances.
Sewage Ejectors	ea						
BUILDING ELECTRICAL							
Building Power Wiring	1 ls	1500.00	\$1,500	58	5	1 /6 /11 /16 in 1 Year	Presumed updated in 1959 during conversion to current library use.  Periodic allowances for infrared testing, maintenance, repairs.
Emergency Generator	ea						Self-contained battery-pack emergency lights.
Emergency Lights	1 ea		\$0	Varies	10		Monitor, maintain, replace batteries as-needed from Operating.
							Ageing zone-type fire alarm control panel monitoring hard-wired end-devices.
Smoke / Fire Detection	1 ls	9850.00	\$9,850	>20	20	1 in 1 Year	Surpassed EUL. Replace with modern fully addressable panel and peripherals.
Signaling / Communication	ls						
BUILDING ELEVATORS							
Shafts and Doorways	ea						No elevators at this building.
Cabs	ea						
Controller/Dispatcher	ea						
Machine Room Equipment	ea						

Costs inflated at 3%

BUILDING MECHANICAL AND ELECTRICAL

Replacement Items	Year 1 2017	Year 2 2018	Year 3 2019	Year 4 2020	Year 5 2021	Year 6 2022	Year 7 2023	Year 8 2024	Year 9 2025	Year 10 2026	Year 11 2027	Year 12 2028	Year 13 2029	Year 14 2030	Year 15 2031	Year 16 2032	Year 17 2033	Year 18 2034	Year 19 2035	Year 20 2036
																	BUIL	DING M	IECHA	NICAL
Building Fire Suppression	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Building Heating 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 & Vent.	\$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 Conditioning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$17,535
Ventilation & Exhaust	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Domestic Hot Water Generation	\$0	\$0	\$0	\$0	\$563	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$877
Sewage Ejectors	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
																	BUII	DING 1	ELECT	RICAL
Building Power Wiring	\$1,500	\$0	\$0	\$0	\$0	\$1,739	\$0	\$0	\$0	\$0	\$2,016	\$0	\$0	\$0	\$0	\$2,337	\$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	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Smoke / Fire Detection	\$9,850	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Signaling / Communication	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
																	BUI	LDING	ELEV	ATORS
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
Controller/Dispatcher	\$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

#### BUILDING ARCHITECTURE

(Expected Useful life)

Replacement Items	Quantity	Cost per unit in 2017 \$\$	Total Cost in 2017 \$\$	AGE (Years)	EUL (Years)	Replacement Schedule Year of action AND duration of project	Notes
STRUCTURE							
Foundation	195_lf		\$0	Varies	100+		Mix of newer poured concrete and older original fieldstone and mortared brick.  No significant interior issues noted. Monitor and maintain from Operating.
Foundation (Exterior)	156 sf	10.00	\$1,560	133	100+	1 in 1 Year	Failing, delaminating parging along south elevation exposed foundation. Significant visible mortar loss at exposed bricks. Costs to remove parging, repair, repoint, and re-parge.  Wood framing.
Framing	1 ls		\$0	133	100+		No observed or reported issues. Monitor.
BUILDING EXTERIOR							
		Includes costs fo	or as-needed framin	g repairs/rebu	ilding		Half-lite wood entry doors at front and rear entrances.
Exterior Common Doors	2 ea	3800.00	\$7,600	~25	30	5 in 1 Year	Future replacement based on 25-year EUL and concurrent with siding/window repl.  Aging segmented-panel overheard garage door.
Garage Door	1 ea	3000.00	\$3,000	>30	30	1 in 1 Year	Surpassed EUL. Replace in Year 1.
Glass Sliding Doors	ea						
Storm Doors	ea	Includes costs fo	or as-needed underl	ving huilding	envelone renai		Clapboard profile vinyl siding. Future replacement concurrent with window and door
Exterior Walls (Vinyl)	<u>1,795</u> sf	17.00	\$30,515	~25	30	5 in 1 Year	
Trim, Soffit & Fascia (Aluminum)	1 ls		\$0	~25	30		Future replacement included with Exterior Walls (above).  Exterior siding and trim maintenance
Exterior Walls (Maintenance)	1,795_sf	0.50	\$898	~25	5	1 /10 /15 /20 in 1 Year	
Exterior Ceilings	sf	<del></del>		. ———			Constitutional and to construct original and the involution of the construction of the
Window Frames (Small)	16	1100.00	or as-needed header \$17,600		repairs 30	5 in 1 Year	Smaller vinyl replacement windows with insulating glass units at east, north,
, ,	16_ ea	Includes costs fo	or as-needed header		repairs		Larger vinyl replacement windows with insulating glass units at south elevation.
Window Frames (Large)	3 ea	5000.00	\$15,000 or as-needed header	~25	30	5 in 1 Year	Future replacement concurrent with siding replacement.  Two original wood-framed, single-glazed basement windows at south elevation.
Window Frames (Basement)	2 ea	650.00	\$1,300	~25	30	5 in 1 Year	
Window Glass	40_ ea		\$0	Varies	15		Monitor, maintain, replace as-needed from Operating.
Storm / Screen Windows	21_ ea		\$0	~25	10		Integrated window screens. No torn or missing screens noted.  Monitor, maintain, repair, replace as-needed from Operating.
Balconies/Wood Decks	425 sf	45.00	\$19,125	21	20	2 in 1 Year	Multi-level timber-framed rear elevation deck with pressure-treated wood decking.  Aging, deteriorating decking boards. Surpassed EUL. Year 2 replacement costs.
Balcony Railings	ea						
Fire Escapes	ea						Conditional Institute of Conditions of Conditions
Building-Mounted Lighting	5 ea		\$0	58	15		Smaller wall-mounted incandescent/CFL fixtures.  Monitor, maintain, replace as-needed from Operating.

Costs inflated at 3%

BUILDING ARCHITECTURE

Replacement Items	Year 1 2017	Year 2 2018	Year 3 2019	Year 4 2020	Year 5 2021	Year 6 2022	Year 7 2023	Year 8 2024	Year 9 2025	Year 10 2026	Year 11 2027	Year 12 2028	Year 13 2029	Year 14 2030	Year 15 2031	Year 16 2032	Year 17 2033	Year 18 2034	Year 19 2035	Year 20 2036
	STRUCTURE																			
Foundation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Foundation (Exterior)	\$1,560	\$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
																	В	U <b>ILDIN</b>	G EXT	ERIOR
Exterior Common Doors	\$0	\$0	\$0	\$0	\$8,554	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Garage Door	\$3,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Glass Sliding Doors	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$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 (Vinyl)	\$0	\$0	\$0	\$0	\$34,345	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Trim, Soffit & Fascia (Aluminum)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Exterior Walls (Maintenance)	\$898	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,171	\$0	\$0	\$0	\$0	\$1,358	\$0	\$0	\$0	\$0	\$1,574
Exterior Ceilings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Window Frames (Small)	\$0	\$0	\$0	\$0	\$19,809	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Window Frames (Large)	\$0	\$0	\$0	\$0	\$16,883	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Window Frames (Basement)	\$0	\$0	\$0	\$0	\$1,463	\$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	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Storm / Screen Windows	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Balconies/Wood Decks	\$0	\$19,699	\$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
Building-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 2017 \$\$	Total Cost in 2017 \$\$	AGE (Years)	EUL (Years)	Replacement Schedule Year of action AND duration of project	Notes
DOOF GYGTEMG							
ROOF SYSTEMS							Wood-truss framing.
Structure	4,120 sf		\$0	133	100+		No observed or reported issues. Monitor.
Structure	4,120 31	Includes costs fo	r as-needed deckin				Ageing asphalt-shingle and roll roofing. Visible shingle lifting/damage, organic growth,
Roof Covering	4,120 sf	8.50	\$35,020	>25	20	1 in 1 Ye	
C	<del></del>						
Roof Covering	sf						
		·					Aluminum gutters and downspouts. Aging, corroding. Spot impact damage.
Roof Drainage	277 lf	8.50	\$2,355	>25	20	1 in 1 Yea	Costs to replace all concurrent with roofing replacement.
Skylights	ea						
							Damaged, lifting flashing, cracked bricks, and localized mortar loss.
Chimney	1 ls	3000.00	\$3,000	133	50	1 /11 in 1 Yes	Allowance to repair, repoint, and re-flash in Year 1. And future repair allow in Yr 11.
D. CD. T.	16						
Roof Railings	lf					-	<del></del>
LIBRARY / READING ROO	M						
LIBRART / READING ROO	/1V1						Painted plaster walls. Last refurbished in 1996. Moisture-related paint failure and
Reading Room Walls	1,910 sf	1.50	\$2,864	21	10	1 /11 in 1 Ye	
Reading Room wans	1,910 SI	1.30	\$2,004		10	1 /11 in 1 Yes	Painted plaster vaulted ceilings.
Reading Room Ceilings	1,873 sf	1.10	\$2,060	21	10	1 /11 in 1 Yes	•
Reading Room Cennigs	1,073 31		account for extra la				Aging carpet presumed to date to the 1996 renovations. Visible age and use-related
Reading Room Floors (Carpet)	1,830 sf	6.00	\$10,980	21	10	1 /11 in 1 Yes	
reading Room Floors (Camper)			410,500			1 /11	Painted basement stairwell walls and painted wood treads, risers, balusters, and railing
Stair Walls and Floors	488 sf	1.00	\$488	21	10	1 /11 in 1 Yea	•
							Various upholstered readings chairs, tables, display cases, librarian desk etc.
Furnishings and Casework	1 ls	2500.00	\$2,500	Varies	5	2 /7 /12 /17 in 1 Yes	Periodic allowances for as-needed replacements, upgrades, and additions.
		·					Ceiling-mounted diffused strip lighting fixture installed during the 1996 renovations.
Interior Lighting	1 ls		\$0	21	30+		No observed or reported issues. Monitor and maintain from Operating.
KITCHEN and BATHOOM							
							Painted drywall walls.
Kitchen & Bathroom Walls	320 sf	1.00	\$320	21	10	1 /11 in 1 Yes	
							Painted drywall ceilings.
Kitchen & Bathroom Ceilings	<u>84</u> sf	1.00	\$84	21	20	1 in 1 Yes	
							Vinyl sheet flooring.
Kitchen & Bathroom Floors		5.00	\$390	1	15	15 in 1 Yes	
Witchen Cohin	1 7	2050.00	¢2.050	21	20	9 in 1 Ye:	Wood cabinets, laminate countertop, inset stainless-steel sink, mini-fridge, microwave.
Kitchen Cabinets	1 ls	2850.00	\$2,850	21	30	9 in 1 Yes	
Bathroom Fixtures	1 1-	1575.00	\$1,575	21	40	19 in 1 Yes	Wall-mounted accessible porcelain sink and accessible height toilet. Installed during
Daumoom fixtures	1 ls	13/3.00	\$1,373		40	in I Yes	ar 1996 renovations. Good conditions. Future replacement based on 40-year EUL.

Costs inflated at 3%

BUILDING ARCHITECTURE--continued

Replacement Items	Year 1 2017	Year 2 2018	Year 3 2019	Year 4 2020	Year 5 2021	Year 6 2022	Year 7 2023	Year 8 2024	Year 9 2025	Year 10 2026	Year 11 2027	Year 12 2028	Year 13 2029	Year 14 2030	Year 15 2031	Year 16 2032	Year 17 2033	Year 18 2034	Year 19 2035	Year 20 2036
																		RC	OF SYS	STEMS
Structure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Roof Covering	\$35,020	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Roof Covering	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Roof Drainage	\$2,355	\$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
Chimney	\$3,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,032	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Roof Railings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
																L	IBRAR	Y / REA	ADING	ROOM
Reading Room Walls	\$2,864	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,849	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reading Room Ceilings	\$2,060	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,768	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reading Room Floors (Carpet)	\$10,980	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,756	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Stair Walls and Floors	\$488	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$656	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Furnishings and Casework	\$0	\$2,575	\$0	\$0	\$0	\$0	\$2,985	\$0	\$0	\$0	\$0	\$3,461	\$0	\$0	\$0	\$0	\$4,012	\$0	\$0	\$0
Interior Lighting	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
																	KITC	CHEN a	nd BAT	НООМ
Kitchen & Bathroom Walls	\$320	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$430	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Kitchen & Bathroom Ceilings	\$84	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Kitchen & Bathroom Floors	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$590	\$0	\$0	\$0	\$0	\$0
Kitchen Cabinets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,610	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Bathroom Fixtures	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,681	\$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.