RESERVE ANALYSIS REPORT

Sample Community Association

Sample, Massachusetts Version 1 December 12, 2017





ADVANCED RESERVE SOLUTIONS Post Office Box 516, Wilbraham, Massachusetts 01095 phuijing@arsinc.com Phone (413) 519-2611 www.arsinc.com

> © 1997 - 2018 ADVANCED RESERVE SOLUTIONS, INC. All Rights Reserved.

Sample Community Association Table of Contents

	Page
Preface	i
Executive Summary	1
Membership Disclosure Summary	2
Note Pad	3
Calculation of Percent Funded	5
Management Summary	8
Management Charts	11
Annual Expenditure Detail	13
Projections	17
Projection Charts	18
Component Detail	20
Index	80

This preface is intended to provide an introduction to the enclosed reserve analysis as well as detailed information regarding the reserve analysis report format, reserve fund goals/objectives and calculation methods. The following sections are included in this preface:

Introduction to Reserve Budgeting	page i
Understanding the Reserve Analysis	page i
Reserve Funding Goals / Objectives	page ii
Reserve Funding Calculation Methods	page ii
Reading the Reserve Analysis	page v
Glossary of Key Terms	page x
Limitations of Reserve Analysis	page xiii

♦ ♦ ♦ INTRODUCTION TO RESERVE BUDGETING ● ♦ ♦ ♦

The Board of Directors of an association has a legal and fiduciary duty to maintain the community in a good state of repair. Individual unit property values are significantly impacted by the level of maintenance and upkeep provided by the association as well as the amount of the regular assessment charged to each owner.

A prudent plan must be implemented to address the issues of long-range maintenance, repair and replacement of the common areas. Additionally, the plan should recognize that the value of each unit is affected by the amount of the regular assessment charged to each unit.

There is a fine line between "not enough," "just right" and "too much." Each member of an association should contribute to the reserve fund for their proportionate amount of "depreciation" (or "use") of the reserve components. Through time, if each owner contributes his "fair share" into the reserve fund for the depreciation of the reserve components, then the possibility of large increases in regular assessments or special assessments will be minimized.

An accurate reserve analysis and a "healthy" reserve fund are essential to protect and maintain the association's common areas and the property values of the individual unit owners. A comprehensive reserve analysis is one of the most significant elements of any association's long-range plan and provides the critical link between sound business judgment and good fiscal planning. The reserve analysis provides a "financial blueprint" for the future of an association.

♦ ♦ ♦ UNDERSTANDING THE RESERVE ANALYSIS ♦ ♦

In order for the reserve analysis to be useful, it must be understandable by a variety of individuals. Board members (from seasoned, experienced Board members to new Board members), property managers, accountants, attorneys and even homeowners may ultimately review the reserve analysis. The reserve analysis must be detailed enough to provide a comprehensive analysis, yet simple enough to enable less experienced individuals to understand the results.

There are four key bits of information that a comprehensive reserve analysis should provide: Budget, Percent Funded, Projections and Inventory. This information is described as follows:

Budget

Amount recommended to be transferred into the reserve account for the fiscal year for which the reserve analysis was prepared. In some cases, the reserve analysis may present two or more funding plans based on different goals/ objectives. The Board should have a clear understanding of the differences among these funding goals/objectives prior to implementing one of them in the annual budget.

Percent Funded

Measure of the reserve fund "health" (expressed as a percentage) as of the beginning of the fiscal year for which the

reserve analysis was prepared. This figure is the ratio of the actual reserve fund on hand to the fully funded balance. A reserve fund that is "100% funded" means the association has accumulated the proportionately correct amount of money, to date, for the reserve components it maintains.

Projections

Indicate the "level of service" the association will provide the membership as well as a "road map" for the fiscal future of the association. The projections define the timetables for repairs and replacements, such as when the buildings will be painted or when the asphalt will be seal coated. The projections also show the financial plan for the association – when an underfunded association will "catch up" or how a properly funded association will remain fiscally "healthy."

Inventory

Complete listing of the reserve components. Key bits of information are available for each reserve component, including placed-in-service date, useful life, remaining life, replacement year, quantity, current cost of replacement, future cost of replacement and analyst's comments.

♦ ♦ ♦ RESERVE FUNDING GOALS / OBJECTIVES ♦ ♦ ♦ ♦

There are four reserve funding goals/objectives which may be used to develop a reserve funding plan that corresponds with the risk tolerance of the association: Full Funding, Baseline Funding, Threshold Funding and Statutory Funding. These goals/objectives are described as follows:

Full Funding

Describes the goal/objective to have reserves on hand equivalent to the value of the deterioration of each reserve component. The objective of this funding goal is to achieve and/or maintain a 100% percent funded reserve fund. The component calculation method or cash flow calculation method is typically used to develop a full funding plan.

Baseline Funding

Describes the goal/objective to have sufficient reserves on hand to never completely run out of money. The objective of this funding goal is to simply pay for all reserve expenses as they come due without regard to the association's percent funded. The cash flow calculation method is typically used to develop a baseline funding plan.

Threshold Funding

Describes the goal/objective other than the 100% level (full funding) or just staying cash-positive (baseline funding). This threshold goal/objective may be a specific percent funded target or a cash balance target. Threshold funding is often a value chosen between full funding and baseline funding. The cash flow calculation method is typically used to develop a threshold funding plan.

Statutory Funding

Describes the pursuit of an objective as described or required by local laws or codes. The component calculation method or cash flow calculation method is typically used to develop a statutory funding plan.

♦ ♦ ♦ RESERVE FUNDING CALCULATION METHODS

There are two funding methods which can be used to develop a reserve funding plan based on a reserve funding goal/ objective: Component Calculation Method and Cash Flow Calculation Method. These calculation methods are described as follows:

Component Calculation Method

This calculation method develops a funding plan for each individual reserve component. The sum of the funding plan for each component equals the total funding plan for the association. This method is often referred to as the "straight line"

method and is widely believed to be the most conservative reserve funding method. This method structures a funding plan that enables the association to pay all reserve expenditures as they come due, enables the association to achieve the ideal level of reserves in time, and then enables the association to maintain the ideal level of reserves through time. The following is a detailed description of the component calculation method:

Step 1: Calculation of fully funded balance for each component

The fully funded balance is calculated for each component based on its age, useful life and current cost. The actual formula is as follows:

Fully Funded Balance = $\frac{Age}{Useful Life}$ X Current Cost

Step 2: Distribution of current reserve funds

The association's current reserve funds are assigned to (or distributed amongst) the reserve components based on each component's remaining life and fully funded balance as follows:

Pass 1: Components are organized in remaining life order, from least to greatest, and the current reserve funds are assigned to each component up to its fully funded balance, until reserves are exhausted.

Pass 2: If all components are assigned their fully funded balance and additional funds exist, they are assigned in a "second pass." Again, the components are organized in remaining life order, from least to greatest, and the remaining current reserve funds are assigned to each component up to its current cost, until reserves are exhausted.

Pass 3: If all components are assigned their current cost and additional funds exist, they are assigned in a "third pass." Components with a remaining life of zero years are assigned double their current cost.

Distributing, or assigning, the current reserve funds in this manner is the most efficient use of the funds on hand – it defers the make-up period of any underfunded reserves over the lives of the components with the largest remaining lives.

Step 3: Developing a funding plan

After step 2, all components have a "starting" balance. A calculation is made to determine what funding would be required to get from the starting balance to the future cost over the number of years remaining until replacement. The funding plan incorporates the annual contribution increase parameter to develop a "stair stepped" contribution.

For example, if an association needs to accumulate \$100,000 in ten years, \$10,000 could be contributed each year. Alternatively, the association could contribute \$8,723 in the first year and increase the contribution by 3% each year thereafter until the tenth year.

In most cases, this rate should match the inflation parameter. Matching the annual contribution increase parameter to the inflation parameter indicates, in theory, that member contributions should increase at the same rate as the cost of living (inflation parameter). Due to the "time value of money," this creates the most equitable distribution of member contributions through time.

Using an annual contribution increase parameter that is greater than the inflation parameter will reduce the burden to the current membership at the expense of the future membership. Using an annual contribution increase parameter that is less than the inflation parameter will increase the burden to the current membership to the benefit of the future membership. The following chart shows a comparison:

	0% Increase	3% Increase	10% Increase
Year 1	\$10,000.00	\$8,723.05	\$6,274.54
Year 2	\$10,000.00	\$8,984.74	\$6,901.99
Year 3	\$10,000.00	\$9,254.28	\$7,592.19
Year 4	\$10,000.00	\$9,531.91	\$8,351.41
Year 5	\$10,000.00	\$9,817.87	\$9,186.55
Year 6	\$10,000.00	\$10,112.41	\$10,105.21
Year 7	\$10,000.00	\$10,415.78	\$11,115.73
Year 8	\$10,000.00	\$10,728.25	\$12,227.30
Year 9	\$10,000.00	\$11,050.10	\$13,450.03
Year 10	\$10,000.00	\$11,381.60	\$14,795.04
TOTAL	\$100,000.00	\$100,000.00	\$100,000.00

This parameter is used to develop a funding plan only; it does not mean that the reserve contributions must be raised each year. There are far more significant factors that will contribute to a total reserve contribution increase or decrease from year to year than this parameter.

One of the major benefits of using this calculation method is that for any single component (or group of components), the accumulated balance and reserve funding can be precisely calculated. For example, using this calculation method, the reserve analysis can indicate the exact amount of current reserve funds "in the bank" for the roofs and the amount of money being funded towards the roofs each month. This information is displayed on the Management / Accounting Summary and Charts as well as elsewhere within the report.

The component calculation method is typically used for well-funded associations (greater that 65% funded) with a goal/ objective of full funding.

Cash Flow Calculation Method

This calculation method develops a funding plan based on current reserve funds and projected expenditures during a specific timeframe (typically 30 years). This funding method structures a funding plan that enables the association to pay for all reserve expenditures as they come due, but is not necessarily concerned with the ideal level of reserves through time.

This calculation method tests reserve contributions against reserve expenditures through time to determine the minimum contribution necessary (baseline funding) or some other defined goal/objective (full funding, threshold funding or statutory funding).

Unlike the component calculation method, this calculation method cannot precisely calculate the reserve funding for any single component (or group of components). In order to work-around this issue to provide this bookkeeping information, a formula has been applied to component method results to calculate a reasonable breakdown. This information is displayed on the Management / Accounting Summary and Charts as well as elsewhere within the report.

The cash flow calculation method is typically used for under-funded associations (less than 65% funded) with a goal/ objective of full funding, threshold funding, baseline funding or statutory funding.

◆ ◆ ◆ ◆ READING THE RESERVE ANALYSIS ◆ ◆ ◆ ◆

In some cases, the reserve analysis may be a lengthy document of one hundred pages or more. A complete and thorough review of the reserve analysis is always a good idea. However, if time is limited, it is suggested that a thorough review of the summary pages be made. If a "red flag" is raised in this review, the reader should then check the detail information, of the component in question, for all relevant information. In this section, a description of most of the summary or report sections is provided along with comments regarding what to look for and how to use each section.

Executive Summary

Provides general information about the client, global parameters used in the calculation of the reserve analysis as well as the core results of the reserve analysis.



Calculation of Percent Funded

Summary displays all reserve components, shown here in "category" order. Provides the remaining life, useful life, current cost and the fully funded balance at the beginning of the fiscal year for which the reserve analysis was prepared.



nent remaining lives and useful lives.

Management / Accounting Summary and Charts

Summary displays all reserve components, shown here in "category" order. Provides the assigned reserve funds at the beginning of the fiscal year for which the reserve analysis was prepared along with the monthly member contribution, interest contribution and total contribution for each component and category. Pie charts show graphically how the total reserve fund is distributed amongst the reserve component categories and how each category is funded on a monthly basis.



Projections and Charts

Summary displays projections of beginning reserve balance, member contribution, interest contribution, expenditures and ending reserve balance for each year of the projection period (shown here for 30 years). The two columns on the right-hand side provide the fully funded ending balance and the percent funded for each year. Charts show the same information in an easy-to-understand graphic format.



Component Detail

Summary provides detailed information about each reserve component. These pages display all information about each reserve component as well as comments from site observations and historical information regarding replacement or other maintenance.



♦ ♦ ♦ GLOSSARY OF KEY TERMS ♦ ♦

Annual Contribution Increase Parameter

The rate used in the calculation of the funding plan. This rate is used on an annual compounding basis. This rate represents, in theory, the rate the association expects to increase contributions each year.

In most cases, this rate should match the inflation parameter. Matching the annual contribution increase parameter to the inflation parameter indicates, in theory, that member contributions should increase at the same rate as the cost of living (inflation parameter). Due to the "time value of money," this creates the most equitable distribution of member contributions through time.

This parameter is used to develop a funding plan only; it does not mean that the reserve contributions must be raised each year. There are far more significant factors that will contribute to a total reserve contribution increase or decrease from year to year than this parameter. See the description of "reserve funding calculation methods" in this preface for more detail on this parameter.

Anticipated Reserve Balance (or Reserve Funds)

The amount of money, as of a certain point in time, held by the association to be used for the repair or replacement of reserve components. This figure is "anticipated" because it is calculated based on the most current financial information available as of the analysis date, which is almost always prior to the fiscal year beginning date for which the reserve analysis is prepared.

Assigned Funds (and "Fixed" Assigned Funds)

The amount of money, as of the fiscal year beginning date for which the reserve analysis is prepared, that a reserve component has been assigned.

The assigned funds are considered "fixed" when the normal calculation process is bypassed and a specific amount of money is assigned to a reserve component. For example, if the normal calculation process assigns \$10,000 to the roofs, but the association would like to show \$20,000 assigned to roofs, "fixed" funds of \$20,000 can be assigned.

Cash Flow Calculation Method

Reserve funding calculation method developed based on total annual expenditures. A more detailed description of the actual calculation process is included in the "reserve funding calculation methods" section of the preface.

Component Calculation Method

Reserve funding calculation method developed based on each individual component. A more detailed description of the actual calculation process is included in the "reserve funding calculation methods" section of the preface.

Contingency Parameter

The rate used as a built-in buffer in the calculation of the funding plan. This rate will assign a percentage of the reserve funds, as of the fiscal year beginning, as contingency funds and will also determine the level of funding toward the contingency each month.

Current Replacement Cost

The amount of money, as of the fiscal year beginning date for which the reserve analysis is prepared, that a reserve component is expected to cost to replace.

Fiscal Year

Indicates the budget year for the association for which the reserve analysis was prepared. The fiscal year beginning (FYB) is the first day of the budget year; the fiscal year end (FYE) is the last day of the budget year.

Fully Funded Reserve Balance (or Ideal Reserves)

The amount of money that should theoretically have accumulated in the reserve fund as of a certain point in time. Fully funded reserves are calculated for each reserve component based on the current replacement cost, age and useful life:

Fully Funded Reserves = $\frac{Age}{Useful Life}$ X Current Replacement Cost

The fully funded reserve balance is the sum of the fully funded reserves for each reserve component.

An association that has accumulated the fully funded reserve balance does not have all of the funds necessary to replace all of its reserve components immediately; it has the proportionately appropriate reserve funds for the reserve components it maintains, based on each component's current replacement cost, age and useful life.

Future Replacement Cost

The amount of money, as of the fiscal year during which replacement of a reserve component is scheduled, that a reserve component is expected to cost to replace. This cost is calculated using the current replacement cost compounded annually by the inflation parameter.

Global Parameters

The financial parameters used to calculate the reserve analysis. See also "inflation parameter," "annual contribution increase parameter," "investment rate parameter" and "taxes on investments parameter."

Inflation Parameter

The rate used in the calculation of future costs for reserve components. This rate is used on an annual compounding basis. This rate represents the rate the association expects the cost of goods and services relating to their reserve components to increase each year.

Interest Contribution

The amount of money contributed to the reserve fund by the interest earned on the reserve fund and member contributions.

Investment Rate Parameter

The gross rate used in the calculation of interest contribution (interest earned) from the reserve balance and member contributions. This rate (net of the taxes on investments parameter) is used on a monthly compounding basis. This parameter represents the weighted average interest rate the association expects to earn on their reserve fund investments.

Membership Contribution

The amount of money contributed to the reserve fund by the association's membership.

Monthly Contribution (and "Fixed" Monthly Contribution)

The amount of money, for the fiscal year which the reserve analysis is prepared, that a reserve component will be funded.

The monthly contribution is considered "fixed" when the normal calculation process is bypassed and a specific amount of money is funded to a reserve component. For example, if the normal calculation process funds \$1,000 to the roofs each month, but the association would like to show \$500 funded to roofs each month, a "fixed" contribution of \$500 can be assigned.

Number of Units (or other assessment basis)

Indicates the number of units for which the reserve analysis was prepared. In "phased" developments (see phasing), this number represents the number of units, and corresponding common area components, that existed as of a certain point in time.

For some associations, assessments and reserve contributions are based on a unit of measure other than the number of units. Examples include time-interval weeks for timeshare resorts or lot acreage for commercial/industrial developments.

One-Time Replacement

Used for components that will be budgeted for only once.

Percent Funded

A measure, expressed as a percentage, of the association's reserve fund "health" as of a certain point in time. This number is the ratio of the anticipated reserve fund balance to the fully funded reserve balance:

Percent Funded = <u>Anticipated Reserve Fund Balance</u> Fully Funded Reserve Balance

An association that is 100% funded does not have all of the reserve funds necessary to replace all of its reserve components immediately; it has the proportionately appropriate reserve funds for the reserve components it maintains, based on each component's current replacement cost, age and useful life.

Percentage of Replacement

The percentage of the reserve component that is expected to be replaced.

For most reserve components, this percentage should be 100%. In some cases, this percentage may be more or less than 100%. For example, fencing which is shared with a neighboring community may be set at 50%.

Phasing

Indicates the number of phases for which the reserve analysis was prepared and the total number of phases expected at build-out (i.e. Phase 4 of 7). In phased developments, the first number represents the number of phases, and corresponding common area components, that existed as of a certain point in time. The second number represents the number of phases that are expected to exist at build-out.

Placed-In-Service Date

The date (month and year) that the reserve component was originally put into service or last replaced.

Remaining Life

The length of time, in years, until a reserve component is scheduled to be replaced.

Remaining Life Adjustment

The length of time, in years, that a reserve component is expected to last in excess (or deficiency) of its useful life for the current cycle of replacement.

If the current cycle of replacement for a reserve component is expected to be greater than or less than the "normal" life expectancy, the reserve component's life should be adjusted using a remaining life adjustment.

For example, if wood trim is painted normally on a 4 year cycle, the useful life should be 4 years. However, when it comes time to paint the wood trim and it is determined that it can be deferred for an additional year, the useful life should remain at 4 years and a remaining life adjustment of +1 year should be used.

Replacement Year

The fiscal year that a reserve component is scheduled to be replaced.

Reserve Components

Line items included in the reserve analysis.

Taxes on Investments Parameter

The rate used to offset the investment rate parameter in the calculation of the interest contribution. This parameter represents the marginal tax rate the association expects to pay on interest earned by the reserve funds and member contributions.

Total Contribution

The sum of the membership contribution and interest contribution.

Useful Life

The length of time, in years, that a reserve component is expected to last each time it is replaced. See also "remaining life adjustment."

♦ ♦ ♦ ♦ LIMITATIONS OF RESERVE ANALYSIS • ♦ ♦ ♦

This reserve analysis is intended as a tool for the association's Board of Directors to be used in evaluating the association's current physical and financial condition with regard to reserve components. The results of this reserve analysis represent the independent opinion of the preparer. There is no implied warranty or guarantee of this work product.

For the purposes of this reserve analysis, it has been assumed that all components have been installed properly, no construction defects exist and all components are operational. Additionally, it has been assumed that all components will be maintained properly in the future.

The representations set forth in this reserve analysis are based on the best information and estimates of the preparer as of the date of this analysis. These estimates are subject to change. This reserve analysis includes estimates are projections of future events based on information currently available and are not necessarily indicative of the actual future outcome. The longer the time period between the estimate and the estimated event, the more likely the possibility or error and/or discrepancy. For example, some assumptions inevitably will not materialize and unanticipated events and circumstances may occur subsequent to the preparation of this reserve analysis. Therefore, the actual replacement costs and remaining lives may vary from this reserve analysis, particularly over an extended period of time and those events could have a significant and negative impact on the accuracy of this reserve analysis and, further, the funds available to meet the association's obligation for repair, replacement or other maintenance of major components during their estimated useful life. Furthermore, the occurrence of vandalism, severe weather conditions, earthquakes, floods, acts of nature or other unforeseen events cannot be predicted and/or accounted for and are excluded when assessing life expectancy, repair and/or replacement costs of the components.

Executive Summary Directed Cash Flow Calculation Method

Client Information:

Account Number	20017
Version Number	1
Analysis Date	12/12/2017
Fiscal Year	1/1/2018 to 12/31/2018
Number of Units	19
Phasing	1 of 1

Global Parameters:

Inflation Rate	2.00%
Annual Contribution Increase	2.00%
Investment Rate	0.50%
Taxes on Investments	30.00%
Contingency	3.00%

Community Profile:

Condominium consists of 19 units in a 3-story brick building. The mid-rise building has a parking garage with 14 spaces on the basement level. A trash/recycling and detached garage building is also located on the site. The community is located above the banks of the Sample River. Building was constructed in 2002.

ARS site visit: November 9, 2017

Adequacy of Reserves as of January 1, 2018:

Anticipated Reserve Balance	\$82,973.82
Fully Funded Reserve Balance	\$463,359.68
Percent Funded	17.91%

			Per Unit
Recommended Funding for the 2018 Fiscal Year:	Annual	Monthly	Per Month
Member Contribution	\$52,250	\$4,354.17	\$229.17
Interest Contribution	\$356	\$29.70	\$1.56
Total Contribution	\$52,606	\$4,383.86	\$230.73

Preparer's Disclosure Statement

Paul Huijing, P.E. completed this reserve study. Consultant certifies that:

1) Consultant has no other involvement with association which could result in actual or perceived conflicts of interest.

2) Consultant made a site visit to this community on November 9, 2017. Component inventories were developed by actual field inventory, representative sampling, or by making "take-offs" of scaled plans/maps from community's developer.

3) Component conditional assessments were developed by actual field observation and representative sampling.

4) Financial assumptions used in this analysis are listed on the Executive Summary and further explained in the Preface of this report.

5) This is a "Level 1" reserve study with a site visit.

6) Windows within units and doors to exterior or common hallway are responsibility of unit owners per property manager.

7) It is assumed that association has no responsibility for maintenance and/or repair of Forest Ridge Road, sidewalks along road, road lighting, or any other components of roadway.

8) There are no other material issues known to consultant at this time which would cause a distortion of the association's situation.

Sample Community Association Note Pad

General unfunded components:

The following components are often repaired and/or replaced on an "as-needed" basis and not funded for a complete replacement at one time.

Concrete:

Typically, budgeting for concrete repairs as a reserve component is excluded as it is anticipated that any repairs required will be addressed immediately due to safety concerns. Minor repairs, as needed, should be addressed immediately as a maintenance issue using the client's operating and/or reserve contingency funds. Should the client desire, funding for this component can be included.

Areas include but not limited to:

- Foundations
- Walls (Exterior/Interior)
- Balconies
- Parking Deck/Entrance Area/Underground Parking

The following components are often repaired and/or replaced on an "as-needed" basis and not fund for a complete replacement at one time.

Plumbing Pipes: Complete replacement of the plumbing pipes is expensive and requires removal of walls, ceilings and floors. Typically, budgeting for plumbing pipes repairs and/or replacements as a reserve component is excluded as it is anticipated that any repairs required will be addressed immediately due to safety concerns. There is no practical method to determine the remaining life of plumbing pipes. Most are completely enclosed so a complete visual inspection is not possible. Plumbing systems are built to last the legal life of a building. Most repairs and/or replacements are due to unforeseen issues, product defects, construction defects, improper installation, or from improper chemical treatments. Repairs to this type of system are done on an 'as-needed' basis. It is rare that a complete system of this type is replaced all at once.

Electrical Services (Lines/Meters): Complete replacement of the electrical service lines is expensive and requires removal of walls, ceilings and floors. Typically, budgeting for electrical repairs and/or replacements as a reserve component is excluded as it is anticipated that any repairs required will be addressed immediately due to safety concerns. There is no practical method to determine the remaining life of electrical service lines. Most are completely enclosed so a complete visual inspection is not possible. Electrical Service systems are built to last the legal life of a building. Most repairs and/or replacements are due to unforeseen issues, product defects, construction defects, or improper installation. Repairs to this type of system are done on an 'as-needed' basis. It is rare that a complete system of this type is replaced all at once. Electrical Meters are replaced on an 'as-needed' basis. The Electric Service provider would replace any damaged component of the system immediately and bill the client accordingly.

Landscaping: Landscaping is an annual maintenance expense.

Fiberboard Ceiling Panels: The fiberboard ceiling panels should be replaced on an 'as-needed' basis.

Exterior/Interior Lighting: Lighting not covered by reserve components is typically replaced on an 'as-needed' basis. Funding for routine replacements/repairs should come from either the reserve contingency and/or the annual operational budget.

Unit Windows/Window Frames: The unit windows are the responsibility of the individual unit owner.

Unit Doors: Responsibility of unit owner.

As-Needed' Repairs and/or Replacements: Operational Expenses

Foundations: Some typical cracking was noted throughout.

Sample Community Association Note Pad

Slab: Some area cracking.

Exterior/Interior Doors: All doors should be kept in good working condition. Any damaged doors should be repaired and/or replaced immediately.

Sidewalk/Patio: The bluestone walkway/patio should be kept in a good state of repair at all times.

Retaining Walls: The retaining walls should be kept in a good state of repair at all times.

Fire Suppression: This system must be in good working condition at all times. Any needed repairs and/or replacement would be made immediately. Fire sprinklers are a pressure system with no controls. No major components to include in reserve study.

Hallway Smoke/Fire Doors: These doors should be replaced on an 'as-needed' basis. Any damaged doors should be repaired and/or replaced immediately.

Emergency Lighting: The emergency lighting should be periodically. Any damaged or not working units should be repaired/replaced immediately.

Calculation of Percent Funded

Sorted by Category

	Remaining Life	Useful Life	Current Cost	Fully Funded Balance
005 Site				
Site - Asphalt Berm/Curb	9	25	\$4,040.00	\$2,585.60
Site - Asphalt Pavement, Maintenance	9	25	\$3,888.00	\$2,488.32
Site - Asphalt Pavement, Overlay	9	25	\$26,930.00	\$17,235.20
Site - Asphalt Sidewalks	9	25	\$3,850.00	\$2,464.00
Site - Granite Curbing, Unfunded	n.a.	n.a.	\$0.00	\$0.00
Site - Granite Steps, Unfunded	n.a.	n.a.	\$0.00	\$0.00
Site - Lighting	9	25	\$25,050.00	\$16,032.00
Site - Stone & Brick Sidewalks	9	25	\$2,922.00	\$1,870.08
Site - Stone Retaining Walls, Maintenance	5	5	\$3,875.00	\$0.00
Sub Total	5-9	5-25	\$70,555.00	\$42,675.20
<u>010 Roof</u>				
Roof - Copper Bay Window, Gatehouse	24	40	\$4,000.00	\$1,600.00
Roof - Copper Flashings, Main Building	9	25	\$15,000.00	\$9,600.00
Roof - Gutters, Aluminum	24	40	\$2,320.00	\$928.00
Roof - Gutters, Copper	24	40	\$6,300.00	\$2,520.00
Roof - Membrane, Main Building	4	20	\$100,750.00	\$80,600.00
Roof - Shingle, Gatehouse	9	25	\$12,982.50	\$8,308.80
Roof - Shingle, Main Building	9	25	\$44,525.00	\$28,496.00
Roof - Shingle, Trash/Garage	9	25	\$4,680.00	\$2,995.20
Sub Total	4-24	20-40	\$190,557.50	\$135,048.00
020 Building Exterior				
Building - Balcony Railing	24	40	\$17,875.00	\$7,150.00
Building - Brick, Repair Allowance	5	5	\$10,635.00	\$0.00
Building - Common Roof Doors, Main Building	14	30	\$2,250.00	\$1,200.00
Building - Common Windows	14	30	\$10,950.00	\$5,840.00
Building - Exterior Doors, Main Building	14	30	\$11,000.00	\$5,866.67
Building - Garage Doors, Gatehouse & Trash/Garag	14	30	\$8,000.00	\$4,266.67
Building - Garage Doors, Main Building	14	30	\$10,000.00	\$5,333.33
Building - Vinyl Siding, Main Building	19	35	\$9,900.00	\$4,525.71
Building - Wood Siding, Repair Allowance	0	5	\$5,250.00	\$5,250.00
Sub Total	0-24	5-40	\$85,860.00	\$39,432.38
030 Building Interior				
Building - Flooring, Carpet	3	19	\$15,014.75	\$12,644.00
Building - Flooring, Tile	14	30	\$1,560.00	\$832.00
Building - Interior Doors, Main Building	19	35	\$30,320.00	\$13,860.57

Calculation of Percent Funded

Sorted by Category

	Remaining Life	Useful Life	Current Cost	Fully Funded Balance
Sub Total	3-19	19-35	\$46,894.75	\$27,336.57
040 Painting				
Painting - Exterior, Gatehouse & Trash/Garage	2	6	\$13,260.00	\$8,840.00
Painting - Exterior, Main Building	2	6	\$11,790.00	\$7,860.00
Painting - Interior, Main Building	4	20	\$26,128.75	\$20,903.00
Sub Total	2-4	6-20	\$51,178.75	\$37,603.00
050 Lighting				
Lighting - Interior Garage & Storage Halls	4	20	\$3,975.00	\$3,180.00
Lighting - Interior Stairwells	4	20	\$5,825.00	\$4,660.00
Lighting - Interior Unit Hallways	4	20	\$11,950.00	\$9,560.00
Sub Total	4	20	\$21,750.00	\$17,400.00
060 Equipment				
Equipment - Bathroom Exhaust Fan	4	20	\$3,000.00	\$2,400.00
Equipment - Dryer Exhaust Fan	4	20	\$6,000.00	\$4,800.00
Equipment - Elevator, Cab Refurbish	14	30	\$10,000.00	\$5,333.33
Equipment - Elevator, Modernization	14	30	\$75,000.00	\$40,000.00
Equipment - Fire Alarm	4	20	\$4,500.00	\$3,600.00
Equipment - Fire Sprinkler, Unfunded	n.a.	n.a.	\$0.00	\$0.00
Equipment - Front Entry Access Intercom	4	20	\$4,000.00	\$3,200.00
Equipment - Furnace	14	30	\$9,000.00	\$4,800.00
Equipment - Irrigation System	4	10	\$4,500.00	\$2,700.00
Equipment - Mailboxes, Main Building	14	30	\$3,100.00	\$1,653.33
Equipment - Parking Garage CO Sensor	9	12	\$750.00	\$187.50
Equipment - Parking Garage Exhaust Fan	4	20	\$5,000.00	\$4,000.00
Equipment - Roof Top Air Handler	2	18	\$20,000.00	\$17,777.78
Equipment - Septic System Leach Field	14	30	\$70,000.00	\$37,333.33
Equipment - Septic System Pump	9	25	\$20,000.00	\$12,800.00
Equipment - Sump Pump	2	18	\$1,500.00	\$1,333.33
Equipment - Surveillance System	4	20	\$10,000.00	\$8,000.00
Equipment - Water Heater	4	10	\$750.00	\$450.00
Sub Total	2-14	10-30	\$247,100.00	\$150,368.61

Calculation of Percent Funded

Sorted by Category

	Remaining Life	Useful Life	Current Cost	Fully Funded Balance
Contingency	n.a.	n.a.	n.a.	\$13,495.91
Total Anticipated Reserve Balance Percent Funded	0-24	5-40	\$713,896.00	\$463,359.68 \$82,973.82 17.91%

Management / Accounting Summary Directed Cash Flow Calculation Method; Sorted by Category

	Balance at Fiscal Year Beginning	Monthly Member Contribution	Monthly Interest Contribution	Total Monthly Contribution
005 Site				
Site - Asphalt Berm/Curb	\$0.00	\$21.86	\$0.06	\$21.92
Site - Asphalt Pavement, Maintenance	\$0.00	\$21.04	\$0.05	\$21.09
Site - Asphalt Pavement, Overlay	\$0.00	\$145.74	\$0.36	\$146.10
Site - Asphalt Sidewalks	\$0.00	\$20.84	\$0.05	\$20.89
Site - Granite Curbing, Unfunded	\$0.00	\$0.00	\$0.00	\$0.00
Site - Granite Steps, Unfunded	\$0.00	\$0.00	\$0.00	\$0.00
Site - Lighting	\$0.00	\$135.57	\$0.33	\$135.90
Site - Stone & Brick Sidewalks	\$0.00	\$15.81	\$0.04	\$15.86
Site - Stone Retaining Walls, Maintenance	\$0.00	\$36.56	\$0.09	\$36.65
Sub Total	\$0.00	\$397.42	\$0.98	\$398.41
<u>010 Roof</u>				
Roof - Copper Bay Window, Gatehouse	\$0.00	\$9.12	\$0.02	\$9.15
Roof - Copper Flashings, Main Building	\$0.00	\$81.18	\$0.20	\$81.38
Roof - Gutters, Aluminum	\$0.00	\$5.29	\$0.02	\$5.31
Roof - Gutters, Copper	\$0.00	\$14.37	\$0.03	\$14.40
Roof - Membrane, Main Building	\$0.00	\$1,178.66	\$2.93	\$1,181.59
Roof - Shingle, Gatehouse	\$0.00	\$70.26	\$0.17	\$70.43
Roof - Shingle, Main Building	\$0.00	\$240.96	\$0.60	\$241.56
Roof - Shingle, Trash/Garage	\$0.00	\$25.33	\$0.07	\$25.39
Sub Total	\$0.00	\$1,625.17	\$4.04	\$1,629.21
020 Building Exterior				
Building - Balcony Railing	\$0.00	\$40.77	\$0.10	\$40.87
Building - Brick, Repair Allowance	\$0.00	\$100.34	\$0.25	\$100.59
Building - Common Roof Doors, Main Building	\$0.00	\$8.14	\$0.02	\$8.16
Building - Common Windows	\$0.00	\$39.63	\$0.10	\$39.73
Building - Exterior Doors, Main Building	\$0.00	\$39.81	\$0.10	\$39.91
Building - Garage Doors, Gatehouse & Trash/Ga	\$0.00	\$28.95	\$0.07	\$29.03
Building - Garage Doors, Main Building	\$0.00	\$36.19	\$0.09	\$36.28
Building - Vinyl Siding, Main Building	\$0.00	\$27.45	\$0.07	\$27.52
Building - Wood Siding, Repair Allowance	\$5,250.00	\$49.53	\$0.12	\$49.66
Sub Total	\$5,250.00	\$370.82	\$0.92	\$371.74
030 Building Interior				
Building - Flooring, Carpet	\$12,644.00	\$46.02	\$3.19	\$49.21

Management / Accounting Summary Directed Cash Flow Calculation Method; Sorted by Category

	Balance at Fiscal Year Beginning	Monthly Member Contribution	Monthly Interest Contribution	Total Monthly Contribution
Building - Flooring, Tile	\$0.00	\$5.65	\$0.02	\$5.66
Building - Interior Doors, Main Building	\$0.00	\$84.07	\$0.21	\$84.27
Sub Total	\$12,644.00	\$135.73	\$3.41	\$139.14
040 Painting				
Painting - Exterior, Gatehouse & Trash/Garage	\$8,840.00	\$108.29	\$2.42	\$110.71
Painting - Exterior, Main Building	\$7,860.00	\$96.28	\$2.15	\$98.43
Painting - Interior, Main Building	\$0.00	\$305.68	\$0.76	\$306.43
Sub Total	\$16,700.00	\$510.25	\$5.32	\$515.57
050 Lighting				
Lighting - Interior Garage & Storage Halls	\$3,180.00	\$11.65	\$0.80	\$12.45
Lighting - Interior Stairwells	\$4,660.00	\$17.07	\$1.17	\$18.24
Lighting - Interior Unit Hallways	\$0.00	\$139.80	\$0.35	\$140.15
Sub Total	\$7,840.00	\$168.52	\$2.32	\$170.84
060 Equipment				
Equipment - Bathroom Exhaust Fan	\$2,400.00	\$8.79	\$0.61	\$9.40
Equipment - Dryer Exhaust Fan	\$2,662.00	\$41.02	\$0.75	\$41.77
Equipment - Elevator, Cab Refurbish	\$0.00	\$36.19	\$0.09	\$36.28
Equipment - Elevator, Modernization	\$0.00	\$271.44	\$0.67	\$272.11
Equipment - Fire Alarm	\$3,600.00	\$13.19	\$0.91	\$14.09
Equipment - Fire Sprinkler, Unfunded	\$0.00	\$0.00	\$0.00	\$0.00
Equipment - Front Entry Access Intercom	\$3,200.00	\$11.72	\$0.81	\$12.53
Equipment - Furnace	\$0.00	\$32.57	\$0.08	\$32.66
Equipment - Irrigation System	\$2,700.00	\$23.05	\$0.72	\$23.77
Equipment - Mailboxes, Main Building	\$0.00	\$11.22	\$0.02	\$11.24
Equipment - Parking Garage CO Sensor	\$0.00	\$4.06	\$0.01	\$4.07
Equipment - Parking Garage Exhaust Fan	\$4,000.00	\$14.65	\$1.01	\$15.66
Equipment - Roof Top Air Handler	\$17,777.78	\$64.29	\$4.48	\$68.77
Equipment - Septic System Leach Field	\$0.00	\$253.34	\$0.63	\$253.98
Equipment - Septic System Pump	\$0.00	\$108.24	\$0.27	\$108.50
Equipment - Sump Pump	\$1,333.33	\$4.82	\$0.33	\$5.15
Equipment - Surveillance System	\$0.00	\$116.99	\$0.29	\$117.28
Equipment - Water Heater	\$450.00	\$3.84	\$0.12	\$3.96
Sub Total	\$38,123.11	\$1,019.43	\$11.80	\$1,031.23

Management / Accounting Summary Directed Cash Flow Calculation Method; Sorted by Category

	Balance at Fiscal Year Beginning	Monthly Member Contribution	Monthly Interest Contribution	Total Monthly Contribution
Contingency	\$2,416.71	\$126.82	\$0.90	\$127.72
Total	\$82,973.82	\$4,354.17	\$29.70	\$4,383.86

Management / Accounting Charts Directed Cash Flow Calculation Method; Sorted by Category



Management / Accounting Charts Directed Cash Flow Calculation Method; Sorted by Category



Annual Expenditure Detail

2018 Fiscal Year	
Building - Wood Siding, Repair Allowance	\$5,250.00
Sub Total	\$5,250.00
2020 Eisaal Voar	
Equipment - Roof Ton Air Handler	\$20,808,00
Equipment Sump Rump	\$1.560.60
Painting - Exterior Gatebouse & Trash/Garage	\$1,300.00
Painting Exterior, Main Building	\$13,735.70 \$12,266,32
	\$12,200.52
	ψ+0,430.02
2021 Fiscal Year	
Building - Flooring, Carpet	\$15,933.77
Sub Total	\$15,933.77
2022 Fiscal Year	
Equipment - Bathroom Exhaust Fan	\$3.247.30
Equipment - Drver Exhaust Fan	\$6,494,59
Equipment - Fire Alarm	\$4,870,94
Equipment - Front Entry Access Intercom	\$4,329.73
Equipment - Irrigation System	\$4.870.94
Equipment - Parking Garage Exhaust Fan	\$5.412.16
Equipment - Surveillance System	\$10.824.32
Equipment - Water Heater	\$811.82
Lighting - Interior Garage & Storage Halls	\$4.302.67
Lighting - Interior Stairwells	\$6.305.17
Lighting - Interior Unit Hallways	\$12,935.06
Painting - Interior, Main Building	\$28,282.60
Roof - Membrane, Main Building	\$109,055.04
Sub Total	\$201,742.35
2023 Fiscal Year	
Building - Brick, Repair Allowance	\$11,741,90
Building - Wood Siding, Repair Allowance	\$5,796,42
Site - Stone Retaining Walls, Maintenance	\$4,278,31
Sub Total	\$21,816.64
2020 Fiscal Tear Painting - Exterior Gatebouse & Trash/Garage	\$15 536 20
Painting - Exterior, Main Building	\$13,330.20 \$13,813,86
	φ13,013.00

Annual Expenditure Detail

Sub Total	\$29,350.07
2027 Fiscal Year	
Equipment - Parking Garage CO Sensor	\$896.32
Equipment - Septic System Pump	\$23,901.85
Roof - Copper Flashings, Main Building	\$17,926.39
Roof - Shingle, Gatehouse	\$15,515.29
Roof - Shingle, Main Building	\$53,211.50
Roof - Shingle, Trash/Garage	\$5,593.03
Site - Asphalt Berm/Curb	\$4,828.17
Site - Asphalt Pavement, Maintenance	\$4,646.52
Site - Asphalt Pavement, Overlay	\$32,183.84
Site - Asphalt Sidewalks	\$4,601.11
Site - Lighting	\$29,937.07
Site - Stone & Brick Sidewalks	\$3,492.06
Sub Total	\$196,733.15
2028 Fiscal Year	
Building - Brick, Repair Allowance	\$12,964.01
Building - Wood Siding, Repair Allowance	\$6,399.72
Site - Stone Retaining Walls, Maintenance	\$4,723.60
Sub Total	\$24,087.33
2032 Fiscal Year	
Building - Common Roof Doors, Main Building	\$2,968.83
Building - Common Windows	\$14,448.29
Building - Exterior Doors, Main Building	\$14,514.27
Building - Flooring, Tile	\$2,058.39
Building - Garage Doors, Gatehouse & Trash/Garage	\$10,555.83
Building - Garage Doors, Main Building	\$13,194.79
Equipment - Elevator, Cab Refurbish	\$13,194.79
Equipment - Elevator, Modernization	\$98,960.91
Equipment - Furnace	\$11,875.31
Equipment - Irrigation System	\$5,937.65
Equipment - Mailboxes, Main Building	\$4,090.38
Equipment - Septic System Leach Field	\$92,363.51
Equipment - Water Heater	\$989.61
Painting - Exterior, Gatehouse & Trash/Garage	\$17,496.29
Painting - Exterior, Main Building	\$15,556.65

Annual Expenditure Detail

Sub Total	\$318,205.50
2033 Fiscal Year	
Building - Brick, Repair Allowance	\$14,313.31
Building - Wood Siding, Repair Allowance	\$7,065.81
Site - Stone Retaining Walls, Maintenance	\$5,215.24
Sub Total	\$26,594.36
2035 Fiscal Year	
Equipment - Sump Pump	\$2,100.36
Sub Total	\$2,100.36
2036 Fiscal Year	
Building - Flooring, Carpet	\$21,444.76
Sub Total	\$21,444.76
2037 Fiscal Year	
Building - Interior Doors, Main Building	\$44,170.51
Building - Vinyl Siding, Main Building	\$14,422.43
Sub Total	\$58,592.95
2038 Fiscal Year	
Building - Brick, Repair Allowance	\$15,803.05
Building - Wood Siding, Repair Allowance	\$7,801.22
Painting - Exterior, Gatehouse & Trash/Garage	\$19,703.66
Painting - Exterior, Main Building	\$17,519.32
Site - Stone Retaining Walls, Maintenance	\$5,758.05
Sub Total	\$66,585.30
2039 Fiscal Year	
Equipment - Parking Garage CO Sensor	\$1,136.75
Sub Total	\$1,136.75
2040 Fiscal Year	
Equipment - Roof Top Air Handler	\$30,919.59
Sub Total	\$30,919.59
2042 Fiscal Year	
Building - Balcony Railing	\$28,750.82
Equipment - Bathroom Exhaust Fan	\$4,825.31
Equipment - Dryer Exhaust Fan	\$9,650.62
Equipment - Fire Alarm	\$7,237.97

Annual Expenditure Detail

Equipment - Front Entry Access Intercom	\$6,433.75
Equipment - Irrigation System	\$7,237.97
Equipment - Parking Garage Exhaust Fan	\$8,042.19
Equipment - Surveillance System	\$16,084.37
Equipment - Water Heater	\$1,206.33
Lighting - Interior Garage & Storage Halls	\$6,393.54
Lighting - Interior Stairwells	\$9,369.15
Lighting - Interior Unit Hallways	\$19,220.83
Painting - Interior, Main Building	\$42,026.45
Roof - Copper Bay Window, Gatehouse	\$6,433.75
Roof - Gutters, Aluminum	\$3,731.57
Roof - Gutters, Copper	\$10,133.15
Roof - Membrane, Main Building	\$162,050.05
Sub Total	\$348,827.82
2043 Fiscal Year	
Building - Brick, Repair Allowance	\$17,447.84
Building - Wood Siding, Repair Allowance	\$8,613.18
Site - Stone Retaining Walls, Maintenance	\$6,357.35
Sub Total	\$32,418.37
2044 Fiscal Year	
Painting - Exterior, Gatehouse & Trash/Garage	\$22,189.52
Painting - Exterior, Main Building	\$19,729.60
Sub Total	\$41,919.12
2047 Fiscal Year	
Site - Lighting	\$44,484.91
Sub Total	\$44,484.91

Projections Directed Cash Flow Calculation Method

Fiscal Year	Beginning Balance	Member Contribution	Interest Contribution	Expenditures	Ending Balance	Fully Funded Ending Balance	Percent Funded
2018	\$82,974	\$52,250	\$356	\$5,250	\$130,330	\$504,145	26%
2019	\$130,330	\$53,295	\$542	\$0	\$184,168	\$552,003	33%
2020	\$184,168	\$54,361	\$563	\$48,431	\$190,661	\$550,589	35%
2021	\$190,661	\$55,448	\$702	\$15,934	\$230,877	\$584,292	40%
2022	\$230,877	\$56,557	\$193	\$201,742	\$85,885	\$424,246	20%
2023	\$85,885	\$57,688	\$317	\$21,817	\$122,073	\$450,834	27%
2024	\$122,073	\$58,842	\$522	\$0	\$181,438	\$501,695	36%
2025	\$181,438	\$60,019	\$732	\$0	\$242,189	\$554,410	44%
2026	\$242,189	\$61,219	\$844	\$29,350	\$274,903	\$578,197	48%
2027	\$274,903	\$62,444	\$374	\$196,733	\$140,987	\$427,793	33%
2028	\$140,987	\$63,692	\$512	\$24,087	\$181,105	\$456,657	40%
2029	\$181,105	\$64,966	\$739	\$0	\$246,810	\$512,317	48%
2030	\$246,810	\$66,266	\$972	\$0	\$314,047	\$570,020	55%
2031	\$314,047	\$67,591	\$1,209	\$0	\$382,848	\$629,827	61%
2032	\$382,848	\$68,943	\$337	\$318,205	\$133,922	\$358,138	37%
2033	\$133,922	\$70,322	\$489	\$26,594	\$178,139	\$388,382	46%
2034	\$178,139	\$71,728	\$740	\$0	\$250,607	\$448,192	56%
2035	\$250,607	\$73,163	\$989	\$2,100	\$322,657	\$508,032	64%
2036	\$322,657	\$74,626	\$1,176	\$21,445	\$377,014	\$549,807	69%
2037	\$377,014	\$76,118	\$1,238	\$58,593	\$395,778	\$554,766	71%
2038	\$395,778	\$77,641	\$1,279	\$66,585	\$408,112	\$552,538	74%
2039	\$408,112	\$79,194	\$1,554	\$1,137	\$487,723	\$620,158	79%
2040	\$487,723	\$80,777	\$1,731	\$30,920	\$539,312	\$658,996	82%
2041	\$539,312	\$82,393	\$2,023	\$0	\$623,728	\$732,273	85%
2042	\$623,728	\$84,041	\$1,099	\$348,828	\$360,040	\$441,740	82%
2043	\$360,040	\$85,722	\$1,286	\$32,418	\$414,629	\$479,041	87%
2044	\$414,629	\$87,436	\$1,447	\$41,919	\$461,593	\$508,357	91%
2045	\$461,593	\$89,185	\$1,761	\$0	\$552,539	\$583,575	95%
2046	\$552,539	\$90,969	\$2,083	\$0	\$645,591	\$661,599	98%
2047	\$645,591	\$92,788	\$2,256	\$44,485	\$696,150	\$695,775	100%

NOTE: In some cases, the projected Ending Balance may exceed the Fully Funded Ending Balance in years following high Expenditures. This is a result of the provision for contingency in this analysis, which in these projections is never expended. The contingency is continually adjusted according to need and any excess is redistributed among all components included.

Projection Charts Directed Cash Flow Calculation Method





Projection Charts Directed Cash Flow Calculation Method





Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Site - Asphalt Be	rm/Curb		
Category	005 Site	Quantity	505 lin. ft.
		Unit Cost	\$8.000
		% of Replacement	100.00%
		Current Cost	\$4,040.00
Placed In Service	01/02	Future Cost	\$4,828.17
Useful Life	25		
		Assigned Reserves at FYB	\$0.00
Remaining Life	9	Monthly Member Contribution	\$21.86
Replacement Year	2027	Monthly Interest Contribution	\$0.06
		Total Monthly Contribution	\$21.92

Comments:



Component covers roadway and parking area asphalt berm/curbing. Asphalt berms were in good condition during site inspection. Asphalt berms/curbs are sufficient to allow for a 1-1/2" overlay in most areas. Some berm installation by hand may be required.

It is difficult to predict service life of asphalt curb/berm. Plowing and other mechanical damage may shorten life span. Additional landscaping repair will be required if curbs/berms replaced.

The cost of paving materials is volatile and correlated with the price of oil. With current low oil prices prevalent, costs may rise significantly in future if oil prices rise.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Site - Asphalt Pa	vement, Maintenance		
Category	005 Site	Quantity	1 total
		Unit Cost	\$3,888.000
		% of Replacement	100.00%
		Current Cost	\$3,888.00
Placed In Service	01/02	Future Cost	\$4,646.52
Useful Life	25		
		Assigned Reserves at FYB	\$0.00
Remaining Life	9	Monthly Member Contribution	\$21.04
Replacement Year	2027	Monthly Interest Contribution	\$0.05
		Total Monthly Contribution	\$21.09

Comments:



Component covers asphalt roadway and parking area maintenance. Asphalt was in good condition with some cracks evident during site inspection. Cracks have been sealed to limit water intrusion. Pavement should be evaluated annually.

19,900	sq. ft crack sealing	@	\$0.12	=	\$2,388.00
1	minor repair allowance	@	\$1,500.00	=	\$1,500.00
			TOTAL	=	\$3,888.00
Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Site - Asphalt Pa	vement, Overlay		
Category	005 Site	Quantity	1 total
		Unit Cost	\$26,930.000
		% of Replacement	100.00%
		Current Cost	\$26,930.00
Placed In Service	01/02	Future Cost	\$32,183.84
Useful Life	25		
		Assigned Reserves at FYB	\$0.00
Remaining Life	9	Monthly Member Contribution	\$145.74
Replacement Year	2027	Monthly Interest Contribution	\$0.36
		Total Monthly Contribution	\$146.10

Comments:



Component covers asphalt roadway and parking areas. Asphalt was in good condition with some cracks evident during site inspection. Cracks have been sealed to limit water intrusion. No significant puddling was observed. Therefore, no significant regrading of streets and parking lots will be required. Favorable soil conditions at the site will limit damage due to freeze thaw cycles. Service life set to 25 years to reflect good condition of asphalt after 16 years and evidence of preventative maintenance.

Overlay will be more costly if delayed too long. Overlaying all streets and parking areas in one mobilization will save \$3000 per mobilization.

Asphalt and granite berms/curbs are sufficient to allow for a 1-1/2" overlay in most areas. Pavement milling will be required in areas where curb is flush with existing sidewalk and roadway. Some berm installation by hand may be required. Condition of curbs are good and discussed in a separate component.

Pavement should be evaluated annually. Crack sealing maintenance should be evaluated annually and listed as separate component.

The cost of paving materials is volatile and correlated with the price of oil. With current low oil prices prevalent, costs may rise significantly in future if oil prices rise.

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

9,900	sq. ft 1.5" overlay	@	\$1.20	=	\$23,880.00
1	manhole cover adjustment	@	\$450.00	=	\$450.00
4	catch basin adjustment	@	\$450.00	=	\$1,800.00
1	pavement marking allowance	@	\$800.00	=	\$800.00
			TOTAL	=	\$26,930.00

Most asphalt areas can be expected to last approximately 20 to 25 years before it will become necessary for an overlay to be applied or other major rehabilitation to be completed. It will be necessary to adjust manhole and valve covers at the time the overlay is applied or other major rehabilitation is completed.

Deflection testing should be conducted by an independent consultant near the end of the estimated useful life to determine the condition of the asphalt and estimated remaining life before the overlay or other major rehabilitation is required. In addition to this service, a consultant may be obtained to prepare the application specifications, and to work with the contractor during actual installation. It is recommended that the client obtain bids for such a consultation near the end of the estimated useful life. As costs vary, a provision for this consulting has not been included in this cost estimate. Should the client request, this cost can be incorporated into this analysis.

1

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Site - Asphalt Sidewalks Category 005 Site 1,100 sq. ft. **Ouantity** \$3.500 Unit Cost % of Replacement 100.00% Current Cost \$3,850.00 01/02 Placed In Service Future Cost \$4,601.11 Useful Life 25 Assigned Reserves at FYB \$0.00 9 Monthly Member Contribution \$20.84 Remaining Life 2027 \$0.05 Replacement Year Monthly Interest Contribution \$20.89 Total Monthly Contribution

Comments:



Component covers asphalt sidewalks. Asphalt was in good condition during site inspection. Favorable soil conditions at the site will limit damage due to freeze thaw cycles. Service life set to 25 years to reflect good condition of asphalt after 16 years.

The cost of paving materials is volatile and correlated with the price of oil. With current low oil prices prevalent, costs may rise significantly in future if oil prices rise.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

<mark>Site - Granite Cu</mark>	rbing, Unfunded		
Category	005 Site	Quantity	704 lin. ft.
		Unit Cost	\$0.000
		% of Replacement	100.00%
		Current Cost	\$0.00
Placed In Service	01/02	Future Cost	\$0.00
Useful Life	n.a.		
		Assigned Reserves at FYB	\$0.00
Remaining Life	n.a.	Monthly Member Contribution	\$0.00
Replacement Year	n.a.	Monthly Interest Contribution	\$0.00
		Total Monthly Contribution	\$0.00

Comments:



Component covers granite curbing of roadway and parking areas. Curbs were in good condition during site inspection. No damage or displaced sections were observed. Component listed for inventory purposes.

Granite curbs are sufficient to allow for a 1-1/2" overlay in most areas. Pavement milling will be required in areas where curb is flush with existing sidewalk and roadway.

Typically, budgeting for curbing repairs as a reserve component is excluded as it is anticipated that any repairs required will be addressed immediately due to safety concerns. Good maintenance practice would not allow the need for repairs to accumulate to a point that they would become a major expense. Minor repairs, as needed, should be addressed immediately as a maintenance issue using the client's operating and/or reserve contingency funds. Should the client desire, funding for this component can be included.

Per Nick at Williams Stone Company, East Otis, MA, granite curbing has an indefinite useful life. If initially set well there should not be issues with movement due to freeze-thaw cycles. Curbs may be damaged by snow plowing or impacts with large vehicles.

granite curbing

704 lin. ft. 704 lin. ft.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Site - Granite Ste	eps, Unfunded		
Category	005 Site	Quantity	1 total
		Unit Cost	\$0.000
		% of Replacement	100.00%
		Current Cost	\$0.00
Placed In Service	01/02	Future Cost	\$0.00
Useful Life	n.a.		
		Assigned Reserves at FYB	\$0.00
Remaining Life	n.a.	Monthly Member Contribution	\$0.00
Replacement Year	n.a.	Monthly Interest Contribution	\$0.00
		Total Monthly Contribution	\$0.00

Comments:



Component covers granite steps adjacent to main building. Steps were in good condition during site inspection. Some displacement of steps will occur over time due to freeze-thaw cycles. Due to safety concerns, repairs should be made immediately funded from operations. Component is included for inventory purposes.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Site - Lighting			
Category	005 Site	Quantity	1 total
		Unit Cost	\$25,050.000
		% of Replacement	100.00%
		Current Cost	\$25,050.00
Placed In Service	01/02	Future Cost	\$29,937.07
Useful Life	20		
Adjustment	+5	Assigned Reserves at FYB	\$0.00
Remaining Life	9	Monthly Member Contribution	\$135.57
Replacement Year	2027	Monthly Interest Contribution	\$0.33
		Total Monthly Contribution	\$135.90

Comments:



Component covers site lighting. Lighting was in good condition at site visit and no issues were reported. Converstion of lighting to LED bulbs should be considered.

Useful life extend based on lighting condition at site visit.

9	decorative post lights	@	\$750.00	=	\$6,750.00
9	aluminum post lights	@	\$2,000.00	=	\$18,000.00
2	spot lights on Riverbend sign	@	\$150.00	=	\$300.00
			TOTAL	=	\$25,050.00

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Site - Stone & Br	ick Sidewalks		
Category	005 Site	Quantity	1 total
		Unit Cost	\$2,922.000
		% of Replacement	100.00%
		Current Cost	\$2,922.00
Placed In Service	01/02	Future Cost	\$3,492.06
Useful Life	25		
		Assigned Reserves at FYB	\$0.00
Remaining Life	9	Monthly Member Contribution	\$15.81
Replacement Year	2027	Monthly Interest Contribution	\$0.04
		Total Monthly Contribution	\$15.86

Comments:



Component covers resetting bluestone and paver sidewalks. Stone paving materials can be reused but will need to be reset periodically due to winter frost action. Brick pavers will eventually need to be replaced.

Sidewalk areas were in good condition during site inspection. Service life set to 25 years to reflect good condition of paving materials after 16 years. Soil conditions are favorable at this site and interval may be extended as the association gains more experience.

100	sq. ft. brick & granite pavers, main entry	@	\$10.00	=	\$1,000.00
63	sq. ft. brick & granite pavers, rear entry	@	\$10.00	=	\$630.00
32	sq. ft. brick pavers at granite stairs	@	\$10.00	=	\$320.00
81	sq. ft. bluestone sidewalk, gatehouse	@	\$12.00	=	\$972.00
			TOTAL	=	\$2,922.00

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Site - Stone Reta	ining Walls, Maintenance		
Category	005 Site	Quantity	775 sq. ft.
		Unit Cost	\$50.000
		% of Replacement	10.00%
		Current Cost	\$3,875.00
Placed In Service	01/18	Future Cost	\$4,278.31
Useful Life	5		
		Assigned Reserves at FYB	\$0.00
Remaining Life	5	Monthly Member Contribution	\$36.56
Replacement Year	2023	Monthly Interest Contribution	\$0.09
		Total Monthly Contribution	\$36.65

Comments:



Component covers stone retaining walls adjacent to buildings and along sidewalk of Forest Ridge Road. Walls were in good condition during site inspection. Some degradation of retaining walls will occur over time due to freeze-thaw cycles. Component is set up to repair 10% of retaining wall area every 5 years. Stones are reused so cost is essentially labor and minor materials. As association gains experience with frequency of stone wall repairs, component cost and frequency should be updated.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Roof - Copper Ba	ay Window, Gatehouse		
Category	010 Roof	Quantity	1 copper roof
		Unit Cost	\$4,000.000
		% of Replacement	100.00%
		Current Cost	\$4,000.00
Placed In Service	01/02	Future Cost	\$6,433.75
Useful Life	40		
		Assigned Reserves at FYB	\$0.00
Remaining Life	24	Monthly Member Contribution	\$9.12
Replacement Year	2042	Monthly Interest Contribution	\$0.02
		Total Monthly Contribution	\$9.15

Comments:



Component covers replacement of copper gatehouse bay window roof. Roof appeared to be in good condition for its age during site visit. No issues were reported by management.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Roof - Copper Fl	ashings, Main Building		
Category	010 Roof	Quantity	1 total
		Unit Cost	\$15,000.000
		% of Replacement	100.00%
		Current Cost	\$15,000.00
Placed In Service	01/02	Future Cost	\$17,926.39
Useful Life	25		
		Assigned Reserves at FYB	\$0.00
Remaining Life	9	Monthly Member Contribution	\$81.18
Replacement Year	2027	Monthly Interest Contribution	\$0.20
		Total Monthly Contribution	\$81.38

Comments:



Roof of main building is comprised of flat EPDM membrane and sloped asphalt shingle areas.

Component covers repair allowance for lead-coated copper flashings and built-in gutters when roof covering is replaced. Copper appeared to be in very good condition during site visit and will have a long useful life. It is unlikely that all copper would need to be replaced when re-roofing. No issues were reported by management. Copper work is difficult to inventory due to inaccessibility. Allowance budget should be modified as association gains experience.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Roof - Gutters, A	luminum		
Category	010 Roof	Quantity	580 lin. ft.
		Unit Cost	\$4.000
		% of Replacement	100.00%
		Current Cost	\$2,320.00
Placed In Service	01/02	Future Cost	\$3,731.57
Useful Life	40		
		Assigned Reserves at FYB	\$0.00
Remaining Life	24	Monthly Member Contribution	\$5.29
Replacement Year	2042	Monthly Interest Contribution	\$0.02
		Total Monthly Contribution	\$5.31

Comments:



Component covers replacement of aluminum gatehouse and trash/recycle/garage gutters and downspouts. Gutters were in good condition during site visit. However, gutter at front door porch on gate house was clogged and dripping. Decay observed on wood soffit and fascia indicates a continual problem. Gutter should be cleaned and soffit/fascia repaired.

The gutters should be cleaned twice a year: fall and spring after seeds drop.

gatehouse gutters	285	lin. ft.
gatehouse downspouts	140	lin. ft.
trash/recycle/garage gutters	115	lin. ft.
trash/recycle/garage downspouts	40	lin. ft.
	580	lin. ft.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Roof - Gutters, C	opper		
Category	010 Roof	Quantity	210 lin. ft.
		Unit Cost	\$30.000
		% of Replacement	100.00%
		Current Cost	\$6,300.00
Placed In Service	01/02	Future Cost	\$10,133.15
Useful Life	40		
		Assigned Reserves at FYB	\$0.00
Remaining Life	24	Monthly Member Contribution	\$14.37
Replacement Year	2042	Monthly Interest Contribution	\$0.03
		Total Monthly Contribution	\$14.40

Comments:



Component covers replacement of red copper downspouts on main building. Downspouts were in good condition during site visit. Lead-coated copper built-in gutters are covered in main roof copper component.

The gutters should be cleaned twice a year: fall and spring after seeds drop.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Roof - Membrane	e, Main Building		
Category	010 Roof	Quantity	4,030 sq. ft.
		Unit Cost	\$25.000
		% of Replacement	100.00%
		Current Cost	\$100,750.00
Placed In Service	01/02	Future Cost	\$109,055.04
Useful Life	20		
		Assigned Reserves at FYB	\$0.00
Remaining Life	4	Monthly Member Contribution	\$1,178.66
Replacement Year	2022	Monthly Interest Contribution	\$2.93
		Total Monthly Contribution	\$1,181.59

Comments:



Roof of main building is comprised of flat EPDM membrane and sloped asphalt shingle areas. Component covers replacement of flat EPDM membrane. Roof appeared to be in good condition for its age during site visit. No issues were reported by management. Minor leaf debris noted during site visit should be cleaned. Some areas of minor ponding were observed. Typical specifications require any ponding to evaporate in 24-48 hours. Ponding water can cause deterioration of roof membrane and seams. Mechanical vent and other penetrations appear in good condition and properly installed. Main equipment area of flat roof is accessible with stairs. Additional main roof flat areas are not easily accessible and were measured from building construction plans. Condition of these areas could not be evaluated.

When roof is replaced, unit-owned air conditioner condensing units will need to be removed and reset. Cost of approximately \$550 per condensor will be responsibility of unit owner and is not included.

main roof membrane	2,633	sq. ft.
main roof, additional areas	996	sq. ft.
front entry membrane	322	sq. ft.
rear entry membrane	79	sq. ft.
	4,030	sq. ft.

In order to ensure a high quality installation, the client may wish to obtain the services of an independent roofing

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

consultant to work with the client and the roofing contractor providing installation. Consultants are available for the preparation of installation specifications and, if desired, to work with the contractor during the installation process. Fees for these services vary based on the size of the project and detail required by the client, and have not been included in the cost used for this component. Should the client desire, a provision for a consultant can be incorporated into this analysis.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Roof - Shingle, G	Satehouse		
Category	010 Roof	Quantity	2,885 sq. ft.
		Unit Cost	\$4.500
		% of Replacement	100.00%
		Current Cost	\$12,982.50
Placed In Service	01/02	Future Cost	\$15,515.29
Useful Life	25		
		Assigned Reserves at FYB	\$0.00
Remaining Life	9	Monthly Member Contribution	\$70.26
Replacement Year	2027	Monthly Interest Contribution	\$0.17
		Total Monthly Contribution	\$70.43

Comments:



Component covers replacement of asphalt architectural shingle gatehouse roof. Roof appeared to be in good condition for its age during site visit. No issues were reported by management. North-facing roof planes exhibited some algae growth due to moist conditions. Consider installing zinc strips on roof to reduce growth.

In order to ensure a high quality installation, the client may wish to obtain the services of an independent roofing consultant to work with the client and the roofing contractor providing installation. Consultants are available for the preparation of installation specifications and, if desired, to work with the contractor during the installation process. Fees for these services vary based on the size of the project and detail required by the client, and have not been included in the cost used for this component. Should the client desire, a provision for a consultant can be incorporated into this analysis.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Roof - Shingle, M	lain Building		
Category	010 Roof	Quantity	1 re-roof
		Unit Cost	\$44,525.000
		% of Replacement	100.00%
		Current Cost	\$44,525.00
Placed In Service	01/02	Future Cost	\$53,211.50
Useful Life	25		
		Assigned Reserves at FYB	\$0.00
Remaining Life	9	Monthly Member Contribution	\$240.96
Replacement Year	2027	Monthly Interest Contribution	\$0.60
		Total Monthly Contribution	\$241.56

Comments:



Roof of main building is comprised of flat EPDM membrane and sloped asphalt shingle areas.

Component covers replacement of asphalt shingle roof. Roof appeared to be in good condition for its age during site visit. No issues were reported by management. One missing tab on GAF Slateline shingles was noted on south slope of west facing gable of main building.

Cost includes upgrade to GAF Slateline shingles and allowance for removal and reinstallation of snow guards.

In order to ensure a high quality installation, the client may wish to obtain the services of an independent roofing consultant to work with the client and the roofing contractor providing installation. Consultants are available for the preparation of installation specifications and, if desired, to work with the contractor during the installation process. Fees for these services vary based on the size of the project and detail required by the client, and have not been included in the cost used for this component. Should the client desire, a provision for a consultant can be incorporated into this analysis.

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

7,550	sq. ft. asphalt shingles	@	\$5.50	=	\$41,525.00
1	snow slide guard labor allowance	@	\$3,000.00	=	\$3,000.00
			TOTAL	=	\$44,525.00

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Roof - Shingle, T	rash/Garage		
Category	010 Roof	Quantity	1,040 sq. ft.
		Unit Cost	\$4.500
		% of Replacement	100.00%
		Current Cost	\$4,680.00
Placed In Service	01/02	Future Cost	\$5,593.03
Useful Life	25		
		Assigned Reserves at FYB	\$0.00
Remaining Life	9	Monthly Member Contribution	\$25.33
Replacement Year	2027	Monthly Interest Contribution	\$0.07
		Total Monthly Contribution	\$25.39

Comments:



Component covers replacement of asphalt architectural shingle trash/recycle/garage roof. Roof appeared to be in good condition for its age during site visit. No issues were reported by management.

In order to ensure a high quality installation, the client may wish to obtain the services of an independent roofing consultant to work with the client and the roofing contractor providing installation. Consultants are available for the preparation of installation specifications and, if desired, to work with the contractor during the installation process. Fees for these services vary based on the size of the project and detail required by the client, and have not been included in the cost used for this component. Should the client desire, a provision for a consultant can be incorporated into this analysis.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Building - Balcony Railing

<u> </u>	<u> </u>		
Category	020 Building Exterior	Quantity	325 lin. ft.
		Unit Cost	\$55.000
		% of Replacement	100.00%
		Current Cost	\$17,875.00
Placed In Service	01/02	Future Cost	\$28,750.82
Useful Life	40		
		Assigned Reserves at FYB	\$0.00
Remaining Life	24	Monthly Member Contribution	\$40.77
Replacement Year	2042	Monthly Interest Contribution	\$0.10
		Total Monthly Contribution	\$40.87

Comments:



Component covers replacement of aluminum balcony railings on main building. Railings were in generally good condition during site visit. Railings are currently in need of painting. Proper maintenance will enable railings to achieve their useful life.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Building - Brick,	Repair Allowance		
Category	020 Building Exterior	Quantity	1 repair allowance
		Unit Cost	\$531,750.000
		% of Replacement	2.00%
		Current Cost	\$10,635.00
Placed In Service	01/18	Future Cost	\$11,741.90
Useful Life	5		
		Assigned Reserves at FYB	\$0.00
Remaining Life	5	Monthly Member Contribution	\$100.34
Replacement Year	2023	Monthly Interest Contribution	\$0.25
		Total Monthly Contribution	\$100.59

Comments:



This component covers brick inspection, sealing, and repairs on a 5 year interval for brick areas of main building and gatehouse. Cost for component currently set at 2% of brick gross area. As association gains experience with brick as it ages, allowance budget should be adjusted. Periodic maintenance mainly involves caulking windows and other penetrations. Exterior should be monitored for leaks and minor issues addressed. Depending on porosity of brick, surface may need periodic sealing.

As the building ages, a second component for major repairs on a 10 year interval should be added. Annual inspection and minor repairs should be funded from operating budget.

Mortar and brick are in generally very good condition. No issues were noted with the brick and mortar during the ARS visual on-site inspection. Based on the current condition and future repair/replacement schedule no remaining life adjustments have been made.

Any areas that show signs of increased damage or new areas showing damage should be addressed immediately. Typical maintenance includes repairing/repointing loose mortar joints between bricks. This involves grinding out mortar between the bricks and replacing it with new mortar in the joints. The repointing process is labor intensive. Other maintenance includes moss control and water sealing.

Shaded brick areas may develop moss/fungus growth and need to be power washed and treated on a regular cycle.

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Untreated areas of moss/fungus may result in mortar failure and create a safety hazard. Power washing and required repairs should be followed by application of a brick waterproofing solution. This will help reduce moss growth. Typically the waterproofing solution service life is about 5 years.

Brick exposed to full sun may exhibit crumbling mortar that allows excessive water penetration. Repair and water sealing are recommended.

Brick veneer penetrations (doors, windows, etc.) are vulnerable to water intrusion and deterioration. Inspect these areas at least annually. Joints between brick and penetrations should be sealed with a high quality sealant.

16,800	sq. ft. brick veneer, main building	@	\$30.00	=	\$504,000.00
925	sq. ft. brick veneer, gatehouse	@	\$30.00	=	\$27,750.00
			TOTAL	=	\$531,750.00

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Building - Common Roof Doors, Main Building

Category	020 Building Exterior	Quantity	1 total
		Unit Cost	\$2,250.000
		% of Replacement	100.00%
		Current Cost	\$2,250.00
Placed In Service	01/02	Future Cost	\$2,968.83
Useful Life	30		
		Assigned Reserves at FYB	\$0.00
Remaining Life	14	Monthly Member Contribution	\$8.14
Replacement Year	2032	Monthly Interest Contribution	\$0.02
		Total Monthly Contribution	\$8.16

Comments:



This component covers exterior steel doors located in flat roof equipment area of main building. Doors were in good condition during site visit, but in need of painting.

2	roof access doors, 36" x 80"	@	\$750.00	=	\$1,500.00
1	fire sprinkler access door 24" x 71"	@	\$750.00	=	\$750.00
			TOTAL	=	\$2,250.00

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Building - Common Windows Category 020 Building Exterior 1 total **Ouantity** Unit Cost \$10,950.000 100.00% % of Replacement Current Cost \$10,950.00 01/02 Placed In Service Future Cost \$14,448.29 Useful Life 30 Assigned Reserves at FYB \$0.00 14 Monthly Member Contribution \$39.63 Remaining Life 2032 \$0.10 Replacement Year Monthly Interest Contribution \$39.73 Total Monthly Contribution

Comments:



This component covers Pella aluminum-clad windows located in common areas of main building and trash/recycle/garage building. Windows were in good condition during site visit, but main building windows will soon need exterior painting.

@

@

@

@

@

3	windows,	main	stairwell,	32"	x 63"	
---	----------	------	------------	-----	-------	--

- 3 windows, rear stairwell, 31" x 31"
- 3 windows, front vestibule, 42" x 78"
- 4 windows, elevator lobby, 32" x 63"
- 4 windows, trash building, 32" x 26"

\$750.00	=	\$2,250.00
\$550.00	=	\$1,650.00
\$750.00	=	\$2,250.00
\$750.00	=	\$3,000.00
\$450.00	=	\$1,800.00
TOTAL	=	\$10,950.00

Unit windows are responsibility of unit owners per condo documents.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Building - Exterio	or Doors, Main Building		
Category	020 Building Exterior	Quantity	1 total
		Unit Cost	\$11,000.000
		% of Replacement	100.00%
		Current Cost	\$11,000.00
Placed In Service	01/02	Future Cost	\$14,514.27
Useful Life	30		
		Assigned Reserves at FYB	\$0.00
Remaining Life	14	Monthly Member Contribution	\$39.81
Replacement Year	2032	Monthly Interest Contribution	\$0.10
		Total Monthly Contribution	\$39.91

Comments:



This component covers exterior Kawneer aluminum storefront entry doors and fixed glass windows located in main building at bottom of stairwells. Doors were in good condition during site visit. Both exterior doors are protected under portico. Interior vestibule door at main entry is not exposed to elements.

With proper maintenance, doors could last indefinitely. Hinges, actuators, etc. will need to be replaced as maintenance items.

1	main entry door, 36" x 84" & sidelights/transom	@	\$5,000.00	=	\$5,000.00
1 1	rear entry door, 36" x 84" & sidelight main entry vestibule door, 36" x 84" &	@ @	\$3,000.00 \$3,000.00	= =	\$3,000.00 \$3,000.00
	sidelight		TOTAL	=	\$11,000.00

Unit doors to common hallways, storage units, or exterior are assumed to be responsibility of unit owners.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Building - Garage Doors, Gatehouse & Trash/Garag

Category	020 Building Exterior	Quantity	4 overhead doors
		Unit Cost	\$2,000.000
		% of Replacement	100.00%
		Current Cost	\$8,000.00
Placed In Service	01/02	Future Cost	\$10,555.83
Useful Life	30		
		Assigned Reserves at FYB	\$0.00
Remaining Life	14	Monthly Member Contribution	\$28.95
Replacement Year	2032	Monthly Interest Contribution	\$0.07
		Total Monthly Contribution	\$29.03

Comments:



This component covers steel 9' x 8' overhead flush doors servicing trash/garage building and gatehouse. Doors were in good condition during site visit. Replacement pricing includes openers.

Service contractor: Door Systems, Inc, 800-545-3667

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Building - Garage	e Doors, Main Building		
Category	020 Building Exterior	Quantity	2 overhead doors
		Unit Cost	\$5,000.000
		% of Replacement	100.00%
		Current Cost	\$10,000.00
Placed In Service	01/02	Future Cost	\$13,194.79
Useful Life	30		
		Assigned Reserves at FYB	\$0.00
Remaining Life	14	Monthly Member Contribution	\$36.19
Replacement Year	2032	Monthly Interest Contribution	\$0.09
		Total Monthly Contribution	\$36.28

Comments:



This component covers steel 10' x 8' overhead doors servicing parking garage of main building. Doors were in good condition during site visit. Replacement pricing includes openers.

Service contractor: Door Systems, Inc, 800-545-3667

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Building - Vinyl	Siding, Main Building		
Category	020 Building Exterior	Quantity	2,200 sq. ft.
		Unit Cost	\$4.500
		% of Replacement	100.00%
		Current Cost	\$9,900.00
Placed In Service	01/02	Future Cost	\$14,422.43
Useful Life	30		
Adjustment	+5	Assigned Reserves at FYB	\$0.00
Remaining Life	19	Monthly Member Contribution	\$27.45
Replacement Year	2037	Monthly Interest Contribution	\$0.07
		Total Monthly Contribution	\$27.52

Comments:



This component covers vinyl siding replacement in flat roof equipment area. Siding is not visible from ground so aesthetic characteristics are less critical. Siding was in good condition during site visit.

The remaining life of this component has been extended due to its lack of visibility.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Building - Wood Siding, Repair Allowance 020 Building Exterior 1 repair allowance Category **Ouantity** Unit Cost \$75,000.000 7.00% % of Replacement \$5,250.00 Current Cost Placed In Service 01/13 Future Cost \$5,796.42 Useful Life 5 Assigned Reserves at FYB \$5,250.00 0 Remaining Life Monthly Member Contribution \$49.53 2018 \$0.12 Replacement Year Monthly Interest Contribution **Total Monthly Contribution** \$49.66

Comments:



Component covers wood siding inspection and repair on a 5 year interval. Wood siding areas are located on gatehouse and trash/recycle/garage building. Repairs costs equaling 7% of siding areas anticipated every 5 years. As association gains experience with wood siding aging, allowance should be adjusted. As the building ages, a second component for major repairs on a 10 year interval may be needed.

Annual inspection and minor repairs should be funded from operating budget. Periodic maintenance involves painting, wood repair, and caulking windows/penetrations. Cedar clapboards are in good condition. However, pine wood trim is particularly vulnerable. Several decayed areas were noted during site visit. Replacement of pine trim with lower maintenance PVC or composite materials should be considered. Boral, a fly-ash composite, may be a good material candidate.

Gutter at front door porch on gate house was clogged and dripping. The decay observed on wood soffit/fascia behind gutter indicates a continual problem. Gutter should be cleaned and soffit/fascia repaired.

3,600	sq. ft. wood siding, gate house	@	\$15.00	=	\$54,000.00
1,400	sq. ft. wood siding, trash/garage bldg	@	\$15.00	=	\$21,000.00
			TOTAL	=	\$75,000.00

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Building - Flooring, Carpet

U	<u> </u>		
Category	030 Building Interior	Quantity	1 total
		Unit Cost	\$15,014.750
		% of Replacement	100.00%
		Current Cost	\$15,014.75
Placed In Service	01/02	Future Cost	\$15,933.77
Useful Life	15		
Adjustment	+4	Assigned Reserves at FYB	\$12,644.00
Remaining Life	3	Monthly Member Contribution	\$46.02
Replacement Year	2021	Monthly Interest Contribution	\$3.19
		Total Monthly Contribution	\$49.21

Comments:



This component covers common area carpet in main building. Carpet was in good condition during site visit. A proper cleaning program will enable carpets to achieve their useful life.

The remaining life of this component has been extended due to its condition at our most recent site visit.

Pricing data Raleigh Rug, Bill Raleigh Budget \$3.50 per sq. ft. plus \$0.25 per sq. ft for removal Add location premium of \$1.00 per sq.ft.

2,016	sq. ft. hallway carpet	@	\$4.75	=	\$9,576.00
1,145	sq. ft. stairwell carpet	@	\$4.75	=	\$5,438.75
			TOTAL	=	\$15.014.75

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Building - Flooring, Tile

Category	030 Building Interior	Quantity	1 total
		Unit Cost	\$1,560.000
		% of Replacement	100.00%
		Current Cost	\$1,560.00
Placed In Service	01/02	Future Cost	\$2,058.39
Useful Life	30		
		Assigned Reserves at FYB	\$0.00
Remaining Life	14	Monthly Member Contribution	\$5.65
Replacement Year	2032	Monthly Interest Contribution	\$0.02
		Total Monthly Contribution	\$5.66

Comments:



This component covers tile floor perimeter in common vestibule areas in main building. Tile was in good condition during site visit. Small job premium applies. Cost includes removing old tile.

40	sq. ft. front entry vestibule	@	\$20.00	=	\$800.00
38	sq. ft. rear entry vestibule	@	\$20.00	=	\$760.00
			TOTAL	=	\$1,560.00

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Building - Interio	r Doors, Main Building		
Category	030 Building Interior	Quantity	1 total
		Unit Cost	\$30,320.000
		% of Replacement	100.00%
		Current Cost	\$30,320.00
Placed In Service	01/02	Future Cost	\$44,170.51
Useful Life	30		
Adjustment	+5	Assigned Reserves at FYB	\$0.00
Remaining Life	19	Monthly Member Contribution	\$84.07
Replacement Year	2037	Monthly Interest Contribution	\$0.21
		Total Monthly Contribution	\$84.27

Comments:



This component covers common area interior doors located in main building. Doors were in good condition during site visit. Extended useful life 5 years based on low number of units in building.

Interior fire doors:

Steel 36" x 80" doors with fire glass window, exit device, closer leading to interior common hallway Door \$1050 incl delivery; Installation \$500; Painting \$250 Total \$1800

Steel 36" x 80" solid door Door \$530 incl delivery; Installation \$400; Painting \$250 Total \$1180

With proper maintenance, doors could last indefinitely. Hinges, actuators, etc. will need to be replaced as maintenance items.

5	main stairwell fire doors, 36" x 80"	@	\$1,800.00	=	\$9,000.00
4	rear stairwell fire doors, 36" x 80"	@	\$1,800.00	=	\$7,200.00

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

3	storage hall, garage fire doors, 36" x 84"	@	\$1,800.00	=	\$5,400.00
4	mechanical closet doors, 36" x 84"	@	\$1,180.00	=	\$4,720.00
1	full view garage door main stairwell, 36" x 84"	@	\$2,000.00	=	\$2,000.00
5	unit hallway closet doors, 28" x 80"	@	\$400.00	=	\$2,000.00
			TOTAL	=	\$30,320.00

Unit doors to common hallways, storage units, or exterior are assumed to be responsibility of unit owners.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

h.

Painting - Exterior, Gatehouse & Trash/Garage

Category	040 Painting	Quantity	1 total
		Unit Cost	\$13,260.000
		% of Replacement	100.00%
		Current Cost	\$13,260.00
Placed In Service	01/14	Future Cost	\$13,795.70
Useful Life	6		
		Assigned Reserves at FYB	\$8,840.00
Remaining Life	2	Monthly Member Contribution	\$108.29
Replacement Year	2020	Monthly Interest Contribution	\$2.42
		Total Monthly Contribution	\$110.71

Comments:



Component covers exterior painting on gatehouse and trash/recycle/garage building. Paint was in generally good condition during site visit. Wood trim on gatehouse need some repair.

The actual date this component was placed into service is not available. For budgeting purposes, this date has been estimated based on its condition at our most recent site visit.

3,600	sq. ft. wood siding, gatehouse	@	\$2.00	=	\$7,200.00
1,400	sq. ft. wood siding, trash building	@	\$2.00	=	\$2,800.00
1	paint trim, gatehouse brick areas	@	\$500.00	=	\$500.00
21	In. ft. painted railings	@	\$10.00	=	\$210.00
4	windows, trash building	@	\$75.00	=	\$300.00
1	pedestrian door, trash building	@	\$150.00	=	\$150.00
4	overhead garage doors	@	\$150.00	=	\$600.00
1	aerial lift per week	@	\$1,500.00	=	\$1,500.00
			TOTAL	=	\$13,260.00

Unit windows are responsibility of unit owners per condo documents.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Unit doors to exterior are assumed to be responsibility of unit owners.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Painting - Exterio	or, Main Building		
Category	040 Painting	Quantity	1 total
		Unit Cost	\$11,790.000
		% of Replacement	100.00%
		Current Cost	\$11,790.00
Placed In Service	01/14	Future Cost	\$12,266.32
Useful Life	6		
		Assigned Reserves at FYB	\$7,860.00
Remaining Life	2	Monthly Member Contribution	\$96.28
Replacement Year	2020	Monthly Interest Contribution	\$2.15
		Total Monthly Contribution	\$98.43

Comments:



Component covers exterior painting on main building. Paint was in generally good condition during site visit. Railings are currently in need of painting. In order to paint the railings, screen panels will need to be removed and reinstalled by unit owners.

The actual date this component was placed into service is not available. For budgeting purposes, this date has been estimated based on its condition at our most recent site visit.

1,770	sg. ft. soffit, frieze board & fascia	0	\$2.00	=	\$3,540.00
325	In. ft. painted balcony railings	@	\$10.00	=	\$3,250.00
3	exterior doors, roof equipment area	@	\$150.00	=	\$450.00
13	windows, common areas	@	\$200.00	=	\$2,600.00
2	overhead doors, parking garage	@	\$150.00	=	\$300.00
1	painted granite step railing	@	\$150.00	=	\$150.00
1	aerial lift per week	@	\$1,500.00	=	\$1,500.00
			TOTAL	=	\$11,790.00

Unit windows are responsibility of unit owners per condo documents.

Unit doors to common hallways, storage units, or exterior are assumed to be responsibility of unit owners.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Painting - Interio	r, Main Building		
Category	040 Painting	Quantity	1 total
		Unit Cost	\$26,128.750
		% of Replacement	100.00%
		Current Cost	\$26,128.75
Placed In Service	01/02	Future Cost	\$28,282.60
Useful Life	20		
		Assigned Reserves at FYB	\$0.00
Remaining Life	4	Monthly Member Contribution	\$305.68
Replacement Year	2022	Monthly Interest Contribution	\$0.76
		Total Monthly Contribution	\$306.43

Comments:



Component covers interior painting of main building common areas. Paint was in generally good condition during site visit. Wall painting area in unit hallways includes painting millwork.

The actual date this component was placed into service is not available. For budgeting purposes, this date has been estimated based on its condition at our most recent site visit.

7,700	sq. ft. hall and vestibule wall area	@	\$1.25	=	\$9,625.00
3,900	sq. ft. stairwell wall area	@	\$1.00	=	\$3,900.00
22	interior doors	@	\$150.00	=	\$3,300.00
2,730	sq. ft. parking garage walls	@	\$0.75	=	\$2,047.50
2,300	sq. ft. hall and vestibule ceilings	@	\$1.00	=	\$2,300.00
925	sq. ft. stairwell ceilings	@	\$1.00	=	\$925.00
5,375	sq. ft. parking garage ceiling	@	\$0.75	=	\$4,031.25
			TOTAL	=	\$26,128.75

Unit windows are responsibility of unit owners per condo documents.

Unit doors to common hallways, storage units, or exterior are assumed to be responsibility of unit owners.
Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Lighting - Interio	r Garage & Storage Halls		
Category	050 Lighting	Quantity	1 total
		Unit Cost	\$3,975.000
		% of Replacement	100.00%
		Current Cost	\$3,975.00
Placed In Service	01/02	Future Cost	\$4,302.67
Useful Life	20		
		Assigned Reserves at FYB	\$3,180.00
Remaining Life	4	Monthly Member Contribution	\$11.65
Replacement Year	2022	Monthly Interest Contribution	\$0.80
		Total Monthly Contribution	\$12.45

Comments:



Component covers interior lighting of main building parking garage and storage hall areas. Lighting was in good condition during site visit. Upgrade to LED lamps should be considered.

13	2' x2' garage ceiling lights	@	\$125.00	=	\$1,625.00
8	4' strip light	@	\$125.00	=	\$1,000.00
4	decorative sconce in garage	@	\$125.00	=	\$500.00
7	dual head emergency lights	@	\$100.00	=	\$700.00
2	exit signs	@	\$75.00	=	\$150.00
			TOTAL	=	\$3,975.00

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Lighting - Interio	r Stairwells		
Category	050 Lighting	Quantity	1 total
		Unit Cost	\$5,825.000
		% of Replacement	100.00%
		Current Cost	\$5,825.00
Placed In Service	01/02	Future Cost	\$6,305.17
Useful Life	20		
		Assigned Reserves at FYB	\$4,660.00
Remaining Life	4	Monthly Member Contribution	\$17.07
Replacement Year	2022	Monthly Interest Contribution	\$1.17
		Total Monthly Contribution	\$18.24

Comments:



Component covers interior lighting of main building stairwell areas. Lighting was in good condition during site visit. Upgrade to LED lamps should be considered.

Emergency backup lighting appears to be an inverter system that powers the recessed lights with a battery backup. Component cost is estimated because specifics were not available.

25	recessed ceiling lights	@	\$100.00	=	\$2,500.00
16	emergency light inverter	@	\$150.00	=	\$2,400.00
9	exit signs	@	\$75.00	=	\$675.00
2	decorative ceiling light	@	\$125.00	=	\$250.00
			TOTAL	=	\$5,825.00

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Lighting - Interio	r Unit Hallways		
Category	050 Lighting	Quantity	1 total
		Unit Cost	\$11,950.000
		% of Replacement	100.00%
		Current Cost	\$11,950.00
Placed In Service	01/02	Future Cost	\$12,935.06
Useful Life	20		
		Assigned Reserves at FYB	\$0.00
Remaining Life	4	Monthly Member Contribution	\$139.80
Replacement Year	2022	Monthly Interest Contribution	\$0.35
		Total Monthly Contribution	\$140.15

Comments:



Component covers interior lighting of main building hallway areas. Lighting was in good condition during site visit. Upgrade to LED lamps should be considered.

Emergency backup lighting appears to be an inverter system that powers the recessed lights with a battery backup. Component cost is estimated because specifics were not available.

24	decorative sconce	@	\$200.00	=	\$4,800.00
40	recessed ceiling lights	@	\$100.00	=	\$4,000.00
15	emergency light inverter	@	\$150.00	=	\$2,250.00
12	exit signs	@	\$75.00	=	\$900.00
			TOTAL	=	\$11,950.00

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Equipment - Batl	hroom Exhaust Fan		
Category	060 Equipment	Quantity	1 Bathroom Exhaust
		Unit Cost	\$3,000.000
		% of Replacement	100.00%
		Current Cost	\$3,000.00
Placed In Service	01/02	Future Cost	\$3,247.30
Useful Life	20		
		Assigned Reserves at FYB	\$2,400.00
Remaining Life	4	Monthly Member Contribution	\$8.79
Replacement Year	2022	Monthly Interest Contribution	\$0.61
		Total Monthly Contribution	\$9.40

Comments:



Component covers unit bathroom exhaust fan located on roof. Greenheck GB-141-LMDX-QD fan appeared to be in average condition with no issues reported.

Service contractor: None

It is recommended that a service contractor check the fan for proper operation periodically.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Equipment - Dryer Exhaust Fan			
Category	060 Equipment	Quantity	2 Dryer Exhaust
		Unit Cost	\$3,000.000
		% of Replacement	100.00%
		Current Cost	\$6,000.00
Placed In Service	01/02	Future Cost	\$6,494.59
Useful Life	20		
		Assigned Reserves at FYB	\$2,662.00
Remaining Life	4	Monthly Member Contribution	\$41.02
Replacement Year	2022	Monthly Interest Contribution	\$0.75
		Total Monthly Contribution	\$41.77

Comments:



Component covers unit dryer exhaust booster fans located on roof. Fan labels were not readable. Fans appeared to be in average condition with no issues reported.

Service contractor: None

It is recommended that a service contractor check the fan for proper operation and potential lint build up regularly.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Equipment - Elev	vator, Cab Refurbish		
Category	060 Equipment	Quantity	1 cab refurbish
		Unit Cost	\$10,000.000
		% of Replacement	100.00%
		Current Cost	\$10,000.00
Placed In Service	01/02	Future Cost	\$13,194.79
Useful Life	30		
		Assigned Reserves at FYB	\$0.00
Remaining Life	14	Monthly Member Contribution	\$36.19
Replacement Year	2032	Monthly Interest Contribution	\$0.09
		Total Monthly Contribution	\$36.28

Comments:



Component covers refurbishment of elevator cab. Elevator cab was in good condition during site visit.

Equipment: ThyssenKrupp Elevator TAC20 Model EP09525

Service contractor: Stanley Elevator Company, Inc. Nashua, NH 800-258-1016 Dave Ulf area sales representative Mr. Ulf stated that the elevator is in good condition with no operational issues. Ballpark cab refurbishment cost will be about \$15,000 for this elevator. This includes basic materials with good trim inside elevator cab.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Equipment - Elev	vator, Modernization		
Category	060 Equipment	Quantity	1 modernization
		Unit Cost	\$75,000.000
		% of Replacement	100.00%
		Current Cost	\$75,000.00
Placed In Service	01/02	Future Cost	\$98,960.91
Useful Life	30		
		Assigned Reserves at FYB	\$0.00
Remaining Life	14	Monthly Member Contribution	\$271.44
Replacement Year	2032	Monthly Interest Contribution	\$0.67
		Total Monthly Contribution	\$272.11

Comments:



Component covers modernization of hydraulic elevator machinery. Elevator was in good condition during site visit and no issues were reported during site visit.

Equipment: ThyssenKrupp Elevator TAC20 Model EP09525

Service contractor: Stanley Elevator Company, Inc. Nashua, NH 800-258-1016 Dave Ulf area sales representative Mr. Ulf stated that the elevator is in good condition with no operational issues. Ballpark modernization cost will be about \$75,000 for this elevator. This includes power unit, door operator, and push button controls in elevator cab.

He does not recommend changing hydraulic oil unless elevator is experiencing problems. Sometimes oil changes cause problems in his experience.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Equipment - Fire Alarm Category 060 Equipment 1 fire alarm panel **Ouantity** Unit Cost \$4,500.000 100.00% % of Replacement \$4,500.00 Current Cost 01/02 Placed In Service Future Cost \$4,870.94 Useful Life 20 Assigned Reserves at FYB \$3,600.00 4 Remaining Life Monthly Member Contribution \$13.19 2022 \$0.91 Replacement Year Monthly Interest Contribution **Total Monthly Contribution** \$14.09

Comments:



Component covers replacement of fire alarm main panel for main building. Main panel is located in main entry vestibule.

Equipment:

Silent Knight IntelliKnight Fire Alarm Control Communicator Model 5808 127 point, expandable to 198 points, single loop addressable fire alarm control/communicator system.

Service contractor: Norel Service Company, Waltham, MA 781-768-5500 Tom Norton No issues reported with current system. Parts are currently available.

Peripheral devices (detectors, pull stations, sirens, boosters, batteries) are not included in budget and should be replaced on as-needed basis from operating budget.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Equipment - Fire	Sprinkler, Unfunded		
Category	060 Equipment	Quantity	1 fire sprinkler
		Unit Cost	\$0.000
		% of Replacement	100.00%
		Current Cost	\$0.00
Placed In Service	01/02	Future Cost	\$0.00
Useful Life	n.a.		
		Assigned Reserves at FYB	\$0.00
Remaining Life	n.a.	Monthly Member Contribution	\$0.00
Replacement Year	n.a.	Monthly Interest Contribution	\$0.00
		Total Monthly Contribution	\$0.00

Comments:



Component covers fire sprinkler system for main building. System should be tested per code and parts replaced on asneeded basis from operating budget. Component listed for inventory purposes.

Equipment:

Fire sprinklers are a pressure system with no controls. No major components to include in reserve study.

Service contractor:

Norel Service Company, Waltham, MA 781-768-5500 Tom Norton confirmed pressure system with no pump or controls.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Equipment - Fro	nt Entry Access Intercom		
Category	060 Equipment	Quantity	1 access intercom
		Unit Cost	\$4,000.000
		% of Replacement	100.00%
		Current Cost	\$4,000.00
Placed In Service	01/02	Future Cost	\$4,329.73
Useful Life	20		
		Assigned Reserves at FYB	\$3,200.00
Remaining Life	4	Monthly Member Contribution	\$11.72
Replacement Year	2022	Monthly Interest Contribution	\$0.81
		Total Monthly Contribution	\$12.53

Comments:



Component covers replacement allowance for front entry access intercom system. System was in good operating order during site visit.

Equipment:

Manufacturer of intercom is not visible on unit. Cost for similar units used.

Service contractor: Norco Alarm 888-501-7870 Phone number was not active.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Equipment - Furnace

Category	060 Equipment	Quantity	2 furnaces
		Unit Cost	\$4,500.000
		% of Replacement	100.00%
		Current Cost	\$9,000.00
Placed In Service	01/02	Future Cost	\$11,875.31
Useful Life	30		
		Assigned Reserves at FYB	\$0.00
Remaining Life	14	Monthly Member Contribution	\$32.57
Replacement Year	2032	Monthly Interest Contribution	\$0.08
		Total Monthly Contribution	\$32.66

Comments:



Component covers common vestibule area Lennox G2602-50-6 furnaces. Furnaces supply heat to vestibules and storage unit hallways in basement. Furnaces appeared to be in good condition with no issues reported. Condensate pump for furnace located in mechanical room B1 was cycling. Per model number the sealed combustion natural gas furnaces have an input of 50,000 BTU/hr and an efficiency of 92%.

Service contractor:

Concord Heating and Air Conditioning, Acton, MA 978-369-6980

Per Chris at Concord Heating, units are not highly stressed and should last 30 years. Budget for replacement of \$5000 recommended.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Equipment - Irrigation System			
Category	060 Equipment	Quantity	1 total
		Unit Cost	\$4,500.000
		% of Replacement	100.00%
		Current Cost	\$4,500.00
Placed In Service	01/12	Future Cost	\$4,870.94
Useful Life	10		
		Assigned Reserves at FYB	\$2,700.00
Remaining Life	4	Monthly Member Contribution	\$23.05
Replacement Year	2022	Monthly Interest Contribution	\$0.72
		Total Monthly Contribution	\$23.77

Comments:



Component covers major parts of irrigation system. System is supplied with city water.

Service contractor: Corbett Irrigation 978-897-9004 Frank Eagan 978-265-2463 Irrigation components inventory per conversation property irrigation contractor.

System consists of 18 zones:

(3) new zone valves installed in 2017; (2) rebuilt in last 5 years
(18) valves: \$150 to replace/rebuild depending on valve manufacturer
Single controller is light commercial unit that ranges from \$800-\$1200 to replace
Single backflow preventer is about \$800 to replace or \$400 to rebuild if practical
Backflow preventer is special Concord, MA required unit that is more costly than typical used.

Typical component service life is difficult to predict and is significantly affected by water quality. 10 years is typically used, but may components are from original construction (15 years). For budgeting purposes, the component placed-in-service date has been estimated/averaged.

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

1	irrigation controller	@	\$1,000.00	=	\$1,000.00
18	irrigation valve	@	\$150.00	=	\$2,700.00
1	backflow preventer	@	\$800.00	=	\$800.00
			TOTAL	=	\$4,500.00

Equipment - Mailboxes, Main Building

Category	060 Equipment	Quantity	1 total
		Unit Cost	\$3,100.000
		% of Replacement	100.00%
		Current Cost	\$3,100.00
Placed In Service	01/02	Future Cost	\$4,090.38
Useful Life	30		
		Assigned Reserves at FYB	\$0.00
Remaining Life	14	Monthly Member Contribution	\$11.22
Replacement Year	2032	Monthly Interest Contribution	\$0.02
		Total Monthly Contribution	\$11.24

Comments:



Component covers Salsbury Industries USPS-STD-4B+ 13 door mailboxes in main vestibule. Mailboxes were in good condition order during site visit.

2	13-door mailboxes	@	\$1,450.00	=	\$2,900.00
1	installation	@	\$200.00	=	\$200.00
			TOTAL	=	\$3,100.00

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Equipment - Par	king Garage CO Sensor		
Category	060 Equipment	Quantity	1 CO sensors
		Unit Cost	\$750.000
		% of Replacement	100.00%
		Current Cost	\$750.00
Placed In Service	01/15	Future Cost	\$896.32
Useful Life	12		
		Assigned Reserves at FYB	\$0.00
Remaining Life	9	Monthly Member Contribution	\$4.06
Replacement Year	2027	Monthly Interest Contribution	\$0.01
		Total Monthly Contribution	\$4.07

Comments:



Component covers (3) carbon monoxide detectors in main building parking garage.

Equipment: Alta Labs GX Series carbon monoxide transmitter and fan controller.

Service contractor: Norel Service Company, Waltham, MA 781-768-5500 Tom Norton Mr. Norton indicated that CO sensors were replaced in 2015.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Equipment - Parl	king Garage Exhaust Fan		
Category	060 Equipment	Quantity	1 garage exhaust
		Unit Cost	\$5,000.000
		% of Replacement	100.00%
		Current Cost	\$5,000.00
Placed In Service	01/02	Future Cost	\$5,412.16
Useful Life	20		
		Assigned Reserves at FYB	\$4,000.00
Remaining Life	4	Monthly Member Contribution	\$14.65
Replacement Year	2022	Monthly Interest Contribution	\$1.01
		Total Monthly Contribution	\$15.66

Comments:



Component covers parking garage exhaust fan located on roof. Greenheck SWB-24-LMD-CW-TH fan appeared to be in average condition with no issues reported.

Service contractor: None

It is recommended that a service contractor check the fan for proper operation regularly.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Equipment - Roo	of Top Air Handler		
Category	060 Equipment	Quantity	1 packaged RTU
		Unit Cost	\$20,000.000
		% of Replacement	100.00%
		Current Cost	\$20,000.00
Placed In Service	01/02	Future Cost	\$20,808.00
Useful Life	20		
Adjustment	-2	Assigned Reserves at FYB	\$17,777.78
Remaining Life	2	Monthly Member Contribution	\$64.29
Replacement Year	2020	Monthly Interest Contribution	\$4.48
		Total Monthly Contribution	\$68.77

Comments:



Component covers common area Lennox GCS16-90-200-2Y packaged roof top unit. Air handler appeared to be in average condition. Unit heats and cools building hallways and stairwells. Per model number the natural gas furnace has input of 200,000 BTU/hr. Cooling capacity is 90,000 BTU/hr (7.5 ton). The remaining life of this component has been decreased based on input from service contractor.

Service contractor:

Concord Heating and Air Conditioning, Acton, MA 978-369-6980

Per Chris at Concord Heating, roof top unit operates in a stressful environment due to high pollen counts in local area. Typical commercial roof top units have a useful life of 15-20 years. Due to high pollen counts, condensor coils need to be cleaned 2-3 times per summer. When the condensor coil clogs, the unit will lock itself out. However, the unit will operate at a higher than normal pressure until it reaches the lockout pressure. This stresses unit and will likely lead to reduced useful life. Chris recommended a replacement cost of \$15,000 for unit and \$5000 for crane. A large crane will be needed due to distance of paved areas from building.

1	roof top packaged HVAC unit	@	\$15,000.00	=	\$15,000.00
1	crane to install unit & remove old unit	@	\$5,000.00	=	\$5,000.00
			TOTAL	=	\$20,000.00

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Equipment - Sep	tic System Leach Field		
Category	060 Equipment	Quantity	1 system
		Unit Cost	\$70,000.000
		% of Replacement	100.00%
		Current Cost	\$70,000.00
Placed In Service	01/02	Future Cost	\$92,363.51
Useful Life	25		
Adjustment	+5	Assigned Reserves at FYB	\$0.00
Remaining Life	14	Monthly Member Contribution	\$253.34
Replacement Year	2032	Monthly Interest Contribution	\$0.63
		Total Monthly Contribution	\$253.98

Comments:



Component covers septic system tanks and leach field. System plans are available at Concord Health Department, but were not available during site visit. Allowance should be refined as more information becomes available. Useful life extended due to favorable soil conditions.

Service contractor:

ABC Cesspool, Acton, MA 978-263-5802

ABC recommends that tanks be pumped annually. Last pumping was done in March 2016. There are (2) 9000 gallon tanks on-site. Pumping septic tanks removes solids and reduces the possibility of solids entering the leach field. Solids in the leach field will quickly shorten useful life.

Concord Board of Health:

Stan Sosnicki 978-318-3275

Mr. Sosnicki stated that the town has plans for the system and that the system was installed by Rhino Construction from Acton. He expects a useful life for a leach field to be about 20-25 years with good maintenance. Septic tank should be pumped every 1-2 years to properly maintain system. Soil conditions at the site (sands and gravels) are favorable for longer leach field life.

Installation contractor: Rhino Construction, Acton, MA 978-263-0268

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Bill Hryniewich 508-626-6915

Contractor is unable to locate records of 2002 installation. Septic and pump chamber tanks should not have to be replaced per Mr. Hryniewich. He believes that leach field will not need to be replaced soon due to favorable soil conditions. Without access to plans, he estimated it could cost \$70,000 to replace leach field.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Equipment - Sep	tic System Pump		
Category	060 Equipment	Quantity	1 pump system
		Unit Cost	\$20,000.000
		% of Replacement	100.00%
		Current Cost	\$20,000.00
Placed In Service	01/02	Future Cost	\$23,901.85
Useful Life	25		
		Assigned Reserves at FYB	\$0.00
Remaining Life	9	Monthly Member Contribution	\$108.24
Replacement Year	2027	Monthly Interest Contribution	\$0.27
		Total Monthly Contribution	\$108.50

Comments:



Component covers pump equipment for septic system. Control for pump is located in Mechanical Room B1. Additional high water alarm is located in trash/garage building.

Pump service contractor:

Hall Pump, Wilmington, MA 781-438-0505

Per David of Hall Pump, they have done some repairs but do not regularly service the pump system. Last service/repairs were performed in 2015. They do not have an inventory of equipment in the mechanical room or pump chamber. To send a crew to create an inventory would cost about \$600. This is highly recommended. A regular maintenance plan, required by town, should be implemented.

Concord Board of Health:

Stan Sosnicki 978-318-3275

Mr. Sosnicki stated that the town has construction plans for the system and that the system was installed by Rhino Construction from Acton. Pump for system should be serviced on quarterly basis.

Installation contractor: Rhino Construction, Acton, MA 978-263-0268 Bill Hryniewich 508-626-6915 Mr. Hryniewich does not have records of installation. He estimated that replacing the large pressure dose pumps may

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

cost \$20,000.

Equipment - Sun	np Pump		
Category	060 Equipment	Quantity	1 pump
		Unit Cost	\$1,500.000
		% of Replacement	100.00%
		Current Cost	\$1,500.00
Placed In Service	01/02	Future Cost	\$1,560.60
Useful Life	15		
Adjustment	+3	Assigned Reserves at FYB	\$1,333.33
Remaining Life	2	Monthly Member Contribution	\$4.82
Replacement Year	2020	Monthly Interest Contribution	\$0.33
		Total Monthly Contribution	\$5.15

Comments:



Component covers sump pump in mechanical room B1. Pump appeared to be in good condition with no issues reported. Useful life extended 3 years to reflect apparent low pump usage due to favorable soil conditions and dry appearance of basement.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Equipment - Sur	veillance System		
Category	060 Equipment	Quantity	1 system
		Unit Cost	\$10,000.000
		% of Replacement	100.00%
		Current Cost	\$10,000.00
Placed In Service	01/02	Future Cost	\$10,824.32
Useful Life	20		
		Assigned Reserves at FYB	\$0.00
Remaining Life	4	Monthly Member Contribution	\$116.99
Replacement Year	2022	Monthly Interest Contribution	\$0.29
		Total Monthly Contribution	\$117.28

Comments:



Component covers surveillance system replacement allowance for main building. Equipment is assumed to be from original construction.

Failure of individual components should be repaired on as-needed basis from operating budget. A large range of costs are associated with surveillance systems depending on capability. Allowance covers general replacement and will need to be refined for accuracy if details are available.

Equipment: No detail available.

Service contractor: None available

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Equipment - Water Heater Category 060 Equipment 1 water heater **Ouantity** Unit Cost \$750.000 % of Replacement 100.00% Current Cost \$750.00 Placed In Service 01/12 Future Cost \$811.82 Useful Life 10 Assigned Reserves at FYB \$450.00 4 Monthly Member Contribution \$3.84 Remaining Life 2022 \$0.12 Replacement Year Monthly Interest Contribution Total Monthly Contribution \$3.96

Comments:



Component covers common area Ruud PEP15-1 point-of-use electric water heater in mechanical room B1. Water heater services adjacent utility sink. Heater appeared to be in good condition with no issues reported. Per model number the water heater has a capacity of 15 gallons.

Adjoining utility sink is a low replacement cost item that is currently unfunded. Materials and labor to replace the sink is approximately \$300. Low use will yield a long useful life for the sink.

Sample Community Association Detail Report Index

	Page
Building - Balcony Railing	40
Building - Brick, Repair Allowance	41
Building - Common Roof Doors, Main Building	43
Building - Common Windows	44
Building - Exterior Doors, Main Building	45
Building - Flooring, Carpet	50
Building - Flooring, Tile	51
Building - Garage Doors, Gatehouse & Trash/Garage	46
Building - Garage Doors, Main Building	47
Building - Interior Doors, Main Building	52
Building - Vinyl Siding, Main Building	48
Building - Wood Siding, Repair Allowance	49
Equipment - Bathroom Exhaust Fan	61
Equipment - Dryer Exhaust Fan	62
Equipment - Elevator, Cab Refurbish	63
Equipment - Elevator, Modernization	64
Equipment - Fire Alarm	65
Equipment - Fire Sprinkler, Unfunded	66
Equipment - Front Entry Access Intercom	67
Equipment - Furnace	68
Equipment - Irrigation System	69
Equipment - Mailboxes, Main Building	70
Equipment - Parking Garage CO Sensor	71
Equipment - Parking Garage Exhaust Fan	72
Equipment - Roof Top Air Handler	73
Equipment - Septic System Leach Field	74
Equipment - Septic System Pump	76
Equipment - Sump Pump	77
Equipment - Surveillance System	78
Equipment - Water Heater	79
Lighting - Interior Garage & Storage Halls	58
Lighting - Interior Stairwells	59
Lighting - Interior Unit Hallways	60
Painting - Exterior, Gatehouse & Trash/Garage	54
Painting - Exterior, Main Building	56
Painting - Interior, Main Building	57
Roof - Copper Bay Window, Gatehouse	30
Roof - Copper Flashings, Main Building	31
Roof - Gutters, Aluminum	32
Roof - Gutters, Copper	33
Root - Membrane, Main Building	34
Root - Shingle, Gatehouse	36
Root - Shingle, Main Building	37
Roof - Shingle, Trash/Garage	39

Sample Community Association Detail Report Index

	Page
Site - Asphalt Berm/Curb	20
Site - Asphalt Pavement, Maintenance	21
Site - Asphalt Pavement, Overlay	22
Site - Asphalt Sidewalks	24
Site - Granite Curbing, Unfunded	25
Site - Granite Steps, Unfunded	26
Site - Lighting	27
Site - Stone & Brick Sidewalks	28
Site - Stone Retaining Walls, Maintenance	29

Number of components included in this reserve analysis is 53.