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"Full" Reserve Study

Chateau Chaumont
Aspen, CO

Report #: 32753-0
For Period Beginning: July 1, 2017
Expires: June 30, 2018

Date Prepared: October 6, 2017

BRYAN FARLEY
CAI-RS
00260
DESIGNATION
RESERVE SPECIALIST

Hello, and welcome to your Reserve Study!

This Report is a valuable budget planning tool, for with it you control the future of your association. It contains all the fundamental information needed to understand your current and future Reserve obligations, the most significant expenditures your association will face.

With respect to Reserves, this Report will tell you "where you are," and "where to go from here."

In this Report, you will find...

1) A List of What you're Reserving For

2) An Evaluation of your Reserve Fund Size and Strength

3) A Recommended Multi-Year Reserve Funding Plan

More Questions?

Visit our website at www.ReserveStudy.com or call us at:

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ASSOCIATION RESERVES
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Table of Contents

3- Minute Executive Summary

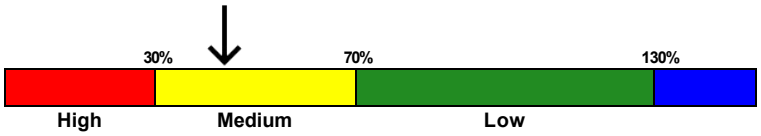
Association:	**Chateau Chaumont**	**Assoc. #: 32753-0**
Location:	**Aspen, CO**	**# of Units:25**
Report Period:	**July 1, 2017 through June 30, 2018**	

Findings/Recommendations as-of: July 1, 2017

Projected Starting Reserve Balance	**$110,263**
Current Fully Funded Reserve Balance	**$247,729**
Average Reserve Deficit or (Surplus) Per Unit	**$5,499**
Percent Funded	**44.5 %**
Recommended 2017 Annual "Fully Funding" Contributions	**$23,022**
Alternate Annual Minimum Contributions to Keep Reserves Above $0	**$17,300**
Recommended 2017 Special Assessments for Reserves	**$0**
Most Recent Annual Reserve Contribution Rate	**$21,317**

Reserves % Funded: 44.5%

Special Assessment Risk:



Economic Assumptions:

Net Annual "After Tax" Interest Earnings Accruing to Reserves	**1.25 %**
Annual Inflation Rate	**3.00 %**

• This is a "Full" Reserve Study, (original, created "from scratch"), based on our site inspection on 8/24/2017.

• The Reserve Study was prepared by a credentialed Reserve Specialist (RS #260).

• Your Reserve Fund is currently 44.5 % Funded. This means the association's special assessment & deferred maintenance risk is currently Medium. The objective of your multi-year Funding Plan is to fund your Reserves to a level where you will enjoy a low risk of such Reserve cash flow problems.

• Based on this starting point and your anticipated future expenses, our recommendation is to budget the Annual Reserve contributions at $23,022 with 8% annual increases for eleven years and 3% annual increases thereafter in order to be within the 70% to 130% level as noted above. 100% "Full" contribution rates are designed to achieve these funding objectives by the end of our 30-year report scope.

• No assets appropriate for Reserve designation were excluded. See photo appendix for component details; the basis of our assumptions.

• We recommend that this Reserve Study be updated annually, with an on-site inspection update every three years.

Executive Summary 32753-0

#	Component	Useful Life (yrs)	Rem. Useful Life (yrs)	Current Average Cost
	Sites & Grounds			
2107	Garage Door - Replace	20	17	$3,250
2109	Snowmelt Ramp Concrete - Replace	30	20	$7,800
2115	Snowmelt Concrete Sidewalk -Replace	30	20	$45,750
2115	Snowmelt Concrete Stairs - Replace	30	25	$2,600
2119	Snowmelt Courtyard Concrete-Replace	30	23	$36,400
2149	Metal Handrail - Repair/Paint	5	0	$1,700
2153	Metal Handrail - Replace	30	10	$8,500
2181	Sign/Monument - Refurbish/Replace	25	9	$5,000
2183	Building Signs - Replace	20	17	$1,500
2191	Outdoor/Site Furniture - Replace	20	10	$3,750
	Building Exteriors			
2303	Glass Wall Lights - Replace	25	18	$1,650
2303	Metal Wall Lights - Replace	25	3	$2,650
2315	Outdoor Carpeting - Replace	10	0	$2,500
2317	Composite Treads/Rails - Replace	25	23	$32,000
2318	Composite Walkway Decks - Replace	25	10	$52,550
2337	Dormers/Fascia - Seal/Paint	7	6	$10,000
2339	Stucco/EIFS - Seal/Paint	15	4	$9,250
2345	Brick Siding - Tuck Point - 10%	5	0	$5,400
2375	Roof: Single Ply - Replace	20	8	$102,400
2383	Roof: Mansard - Replace	30	18	$91,200
2387	Gutters/Downspouts - Replace	30	18	$3,300
2389	Heat Tape - Replace	10	0	$6,200
	Mechanical			
2505	Garage Operator - Replace	12	10	$3,000
2533	Pumps/Valves - Repair - 30%	5	1	$3,000
2561	Boiler - Replace (150000 BTU)	25	15	$18,500
2561	Boilers - Replace (399000 BTU)	25	15	$55,000
2565	Water Softener Tank - Replace	15	13	$12,000
2571	Boiler/Snowmelt Controller -Replace	10	0	$1,500
	Spa			
2805	Fencing: Metal - Replace	30	23	$4,900
2817	Spa - Resurface	6	0	$5,000
2821	Spa - Re-Tile	24	17	$1,900
2830	Heat Exchanger - Replace	15	9	$3,000
2832	Spa Boiler - Replace	25	19	$18,500
2833	Spa Filter - Replace	20	13	$1,300
2837	Pump - Repair/Replace	10	4	$1,950
35	**Total Funded Components**			

Note 1: Yellow highlighted line items are expected to require attention in this intial year.

Introduction

A Reserve Study is the art and science of anticipating, and preparing for, an association's major common area repair and replacement expenses. Partially art, because in this field we are making projections about the future. Partially science, because our work is a combination of research and well-defined computations, following consistent National Reserve Study Standard principles.

The foundation of this and every Reserve Study is your Reserve Component List (what you are reserving for). This is because the Reserve Component List defines the *scope and schedule* of all your anticipated upcoming Reserve projects. Based on that List and your starting balance, we calculate the association's Reserve Fund Strength (reported in terms of "Percent Funded"). Then we compute a Reserve Funding Plan to provide for the Reserve needs of the association. These form the three results of your Reserve Study.

RESERVE STUDY RESULTS

Reserve contributions are not “for the future”. Reserve contributions are designed to offset the ongoing, daily deterioration of your Reserve assets. Done well, a stable, budgeted Reserve Funding Plan will collect sufficient funds from the owners who enjoyed the use of those assets, so the association is financially prepared for the irregular expenditures scattered through future years when those projects eventually require replacement.

Methodology

For this Full Reserve Study, we started with a review of your Governing Documents, recent Reserve expenditures, an evaluation of how expenditures are handled (ongoing maintenance vs Reserves), and research into any well-established association precedents. We performed an on-site inspection to quantify and evaluate your common areas, creating your Reserve Component List *from scratch*.

Which Physical Assets are Funded by Reserves?

RESERVE COMPONENT "FOUR-PART TEST"

There is a national-standard four-part test to determine which expenses should appear in your Reserve Component List. First, it must be a common area maintenance responsibility. Second, the component must have a limited life. Third, the remaining life must be predictable (or it by definition is a *surprise* which cannot be accurately anticipated). Fourth, the component must be above a minimum threshold cost (often between .5% and 1% of an association's total budget). This limits Reserve Components to major, predictable expenses. Within this framework, it is inappropriate to include *lifetime* components, unpredictable expenses (such as damage due to fire, flood, or earthquake), and expenses more appropriately handled from the Operational Budget or as an insured loss.

How do we establish Useful Life and Remaining Useful Life estimates?

1) Visual Inspection (observed wear and age)
2) Association Reserves database of experience
3) Client History (install dates & previous life cycle information)
4) Vendor Evaluation and Recommendation

How do we establish Current Repair/Replacement Cost Estimates?

In this order...

1) Actual client cost history, or current proposals
2) Comparison to Association Reserves database of work done at similar associations
3) Vendor Recommendations
4) Reliable National Industry cost estimating guidebooks

How much Reserves are enough?

Reserve adequacy is not measured in cash terms. Reserve adequacy is found when the *amount* of current Reserve cash is compared to Reserve component deterioration (the *needs of the association*). Having *enough* means the association can execute its projects in a timely manner with existing Reserve funds. Not having *enough* typically creates deferred maintenance or special assessments.

Adequacy is measured in a two-step process:

1) Calculate the *value of deterioration* at the association (called Fully Funded Balance, or FFB).
2) Compare that to the Reserve Fund Balance, and express as a percentage.

Each year, the *value of deterioration* at the association changes. When there is more deterioration (as components approach the time they need to be replaced), there should be more cash to offset that deterioration and prepare for the expenditure. Conversely, the *value of deterioration* shrinks after projects are accomplished. The *value of deterioration* (the FFB) changes each year, and is a moving but predictable target.

There is a high risk of special assessments and deferred maintenance when the Percent Funded is *weak*, below 30%. Approximately 30% of all associations are in this high risk range. While the 100% point is Ideal (indicating Reserve cash is equal to the *value of deterioration*), a Reserve Fund in the 70% - 130% range is considered strong (low risk of special assessment).

Measuring your Reserves by Percent Funded tells how well prepared your association is for upcoming Reserve expenses. New buyers should be very aware of this important disclosure!

How much should we contribute?

RESERVE FUNDING PRINCIPLES

According to National Reserve Study Standards, there are four Funding Principles to balance in developing your Reserve Funding Plan. Our first objective is to design a plan that provides you with sufficient cash to perform your Reserve projects on time. Second, a stable contribution is desirable because it keeps these naturally irregular expenses from unsettling the budget.

Reserve contributions that are evenly distributed over current and future owners enable each owner to pay their fair share of the association's Reserve expenses over the years. And finally, we develop a plan that is fiscally responsible and safe for Boardmembers to recommend to their association. Remember, it is the Board's job to provide for the ongoing care of the common areas. Boardmembers invite liability exposure when Reserve contributions are inadequate to offset ongoing common area deterioration.

What is our Recommended Funding Goal?

Maintaining the Reserve Fund at a level equal to the *value* of deterioration is called "Full Funding" (100% Funded). As each asset ages and becomes "used up," the Reserve Fund grows proportionally. **This is simple, responsible, and our recommendation.** Evidence shows that associations in the 70 - 130% range *enjoy a low risk of special assessments or deferred maintenance.*

FUNDING OBJECTIVES

Allowing the Reserves to fall close to zero, but not below zero, is called Baseline Funding. Doing so allows the Reserve Fund to drop into the 0 - 30% range, where there is a high risk of special assessments & deferred maintenance. Since Baseline Funding still provides for the timely execution of all Reserve projects, and only the "margin of safety" is different, Baseline Funding contributions average only 10% - 15% less than Full Funding contributions. Threshold Funding is the title of all other Cash or Percent Funded objectives *between* Baseline Funding and Full Funding.

Site Inspection Notes

During our site visit on 8/24/2017 we visually inspected the common area assets and were able to see a majority of the common areas.

Please see photo appendix for component details; the basis of our assumptions.

Projected Expenses

While this Reserve Study looks forward 30 years, we have no expectation that all these expenses will all take place as anticipated. This Reserve Study needs to be updated annually because we expect the timing of these expenses to shift and the size of these expenses to change. We do feel more certain of the timing and cost of near-term expenses than expenses many years away. Please be aware of your near-term expenses, which we are able to project more accurately than the more distant projections.

The figure below summarizes the projected future expenses at your association as defined by your Reserve Component List. A summary of these expenses are shown in the 30-yr Summary Table, while details of the projects that make up these expenses are shown in the Cash Flow Detail Table.

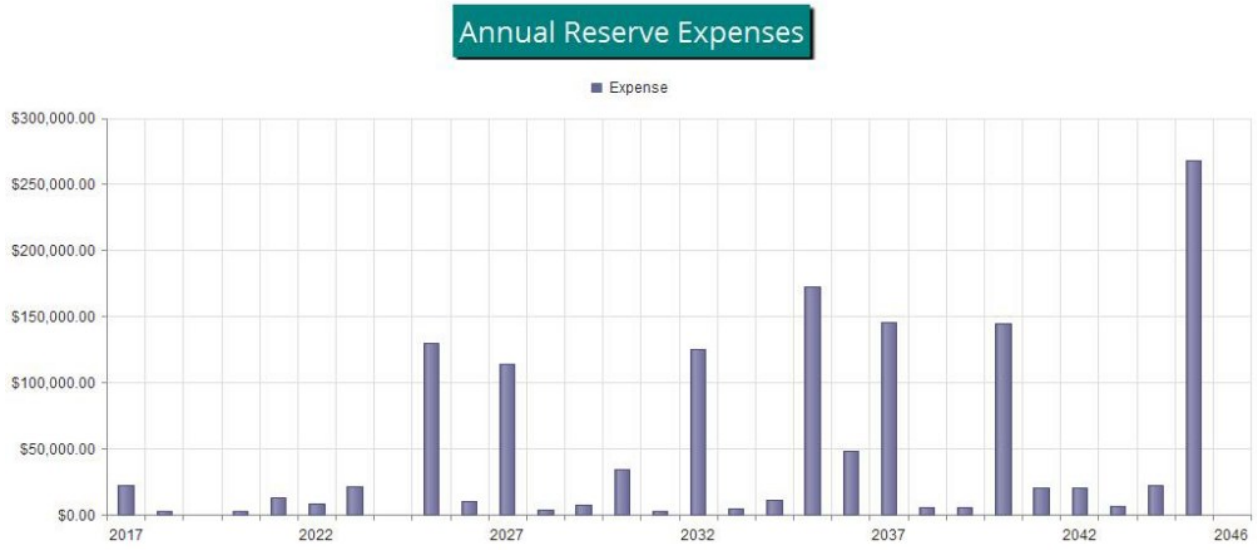


Figure 1

Reserve Fund Status

As of 7/1/2017 your Reserve Fund balance is projected to be $110,263 and your Fully Funded Balance is computed to be $247,729 (see the Fully Funded Balance Table). This figure represents the deteriorated value of your common area components. Comparing your Reserve Balance to your Fully Funded Balance indicates your Reserves are 44.5 % Funded.

Recommended Funding Plan

Based on your current Percent Funded and your near-term and long-term Reserve needs, we are recommending budgeted contributions of $23,022 Annual. The overall 30-yr plan, in perspective, is shown below. This same information is shown numerically in both the 30-yr Summary Table and the Cash Flow Detail Table.

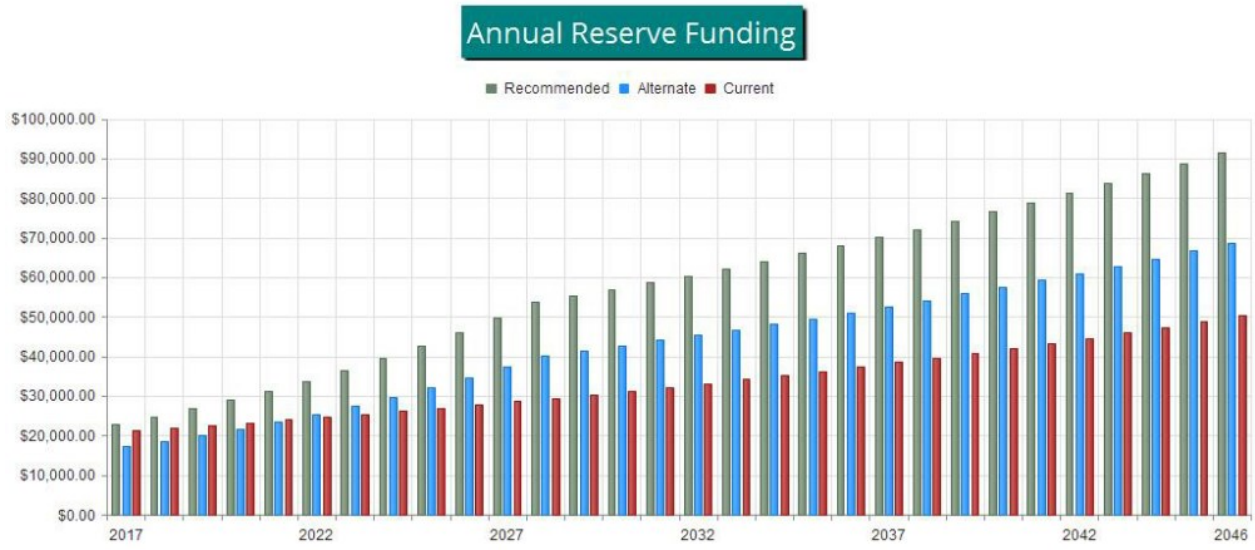


Figure 2

The following chart shows your Reserve balance under our recommended Full Funding Plan, an alternate Baseline Funding Plan, and at your current budgeted contribution rate, compared to your always-changing Fully Funded Balance target.

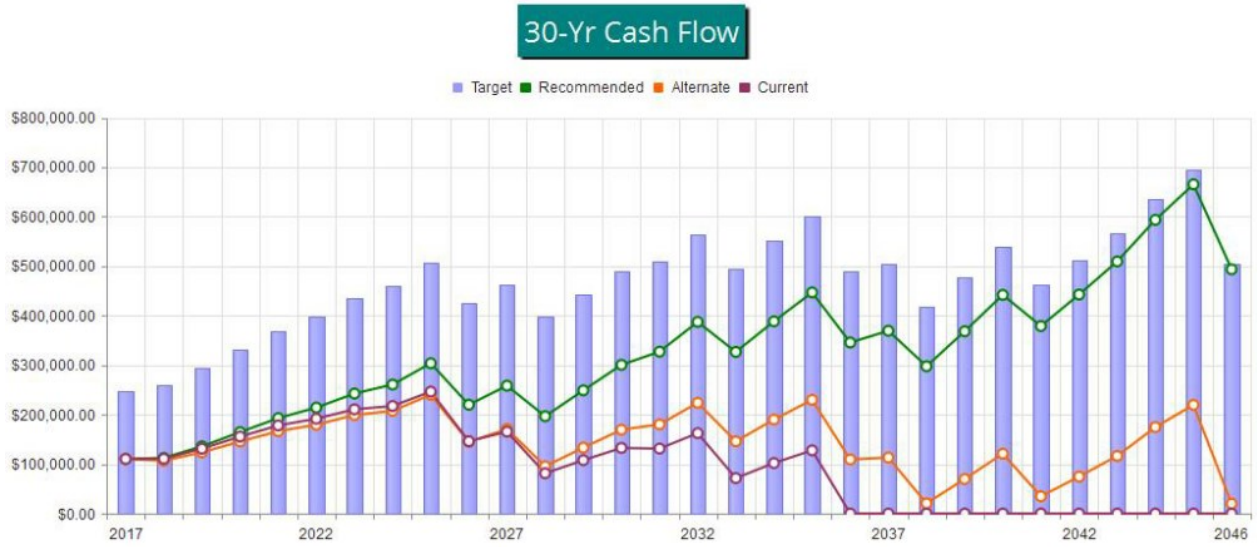


Figure 3

This figure shows the same information plotted on a Percent Funded scale. It is clear here to see how your Reserve Fund strength approaches the 100% Funded level under our recommended multi-yr Funding Plan.

Figure 4

Table Descriptions

The tabular information in this Report is broken down into nine tables, not all which may have been chosen by your Project Manager to appear in your report. Tables are listed in the order in which they appear in your Report.

Executive Summary is a summary of your Reserve Components

Budget Summary is a management and accounting tool, summarizing groupings of your Reserve Components.

Analysis Summary provides a summary of the starting financial information and your Project Manager's Financial Analysis decision points.

Component List Detail discloses key Component information, providing the foundation upon which the financial analysis is performed.

Fully Funded Balance shows the calculation of the Fully Funded Balance for each of your components, and their contributions to the association total. For each component, the Fully Funded Balance is the fraction of life used up multiplied by its estimated Current Replacement Cost.

Component Significance shows the relative significance of each component to Reserve funding needs of the association, helping you see which components have more (or less) influence than others on your total Reserve contribution rate. The deterioration cost/yr of each component is calculated by dividing the estimated Current Replacement Cost by its Useful Life, then that component's percentage of the total is displayed.

Acct/Tax Summary provides information on each Component's proportionate portion of key totals, valuable to accounting professionals primarily during tax preparation time of year.

30-Yr Summary provides a one-page 30-year summary of the cash flowing into and out of the Reserve Fund, with a display of the Fully Funded Balance, Percent Funded, and special assessment risk at the beginning of each year.

Cash Flow Detail shows the detailed income and expenses for each of the next 30 years. This table makes it possible to see which components are projected to require repair or replacement in a particular year, and the size of those individual expenses.

Budget Summary

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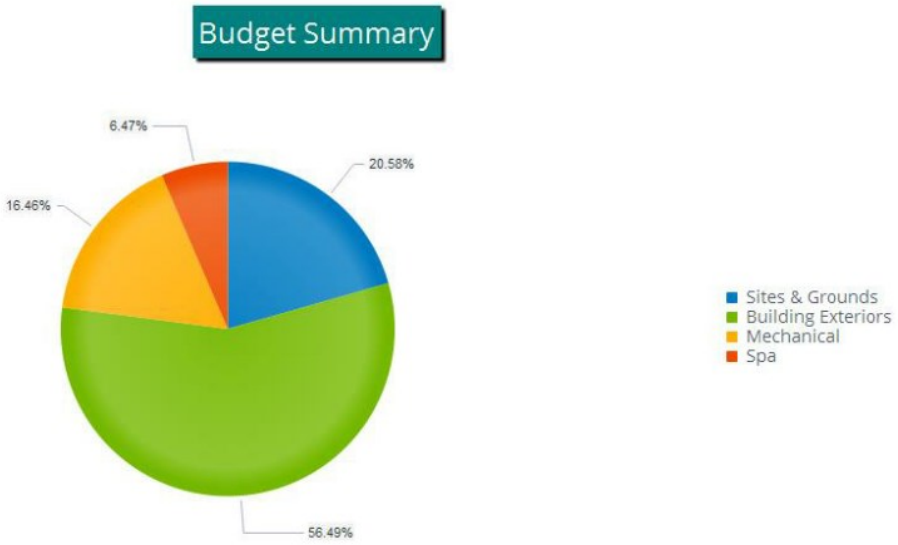
Full

	Useful Life		2017 Rem. Useful Life		Estimated Replacement Cost in 2017	2017 Expenditures	07/01/2017 Current Fund Balance	07/01/2017 Fully Funded Balance	Remaining Bal. to be Funded	2017 Contributions
	Min	Max	Min	Max						
Sites & Grounds	5	30	0	25	$116,250	$1,700	$6,775	$39,931	$109,475	$3,672
Building Exteriors	5	30	0	23	$319,100	$14,100	$91,718	$158,436	$227,382	$13,405
Mechanical	5	25	0	15	$93,000	$1,500	$4,400	$35,400	$88,600	$4,017
Spa	6	30	0	23	$36,550	$5,000	$7,370	$13,963	$29,180	$1,928
					$564,900	$22,300	$110,263	$247,729	$454,637	$23,022
								Percent Funded:	44.5%	



#	Component	Quantity	Useful Life	Rem. Useful Life	Current Cost Estimate Best Case	Current Cost Estimate Worst Case
	Sites & Grounds					
2107	Garage Door - Replace	~ (1) 12x7 Door	20	17	$2,500	$4,000
2109	Snowmelt Ramp Concrete - Replace	~ 300 GSF	30	20	$6,600	$9,000
2115	Snowmelt Concrete Sidewalk -Replace	~ 1800 GSF	30	20	$38,700	$52,800
2115	Snowmelt Concrete Stairs - Replace	~ 100 GSF	30	25	$2,200	$3,000
2119	Snowmelt Courtyard Concrete-Replace	~ 1400 GSF	30	23	$30,800	$42,000
2149	Metal Handrail - Repair/Paint	~ 170 LF	5	0	$1,400	$2,000
2153	Metal Handrail - Replace	~ 170 LF	30	10	$6,800	$10,200
2181	Sign/Monument - Refurbish/Replace	~ (1) Wood	25	9	$4,000	$6,000
2183	Building Signs - Replace	~ (2) Signs	20	17	$1,000	$2,000
2191	Outdoor/Site Furniture - Replace	~ (25) Metal Pieces	20	10	$3,000	$4,500
	Building Exteriors					
2303	Glass Wall Lights - Replace	~ (12) Lights	25	18	$1,500	$1,800
2303	Metal Wall Lights - Replace	~ (19) Lights	25	3	$2,400	$2,900
2315	Outdoor Carpeting - Replace	~ 36 GSY	10	0	$2,000	$3,000
2317	Composite Treads/Rails - Replace	~ 460 GSF	25	23	$30,000	$34,000
2318	Composite Walkway Decks - Replace	~ 750 GSF	25	10	$48,800	$56,300
2337	Dormers/Fascia - Seal/Paint	~ 2000 GSF	7	6	$9,500	$10,500
2339	Stucco/EIFS - Seal/Paint	~ 2600 GSF	15	4	$7,900	$10,600
2345	Brick Siding - Tuck Point - 10%	~ 10% of 6000 GSF	5	0	$4,800	$6,000
2375	Roof: Single Ply - Replace	~ 6600 GSF	20	8	$85,900	$118,900
2383	Roof: Mansard - Replace	~ 5700 GSF	30	18	$79,800	$102,600
2387	Gutters/Downspouts - Replace	~ 370 LF	30	18	$2,900	$3,700
2389	Heat Tape - Replace	~ 370 LF	10	0	$5,100	$7,300
	Mechanical					
2505	Garage Operator - Replace	~ (1) Unit	12	10	$2,500	$3,500
2533	Pumps/Valves - Repair - 30%	~ 30% of (6) Pumps	5	1	$2,000	$4,000
2561	Boiler - Replace (150000 BTU)	~ (1) 150000 BTU Unit	25	15	$15,000	$22,000
2561	Boilers - Replace (399000 BTU)	~ (2) 399000 BTU Unit	25	15	$50,000	$60,000
2565	Water Softener Tank - Replace	~ (1) Tank	15	13	$11,500	$12,500
2571	Boiler/Snowmelt Controller -Replace	~ (1) Controller	10	0	$1,000	$2,000
	Spa					
2805	Fencing: Metal - Replace	~ 70 LF	30	23	$4,200	$5,600
2817	Spa - Resurface	~ (1) 7x12. Spa	6	0	$4,000	$6,000
2821	Spa - Re-Tile	~ 38 LF	24	17	$1,700	$2,100
2830	Heat Exchanger - Replace	~ (1) Unit	15	9	$2,000	$4,000
2832	Spa Boiler - Replace	~ (1) 150000 BTU Unit	25	19	$15,000	$22,000
2833	Spa Filter - Replace	~ (1) Filter	20	13	$1,100	$1,500
2837	Pump - Repair/Replace	~ (2) Pumps	10	4	$1,600	$2,300

35 Total Funded Components

Fully Funded Balance

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Full

#	Component	Current Cost Estimate	X	Effective Age	/	Useful Life	=	Fully Funded Balance
	Sites & Grounds							
2107	Garage Door - Replace	$3,250	X	3	/	20	=	$488
2109	Snowmelt Ramp Concrete - Replace	$7,800	X	10	/	30	=	$2,600
2115	Snowmelt Concrete Sidewalk -Replace	$45,750	X	10	/	30	=	$15,250
2115	Snowmelt Concrete Stairs - Replace	$2,600	X	5	/	30	=	$433
2119	Snowmelt Courtyard Concrete-Replace	$36,400	X	7	/	30	=	$8,493
2149	Metal Handrail - Repair/Paint	$1,700	X	5	/	5	=	$1,700
2153	Metal Handrail - Replace	$8,500	X	20	/	30	=	$5,667
2181	Sign/Monument - Refurbish/Replace	$5,000	X	16	/	25	=	$3,200
2183	Building Signs - Replace	$1,500	X	3	/	20	=	$225
2191	Outdoor/Site Furniture - Replace	$3,750	X	10	/	20	=	$1,875
	Building Exteriors							
2303	Glass Wall Lights - Replace	$1,650	X	7	/	25	=	$462
2303	Metal Wall Lights - Replace	$2,650	X	22	/	25	=	$2,332
2315	Outdoor Carpeting - Replace	$2,500	X	10	/	10	=	$2,500
2317	Composite Treads/Rails - Replace	$32,000	X	2	/	25	=	$2,560
2318	Composite Walkway Decks - Replace	$52,550	X	15	/	25	=	$31,530
2337	Dormers/Fascia - Seal/Paint	$10,000	X	1	/	7	=	$1,429
2339	Stucco/EIFS - Seal/Paint	$9,250	X	11	/	15	=	$6,783
2345	Brick Siding - Tuck Point - 10%	$5,400	X	5	/	5	=	$5,400
2375	Roof: Single Ply - Replace	$102,400	X	12	/	20	=	$61,440
2383	Roof: Mansard - Replace	$91,200	X	12	/	30	=	$36,480
2387	Gutters/Downspouts - Replace	$3,300	X	12	/	30	=	$1,320
2389	Heat Tape - Replace	$6,200	X	10	/	10	=	$6,200
	Mechanical							
2505	Garage Operator - Replace	$3,000	X	2	/	12	=	$500
2533	Pumps/Valves - Repair - 30%	$3,000	X	4	/	5	=	$2,400
2561	Boiler - Replace (150000 BTU)	$18,500	X	10	/	25	=	$7,400
2561	Boilers - Replace (399000 BTU)	$55,000	X	10	/	25	=	$22,000
2565	Water Softener Tank - Replace	$12,000	X	2	/	15	=	$1,600
2571	Boiler/Snowmelt Controller -Replace	$1,500	X	10	/	10	=	$1,500
	Spa							
2805	Fencing: Metal - Replace	$4,900	X	7	/	30	=	$1,143
2817	Spa - Resurface	$5,000	X	6	/	6	=	$5,000
2821	Spa - Re-Tile	$1,900	X	7	/	24	=	$554
2830	Heat Exchanger - Replace	$3,000	X	6	/	15	=	$1,200
2832	Spa Boiler - Replace	$18,500	X	6	/	25	=	$4,440
2833	Spa Filter - Replace	$1,300	X	7	/	20	=	$455
2837	Pump - Repair/Replace	$1,950	X	6	/	10	=	$1,170
								$247,729

Component Significance

32753-0
Full

#	Component	Useful Life (yrs)	Current Cost Estimate	Deterioration Cost/Yr	Deterioration Significance
	Sites & Grounds				
2107	Garage Door - Replace	20	$3,250	$163	0.60 %
2109	Snowmelt Ramp Concrete - Replace	30	$7,800	$260	0.96 %
2115	Snowmelt Concrete Sidewalk -Replace	30	$45,750	$1,525	5.61 %
2115	Snowmelt Concrete Stairs - Replace	30	$2,600	$87	0.32 %
2119	Snowmelt Courtyard Concrete-Replace	30	$36,400	$1,213	4.47 %
2149	Metal Handrail - Repair/Paint	5	$1,700	$340	1.25 %
2153	Metal Handrail - Replace	30	$8,500	$283	1.04 %
2181	Sign/Monument - Refurbish/Replace	25	$5,000	$200	0.74 %
2183	Building Signs - Replace	20	$1,500	$75	0.28 %
2191	Outdoor/Site Furniture - Replace	20	$3,750	$188	0.69 %
	Building Exteriors				
2303	Glass Wall Lights - Replace	25	$1,650	$66	0.24 %
2303	Metal Wall Lights - Replace	25	$2,650	$106	0.39 %
2315	Outdoor Carpeting - Replace	10	$2,500	$250	0.92 %
2317	Composite Treads/Rails - Replace	25	$32,000	$1,280	4.71 %
2318	Composite Walkway Decks - Replace	25	$52,550	$2,102	7.74 %
2337	Dormers/Fascia - Seal/Paint	7	$10,000	$1,429	5.26 %
2339	Stucco/EIFS - Seal/Paint	15	$9,250	$617	2.27 %
2345	Brick Siding - Tuck Point - 10%	5	$5,400	$1,080	3.98 %
2375	Roof: Single Ply - Replace	20	$102,400	$5,120	18.85 %
2383	Roof: Mansard - Replace	30	$91,200	$3,040	11.19 %
2387	Gutters/Downspouts - Replace	30	$3,300	$110	0.40 %
2389	Heat Tape - Replace	10	$6,200	$620	2.28 %
	Mechanical				
2505	Garage Operator - Replace	12	$3,000	$250	0.92 %
2533	Pumps/Valves - Repair - 30%	5	$3,000	$600	2.21 %
2561	Boiler - Replace (150000 BTU)	25	$18,500	$740	2.72 %
2561	Boilers - Replace (399000 BTU)	25	$55,000	$2,200	8.10 %
2565	Water Softener Tank - Replace	15	$12,000	$800	2.94 %
2571	Boiler/Snowmelt Controller -Replace	10	$1,500	$150	0.55 %
	Spa				
2805	Fencing: Metal - Replace	30	$4,900	$163	0.60 %
2817	Spa - Resurface	6	$5,000	$833	3.07 %
2821	Spa - Re-Tile	24	$1,900	$79	0.29 %
2830	Heat Exchanger - Replace	15	$3,000	$200	0.74 %
2832	Spa Boiler - Replace	25	$18,500	$740	2.72 %
2833	Spa Filter - Replace	20	$1,300	$65	0.24 %
2837	Pump - Repair/Replace	10	$1,950	$195	0.72 %
35	Total Funded Components			$27,168	100.00 %

30-Year Reserve Plan Summary

32753-0 Full

Fiscal Year Start: 2017	Interest: 1.25 %	Inflation: 3.00 %

Reserve Fund Strength Calculations: (All values of Fiscal Year Start Date)	Projected Reserve Balance Changes

Year	Starting Reserve Balance	Fully Funded Balance	Percent Funded		Special Assmt Risk	% Increase In Annual Reserve Contribs.	Reserve Contribs.	Loan or Special Assmts	Interest Income	Reserve Expenses
2017	$110,263	$247,729	44.5 %		Medium	8.00 %	$23,022	$0	$1,391	$22,300
2018	$112,375	$260,176	43.2 %		Medium	8.00 %	$24,864	$0	$1,550	$3,090
2019	$135,699	$293,621	46.2 %		Medium	8.00 %	$26,853	$0	$1,875	$0
2020	$164,426	$332,117	49.5 %		Medium	8.00 %	$29,001	$0	$2,231	$2,896
2021	$192,763	$369,677	52.1 %		Medium	8.00 %	$31,321	$0	$2,541	$12,606
2022	$214,020	$399,279	53.6 %		Medium	8.00 %	$33,827	$0	$2,852	$8,231
2023	$242,467	$435,220	55.7 %		Medium	8.00 %	$36,533	$0	$3,143	$21,493
2024	$260,650	$459,552	56.7 %		Medium	8.00 %	$39,456	$0	$3,525	$0
2025	$303,631	$507,755	59.8 %		Medium	8.00 %	$42,612	$0	$3,270	$129,717
2026	$219,795	$424,827	51.7 %		Medium	8.00 %	$46,021	$0	$2,987	$10,438
2027	$258,365	$463,333	55.8 %		Medium	8.00 %	$49,703	$0	$2,842	$114,367
2028	$196,542	$397,042	49.5 %		Medium	8.00 %	$53,679	$0	$2,782	$4,153
2029	$248,850	$443,412	56.1 %		Medium	3.00 %	$55,289	$0	$3,431	$7,129
2030	$300,442	$489,269	61.4 %		Medium	3.00 %	$56,948	$0	$3,920	$34,217
2031	$327,094	$509,799	64.2 %		Medium	3.00 %	$58,656	$0	$4,462	$2,950
2032	$387,263	$564,382	68.6 %		Medium	3.00 %	$60,416	$0	$4,459	$125,572
2033	$326,566	$495,571	65.9 %		Medium	3.00 %	$62,229	$0	$4,466	$4,814
2034	$388,447	$550,385	70.6 %		Low	3.00 %	$64,096	$0	$5,217	$10,991
2035	$446,768	$601,828	74.2 %		Low	3.00 %	$66,018	$0	$4,949	$172,201
2036	$345,535	$490,156	70.5 %		Low	3.00 %	$67,999	$0	$4,466	$48,660
2037	$369,340	$503,810	73.3 %		Low	3.00 %	$70,039	$0	$4,166	$146,024
2038	$297,520	$419,061	71.0 %		Low	3.00 %	$72,140	$0	$4,159	$5,581
2039	$368,238	$477,942	77.0 %		Low	3.00 %	$74,304	$0	$5,060	$5,748
2040	$441,854	$539,978	81.8 %		Low	3.00 %	$76,533	$0	$5,127	$144,664
2041	$378,850	$462,402	81.9 %		Low	3.00 %	$78,829	$0	$5,131	$20,226
2042	$442,585	$512,325	86.4 %		Low	3.00 %	$81,194	$0	$5,947	$20,310
2043	$509,416	$565,367	90.1 %		Low	3.00 %	$83,630	$0	$6,889	$6,470
2044	$593,466	$636,013	93.3 %		Low	3.00 %	$86,139	$0	$7,863	$22,213
2045	$665,255	$694,374	95.8 %		Low	3.00 %	$88,723	$0	$7,238	$267,802
2046	$493,414	$503,393	98.0 %		Low	3.00 %	$91,385	$0	$6,778	$0

30-Year Income/Expense Detail (yrs 0 through 4)

32753-0 Full

	Fiscal Year	2017	2018	2019	2020	2021
	Starting Reserve Balance	$110,263	$112,375	$135,699	$164,426	$192,763
	Annual Reserve Contribution	$23,022	$24,864	$26,853	$29,001	$31,321
	Recommended Special Assessments	$0	$0	$0	$0	$0
	Interest Earnings	$1,391	$1,550	$1,875	$2,231	$2,541
	Total Income	$134,675	$138,789	$164,426	$195,659	$226,625
#	Component					
	Sites & Grounds					
2107	Garage Door - Replace	$0	$0	$0	$0	$0
2109	Snowmelt Ramp Concrete - Replace	$0	$0	$0	$0	$0
2115	Snowmelt Concrete Sidewalk -Replace	$0	$0	$0	$0	$0
2115	Snowmelt Concrete Stairs - Replace	$0	$0	$0	$0	$0
2119	Snowmelt Courtyard Concrete-Replace	$0	$0	$0	$0	$0
2149	Metal Handrail - Repair/Paint	$1,700	$0	$0	$0	$0
2153	Metal Handrail - Replace	$0	$0	$0	$0	$0
2181	Sign/Monument - Refurbish/Replace	$0	$0	$0	$0	$0
2183	Building Signs - Replace	$0	$0	$0	$0	$0
2191	Outdoor/Site Furniture - Replace	$0	$0	$0	$0	$0
	Building Exteriors					
2303	Glass Wall Lights - Replace	$0	$0	$0	$0	$0
2303	Metal Wall Lights - Replace	$0	$0	$0	$2,896	$0
2315	Outdoor Carpeting - Replace	$2,500	$0	$0	$0	$0
2317	Composite Treads/Rails - Replace	$0	$0	$0	$0	$0
2318	Composite Walkway Decks - Replace	$0	$0	$0	$0	$0
2337	Dormers/Fascia - Seal/Paint	$0	$0	$0	$0	$0
2339	Stucco/EIFS - Seal/Paint	$0	$0	$0	$0	$10,411
2345	Brick Siding - Tuck Point - 10%	$5,400	$0	$0	$0	$0
2375	Roof: Single Ply - Replace	$0	$0	$0	$0	$0
2383	Roof: Mansard - Replace	$0	$0	$0	$0	$0
2387	Gutters/Downspouts - Replace	$0	$0	$0	$0	$0
2389	Heat Tape - Replace	$6,200	$0	$0	$0	$0
	Mechanical					
2505	Garage Operator - Replace	$0	$0	$0	$0	$0
2533	Pumps/Valves - Repair - 30%	$0	$3,090	$0	$0	$0
2561	Boiler - Replace (150000 BTU)	$0	$0	$0	$0	$0
2561	Boilers - Replace (399000 BTU)	$0	$0	$0	$0	$0
2565	Water Softener Tank - Replace	$0	$0	$0	$0	$0
2571	Boiler/Snowmelt Controller -Replace	$1,500	$0	$0	$0	$0
	Spa					
2805	Fencing: Metal - Replace	$0	$0	$0	$0	$0
2817	Spa - Resurface	$5,000	$0	$0	$0	$0
2821	Spa - Re-Tile	$0	$0	$0	$0	$0
2830	Heat Exchanger - Replace	$0	$0	$0	$0	$0
2832	Spa Boiler - Replace	$0	$0	$0	$0	$0
2833	Spa Filter - Replace	$0	$0	$0	$0	$0
2837	Pump - Repair/Replace	$0	$0	$0	$0	$2,195
	Total Expenses	$22,300	$3,090	$0	$2,896	$12,606
	Ending Reserve Balance	$112,375	$135,699	$164,426	$192,763	$214,020

	Fiscal Year	2022	2023	2024	2025	2026
	Starting Reserve Balance	$214,020	$242,467	$260,650	$303,631	$219,795
	Annual Reserve Contribution	$33,827	$36,533	$39,456	$42,612	$46,021
	Recommended Special Assessments	$0	$0	$0	$0	$0
	Interest Earnings	$2,852	$3,143	$3,525	$3,270	$2,987
	Total Income	$250,698	$282,143	$303,631	$349,512	$268,803
#	Component					
	Sites & Grounds					
2107	Garage Door - Replace	$0	$0	$0	$0	$0
2109	Snowmelt Ramp Concrete - Replace	$0	$0	$0	$0	$0
2115	Snowmelt Concrete Sidewalk -Replace	$0	$0	$0	$0	$0
2115	Snowmelt Concrete Stairs - Replace	$0	$0	$0	$0	$0
2119	Snowmelt Courtyard Concrete-Replace	$0	$0	$0	$0	$0
2149	Metal Handrail - Repair/Paint	$1,971	$0	$0	$0	$0
2153	Metal Handrail - Replace	$0	$0	$0	$0	$0
2181	Sign/Monument - Refurbish/Replace	$0	$0	$0	$0	$6,524
2183	Building Signs - Replace	$0	$0	$0	$0	$0
2191	Outdoor/Site Furniture - Replace	$0	$0	$0	$0	$0
	Building Exteriors					
2303	Glass Wall Lights - Replace	$0	$0	$0	$0	$0
2303	Metal Wall Lights - Replace	$0	$0	$0	$0	$0
2315	Outdoor Carpeting - Replace	$0	$0	$0	$0	$0
2317	Composite Treads/Rails - Replace	$0	$0	$0	$0	$0
2318	Composite Walkway Decks - Replace	$0	$0	$0	$0	$0
2337	Dormers/Fascia - Seal/Paint	$0	$11,941	$0	$0	$0
2339	Stucco/EIFS - Seal/Paint	$0	$0	$0	$0	$0
2345	Brick Siding - Tuck Point - 10%	$6,260	$0	$0	$0	$0
2375	Roof: Single Ply - Replace	$0	$0	$0	$129,717	$0
2383	Roof: Mansard - Replace	$0	$0	$0	$0	$0
2387	Gutters/Downspouts - Replace	$0	$0	$0	$0	$0
2389	Heat Tape - Replace	$0	$0	$0	$0	$0
	Mechanical					
2505	Garage Operator - Replace	$0	$0	$0	$0	$0
2533	Pumps/Valves - Repair - 30%	$0	$3,582	$0	$0	$0
2561	Boiler - Replace (150000 BTU)	$0	$0	$0	$0	$0
2561	Boilers - Replace (399000 BTU)	$0	$0	$0	$0	$0
2565	Water Softener Tank - Replace	$0	$0	$0	$0	$0
2571	Boiler/Snowmelt Controller -Replace	$0	$0	$0	$0	$0
	Spa					
2805	Fencing: Metal - Replace	$0	$0	$0	$0	$0
2817	Spa - Resurface	$0	$5,970	$0	$0	$0
2821	Spa - Re-Tile	$0	$0	$0	$0	$0
2830	Heat Exchanger - Replace	$0	$0	$0	$0	$3,914
2832	Spa Boiler - Replace	$0	$0	$0	$0	$0
2833	Spa Filter - Replace	$0	$0	$0	$0	$0
2837	Pump - Repair/Replace	$0	$0	$0	$0	$0
	Total Expenses	$8,231	$21,493	$0	$129,717	$10,438
	Ending Reserve Balance	$242,467	$260,650	$303,631	$219,795	$258,365

	Fiscal Year	2027	2028	2029	2030	2031
	Starting Reserve Balance	$258,365	$196,542	$248,850	$300,442	$327,094
	Annual Reserve Contribution	$49,703	$53,679	$55,289	$56,948	$58,656
	Recommended Special Assessments	$0	$0	$0	$0	$0
	Interest Earnings	$2,842	$2,782	$3,431	$3,920	$4,462
	Total Income	$310,909	$253,003	$307,571	$361,310	$390,212
#	Component					
	Sites & Grounds					
2107	Garage Door - Replace	$0	$0	$0	$0	$0
2109	Snowmelt Ramp Concrete - Replace	$0	$0	$0	$0	$0
2115	Snowmelt Concrete Sidewalk -Replace	$0	$0	$0	$0	$0
2115	Snowmelt Concrete Stairs - Replace	$0	$0	$0	$0	$0
2119	Snowmelt Courtyard Concrete-Replace	$0	$0	$0	$0	$0
2149	Metal Handrail - Repair/Paint	$2,285	$0	$0	$0	$0
2153	Metal Handrail - Replace	$11,423	$0	$0	$0	$0
2181	Sign/Monument - Refurbish/Replace	$0	$0	$0	$0	$0
2183	Building Signs - Replace	$0	$0	$0	$0	$0
2191	Outdoor/Site Furniture - Replace	$5,040	$0	$0	$0	$0
	Building Exteriors					
2303	Glass Wall Lights - Replace	$0	$0	$0	$0	$0
2303	Metal Wall Lights - Replace	$0	$0	$0	$0	$0
2315	Outdoor Carpeting - Replace	$3,360	$0	$0	$0	$0
2317	Composite Treads/Rails - Replace	$0	$0	$0	$0	$0
2318	Composite Walkway Decks - Replace	$70,623	$0	$0	$0	$0
2337	Dormers/Fascia - Seal/Paint	$0	$0	$0	$14,685	$0
2339	Stucco/EIFS - Seal/Paint	$0	$0	$0	$0	$0
2345	Brick Siding - Tuck Point - 10%	$7,257	$0	$0	$0	$0
2375	Roof: Single Ply - Replace	$0	$0	$0	$0	$0
2383	Roof: Mansard - Replace	$0	$0	$0	$0	$0
2387	Gutters/Downspouts - Replace	$0	$0	$0	$0	$0
2389	Heat Tape - Replace	$8,332	$0	$0	$0	$0
	Mechanical					
2505	Garage Operator - Replace	$4,032	$0	$0	$0	$0
2533	Pumps/Valves - Repair - 30%	$0	$4,153	$0	$0	$0
2561	Boiler - Replace (150000 BTU)	$0	$0	$0	$0	$0
2561	Boilers - Replace (399000 BTU)	$0	$0	$0	$0	$0
2565	Water Softener Tank - Replace	$0	$0	$0	$17,622	$0
2571	Boiler/Snowmelt Controller -Replace	$2,016	$0	$0	$0	$0
	Spa					
2805	Fencing: Metal - Replace	$0	$0	$0	$0	$0
2817	Spa - Resurface	$0	$0	$7,129	$0	$0
2821	Spa - Re-Tile	$0	$0	$0	$0	$0
2830	Heat Exchanger - Replace	$0	$0	$0	$0	$0
2832	Spa Boiler - Replace	$0	$0	$0	$0	$0
2833	Spa Filter - Replace	$0	$0	$0	$1,909	$0
2837	Pump - Repair/Replace	$0	$0	$0	$0	$2,950
	Total Expenses	$114,367	$4,153	$7,129	$34,217	$2,950
	Ending Reserve Balance	$196,542	$248,850	$300,442	$327,094	$387,263

	Fiscal Year	2032	2033	2034	2035	2036
	Starting Reserve Balance	$387,263	$326,566	$388,447	$446,768	$345,535
	Annual Reserve Contribution	$60,416	$62,229	$64,096	$66,018	$67,999
	Recommended Special Assessments	$0	$0	$0	$0	$0
	Interest Earnings	$4,459	$4,466	$5,217	$4,949	$4,466
	Total Income	$452,138	$393,261	$457,760	$517,736	$417,999
#	Component					
	Sites & Grounds					
2107	Garage Door - Replace	$0	$0	$5,372	$0	$0
2109	Snowmelt Ramp Concrete - Replace	$0	$0	$0	$0	$0
2115	Snowmelt Concrete Sidewalk -Replace	$0	$0	$0	$0	$0
2115	Snowmelt Concrete Stairs - Replace	$0	$0	$0	$0	$0
2119	Snowmelt Courtyard Concrete-Replace	$0	$0	$0	$0	$0
2149	Metal Handrail - Repair/Paint	$2,649	$0	$0	$0	$0
2153	Metal Handrail - Replace	$0	$0	$0	$0	$0
2181	Sign/Monument - Refurbish/Replace	$0	$0	$0	$0	$0
2183	Building Signs - Replace	$0	$0	$2,479	$0	$0
2191	Outdoor/Site Furniture - Replace	$0	$0	$0	$0	$0
	Building Exteriors					
2303	Glass Wall Lights - Replace	$0	$0	$0	$2,809	$0
2303	Metal Wall Lights - Replace	$0	$0	$0	$0	$0
2315	Outdoor Carpeting - Replace	$0	$0	$0	$0	$0
2317	Composite Treads/Rails - Replace	$0	$0	$0	$0	$0
2318	Composite Walkway Decks - Replace	$0	$0	$0	$0	$0
2337	Dormers/Fascia - Seal/Paint	$0	$0	$0	$0	$0
2339	Stucco/EIFS - Seal/Paint	$0	$0	$0	$0	$16,220
2345	Brick Siding - Tuck Point - 10%	$8,413	$0	$0	$0	$0
2375	Roof: Single Ply - Replace	$0	$0	$0	$0	$0
2383	Roof: Mansard - Replace	$0	$0	$0	$155,262	$0
2387	Gutters/Downspouts - Replace	$0	$0	$0	$5,618	$0
2389	Heat Tape - Replace	$0	$0	$0	$0	$0
	Mechanical					
2505	Garage Operator - Replace	$0	$0	$0	$0	$0
2533	Pumps/Valves - Repair - 30%	$0	$4,814	$0	$0	$0
2561	Boiler - Replace (150000 BTU)	$28,822	$0	$0	$0	$0
2561	Boilers - Replace (399000 BTU)	$85,688	$0	$0	$0	$0
2565	Water Softener Tank - Replace	$0	$0	$0	$0	$0
2571	Boiler/Snowmelt Controller -Replace	$0	$0	$0	$0	$0
	Spa					
2805	Fencing: Metal - Replace	$0	$0	$0	$0	$0
2817	Spa - Resurface	$0	$0	$0	$8,512	$0
2821	Spa - Re-Tile	$0	$0	$3,140	$0	$0
2830	Heat Exchanger - Replace	$0	$0	$0	$0	$0
2832	Spa Boiler - Replace	$0	$0	$0	$0	$32,440
2833	Spa Filter - Replace	$0	$0	$0	$0	$0
2837	Pump - Repair/Replace	$0	$0	$0	$0	$0
	Total Expenses	$125,572	$4,814	$10,991	$172,201	$48,660
	Ending Reserve Balance	$326,566	$388,447	$446,768	$345,535	$369,340

	Fiscal Year	2037	2038	2039	2040	2041
	Starting Reserve Balance	$369,340	$297,520	$368,238	$441,854	$378,850
	Annual Reserve Contribution	$70,039	$72,140	$74,304	$76,533	$78,829
	Recommended Special Assessments	$0	$0	$0	$0	$0
	Interest Earnings	$4,166	$4,159	$5,060	$5,127	$5,131
	Total Income	$443,544	$373,819	$447,603	$523,514	$462,811
#	Component					
	Sites & Grounds					
2107	Garage Door - Replace	$0	$0	$0	$0	$0
2109	Snowmelt Ramp Concrete - Replace	$14,088	$0	$0	$0	$0
2115	Snowmelt Concrete Sidewalk -Replace	$82,630	$0	$0	$0	$0
2115	Snowmelt Concrete Stairs - Replace	$0	$0	$0	$0	$0
2119	Snowmelt Courtyard Concrete-Replace	$0	$0	$0	$71,839	$0
2149	Metal Handrail - Repair/Paint	$3,070	$0	$0	$0	$0
2153	Metal Handrail - Replace	$0	$0	$0	$0	$0
2181	Sign/Monument - Refurbish/Replace	$0	$0	$0	$0	$0
2183	Building Signs - Replace	$0	$0	$0	$0	$0
2191	Outdoor/Site Furniture - Replace	$0	$0	$0	$0	$0
	Building Exteriors					
2303	Glass Wall Lights - Replace	$0	$0	$0	$0	$0
2303	Metal Wall Lights - Replace	$0	$0	$0	$0	$0
2315	Outdoor Carpeting - Replace	$4,515	$0	$0	$0	$0
2317	Composite Treads/Rails - Replace	$0	$0	$0	$63,155	$0
2318	Composite Walkway Decks - Replace	$0	$0	$0	$0	$0
2337	Dormers/Fascia - Seal/Paint	$18,061	$0	$0	$0	$0
2339	Stucco/EIFS - Seal/Paint	$0	$0	$0	$0	$0
2345	Brick Siding - Tuck Point - 10%	$9,753	$0	$0	$0	$0
2375	Roof: Single Ply - Replace	$0	$0	$0	$0	$0
2383	Roof: Mansard - Replace	$0	$0	$0	$0	$0
2387	Gutters/Downspouts - Replace	$0	$0	$0	$0	$0
2389	Heat Tape - Replace	$11,198	$0	$0	$0	$0
	Mechanical					
2505	Garage Operator - Replace	$0	$0	$5,748	$0	$0
2533	Pumps/Valves - Repair - 30%	$0	$5,581	$0	$0	$0
2561	Boiler - Replace (150000 BTU)	$0	$0	$0	$0	$0
2561	Boilers - Replace (399000 BTU)	$0	$0	$0	$0	$0
2565	Water Softener Tank - Replace	$0	$0	$0	$0	$0
2571	Boiler/Snowmelt Controller -Replace	$2,709	$0	$0	$0	$0
	Spa					
2805	Fencing: Metal - Replace	$0	$0	$0	$9,671	$0
2817	Spa - Resurface	$0	$0	$0	$0	$10,164
2821	Spa - Re-Tile	$0	$0	$0	$0	$0
2830	Heat Exchanger - Replace	$0	$0	$0	$0	$6,098
2832	Spa Boiler - Replace	$0	$0	$0	$0	$0
2833	Spa Filter - Replace	$0	$0	$0	$0	$0
2837	Pump - Repair/Replace	$0	$0	$0	$0	$3,964
	Total Expenses	$146,024	$5,581	$5,748	$144,664	$20,226
	Ending Reserve Balance	$297,520	$368,238	$441,854	$378,850	$442,585

	Fiscal Year	2042	2043	2044	2045	2046
	Starting Reserve Balance	$442,585	$509,416	$593,466	$665,255	$493,414
	Annual Reserve Contribution	$81,194	$83,630	$86,139	$88,723	$91,385
	Recommended Special Assessments	$0	$0	$0	$0	$0
	Interest Earnings	$5,947	$6,889	$7,863	$7,238	$6,778
	Total Income	$529,726	$599,936	$687,468	$761,216	$591,576
#	Component					
	Sites & Grounds					
2107	Garage Door - Replace	$0	$0	$0	$0	$0
2109	Snowmelt Ramp Concrete - Replace	$0	$0	$0	$0	$0
2115	Snowmelt Concrete Sidewalk -Replace	$0	$0	$0	$0	$0
2115	Snowmelt Concrete Stairs - Replace	$5,444	$0	$0	$0	$0
2119	Snowmelt Courtyard Concrete-Replace	$0	$0	$0	$0	$0
2149	Metal Handrail - Repair/Paint	$3,559	$0	$0	$0	$0
2153	Metal Handrail - Replace	$0	$0	$0	$0	$0
2181	Sign/Monument - Refurbish/Replace	$0	$0	$0	$0	$0
2183	Building Signs - Replace	$0	$0	$0	$0	$0
2191	Outdoor/Site Furniture - Replace	$0	$0	$0	$0	$0
	Building Exteriors					
2303	Glass Wall Lights - Replace	$0	$0	$0	$0	$0
2303	Metal Wall Lights - Replace	$0	$0	$0	$6,063	$0
2315	Outdoor Carpeting - Replace	$0	$0	$0	$0	$0
2317	Composite Treads/Rails - Replace	$0	$0	$0	$0	$0
2318	Composite Walkway Decks - Replace	$0	$0	$0	$0	$0
2337	Dormers/Fascia - Seal/Paint	$0	$0	$22,213	$0	$0
2339	Stucco/EIFS - Seal/Paint	$0	$0	$0	$0	$0
2345	Brick Siding - Tuck Point - 10%	$11,306	$0	$0	$0	$0
2375	Roof: Single Ply - Replace	$0	$0	$0	$234,284	$0
2383	Roof: Mansard - Replace	$0	$0	$0	$0	$0
2387	Gutters/Downspouts - Replace	$0	$0	$0	$0	$0
2389	Heat Tape - Replace	$0	$0	$0	$0	$0
	Mechanical					
2505	Garage Operator - Replace	$0	$0	$0	$0	$0
2533	Pumps/Valves - Repair - 30%	$0	$6,470	$0	$0	$0
2561	Boiler - Replace (150000 BTU)	$0	$0	$0	$0	$0
2561	Boilers - Replace (399000 BTU)	$0	$0	$0	$0	$0
2565	Water Softener Tank - Replace	$0	$0	$0	$27,455	$0
2571	Boiler/Snowmelt Controller -Replace	$0	$0	$0	$0	$0
	Spa					
2805	Fencing: Metal - Replace	$0	$0	$0	$0	$0
2817	Spa - Resurface	$0	$0	$0	$0	$0
2821	Spa - Re-Tile	$0	$0	$0	$0	$0
2830	Heat Exchanger - Replace	$0	$0	$0	$0	$0
2832	Spa Boiler - Replace	$0	$0	$0	$0	$0
2833	Spa Filter - Replace	$0	$0	$0	$0	$0
2837	Pump - Repair/Replace	$0	$0	$0	$0	$0
	Total Expenses	$20,310	$6,470	$22,213	$267,802	$0
	Ending Reserve Balance	$509,416	$593,466	$665,255	$493,414	$591,576

Accuracy, Limitations, and Disclosures

Association Reserves and its employees have no ownership, management, or other business relationships with the client other than this Reserve Study engagement. Bryan Farley, R.S., president of the Colorado LLC, is a credentialed Reserve Specialist (#260). All work done by Association Reserves is performed under his Responsible Charge and is performed in accordance with National Reserve Study Standards (NRSS). There are no material issues to our knowledge that have not been disclosed to the client that would cause a distortion of the client's situation.

Per NRSS, information provided by official representative(s) of the client, vendors, and suppliers regarding financial details, component physical details and/or quantities, or historical issues/conditions will be deemed reliable, and is not intended to be used for the purpose of any type of audit, quality/forensic analysis, or background checks of historical records. As such, information provided to us has not been audited or independently verified.

Estimates for interest and inflation have been included, because including such estimates are more accurate than ignoring them completely. When we are hired to prepare Update reports, the client is considered to have deemed those previously developed component quantities as accurate and reliable, whether established by our firm or other individuals/firms (unless specifically mentioned in our Site Inspection Notes). During inspections our company standard is to establish measurements within 5% accuracy, and our scope includes visual inspection of accessible areas and components and does not include any destructive or other testing. Our work is done only for budget purposes. Uses or expectations outside our expertise and scope of work include, but are not limited to, project audit, quality inspection, and the identification of construction defects, hazardous materials, or dangerous conditions. Identifying hidden issues such as but not limited to plumbing or electrical problems are also outside our scope of work. Our estimates assume proper original installation & construction, adherence to recommended preventive maintenance, a stable economic environment, and do not consider frequency or severity of natural disasters. Our opinions of component Useful Life, Remaining Useful Life, and current or future cost estimates are not a warranty or guarantee of actual costs or timing.

Because the physical and financial status of the property, legislation, the economy, weather, owner expectations, and usage are all in a continual state of change over which we have no control, we do not expect that the events projected in this document will all occur exactly as planned. This Reserve Study is by nature a "one-year" document in need of being updated annually so that more accurate estimates can be incorporated. It is only because a long-term perspective improves the accuracy of near-term planning that this Report projects expenses into the future. We fully expect a number of adjustments will be necessary through the interim years to the cost and timing of expense projections and the funding necessary to prepare for those estimated expenses.

Terms and Definitions

BTU	British Thermal Unit (a standard unit of energy)
DIA	Diameter
GSF	Gross Square Feet (area). Equivalent to Square Feet
GSY	Gross Square Yards (area). Equivalent to Square Yards
HP	Horsepower
LF	Linear Feet (length)
Effective Age	The difference between Useful Life and Remaining Useful Life. Note that this is not necessarily equivalent to the chronological age of the component.
Fully Funded Balance (FFB)	The value of the deterioration of the Reserve Components. This is the fraction of life "used up" of each component multiplied by its estimated Current Replacement. While calculated for each component, it is summed together for an association total.
Inflation	Cost factors are adjusted for inflation at the rate defined in the Executive Summary and compounded annually. These increasing costs can be seen as you follow the recurring cycles of a component on the "30-yr Income/Expense Detail" table.
Interest	Interest earnings on Reserve Funds are calculated using the average balance for the year (taking into account income and expenses through the year) and compounded monthly using the rate defined in the Executive Summary. Annual interest earning assumption appears in the Executive Summary.
Percent Funded	The ratio, at a particular point in time (the first day of the Fiscal Year), of the actual (or projected) Reserve Balance to the Fully Funded Balance, expressed as a percentage.
Remaining Useful Life (RUL)	The estimated time, in years, that a common area component can be expected to continue to serve its intended function.
Useful Life (UL)	The estimated time, in years, that a common area component can be expected to serve its intended function.

Component Details

The primary purpose of the photographic appendix is to provide the reader with the basis of our funding assumptions resulting from our physical analysis and subsequent research. The photographs herein represent a wide range of elements that were observed and measured against National Reserve Study Standards to determine if they meet the criteria for reserve funding:

1) Common are maintenance, repair & replacement reasonability
2) Components must have a limited life
3) Life limit must be predictable
4) Above a minimum threshold cost (board's discretion – typically ½ to 1% of annual operating expenses).

Some components are recommended for reserve funding, while others are not. The components that meet these criteria in our judgment are shown with corresponding maintenance, repair or replacement cycles to the left of the photo (UL = Useful Life or how often the project is expected to occur, RUL = Remaining Useful Life or how many years from our reporting period) and a representative market cost range termed "Best Cost" and "Worst Cost" below the photo. There are many factors that can result in a wide variety of potential cost; we are attempting to represent a market average for budget purposes. Where there is no UL, the component is expected to be a one-time expense. Where no pricing, the component deemed inappropriate for Reserve Funding.

Sites & Grounds

Comp #: 2105 Parking Structure - Seal/Repair **Quantity: (1) Structure**

Location: Parking area

Funded?: No. Unpredictable scope

History:

Evaluation: Forensic building evaluation is beyond the scope of this Reserve Study. We are unable to inspect the issues causing this issue, however we recommend that the garage be inspected by an envelope specialist. A reserve study conducts a limited visual review, no observation or evaluation of the underlying waterproofing was available. We think it is reasonable to assume the assembly consists of structural concrete slab (parking garage ceiling below) with a waterproof membrane installed on top of the concrete structural slab, and then the concrete topping slab on top of the waterproof membrane. The concrete topping slab helps extend the useful life of the waterproofing by protecting it from deterioration by ultra violet sunlight and general wear and tear. The concrete also increases the useful life of the roof by limiting the amount of water that reaches the waterproofing and limits the amount of thermal expansion and contraction, since waterproofing is not exposed to direct sunlight. The down side to this type of system is that the waterproofing cannot be viewed to determine its current condition, or to estimate its useful life. Spot repairs can also be difficult to pinpoint and tend to be more costly to repair. Inspect, clean and repair as needed. Update the Reserve Study when information from inspections becomes available.

Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source:

Comp #: 2107 Garage Door - Replace **Quantity: ~ (1) 12x7 Door**

Location: Parking structure

Funded?: Yes.

History: Replaced in 2014

Evaluation: Door determined to be in good condition typically exhibit a uniform finish or coating, functioning hardware, and supports which are firm and secure. Overall appearance is good and upholding aesthetic standards for the development. Garage doors should have a long life expectancy under normal circumstances. Should be inspected and repaired as-needed as an Operating expense to ensure good function. Be sure to inspect internal components (springs, tracks, etc.) for damage and deterioration. Doors should ideally be replaced in all areas at the same time to maintain consistent appearance and obtain better pricing through economies of scale. There are a wide variety of styles available, and costs can vary greatly. Estimates shown here are based on replacement with type comparable to existing doors.

Useful Life:
20 years

Remaining Life:
17 years

Best Case: $ 2,500 Worst Case: $ 4,000

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 2109 Snowmelt Ramp Concrete - Replace **Quantity: ~ 300 GSF**

Location: Driveway area

Funded?: Yes.

History: Replaced in 2007

Evaluation: Concrete driveways determined to be in good condition typically exhibit smooth surfaces with positive slopes. Good, consistent aesthetic condition. Driveways are reported to be the maintenance and repair responsibility of the Association. Although complete replacement of all areas together should not be required, conditions observed merit inclusion of an allowance for ongoing repairs and partial replacements. Exposure to sunlight, weather, and frequent vehicle traffic can lead to larger, more frequent repairs, especially for older properties. Inspect all areas periodically to identify trip hazards or other safety issues. Timeline and cost ranges shown here should be re-evaluated during future Reserve Study updates. It was reported that the driveway has a snowmelt system. We did not have access to inspect the snowmelt lines. This component funds for the removal and replacement of the snowmelt lines that lay beneath the concrete. Over time, the lines will deteriorate and will need to be replaced. This project will include tearing out the concrete, removing and re-laying the lines. Snowmelt systems should be inspected regularly and repaired as-needed by serving vendor or maintenance staff to ensure proper function and optimal performance. Minor repairs such as pump/motor replacements, electronic system parts, etc. should be considered an Operating expense. Plan to replace the entire system at the approximate interval shown below based on our experience and research with similar systems. Total life span can vary based on level of use, preventive maintenance, quality of materials and installation, etc. The snowmelt system revolves around keeping the top surface warm enough to melt falling snow when it contacts the surface instead of letting it pile up. The two popular types of heating systems both work by generating radiant heat underneath the driveway, thus keeping the pavement warm during snowstorms. The first heating method uses an electric current to generate heat on a wire or across a mat, in almost exactly the same manner as most indoor floor-heating systems. The second method uses a series of tubes and pumps to move hot water directly underneath the driveway, warming it up.

Useful Life:
30 years

Remaining Life:
20 years

Best Case: $ 6,600 Worst Case: $ 9,000

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 2115 Snowmelt Concrete Sidewalk -Replace **Quantity: ~ 1800 GSF**

Location: Common area

Funded?: Yes.

History: Replaced in 2007

Evaluation: This is the around the building perimeter. Concrete sidewalks determined to be in good condition typically exhibit smooth surfaces with positive slopes. If present, cracking is minimal and sporadic, and any trip hazards are isolated, not consistent in all areas. Normal signs of wear and age. Colorado is home to expansive soils. One of the causes of concrete damage in this type of soil moisture. Expansive soils tend to swell in size when wet and contract as they dry out. As the soil expands and contracts it can create enough force to cause major damage to sidewalks. Repair any trip and fall hazards immediately to ensure safety. As routine maintenance, inspect regularly, pressure wash for appearance and repair promptly as needed to prevent water penetrating into the base and causing further damage. In our experience, larger repair/replacement expenses emerge as the community ages. Although difficult to predict timing, cost and scope, we suggest a rotating funding allowance to supplement the operating/maintenance budget for periodic larger repairs. Adjust as conditions, actual expense patterns dictate within future reserve study updates. It was reported that the concrete has a snowmelt system. We did not have access to inspect the snowmelt lines. This component funds for the removal and replacement of the snowmelt lines that lay beneath the concrete. Over time, the lines will deteriorate and will need to be replaced. This project will include tearing out the concrete, removing and re-laying the lines. Snowmelt systems should be inspected regularly and repaired as-needed by serving vendor or maintenance staff to ensure proper function and optimal performance. Minor repairs such as pump/motor replacements, electronic system parts, etc. should be considered an Operating expense. Plan to replace the entire system at the approximate interval shown below based on our experience and research with similar systems. Total life span can vary based on level of use, preventive maintenance, quality of materials and installation, etc. The snowmelt system revolves around keeping the top surface warm enough to melt falling snow when it contacts the surface instead of letting it pile up. The two popular types of heating systems both work by generating radiant heat underneath the driveway, thus keeping the pavement warm during snowstorms. The first heating method uses an electric current to generate heat on a wire or across a mat, in almost exactly the same manner as most indoor floor-heating systems. The second method uses a series of tubes and pumps to move hot water directly underneath the concrete, warming it up.

Useful Life:
30 years

Remaining Life:
20 years

Best Case: $ 38,700 Worst Case: $ 52,800

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 2115 Snowmelt Concrete Stairs - Replace **Quantity: ~ 100 GSF**

Location: Common area, leading to garage

Funded?: Yes.

History: Replaced in 2012/2013.

Evaluation: This refers to the stairs from the courtyard to the garage. Concrete sidewalks determined to be in good condition typically exhibit smooth surfaces with positive slopes. If present, cracking is minimal and sporadic, and any trip hazards are isolated, not consistent in all areas. Normal signs of wear and age. Colorado is home to expansive soils. One of the causes of concrete damage in this type of soil moisture. Expansive soils tend to swell in size when wet and contract as they dry out. As the soil expands and contracts it can create enough force to cause major damage to sidewalks. Repair any trip and fall hazards immediately to ensure safety. As routine maintenance, inspect regularly, pressure wash for appearance and repair promptly as needed to prevent water penetrating into the base and causing further damage. In our experience, larger repair/replacement expenses emerge as the community ages. Although difficult to predict timing, cost and scope, we suggest a rotating funding allowance to supplement the operating/maintenance budget for periodic larger repairs. Adjust as conditions, actual expense patterns dictate within future reserve study updates. It was reported that the concrete has a snowmelt system. We did not have access to inspect the snowmelt lines. This component funds for the removal and replacement of the snowmelt lines that lay beneath the concrete. Over time, the lines will deteriorate and will need to be replaced. This project will include tearing out the concrete, removing and re-laying the lines. Snowmelt systems should be inspected regularly and repaired as-needed by serving vendor or maintenance staff to ensure proper function and optimal performance. Minor repairs such as pump/motor replacements, electronic system parts, etc. should be considered an Operating expense. Plan to replace the entire system at the approximate interval shown below based on our experience and research with similar systems. Total life span can vary based on level of use, preventive maintenance, quality of materials and installation, etc. The snowmelt system revolves around keeping the top surface warm enough to melt falling snow when it contacts the surface instead of letting it pile up. The two popular types of heating systems both work by generating radiant heat underneath the driveway, thus keeping the pavement warm during snowstorms. The first heating method uses an electric current to generate heat on a wire or across a mat, in almost exactly the same manner as most indoor floor-heating systems. The second method uses a series of tubes and pumps to move hot water directly underneath the concrete, warming it up.

Useful Life:
30 years

Remaining Life:
25 years

Best Case: $ 2,200 Worst Case: $ 3,000

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 2119 Snowmelt Courtyard Concrete-Replace **Quantity: ~ 1400 GSF**

Location: Common area

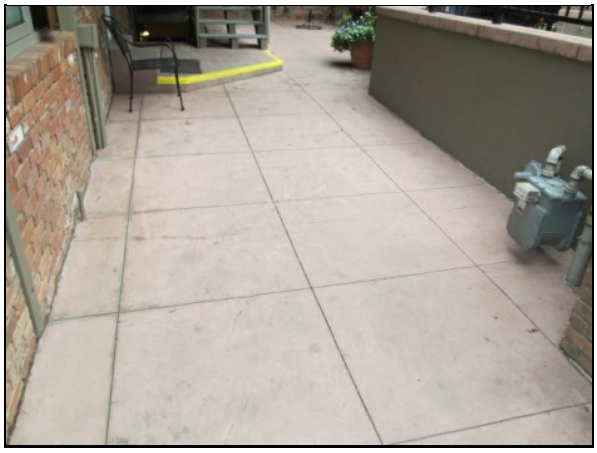
Funded?: Yes.

History: Replaced in 2010/2011

Evaluation: Stamped concrete determined to be in good condition shows a consistent, attractive pattern with minimal cracking and other signs of wear or age. Attractive appearance in keeping with local aesthetic standards. Inspect regularly and seal cracks and pressure wash periodically as part of routine preventive maintenance. This type of routine inspection and preventive maintenance is typically included within the Operating budget. In our experience, decorative concrete will generally crack, fade and wear over time lowering aesthetic appeal. Even if properly maintained, best to plan to replace at the interval below primarily for aesthetic purposes. A wide variety of designs and patterns, color options, etc. is available. Costs shown are intended to fund for replacement to a comparable standard as currently existing. It was reported that the concrete has a snowmelt system. We did not have access to inspect the snowmelt lines. This component funds for the removal and replacement of the snowmelt lines that lay beneath the concrete. Over time, the lines will deteriorate and will need to be replaced. This project will include tearing out the concrete, removing and re-laying the lines. Snowmelt systems should be inspected regularly and repaired as-needed by serving vendor or maintenance staff to ensure proper function and optimal performance. Minor repairs such as pump/motor replacements, electronic system parts, etc. should be considered an Operating expense. Plan to replace the entire system at the approximate interval shown below based on our experience and research with similar systems. Total life span can vary based on level of use, preventive maintenance, quality of materials and installation, etc. The snowmelt system revolves around keeping the top surface warm enough to melt falling snow when it contacts the surface instead of letting it pile up. The two popular types of heating systems both work by generating radiant heat underneath the driveway, thus keeping the pavement warm during snowstorms. The first heating method uses an electric current to generate heat on a wire or across a mat, in almost exactly the same manner as most indoor floor-heating systems. The second method uses a series of tubes and pumps to move hot water directly underneath the concrete, warming it up.

Useful Life:
30 years

Remaining Life:
23 years



Best Case: $ 30,800 Worst Case: $ 42,000

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 2149 Metal Handrail - Repair/Paint **Quantity: ~ 170 LF**

Location: Common areas

Funded?: Yes.

History:

Evaluation: Plan to paint soon. Peeling and chipping was observed. Metal fencing determined to be in poor condition typically exhibits more advanced deterioration of coating or surface finish, with notable wear, possibly including corrosion and rust. In advanced cases, coating may be flaking or peeling away to expose metal structure. Poor curb appeal. Metal fencing should be painted at the interval shown here in order to inhibit or delay onset of rust/corrosion and prevent or minimize costly repairs. Painting not only protects the metal surface from excessive wear, but promotes a good, attractive appearance in the common areas. Costs can vary greatly depending on existing conditions of fencing, which will dictate amount of repair/prep work required.

Useful Life:
5 years

Remaining Life:
0 years

Best Case: $ 1,400 Worst Case: $ 2,000

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 2153 Metal Handrail - Replace **Quantity: ~ 170 LF**

Location: Common areas

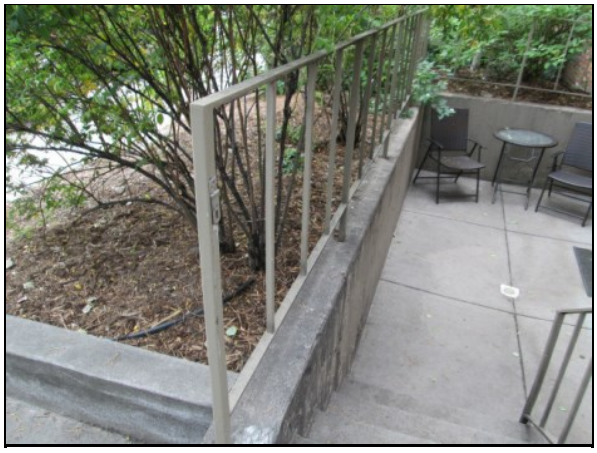
Funded?: Yes.

History:

Evaluation: Metal handrails determined to be in fair condition typically exhibits some minor to moderate amounts of surface wear and other signs of age, which may include corrosion, loose or unstable pieces/sections or hardware, and/or overgrowth by surrounding vegetation. Overall, appears to be in serviceable but declining condition. In our experience, metal handrails will typically eventually break down due to a combination of sun and weather exposure, which is sometimes exacerbated by other factors such as irrigation overspray, abuse and lack of preventive maintenance. For some types of fencing, complete replacement is advisable over recoating or refinishing due to relatively short lifespan of coatings and consideration of total life-cycle cost.

Useful Life:
30 years

Remaining Life:
10 years



Best Case: $ 6,800 Worst Case: $ 10,200

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 2169 Trash Enclosures - Replace - 50% **Quantity: ~ 50% of (1) Enclosure**

Location: Common areas

Funded?: No. Repair/replace using funds from the operating budget.

History:

Evaluation: The enclosure is ~ 10 LF of wood fence, ~ 8' tall. The HOA is responsible for half of the enclosure. Trash enclosures should be cleaned and inspected regularly, and repaired as needed to ensure safety and good function. Enclosures left to deteriorate can become an eyesore and will have a negative effect on the aesthetic value in the common areas. Due to exposed location and occasional damage from garbage trucks, trash enclosures generally require full replacement at some point. In general, costs related to this component are expected to be included in the Association's Operating budget. No recommendation for Reserve funding at this time. However, any repair and maintenance or other related expenditures should be tracked, and this component should be re-evaluated during future Reserve Study updates based on most recent information and data available at that time. If deemed appropriate for Reserve funding, component can be included in the funding plan at that time.

Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source:

Comp #: 2181 Sign/Monument - Refurbish/Replace **Quantity: ~ (1) Wood**

Location: Entrances

Funded?: Yes.

History: Replaced in ~ 2001/2002

Evaluation: Monument signage determined to be in good condition typically exhibits good appearance and aesthetics in keeping with local area. Generally uniform and attractive finishes. If present, lettering is clean, complete and legible and any surrounding landscaping, lighting, etc. is attractive and functioning. As routine maintenance, inspect regularly, clean/touch-up and repair as an Operating expense. Plan to refurbish or replace at the interval below. Timing and scope of refurbishing or replacement projects is subjective but should always be scheduled in order to maintain good curb appeal. In our experience, most Associations choose to refurbish or replace signage periodically in order to maintain good appearance and aesthetics in keeping with local area, often before signage is in poor physical condition. If present, concrete walls are expected to be painted and repaired as part of refurbishing, but not fully replaced unless otherwise noted. Costs can vary significantly depending on style/type desired, and may include additional costs for design work, landscaping, lighting, water features, etc. Reserve Study updates should incorporate any estimates or information collected regarding potential projects.

Useful Life:
25 years

Remaining Life:
9 years

Best Case: $ 4,000 Worst Case: $ 6,000

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 2183 Building Signs - Replace **Quantity: ~ (2) Signs**

Location: Throughout common areas

Funded?: Yes.

History: Replaced in 2015/2016.

Evaluation: Signage determined to be in good condition typically exhibits good appearance and aesthetics in keeping with local area. Generally uniform and attractive finishes. If present, lettering is clean, complete and legible and any surrounding landscaping, lighting, etc. is attractive and functioning. As routine maintenance, inspect regularly, clean/touch-up and repair as an Operating expense. Plan to refurbish or replace at the interval below. Timing and scope of refurbishing or replacement projects is subjective but should always be scheduled in order to maintain good curb appeal. In our experience, most Associations choose to refurbish or replace signage periodically in order to maintain good appearance and aesthetics in keeping with local area, often before signage is in poor physical condition. If present, concrete walls are expected to be painted and repaired as part of refurbishing, but not fully replaced unless otherwise noted. Costs can vary significantly depending on style/type desired, and may include additional costs for design work, landscaping, lighting, water features, etc. Reserve Study updates should incorporate any estimates or information collected regarding potential projects.

Useful Life:
20 years

Remaining Life:
17 years

Best Case: $ 1,000 Worst Case: $ 2,000

Cost Source: Client Cost History

Comp #: 2191 Outdoor/Site Furniture - Replace **Quantity: ~ (25) Metal Pieces**
Location: Common areas
Funded?: Yes.
History:
Evaluation: Includes one metal table, twenty chairs, and four drink tables. Outdoor/site furniture determined to be in good condition typically exhibits little to no significant signs of wear or age. Style is attractive and appropriate for the local aesthetic standards of the development. Inspect regularly, clean for appearance and repair as needed from general Operating funds. Cost to replace individual pieces may not meet threshold for Reserve funding. We recommend planning for regular intervals of complete replacement at the time frame indicated below, to maintain a good, consistent appearance in the common areas. Costs shown are based on replacement with comparable types unless otherwise noted.

Useful Life:
20 years

Remaining Life:
10 years

Best Case: $ 3,000 Worst Case: $ 4,500

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 2195 Landscaping - Refurbish **Quantity: Common Areas**
Location: Common areas
Funded?: No. Refurbish using funds from the operating budget.
History:
Evaluation: Landscaping costs are expected to be included in the Association's annual Operating budget. No recommendation for Reserve funding at this time. Monitor and include funding in Reserve Study updates if needed.

Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source:

Comp #: 2303 Glass Wall Lights - Replace **Quantity: ~ (12) Lights**

Location: Building exteriors, first level
Funded?: Yes.
History: Replaced in 2010/2011
Evaluation: Exterior lights determined to be in good condition typically exhibit only minor signs of normal wear and tear, and are consistent with local aesthetic standards for the development. Observed during daylight hours, but assumed to be in functional operating condition. As routine maintenance, clean by wiping down with an appropriate cleaner, change bulbs and repair as needed. Best practice is to plan for replacement of all lighting together at roughly the time frame below for cost efficiency and consistent quality/appearance throughout development. Should be coordinated with exterior painting projects whenever possible. Individual replacements should be considered an Operating expense. If available, an extra supply of replacement fixtures should be kept on-site to allow for prompt replacement.

Useful Life:
25 years

Remaining Life:
18 years

Best Case: $ 1,500 Worst Case: $ 1,800

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 2303 Metal Wall Lights - Replace **Quantity: ~ (19) Lights**

Location: Building exteriors

Funded?: Yes.

History:

Evaluation: Reportedly original to the building. Exterior lights determined to be in fair condition typically exhibit more moderate signs of wear and age, but are generally believed to be aging normally with no unusual conditions noted. Observed during daylight hours, but assumed to be in functional operating condition. As routine maintenance, clean by wiping down with an appropriate cleaner, change bulbs and repair as needed. Best practice is to plan for replacement of all lighting together at roughly the time frame below for cost efficiency and consistent quality/appearance throughout development. Should be coordinated with exterior painting projects whenever possible. Individual replacements should be considered an Operating expense. If available, an extra supply of replacement fixtures should be kept on-site to allow for prompt replacement.

Useful Life:
25 years

Remaining Life:
3 years

Best Case: $ 2,400 Worst Case: $ 2,900

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 2304 Ext. Lights (Utility) – Replace **Quantity: ~ (6) Fixtures**

Location: Building exteriors

Funded?: No. Replace/repair using funds from the operating budget.

History:

Evaluation: Located in the carpeted areas. Generic utility lights are typically replaced on an as-needed basis when individual fixtures fail. Lower aesthetic priority, and do not have the same need for consistency in appearance as decorative lighting. Most often replaced as an Operating expense. No recommendation for Reserve funding at this time. However, any repair and maintenance or other related expenditures should be tracked, and this component should be re-evaluated during future Reserve Study updates based on most recent information and data available at that time. If deemed appropriate for Reserve funding, component can be included in the funding plan at that time.

Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source:

Comp #: 2309 Staircase Structure - Repair **Quantity: ~ (2) Structure**

Location: Building exteriors

Funded?: No. Structure should last beyond the scope of this report

History:

Evaluation: Staircases should be inspected regularly to ensure safety and stability; repair promptly as needed using general Operating funds. Make sure that all steps and landings drain properly to avoid standing water which can lead to slip and fall hazards. In most cases, there is no predictable timing and scope for major repairs or replacements to these types of staircases. As the stair structure ages, repairs may become more frequent and the Reserve Study should be updated to reflect current conditions. No recommendation for Reserve funding at this time.

Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source:

Comp #: 2315 Outdoor Carpeting - Replace **Quantity: ~ 36 GSY**

Location: Building exteriors

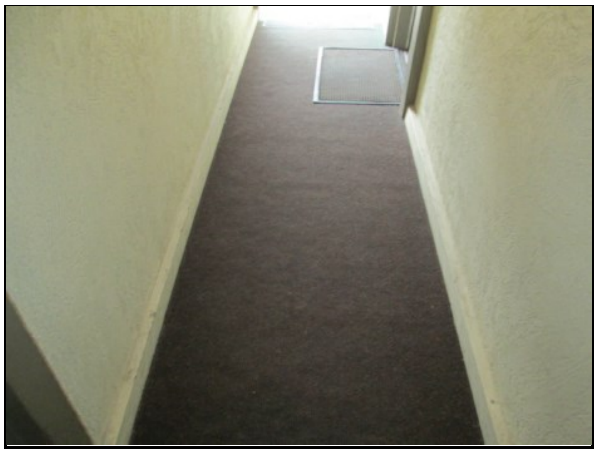
Funded?: Yes.

History: Replaced in 2003

Evaluation: Carpet appeared to be older. No view of any underlying waterproofing measures was included in this inspection, but may be warranted if damage or deterioration to structure may be a concern. If further investigation is completed, the Reserve Study should be updated accordingly based on any new information obtained. Replacement is often required at relatively short intervals compared to other materials, meaning that carpeting can have a much higher total life-cycle cost than alternative surfaces. Replacement will also be required in order to maintain good aesthetic standards in the common areas. Costs shown assume that carpeting will be replaced with similar material. If a new decking system is to be installed, cost estimates should be updated accordingly.

Useful Life:
10 years

Remaining Life:
0 years



Best Case: $ 2,000 Worst Case: $ 3,000

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 2317 Composite Treads/Rails - Replace **Quantity: ~ 460 GSF**

Location: Building exteriors

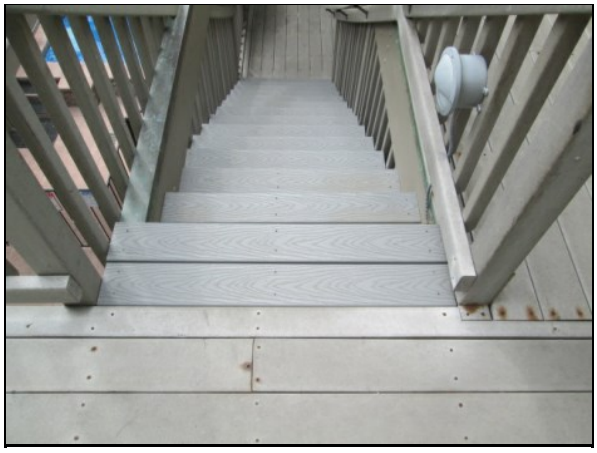
Funded?: Yes.

History: Replaced in 2015/2016.

Evaluation: Good conditions were observed at the time of the inspection. No cracking or weathering noted. Surface appearance was of that of a composite/plastic/PVC material. Typical warranty period based on a Trex type material is 25 years. However that warranty period is based on proper installation and maintenance. We recommend ongoing evaluations of all elevated decks by a qualified decking or waterproofing contractor to assess overall condition and performance of system components. As part of ongoing maintenance program, inspect regularly for any damage/deterioration. Ensure that any rail assemblies are secure. Note: project costs can vary significantly; professional specifications, soliciting several estimates, and professional project oversight are recommended. Track actual expenses for inclusion within future Reserve Study updates. If properly installed composite decking systems should experience an extended useful life. Decks should be thoroughly evaluated by a decking or waterproofing contractor prior to re-coating in order to determine scope of any required repairs. If the deck system has a warranty, the association should make sure to follow any requirements necessary to maintain said warranty, such as re-coating at required intervals and conducting professional inspections. As a general rule, potted plants and other items that may trap water should be elevated off the deck or used with a waterproof liner in order to prevent prolonged exposure.

Useful Life:
25 years

Remaining Life:
23 years



Best Case: $ 30,000 Worst Case: $ 34,000

Cost Source: Client Cost History + Inflation

Comp #: 2318 Composite Walkway Decks - Replace **Quantity: ~ 750 GSF**

Location: Building exteriors decks and rails

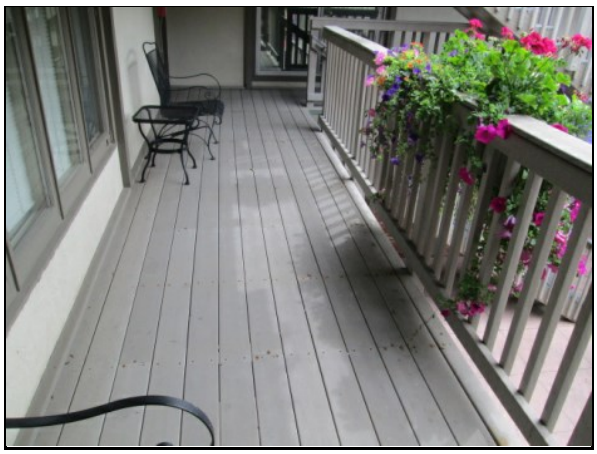
Funded?: Yes.

History: Replaced in 2002/2003.

Evaluation: Fair conditions were observed at the time of the inspection. No extensive cracking or weathering noted, however, the surfaces appeared to be slightly faded. Surface appearance was of that of a composite/plastic/PVC material. Typical warranty period based on a Trex type material is 25 years. However that warranty period is based on proper installation and maintenance. We recommend ongoing evaluations of all elevated decks by a qualified decking or waterproofing contractor to assess overall condition and performance of system components. As part of ongoing maintenance program, inspect regularly for any damage/deterioration. Ensure that any rail assemblies are secure. Note: project costs can vary significantly; professional specifications, soliciting several estimates, and professional project oversight are recommended. Track actual expenses for inclusion within future Reserve Study updates. If properly installed composite decking systems should experience an extended useful life. Decks should be thoroughly evaluated by a decking or waterproofing contractor prior to re-coating in order to determine scope of any required repairs. If the deck system has a warranty, the association should make sure to follow any requirements necessary to maintain said warranty, such as re-coating at required intervals and conducting professional inspections. As a general rule, potted plants and other items that may trap water should be elevated off the deck or used with a waterproof liner in order to prevent prolonged exposure.

Useful Life:
25 years

Remaining Life:
10 years



Best Case: $ 48,800 Worst Case: $ 56,300

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 2323 Composite Stair Rails - Replace **Quantity: ~ 120 LF**
Location: Stairs and landings
Funded?: No. Funding included with component #2317
History: Replaced in 2016
Evaluation: Deck railings determined to be in good condition typically exhibit no unusual or significant signs of physical wear or age, and appear to be strong and stable wherever inspected. Plan to replace at the same time as component #2317. No separate funding needed.

Useful Life:

Remaining Life:

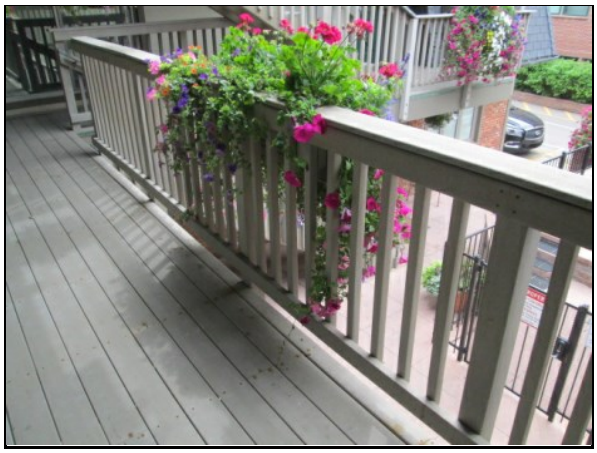
Best Case: Worst Case:

Cost Source:

Comp #: 2324 Composite Walkway Rails - Replace **Quantity: ~ 170 LF**
Location: Walkways
Funded?: No. Funding included with component #2318
History: Replaced in 2002/2003
Evaluation: Deck railings determined to be in fair condition typically exhibit some wear and age, but are not showing any advanced structural concerns, loose attachments, rust, etc. Plan to replace at the same time as component #2318. No separate funding needed.

Useful Life:

Remaining Life:



Best Case: Worst Case:

Cost Source:

Comp #: 2337 Dormers/Fascia - Seal/Paint **Quantity: ~ 2000 GSF**

Location: Building Exterior Wood Surfaces

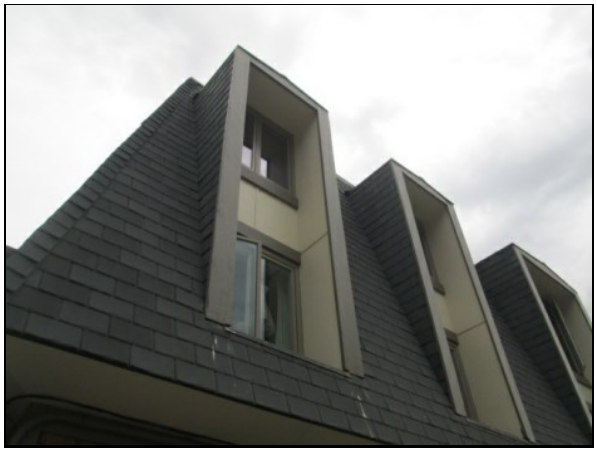
Funded?: Yes.

History: Partial project completed in 2016/2017

Evaluation: Touchups were done to the dormer trim, walkway and stair trim. Painted exterior surfaces determined to be in good condition typically exhibit consistent, attractive color and texture with no unusual or significant signs of wear or deterioration. Appearance is good and upholding the aesthetic standards of the development. As routine maintenance, inspect regularly (including sealants), repair locally and touch-up paint as needed. Typical paint cycles can vary greatly depending upon many factors including; type of material painted, surface preparations, quality of material, application methods, weather conditions during application, moisture beneath paint, and exposure to weather conditions. Proper sealant/caulking is critical to preventing water intrusion and resulting damage to the building structure. Incorrect installations of sealant are common, and can greatly decrease its useful life. Inspect sealant, more frequently as it ages, to determine if it is failing. Typical sealant problems include failure of sealant to adhere to adjacent materials and tearing/splitting of the sealant itself. As sealants age and are exposure to ultra-violet sunlight, they will dry out, harden, and lose their elastic ability. Remove and replace sealant as signs of failure begin to appear. Proper cleaning, prep work, and proper installation are critical for a long lasting sealant/caulking. Do not install sealant in locations that would block water drainage from behind the siding. Repair areas as needed prior to project. For best results, the association may want to consult with a building envelope specialist or waterproofing contractor to specify types of materials to be used and define complete scope of work before bidding. Best practice is to coordinate this type of work with other projects whenever practical, such as balcony sealing, planter waterproofing, etc.

Useful Life:
7 years

Remaining Life:
6 years



Best Case: $ 9,500 Worst Case: $ 10,500

Cost Source: Client Cost History

Comp #: 2339 Stucco/EIFS - Seal/Paint **Quantity: ~ 2600 GSF**

Location: Building Exteriors

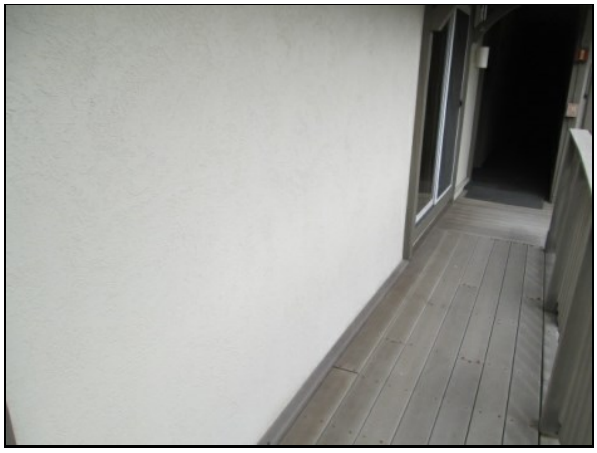
Funded?: Yes.

History: Painted in 2006/2007

Evaluation: Painted exterior surfaces determined to be in good condition typically exhibit consistent, attractive color and texture with no unusual or significant signs of wear or deterioration. Appearance is good and upholding the aesthetic standards of the development. The sealant material is unknown. Stucco is a relatively low maintenance material, although sealants require more maintenance. As annual maintenance, inspect stucco and sealants for any visible problems. Replacing sealants is an important part of maintaining stucco's waterproofing. Sealants are typically located at the intersections of the stucco and other material such as windows, door and vents. We have assumed the sealants are silicone, which under good conditions may have a useful life of approximately 15 to 20 years. Urethane sealants would have a useful life of 8-12 years. At time of sealant replacement we recommend recoating the stucco to minimize water penetration and for appearance. Stucco can be recoated to help limited the amount of water penetrating into the stucco. There are three general options for recoating stucco. The least expensive option is applying a new acrylic topcoat, the second option is coating with an elastomeric finish, preferably permeable (~50% more expensive than acrylic) and a third option is a skim coat of stucco (about three times as expensive as acrylic). Generally the more expensive option has the longest useful life, and the least expensive has the shortest useful life. Additional information on Stucco is available at the Portland Cement Association's website http://www.cement.org/stucco/index.asp Stucco is not an impermeable material and allows moisture to penetrate the surface, become captured by the water resistive barrier (WRB) beneath (typically Tyvek, felt or similar material), and either evaporate back through to the exterior or drain down and out the base of the wall assembly through a weep screed. Typically north facing sides will typically retain more moisture, which could cause a quicker rate of deterioration.

Useful Life:
15 years

Remaining Life:
4 years



Best Case: $ 7,900 Worst Case: $ 10,600

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 2345 Brick Siding - Tuck Point - 10% **Quantity: ~ 10% of 6000 GSF**

Location: Building exteriors

Funded?: Yes.

History:

Evaluation: Minor deterioration and failing noted. The client may need small allowance to perform repairs. Plan to repair every 5 years. Brick is typically a low maintenance material that usually requires little maintenance work. After 30-50 years (or more), mortar between brick can require repointing. Repointing involves grinding out small sections of existing mortar and installing new mortar and continuing on until all the mortar has been replaced. As the brick and mortar ages cracking may appear, indicating need for repointing. Currently there is no predictable scope or timing for repointing work. Reserve Study review is for financial planning purposes only, and if a thorough investigation of brick and mortar is desired, we recommend having a masonry specialist inspect the brick and mortar. Funding can be added to future updates to the Reserve Study if scope and timing become more well-defined. No funding suggested at this time.

Useful Life:
5 years

Remaining Life:
0 years

Best Case: $ 4,800 Worst Case: $ 6,000

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 2375 Roof: Single Ply - Replace **Quantity: ~ 6600 GSF**

Location: Roof

Funded?: Yes.

History: TPO installed in 2005/2006

Evaluation: Minor ponding noted near the drains. No major issues were reported. Roof should have a 20 year warranty. Single ply roofs determined to be in fair condition and exhibit more moderate signs of wear and deterioration to the membrane. Wrinkling/blistering may be evident at this stage, as well as buildup of organic growth. Overall believed to be aging normally. Our inspection is limited to a visual evaluation of accessible areas and is not a substitute for a comprehensive inspection including destructive testing, sub-surface moisture evaluation, core sampling, etc. Typical useful life of a flat (AKA "low-slope") roof is 15-20 years depending on the quality of the roof system installed and the maintenance receives throughout its life. As routine maintenance, many manufacturers recommend professional inspections at least twice annually and after storms. Promptly repair any damaged sections or any other repairs needed to ensure waterproof integrity of roof. Keep scuppers, drains, gutters, and downspouts clear and free of debris to allow proper drainage and prevent the ponding of water on the roof surface. We recommend using walk pads or extra roofing material to provide pathways in high-traffic areas, such as around HVAC units or other equipment. Take care to minimize any penetrations in the roof system, and to properly waterproof and all drains, vent pipes, conduit penetrations, etc. For more information, we recommend consulting with independent roofing consultants or with organizations such as the Roof Consultant Institute http://www.rci-online.org/ and the National Roofing Contractors Association (NRCA) http://www.nrca.net/. If the roof has a warranty, be sure to review terms and conduct proper inspections/repairs as needed to keep warranty in force.

Useful Life:
20 years

Remaining Life:
8 years

Best Case: $ 85,900 Worst Case: $ 118,900

Cost Source: Research with Local Vendor/Contractor

Comp #: 2383 Roof: Mansard - Replace **Quantity: ~ 5700 GSF**

Location: Building exteriors

Funded?: Yes.

History: Replaced in 2005/2006

Evaluation: The material appears to be a rubber material made to look like slate. Vendor reported that the material is Lamarite slate. Mansard shingle roofs were observed to be in good condition typically exhibit few or no slipping/missing sections. Little to no organic growth or staining patterns evident, and no unusual or significant leaks reported. Vendor reported minor curling. Mansard roof sections around perimeter of building should have a very long useful life, due in part to steep slope with helps shed water and debris faster while also absorbing less sunlight. Slipping/missing shingles should be repaired or replaced promptly to ensure adequate protection. Best practice is to try and coordinate replacement of mansard roof sections with other roofs whenever practical. As routine maintenance, many manufacturers recommend inspections at least twice annually and after large storm events. We recommend having roof inspected in greater detail (including conditions of sub-surface materials) by an independent roofing consultant prior to replacement. There is a wealth of information available through organizations such as the Roof Consultant Institute http://www.rci-online.org/ and the National Roofing Contractors Association (NRCA) http://www.nrca.net/. If the roof has a warranty, be sure to review terms and conduct proper inspections/repairs as needed to keep warranty in force.

Useful Life:
30 years

Remaining Life:
18 years

Best Case: $ 79,800 Worst Case: $ 102,600

Cost Source: Research with Local Vendor/Contractor

Comp #: 2387 Gutters/Downspouts - Replace **Quantity: ~ 370 LF**

Location: Building exeriors

Funded?: Yes.

History:

Evaluation: Aluminum gutters. 4.5 inches wide. Gutters and downspouts determined to be in good condition typically exhibit little to no significant surface wear or deterioration of material. No obvious sagging or tilting sections. Attachments to building appear to be strong and stable. Gutters and downspouts are assumed to be functioning properly unless otherwise noted. As routine maintenance, inspect regularly, keep gutters and downspouts free of debris. If buildings are located near trees, keep trees trimmed back to avoid accumulation of leaves on the roof surface which will accumulate in the gutters and increase maintenance requirements while reducing life expectancy. Repair or replace individual sections as needed as an Operating expense. We generally recommend that the gutters and downspouts be replaced when the roof is being resurfaced/replaced. National Roofing Contractor Association (NRCA) roofing standard includes installing eave flashings at the gutters. We suggest to plan for total replacement of gutter and downspouts at the same intervals as roof replacement for cost efficiency. Unless otherwise noted, costs shown here assume replacement with similar type as are currently in place.

Useful Life:
30 years

Remaining Life:
18 years

Best Case: $ 2,900 Worst Case: $ 3,700

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 2389 Heat Tape - Replace **Quantity: ~ 370 LF**

Location: Building exteriors

Funded?: Yes.

History:

Evaluation: The heat tape was reported to be in poor condition. Based upon the age of the heat tape, plan to replace soon. Heat tape was observed along the edges of the roof and the downspouts. Heat tape generally follows the length of the gutter and downspouts. Heat cables, when installed and functioning properly, will help offset the likelihood of an ice dam. Heat tape, on average, creates an output between 50-70°F. When installed in the gutters, the heat cables can keep your gutters and downspouts from collecting and freezing with ice and snow melt.

Useful Life:
10 years

Remaining Life:
0 years

Best Case: $ 5,100 Worst Case: $ 7,300

Cost Source: ARI Cost Database: Similar Project Cost History

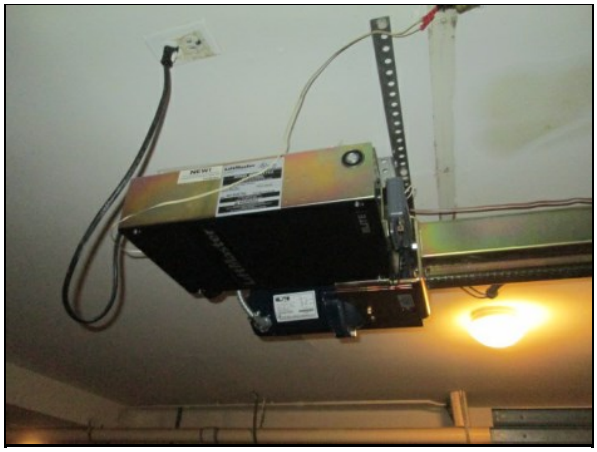
Mechanical

Comp #: 2505 Garage Operator - Replace **Quantity: ~ (1) Unit**

Location: Entry areas
Funded?: Yes.
History: Installed in 2015
Evaluation: Minimal or no subjective/aesthetic value for this component. Useful life is based primarily on normal expectations for service/performance life in this location. Unless otherwise noted, remaining useful life expectancy is based primarily on original installation or last replacement/purchase date, our experience with similar systems/components, and assuming normal amount of usage and good preventive maintenance. We recommend regular inspections (including service and repair as needed) be paid through the Operating budget. Even with ongoing maintenance, plan for replacement at typical life expectancy indicated below. Useful life can vary greatly depending on level of use, exposure to the elements, etc. Monitor actual expenses closely for future Reserve Study updates. Unless otherwise noted, funding to replace with similar units.

Useful Life:
12 years

Remaining Life:
10 years



Best Case: $ 2,500 Worst Case: $ 3,500

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 2533 Pumps/Valves - Repair - 30% **Quantity: ~ 30% of (6) Pumps**

Location: Mechanical area

Funded?: Yes.

History: Mostly replaced in 2007 and 2011.

Evaluation: Plan to replace 2 every 5 years. Pump motor replacements should ideally be coordinated with replacement of other HVAC equipment whenever possible to minimize downtime and obtain better pricing for installation, etc. Costs to replace are based on replacement with same size motor(s) unless otherwise noted, plus an allowance for service and refurbishment/rebuilding of overall pump assembly. In some cases, complete replacement of entire pump assembly may be warranted, and if required, costs should be incorporated into future Reserve Study updates.

Useful Life:
5 years

Remaining Life:
1 years

Best Case: $ 2,000 Worst Case: $ 4,000

Cost Source: Allowance

Comp #: 2561 Boiler - Replace (150000 BTU) **Quantity: ~ (1) 150000 BTU Unit**

Location: Mechanical areas

Funded?: Yes.

History: Replaced in 2007

Evaluation: Model - KBN150. Serial F07H100. 150000 BTU. Minimal or no subjective/aesthetic value for this component. Useful life is based primarily on normal expectations for service/performance life in this location. Unless otherwise noted, remaining useful life expectancy is based primarily on original installation or last replacement/purchase date, our experience with similar systems/components, and assuming normal amount of usage and good preventive maintenance. With routine inspection and maintenance, the boiler should have an approximate useful life as shown below before replacement with future technology and efficiencies will be warranted. Life expectancy can vary based on level of use and location on the property. When considering replacements, the Association should strongly consider replacing with high-efficiency models. Although initial cost may be higher than conventional alternatives, the payback period in energy savings is often a fraction of the overall life span of the boiler itself. Costs to replace are based on replacement with same approximate size and capacity.

Useful Life:
25 years

Remaining Life:
15 years

Best Case: $ 15,000 Worst Case: $ 22,000

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 2561 Boilers - Replace (399000 BTU) **Quantity: ~ (2) 399000 BTU Unit**
Location: Mechanical areas
Funded?: Yes.
History: Installed in 2007
Evaluation: Model- KBN399. Serial E07H100. 399000 BTU. Minimal or no subjective/aesthetic value for this component. Useful life is based primarily on normal expectations for service/performance life in this location. Unless otherwise noted, remaining useful life expectancy is based primarily on original installation or last replacement/purchase date, our experience with similar systems/components, and assuming normal amount of usage and good preventive maintenance. [FUND] With routine inspection and maintenance, the boiler should have an approximate useful life as shown below before replacement with future technology and efficiencies will be warranted. Life expectancy can vary based on level of use and location on the property. When considering replacements, the Association should strongly consider replacing with high-efficiency models. Although initial cost may be higher than conventional alternatives, the payback period in energy savings is often a fraction of the overall life span of the boiler itself. Costs to replace are based on replacement with same approximate size and capacity.

Useful Life:
25 years

Remaining Life:
15 years

Best Case: $ 50,000 Worst Case: $ 60,000

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 2565 Water Softener Tank - Replace **Quantity: ~ (1) Tank**

Location: Mechanical area
Funded?: Yes.
History: Installed in 2015/2016.
Evaluation: Culligan water softener tank. Minimal or no subjective/aesthetic value for this component. Useful life is based primarily on normal expectations for service/performance life in this location. Unless otherwise noted, remaining useful life expectancy is based primarily on original installation or last replacement/purchase date, our experience with similar systems/components, and assuming normal amount of usage and good preventive maintenance. Water softener storage tanks should be inspected for leaks and other problems routinely by servicing vendor or maintenance staff. Small repairs and cleaning should be considered an Operating expense and conducted as needed. Plan to replace at the approximate interval shown below, ideally coordinated with replacement of the boiler/hot water heater itself in order to achieve better pricing and minimize system downtime.

Useful Life:
15 years

Remaining Life:
13 years

Best Case: $ 11,500 Worst Case: $ 12,500

Cost Source: Client Cost History

Comp #: 2569 Expansion Tank - Replace **Quantity: ~ (3) Tanks**

Location: Mechanical area
Funded?: No.
History:
Evaluation: Expansion tanks should be inspected for leaks and other problems routinely by servicing vendor or maintenance staff. Small repairs and cleaning should be considered an Operating expense and conducted as needed. Tanks are smaller and can be replaced as needed.

Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source:

Comp #: 2571 Boiler/Snowmelt Controller -Replace **Quantity: ~ (1) Controller**
Location: Mechanical area
Funded?: Yes.
History: Replaced in 2007
Evaluation: Unit appeared to be older. System combined with snow/ice sensor provides automatic detection (snow/ice) and maintains a set temperature in the snow melting slab/asphalt. These controllers will help conserve the life of the boiler snow melt systems.

Useful Life:
10 years

Remaining Life:
0 years

Best Case: $ 1,000 Worst Case: $ 2,000

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 2573 Plumbing System - Repair **Quantity: System**
Location: Building
Funded?: No.
History:
Evaluation: Client reportedly performed a large amount of work in 2016/2017 of ~ $200k. Reportedly, the pipes had an epoxy liner installed to prevent potential leaking. Analysis of plumbing system(s) beyond visual inspection of visible piping is not within the scope of a Reserve Study. Some types of piping used historically are known to be life limited. Manufacturing defects may become apparent from time to time and certain site conditions can contribute to premature deterioration of system components. Typically, if installed per architectural specifications and local building codes, there is no predictable time frame for large scale repair/replacement expenses within the scope of our report. If leaks, poor flow, sediments, defective material and/or installation become evident, have qualified plumber and/or engineer evaluate in more detail and develop scope of any repair/replacement needed; funding for even one time projects can be incorporated within Reserve Study updates if warranted. Treat minor local repairs as ongoing maintenance expense. If patterns of significant repair costs emerge, funding may be incorporated into future Reserve Study updates to supplement the Operating budget. No basis for Reserve funding at this time.

Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source:

Comp #: 2581 Irrigation Controller - Replace **Quantity: ~ (1) Controller**

Location: Mechanical area

Funded?: No. Repair/replace using funds from the operating budget.

History:

Evaluation: In general, costs related to this component are expected to be included in the Association's Operating budget. No recommendation for Reserve funding at this time. However, any repair and maintenance or other related expenditures should be tracked, and this component should be re-evaluated during future Reserve Study updates based on most recent information and data available at that time. If deemed appropriate for Reserve funding, component can be included in the funding plan at that time.

Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source:

Spa

Comp #: 2805 Fencing: Metal - Replace **Quantity: ~ 70 LF**
Location: Pool area
Funded?: Yes.
History: Installed in 2010/2011.
Evaluation: appears to be powder coated. No painting is needed. Metal fencing determined to be in good physical/structural condition is stable and upright, with no signs or reports of damage or required repairs. All components and hardware appear to be in serviceable condition with no unusual or advanced signs of wear or age. Fencing is in good aesthetic condition. In our experience, metal fencing will typically eventually break down due to a combination of sun and weather exposure, which is sometimes exacerbated by other factors such as irrigation overspray, abuse and lack of preventive maintenance. For some types of fencing, complete replacement is advisable over recoating or refinishing due to relatively short lifespan of coatings and consideration of total life-cycle cost.

Useful Life:
30 years

Remaining Life:
23 years

Best Case: $ 4,200 Worst Case: $ 5,600

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 2817 Spa - Resurface **Quantity: ~ (1) 7x12. Spa**

Location: Spa area
Funded?: Yes.
History: Resurfaced in 2010/2011
Evaluation: Spas sometimes need to be resurfaced more frequently than pools due to higher chance of chemical imbalances. Whenever possible, both should be done at the same time to achieve better pricing and minimize downtime. While drained for resurfacing, any other repairs to lighting, handrails, stairs, ladders, etc. should be conducted as needed. This type of project is best suited for slow/offseason to minimize downtime during periods when spa is used heavily.

Useful Life:
6 years

Remaining Life:
0 years

Best Case: $ 4,000 Worst Case: $ 6,000

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 2821 Spa - Re-Tile **Quantity: ~ 38 LF**

Location: Spa
Funded?: Yes.
History: Replaced in 2010/2011
Evaluation: Pool/Spa was observed to be in good condition. Pavers did not exhibit any major cracking. Appearance was noted to be upholding appropriate aesthetic standards for the property. Small repairs to waterline tile should be done as needed as an Operating expense. Complete re-tiling is warranted at longer intervals to restore the look and feel of the interior finish. While drained for resurfacing, any other repairs to lighting, handrails, stairs, ladders, etc. should be conducted as needed. This type of project is best suited for slow/offseason to minimize downtime during periods when pool is used heavily. Should be expected at the approximate interval shown below to preserve this important amenity of the association.

Useful Life:
24 years

Remaining Life:
17 years

Best Case: $ 1,700 Worst Case: $ 2,100

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 2825 Spa Cover - Replace **Quantity: ~ (1) Cover**

Location: Spa area

Funded?: No. Repair/replace as needed using funds from the operating budget.

History:

Evaluation: In general, costs related to this component are expected to be included in the Association's Operating budget. No recommendation for Reserve funding at this time. However, any repair and maintenance or other related expenditures should be tracked, and this component should be re-evaluated during future Reserve Study updates based on most recent information and data available at that time. If deemed appropriate for Reserve funding, component can be included in the funding plan at that time.

Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source:

Comp #: 2830 Heat Exchanger - Replace **Quantity: ~ (1) Unit**

Location: Mechanical area

Funded?: Yes.

History: Installed in 2011

Evaluation: Triangle Tube heat exchanger was observed to be experiencing scaling, however, vendor reported that the unit should not experience any loss of useful life. Minimal or no subjective/aesthetic value for this component. Useful life is based primarily on normal expectations for service/performance life in this location. Unless otherwise noted, remaining useful life expectancy is based primarily on original installation or last replacement/purchase date, our experience with similar systems/components, and assuming normal amount of usage and good preventive maintenance. Heat exchanger should be inspected and serviced regularly as an Operating expense. In some cases, individual parts (i.e. plates for plate heat exchanger units) can be replaced without needing to replace the entire unit. Costs shown here are based on complete replacement unless otherwise noted.

Useful Life:
15 years

Remaining Life:
9 years

Best Case: $ 2,000 Worst Case: $ 4,000

Cost Source: Research with Local Vendor/Contractor

Comp #: 2832 Spa Boiler - Replace **Quantity: ~ (1) 150000 BTU Unit**
Location: Mechanical areas
Funded?: Yes.
History: Installed in 2011
Evaluation: Model - KBN151. Serial F11H101. 150000 BTU. Minimal or no subjective/aesthetic value for this component. Useful life is based primarily on normal expectations for service/performance life in this location. Unless otherwise noted, remaining useful life expectancy is based primarily on original installation or last replacement/purchase date, our experience with similar systems/components, and assuming normal amount of usage and good preventive maintenance. With routine inspection and maintenance, the boiler should have an approximate useful life as shown below before replacement with future technology and efficiencies will be warranted. Life expectancy can vary based on level of use and location on the property. When considering replacements, the Association should strongly consider replacing with high-efficiency models. Although initial cost may be higher than conventional alternatives, the payback period in energy savings is often a fraction of the overall life span of the boiler itself. Costs to replace are based on replacement with same approximate size and capacity.

Useful Life:
25 years

Remaining Life:
19 years

Best Case: $ 15,000 Worst Case: $ 22,000

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 2833 Spa Filter - Replace **Quantity: ~ (1) Filter**
Location: Spa area
Funded?: Yes.
History: Installed in 2011
Evaluation: Filter was reported to be in good, operational condition.Vendor should inspect regularly for optimal performance and address any repairs or preventive maintenance as needed. Life can vary depending on location, as well as level of use and preventive maintenance. Plan to replace at the approximate interval shown below.

Useful Life:
20 years

Remaining Life:
13 years

Best Case: $ 1,100 Worst Case: $ 1,500

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 2837 Pump - Repair/Replace **Quantity: ~ (2) Pumps**
Location: Spa area
Funded?: Yes.
History: Replaced in 2011
Evaluation: Pumps should be inspected regularly for leaks and other mechanical problems. Cost shown is based on replacement with the same type and size unless otherwise noted, and includes small allowance for new piping/valves/other repairs as needed.

Useful Life:
10 years

Remaining Life:
4 years

Best Case: $ 1,600 Worst Case: $ 2,300

Cost Source: ARI Cost Database: Similar Project Cost History