

Serving the Pacific Northwest
505 South 336th Street, Suite 620
Federal Way, WA 98003



**ASSOCIATION
RESERVES™**

Planning For The Inevitable™

Regional Offices
Arizona
California
Colorado
Florida
Hawaii
Nevada
North Carolina
Texas
Washington

Tel : (253) 661-5437 / (866) 900-2792
Fax : (253) 661-5430
www.reservestudy.com

Update "With-Site-Visit" Reserve Study



Grand Firs HOA Graham, WA

Report #: 23055-3
For Period Beginning: February 1, 2020
Expires: January 31, 2021

Date Prepared: December 10, 2019

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:

253-661-5437



Table of Contents

3-Minute Executive Summary	1
Reserve Study Summary	1
Executive Summary (Component List)	2
Introduction, Objectives, and Methodology	3
Which Physical Assets are Funded by Reserves?	4
How do we establish Useful Life and Remaining Useful Life estimates?	4
How do we establish Current Repair/Replacement Cost Estimates?	4
How much Reserves are enough?	5
How much should we contribute?	6
What is our Recommended Funding Goal?	6
Site Inspection Notes	7
Projected Expenses	8
Annual Reserve Expenses Graph	8
Reserve Fund Status & Recommended Funding Plan	9
Annual Reserve Funding Graph	9
30-Yr Cash Flow Graph	10
Percent Funded Graph	10
Table Descriptions	11
Reserve Component List Detail	12
Fully Funded Balance	13
Component Significance	14
30-Year Reserve Plan Summary	15
30-Year Reserve Plan Summary (Alternate Funding Plan)	16
30-Year Income/Expense Detail	17
Accuracy, Limitations, and Disclosures	23
Terms and Definitions	24
Component Details	25
Site & Grounds	26
Recreation	47
Systems	54

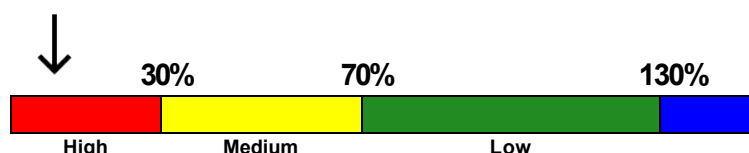
3- Minute Executive Summary

Association: Grand Firs HOA **Assoc. #: 23055-3**
Location: Graham, WA **# of Units: 402**
Report Period: February 1, 2020 through January 31, 2021

Findings/Recommendations as-of: February 1, 2020

Starting Reserve Balance	\$130,372
Current Fully Funded Reserve Balance	\$1,555,617
Percent Funded	8.4 %
Average Reserve (Deficit) or Surplus Per Unit	(\$3,545)
Recommended 2020 100% Monthly "Full Funding" Contributions	\$17,200
2020 "Alternate / Baseline Funding" minimum to keep Reserves above \$0	\$16,500
Most Recent Budgeted Contribution Rate	\$3,477

Reserves % Funded: 8.4%



Economic Assumptions:

Net Annual "After Tax" Interest Earnings Accruing to Reserves 1.00 %
 Annual Inflation Rate 3.00 %

- This is a Update "With-Site-Visit" Reserve Study, meeting or exceeding all requirements of the RCW. This study was prepared by, or under the supervision of a credentialed Reserve Specialist (RS™).
- Your Reserve Fund is currently 8.4 % Funded. This means the association's special assessment & deferred maintenance risk is currently High. 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 increase budget Reserve Contributions to \$17,200. The 100% "Full Funding" contribution rate is designed to gradually achieve the funding objective by the end of our 30-year report scope.
- No assets appropriate for Reserve designation known to be excluded. See appendix for component information and the basis of our assumptions. "Alternate Funding" in this report is synonymous with Baseline Funding, as defined within the RCW "to maintain the reserve account balance above zero throughout the thirty-year study period, without special assessments." Funding plan contribution rates are presented as an aggregate total, assuming average percentage of ownership. The actual ownership allocation may vary - refer to your governing documents.

#	Component	Useful Life (yrs)	Rem. Useful Life (yrs)	Current Average Cost
Site & Grounds				
100	Concrete - Local Repair/Replace	5	4	\$5,000
112	Metal Fence - Repair/Replace	30	16	\$17,000
120	Asphalt - Resurface	30	16	\$1,300,000
121	Asphalt - Seal/Repair	5	0	\$162,500
135	Entry Gates - Repair/Replace	30	16	\$20,500
136	Entry Gate Operators - Replace	15	1	\$15,500
137	Gate Access Panels - Replace	15	1	\$10,000
140	Wood Fence - Replace	20	6	\$450,000
141	Wood Fence - Replace	20	19	\$90,000
142	Wood Fence - Stain	20	6	\$18,000
145	Split Rail Fence - Replace	20	6	\$145,000
155	Chain Link Fence - Replace	30	16	\$54,500
160	Pole Lights - Replace	20	6	\$200,000
164	Landscape Lights - Replace	15	1	\$3,350
170	Landscape - Refurbish	5	5	\$5,000
176	Irrigation Timers - Replace	15	1	\$6,550
185	Stormwater Ponds - Clean/Refurbish	15	1	\$25,500
205	Mailboxes - Replace	20	6	\$50,000
210	Required Signage - Replace	20	6	\$11,900
Recreation				
320	Sport Court - Seal/Repair/Stripe	10	5	\$4,000
323	Asphalt Path - Seal/Repair	5	0	\$5,250
330	Basketball Eqp - Replace	20	6	\$2,500
340	Play Equipment - Replace	15	1	\$47,500
341	Play Chips - Replenish	5	1	\$6,000
342	Play Equipment - Replace	15	14	\$20,000
343	Play Chips - Replenish	5	4	\$900
346	Outdoor Furniture - Replace	20	6	\$13,000
27 Total Funded Components				

Note 1: Yellow highlighted line items are expected to require attention in this initial year, green highlighted items are expected to occur within the first-five years.

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 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 [Update With-Site-Visit Reserve Study](#), we started with a review of your prior Reserve Study, then looked into recent Reserve expenditures, evaluated how expenditures are handled (ongoing maintenance vs Reserves), and researched any well-established association

precedents. We performed an on-site inspection to evaluate your common areas, updating and adjusting your Reserve Component List as appropriate.

Which Physical Assets are Funded by Reserves?

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



RESERVE COMPONENT "FOUR-PART TEST"

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 12/3/2019, we visually inspected all visible common areas, while compiling a photographic inventory, noting: current condition, make & model information where appropriate, apparent levels of care and maintenance, exposure to weather elements and other factors that may affect the components useful life.

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.

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.

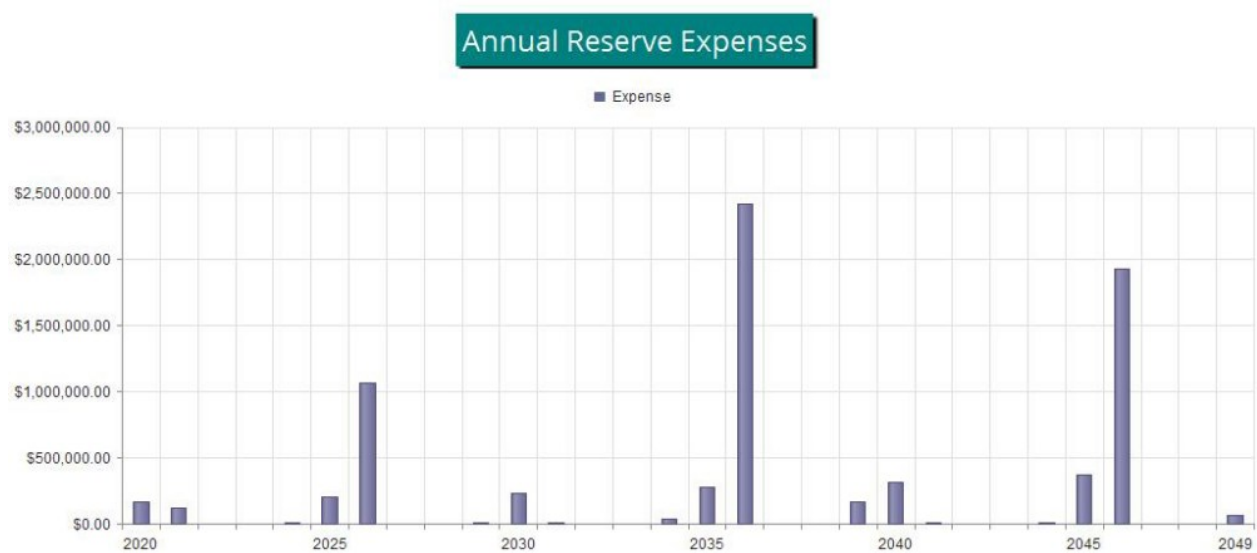


Figure 1

Reserve Fund Status

The starting point for our financial analysis is your Reserve Fund balance, projected to be \$130,372 as-of the start of your Fiscal Year on 2/1/2020. As of that date, your Fully Funded Balance is computed to be \$1,555,617 (see Fully Funded Balance Table). This figure represents the deteriorated value of your common area components.

Recommended Funding Plan

Based on your current Percent Funded and your near-term and long-term Reserve needs, we are recommending budgeted contributions of \$17,200 per month this Fiscal Year. 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.

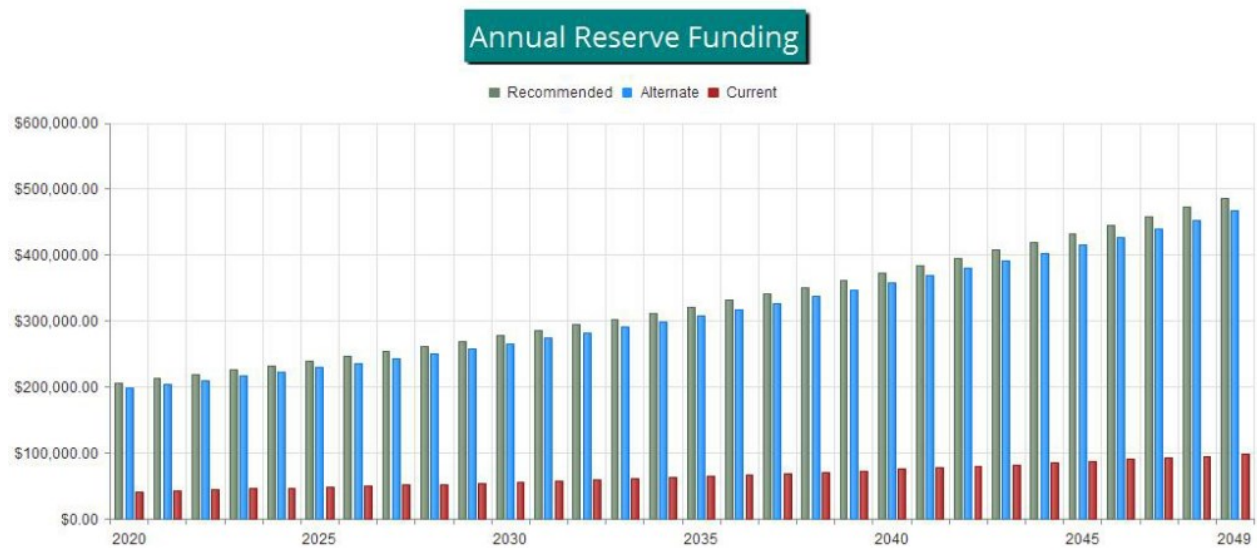


Figure 2

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 (assumes future increases), compared to your always-changing Fully Funded Balance target.

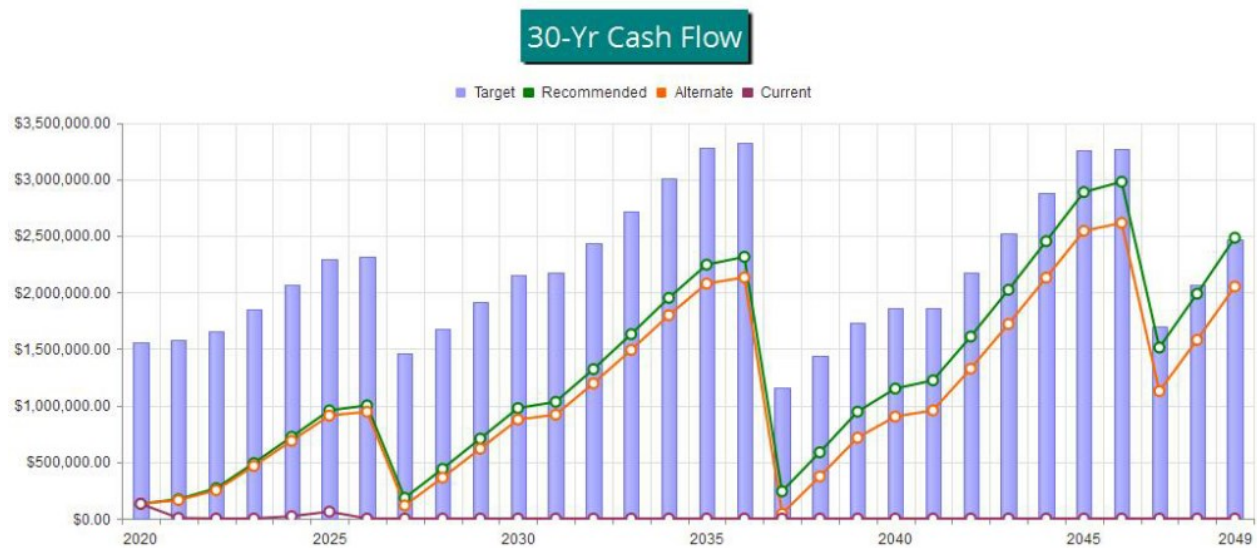


Figure 3

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

Executive Summary is a summary of your Reserve Components

Reserve 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 property 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 property, 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.

30-Yr Reserve Plan 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.

30-Year Income/Expense 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.

Reserve Component List Detail

23055-3
WSV

# Component	Quantity	Useful Life	Rem. Useful Life	Current Cost Estimate		
				Best Case	Worst Case	
Site & Grounds						
100 Concrete - Local Repair/Replace	Extensive square feet	5	4	\$4,000	\$6,000	
112 Metal Fence - Repair/Replace	~ 230 linear feet	30	16	\$14,000	\$20,000	
120 Asphalt - Resurface	~ 650,000 square ft	30	16	\$1,200,000	\$1,400,000	
121 Asphalt - Seal/Repair	~ 650,000 square ft	5	0	\$130,000	\$195,000	
135 Entry Gates - Repair/Replace	(2) 30' swing gates	30	16	\$16,000	\$25,000	
136 Entry Gate Operators - Replace	(4) Chamberlain Elite	15	1	\$13,000	\$18,000	
137 Gate Access Panels - Replace	(2) Elite panels	15	1	\$9,000	\$11,000	
140 Wood Fence - Replace	~ 15,000 linear feet	20	6	\$375,000	\$525,000	
141 Wood Fence - Replace	~ 3,000 linear feet	20	19	\$75,000	\$105,000	
142 Wood Fence - Stain	~ 3,000 linear feet	20	6	\$15,000	\$21,000	
145 Split Rail Fence - Replace	~ 7,500 linear feet	20	6	\$130,000	\$160,000	
155 Chain Link Fence - Replace	~ 2.050 linear feet	30	16	\$47,000	\$62,000	
160 Pole Lights - Replace	~ (90) assemblies	20	6	\$170,000	\$230,000	
164 Landscape Lights - Replace	~ (38) lights	15	1	\$2,900	\$3,800	
170 Landscape - Refurbish	Plantings, Shrubs, Turf	5	5	\$4,000	\$6,000	
176 Irrigation Timeclocks - Replace	(13) Hunter controllers	15	1	\$4,900	\$8,200	
185 Stormwater Ponds - Clean/Refurbish	(3) assorted sizes	15	1	\$19,000	\$32,000	
205 Mailboxes - Replace	(28) metal cluster stands	20	6	\$43,000	\$57,000	
210 Required Signage - Replace	~ (77) signs	20	6	\$9,800	\$14,000	
Recreation						
320 Sport Court - Seal/Repair/Stripe	~ 3,950 square feet	10	5	\$3,000	\$5,000	
323 Asphalt Path - Seal/Repair	~ 5,250 square feet	5	0	\$4,000	\$6,500	
330 Basketball Eqp - Replace	(2) assemblies	20	6	\$2,000	\$3,000	
340 Play Equipment - Replace	Extensive, assorted	15	1	\$40,000	\$55,000	
341 Play Chips - Replenish	~ 150 cubic yards	5	1	\$5,000	\$7,000	
342 Play Equipment - Replace	(1) Challengers® 350-1715	15	14	\$17,000	\$23,000	
343 Play Chips - Replenish	~ 16 cubic yards	5	4	\$800	\$1,000	
346 Outdoor Furniture - Replace	(22) assorted pieces	20	6	\$10,000	\$16,000	

27 Total Funded Components

#	Component	Current Cost Estimate	X	Effective Age	/	Useful Life	=	Fully Funded Balance
Site & Grounds								
100	Concrete - Local Repair/Replace	\$5,000	X	1	/	5	=	\$1,000
112	Metal Fence - Repair/Replace	\$17,000	X	14	/	30	=	\$7,933
120	Asphalt - Resurface	\$1,300,000	X	14	/	30	=	\$606,667
121	Asphalt - Seal/Repair	\$162,500	X	5	/	5	=	\$162,500
135	Entry Gates - Repair/Replace	\$20,500	X	14	/	30	=	\$9,567
136	Entry Gate Operators - Replace	\$15,500	X	14	/	15	=	\$14,467
137	Gate Access Panels - Replace	\$10,000	X	14	/	15	=	\$9,333
140	Wood Fence - Replace	\$450,000	X	14	/	20	=	\$315,000
141	Wood Fence - Replace	\$90,000	X	1	/	20	=	\$4,500
142	Wood Fence - Stain	\$18,000	X	14	/	20	=	\$12,600
145	Split Rail Fence - Replace	\$145,000	X	14	/	20	=	\$101,500
155	Chain Link Fence - Replace	\$54,500	X	14	/	30	=	\$25,433
160	Pole Lights - Replace	\$200,000	X	14	/	20	=	\$140,000
164	Landscape Lights - Replace	\$3,350	X	14	/	15	=	\$3,127
170	Landscape - Refurbish	\$5,000	X	0	/	5	=	\$0
176	Irrigation Timeclocks - Replace	\$6,550	X	14	/	15	=	\$6,113
185	Stormwater Ponds - Clean/Refurbish	\$25,500	X	14	/	15	=	\$23,800
205	Mailboxes - Replace	\$50,000	X	14	/	20	=	\$35,000
210	Required Signage - Replace	\$11,900	X	14	/	20	=	\$8,330
Recreation								
320	Sport Court - Seal/Repair/Stripe	\$4,000	X	5	/	10	=	\$2,000
323	Asphalt Path - Seal/Repair	\$5,250	X	5	/	5	=	\$5,250
330	Basketball Eqp - Replace	\$2,500	X	14	/	20	=	\$1,750
340	Play Equipment - Replace	\$47,500	X	14	/	15	=	\$44,333
341	Play Chips - Replenish	\$6,000	X	4	/	5	=	\$4,800
342	Play Equipment - Replace	\$20,000	X	1	/	15	=	\$1,333
343	Play Chips - Replenish	\$900	X	1	/	5	=	\$180
346	Outdoor Furniture - Replace	\$13,000	X	14	/	20	=	\$9,100
								\$1,555,617

Component Significance

23055-3
WSV

#	Component	Useful Life (yrs)	Current Cost Estimate	Deterioration Cost/Yr	Deterioration Significance
Site & Grounds					
100	Concrete - Local Repair/Replace	5	\$5,000	\$1,000	0.71 %
112	Metal Fence - Repair/Replace	30	\$17,000	\$567	0.40 %
120	Asphalt - Resurface	30	\$1,300,000	\$43,333	30.67 %
121	Asphalt - Seal/Repair	5	\$162,500	\$32,500	23.00 %
135	Entry Gates - Repair/Replace	30	\$20,500	\$683	0.48 %
136	Entry Gate Operators - Replace	15	\$15,500	\$1,033	0.73 %
137	Gate Access Panels - Replace	15	\$10,000	\$667	0.47 %
140	Wood Fence - Replace	20	\$450,000	\$22,500	15.92 %
141	Wood Fence - Replace	20	\$90,000	\$4,500	3.18 %
142	Wood Fence - Stain	20	\$18,000	\$900	0.64 %
145	Split Rail Fence - Replace	20	\$145,000	\$7,250	5.13 %
155	Chain Link Fence - Replace	30	\$54,500	\$1,817	1.29 %
160	Pole Lights - Replace	20	\$200,000	\$10,000	7.08 %
164	Landscape Lights - Replace	15	\$3,350	\$223	0.16 %
170	Landscape - Refurbish	5	\$5,000	\$1,000	0.71 %
176	Irrigation Timerclocks - Replace	15	\$6,550	\$437	0.31 %
185	Stormwater Ponds - Clean/Refurbish	15	\$25,500	\$1,700	1.20 %
205	Mailboxes - Replace	20	\$50,000	\$2,500	1.77 %
210	Required Signage - Replace	20	\$11,900	\$595	0.42 %
Recreation					
320	Sport Court - Seal/Repair/Stripe	10	\$4,000	\$400	0.28 %
323	Asphalt Path - Seal/Repair	5	\$5,250	\$1,050	0.74 %
330	Basketball Eqp - Replace	20	\$2,500	\$125	0.09 %
340	Play Equipment - Replace	15	\$47,500	\$3,167	2.24 %
341	Play Chips - Replenish	5	\$6,000	\$1,200	0.85 %
342	Play Equipment - Replace	15	\$20,000	\$1,333	0.94 %
343	Play Chips - Replenish	5	\$900	\$180	0.13 %
346	Outdoor Furniture - Replace	20	\$13,000	\$650	0.46 %
27	Total Funded Components			\$141,310	100.00 %

30-Year Reserve Plan Summary

23055-3
WSV

Fiscal Year Start: 2020	Interest: 1.00 %	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		Loan or Special Assmts	Interest Income	Reserve Expenses
						In Annual	Reserve Contribs.			
2020	\$130,372	\$1,555,617	8.4 %		High	394.70 %	\$206,400	\$0	\$1,504	\$167,750
2021	\$170,526	\$1,575,052	10.8 %		High	3.00 %	\$212,592	\$0	\$2,189	\$117,832
2022	\$267,475	\$1,650,852	16.2 %		High	3.00 %	\$218,970	\$0	\$3,787	\$0
2023	\$490,232	\$1,854,791	26.4 %		High	3.00 %	\$225,539	\$0	\$6,058	\$0
2024	\$721,829	\$2,069,481	34.9 %		Medium	3.00 %	\$232,305	\$0	\$8,385	\$6,641
2025	\$955,878	\$2,288,542	41.8 %		Medium	3.00 %	\$239,274	\$0	\$9,775	\$204,902
2026	\$1,000,026	\$2,314,881	43.2 %		Medium	3.00 %	\$246,452	\$0	\$5,908	\$1,070,348
2027	\$182,038	\$1,455,662	12.5 %		High	3.00 %	\$253,846	\$0	\$3,104	\$0
2028	\$438,987	\$1,678,339	26.2 %		High	3.00 %	\$261,461	\$0	\$5,723	\$0
2029	\$706,172	\$1,913,067	36.9 %		Medium	3.00 %	\$269,305	\$0	\$8,408	\$7,698
2030	\$976,187	\$2,152,439	45.4 %		Medium	3.00 %	\$277,384	\$0	\$10,034	\$232,162
2031	\$1,031,444	\$2,173,492	47.5 %		Medium	3.00 %	\$285,706	\$0	\$11,755	\$8,305
2032	\$1,320,600	\$2,431,616	54.3 %		Medium	3.00 %	\$294,277	\$0	\$14,745	\$0
2033	\$1,629,622	\$2,712,083	60.1 %		Medium	3.00 %	\$303,105	\$0	\$17,894	\$0
2034	\$1,950,621	\$3,007,190	64.9 %		Medium	3.00 %	\$312,199	\$0	\$20,967	\$39,176
2035	\$2,244,610	\$3,277,210	68.5 %		Medium	3.00 %	\$321,564	\$0	\$22,781	\$275,371
2036	\$2,313,585	\$3,318,656	69.7 %		Medium	3.00 %	\$331,211	\$0	\$12,764	\$2,417,330
2037	\$240,231	\$1,161,930	20.7 %		High	3.00 %	\$341,148	\$0	\$4,127	\$0
2038	\$585,505	\$1,437,359	40.7 %		Medium	3.00 %	\$351,382	\$0	\$7,647	\$0
2039	\$944,534	\$1,728,267	54.7 %		Medium	3.00 %	\$361,924	\$0	\$10,462	\$168,161
2040	\$1,148,759	\$1,862,131	61.7 %		Medium	3.00 %	\$372,781	\$0	\$11,846	\$312,006
2041	\$1,221,380	\$1,859,507	65.7 %		Medium	3.00 %	\$383,965	\$0	\$14,143	\$11,162
2042	\$1,608,326	\$2,174,560	74.0 %		Low	3.00 %	\$395,484	\$0	\$18,144	\$0
2043	\$2,021,953	\$2,518,685	80.3 %		Low	3.00 %	\$407,348	\$0	\$22,359	\$0
2044	\$2,451,660	\$2,881,499	85.1 %		Low	3.00 %	\$419,569	\$0	\$26,677	\$11,993
2045	\$2,885,912	\$3,251,463	88.8 %		Low	3.00 %	\$432,156	\$0	\$29,304	\$370,075
2046	\$2,977,296	\$3,272,577	91.0 %		Low	3.00 %	\$445,120	\$0	\$22,435	\$1,933,168
2047	\$1,511,683	\$1,693,481	89.3 %		Low	3.00 %	\$458,474	\$0	\$17,489	\$0
2048	\$1,987,646	\$2,067,593	96.1 %		Low	3.00 %	\$472,228	\$0	\$22,340	\$0
2049	\$2,482,215	\$2,462,627	100.8 %		Low	3.00 %	\$486,395	\$0	\$27,073	\$61,035

30-Year Reserve Plan Summary (Alternate Funding Plan)

23055-3
WSV

Fiscal Year Start: 2020					Interest: 1.00 %		Inflation: 3.00 %		
Reserve Fund Strength Calculations: (All values of Fiscal Year Start Date)					Projected Reserve Balance Changes				
					% Increase				
	Starting	Fully		Special	In Annual		Loan or		
Year	Reserve Balance	Funded Balance	Percent Funded	Assmt Risk	Reserve Contribs.	Reserve Contribs.	Special Assmts	Interest Income	Reserve Expenses
2020	\$130,372	\$1,555,617	8.4 %		374.57 %	\$198,000	\$0	\$1,462	\$167,750
2021	\$162,084	\$1,575,052	10.3 %	High	3.00 %	\$203,940	\$0	\$2,061	\$117,832
2022	\$250,253	\$1,650,852	15.2 %	High	3.00 %	\$210,058	\$0	\$3,569	\$0
2023	\$463,880	\$1,854,791	25.0 %	High	3.00 %	\$216,360	\$0	\$5,747	\$0
2024	\$685,987	\$2,069,481	33.1 %	Medium	3.00 %	\$222,851	\$0	\$7,977	\$6,641
2025	\$910,175	\$2,288,542	39.8 %	Medium	3.00 %	\$229,536	\$0	\$9,267	\$204,902
2026	\$944,077	\$2,314,881	40.8 %	Medium	3.00 %	\$236,422	\$0	\$5,295	\$1,070,348
2027	\$115,446	\$1,455,662	7.9 %	High	3.00 %	\$243,515	\$0	\$2,383	\$0
2028	\$361,344	\$1,678,339	21.5 %	High	3.00 %	\$250,820	\$0	\$4,890	\$0
2029	\$617,054	\$1,913,067	32.3 %	Medium	3.00 %	\$258,345	\$0	\$7,458	\$7,698
2030	\$875,159	\$2,152,439	40.7 %	Medium	3.00 %	\$266,095	\$0	\$8,962	\$232,162
2031	\$918,055	\$2,173,492	42.2 %	Medium	3.00 %	\$274,078	\$0	\$10,558	\$8,305
2032	\$1,194,386	\$2,431,616	49.1 %	Medium	3.00 %	\$282,301	\$0	\$13,417	\$0
2033	\$1,490,103	\$2,712,083	54.9 %	Medium	3.00 %	\$290,770	\$0	\$16,430	\$0
2034	\$1,797,303	\$3,007,190	59.8 %	Medium	3.00 %	\$299,493	\$0	\$19,363	\$39,176
2035	\$2,076,983	\$3,277,210	63.4 %	Medium	3.00 %	\$308,478	\$0	\$21,032	\$275,371
2036	\$2,131,121	\$3,318,656	64.2 %	Medium	3.00 %	\$317,732	\$0	\$10,863	\$2,417,330
2037	\$42,386	\$1,161,930	3.6 %	High	3.00 %	\$327,264	\$0	\$2,070	\$0
2038	\$371,720	\$1,437,359	25.9 %	High	3.00 %	\$337,082	\$0	\$5,427	\$0
2039	\$714,229	\$1,728,267	41.3 %	Medium	3.00 %	\$347,194	\$0	\$8,074	\$168,161
2040	\$901,336	\$1,862,131	48.4 %	Medium	3.00 %	\$357,610	\$0	\$9,284	\$312,006
2041	\$956,224	\$1,859,507	51.4 %	Medium	3.00 %	\$368,338	\$0	\$11,400	\$11,162
2042	\$1,324,801	\$2,174,560	60.9 %	Medium	3.00 %	\$379,388	\$0	\$15,215	\$0
2043	\$1,719,404	\$2,518,685	68.3 %	Medium	3.00 %	\$390,770	\$0	\$19,236	\$0
2044	\$2,129,410	\$2,881,499	73.9 %	Low	3.00 %	\$402,493	\$0	\$23,353	\$11,993
2045	\$2,543,264	\$3,251,463	78.2 %	Low	3.00 %	\$414,568	\$0	\$25,773	\$370,075
2046	\$2,613,529	\$3,272,577	79.9 %	Low	3.00 %	\$427,005	\$0	\$18,690	\$1,933,168
2047	\$1,126,056	\$1,693,481	66.5 %	Medium	3.00 %	\$439,815	\$0	\$13,521	\$0
2048	\$1,579,393	\$2,067,593	76.4 %	Low	3.00 %	\$453,010	\$0	\$18,142	\$0
2049	\$2,050,544	\$2,462,627	83.3 %	Low	3.00 %	\$466,600	\$0	\$22,637	\$61,035

30-Year Income/Expense Detail

23055-3
WSV

Fiscal Year	2020	2021	2022	2023	2024
Starting Reserve Balance	\$130,372	\$170,526	\$267,475	\$490,232	\$721,829
Annual Reserve Contribution	\$206,400	\$212,592	\$218,970	\$225,539	\$232,305
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$1,504	\$2,189	\$3,787	\$6,058	\$8,385
Total Income	\$338,276	\$385,307	\$490,232	\$721,829	\$962,519
# Component					
Site & Grounds					
100 Concrete - Local Repair/Replace	\$0	\$0	\$0	\$0	\$5,628
112 Metal Fence - Repair/Replace	\$0	\$0	\$0	\$0	\$0
120 Asphalt - Resurface	\$0	\$0	\$0	\$0	\$0
121 Asphalt - Seal/Repair	\$162,500	\$0	\$0	\$0	\$0
135 Entry Gates - Repair/Replace	\$0	\$0	\$0	\$0	\$0
136 Entry Gate Operators - Replace	\$0	\$15,965	\$0	\$0	\$0
137 Gate Access Panels - Replace	\$0	\$10,300	\$0	\$0	\$0
140 Wood Fence - Replace	\$0	\$0	\$0	\$0	\$0
141 Wood Fence - Replace	\$0	\$0	\$0	\$0	\$0
142 Wood Fence - Stain	\$0	\$0	\$0	\$0	\$0
145 Split Rail Fence - Replace	\$0	\$0	\$0	\$0	\$0
155 Chain Link Fence - Replace	\$0	\$0	\$0	\$0	\$0
160 Pole Lights - Replace	\$0	\$0	\$0	\$0	\$0
164 Landscape Lights - Replace	\$0	\$3,451	\$0	\$0	\$0
170 Landscape - Refurbish	\$0	\$0	\$0	\$0	\$0
176 Irrigation Timedlocks - Replace	\$0	\$6,747	\$0	\$0	\$0
185 Stormwater Ponds - Clean/Refurbish	\$0	\$26,265	\$0	\$0	\$0
205 Mailboxes - Replace	\$0	\$0	\$0	\$0	\$0
210 Required Signage - Replace	\$0	\$0	\$0	\$0	\$0
Recreation					
320 Sport Court - Seal/Repair/Stripe	\$0	\$0	\$0	\$0	\$0
323 Asphalt Path - Seal/Repair	\$5,250	\$0	\$0	\$0	\$0
330 Basketball Eqp - Replace	\$0	\$0	\$0	\$0	\$0
340 Play Equipment - Replace	\$0	\$48,925	\$0	\$0	\$0
341 Play Chips - Replenish	\$0	\$6,180	\$0	\$0	\$0
342 Play Equipment - Replace	\$0	\$0	\$0	\$0	\$0
343 Play Chips - Replenish	\$0	\$0	\$0	\$0	\$1,013
346 Outdoor Furniture - Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$167,750	\$117,832	\$0	\$0	\$6,641
Ending Reserve Balance	\$170,526	\$267,475	\$490,232	\$721,829	\$955,878

Fiscal Year	2025	2026	2027	2028	2029
Starting Reserve Balance	\$955,878	\$1,000,026	\$182,038	\$438,987	\$706,172
Annual Reserve Contribution	\$239,274	\$246,452	\$253,846	\$261,461	\$269,305
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$9,775	\$5,908	\$3,104	\$5,723	\$8,408
Total Income	\$1,204,928	\$1,252,386	\$438,987	\$706,172	\$983,886
# Component					
Site & Grounds					
100 Concrete - Local Repair/Replace	\$0	\$0	\$0	\$0	\$6,524
112 Metal Fence - Repair/Replace	\$0	\$0	\$0	\$0	\$0
120 Asphalt - Resurface	\$0	\$0	\$0	\$0	\$0
121 Asphalt - Seal/Repair	\$188,382	\$0	\$0	\$0	\$0
135 Entry Gates - Repair/Replace	\$0	\$0	\$0	\$0	\$0
136 Entry Gate Operators - Replace	\$0	\$0	\$0	\$0	\$0
137 Gate Access Panels - Replace	\$0	\$0	\$0	\$0	\$0
140 Wood Fence - Replace	\$0	\$537,324	\$0	\$0	\$0
141 Wood Fence - Replace	\$0	\$0	\$0	\$0	\$0
142 Wood Fence - Stain	\$0	\$21,493	\$0	\$0	\$0
145 Split Rail Fence - Replace	\$0	\$173,138	\$0	\$0	\$0
155 Chain Link Fence - Replace	\$0	\$0	\$0	\$0	\$0
160 Pole Lights - Replace	\$0	\$238,810	\$0	\$0	\$0
164 Landscape Lights - Replace	\$0	\$0	\$0	\$0	\$0
170 Landscape - Refurbish	\$5,796	\$0	\$0	\$0	\$0
176 Irrigation Timedlocks - Replace	\$0	\$0	\$0	\$0	\$0
185 Stormwater Ponds - Clean/Refurbish	\$0	\$0	\$0	\$0	\$0
205 Mailboxes - Replace	\$0	\$59,703	\$0	\$0	\$0
210 Required Signage - Replace	\$0	\$14,209	\$0	\$0	\$0
Recreation					
320 Sport Court - Seal/Repair/Stripe	\$4,637	\$0	\$0	\$0	\$0
323 Asphalt Path - Seal/Repair	\$6,086	\$0	\$0	\$0	\$0
330 Basketball Eqp - Replace	\$0	\$2,985	\$0	\$0	\$0
340 Play Equipment - Replace	\$0	\$0	\$0	\$0	\$0
341 Play Chips - Replenish	\$0	\$7,164	\$0	\$0	\$0
342 Play Equipment - Replace	\$0	\$0	\$0	\$0	\$0
343 Play Chips - Replenish	\$0	\$0	\$0	\$0	\$1,174
346 Outdoor Furniture - Replace	\$0	\$15,523	\$0	\$0	\$0
Total Expenses	\$204,902	\$1,070,348	\$0	\$0	\$7,698
Ending Reserve Balance	\$1,000,026	\$182,038	\$438,987	\$706,172	\$976,187

Fiscal Year	2030	2031	2032	2033	2034
Starting Reserve Balance	\$976,187	\$1,031,444	\$1,320,600	\$1,629,622	\$1,950,621
Annual Reserve Contribution	\$277,384	\$285,706	\$294,277	\$303,105	\$312,199
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$10,034	\$11,755	\$14,745	\$17,894	\$20,967
Total Income	\$1,263,606	\$1,328,905	\$1,629,622	\$1,950,621	\$2,283,786
# Component					
Site & Grounds					
100 Concrete - Local Repair/Replace	\$0	\$0	\$0	\$0	\$7,563
112 Metal Fence - Repair/Replace	\$0	\$0	\$0	\$0	\$0
120 Asphalt - Resurface	\$0	\$0	\$0	\$0	\$0
121 Asphalt - Seal/Repair	\$218,386	\$0	\$0	\$0	\$0
135 Entry Gates - Repair/Replace	\$0	\$0	\$0	\$0	\$0
136 Entry Gate Operators - Replace	\$0	\$0	\$0	\$0	\$0
137 Gate Access Panels - Replace	\$0	\$0	\$0	\$0	\$0
140 Wood Fence - Replace	\$0	\$0	\$0	\$0	\$0
141 Wood Fence - Replace	\$0	\$0	\$0	\$0	\$0
142 Wood Fence - Stain	\$0	\$0	\$0	\$0	\$0
145 Split Rail Fence - Replace	\$0	\$0	\$0	\$0	\$0
155 Chain Link Fence - Replace	\$0	\$0	\$0	\$0	\$0
160 Pole Lights - Replace	\$0	\$0	\$0	\$0	\$0
164 Landscape Lights - Replace	\$0	\$0	\$0	\$0	\$0
170 Landscape - Refurbish	\$6,720	\$0	\$0	\$0	\$0
176 Irrigation Timedlocks - Replace	\$0	\$0	\$0	\$0	\$0
185 Stormwater Ponds - Clean/Refurbish	\$0	\$0	\$0	\$0	\$0
205 Mailboxes - Replace	\$0	\$0	\$0	\$0	\$0
210 Required Signage - Replace	\$0	\$0	\$0	\$0	\$0
Recreation					
320 Sport Court - Seal/Repair/Stripe	\$0	\$0	\$0	\$0	\$0
323 Asphalt Path - Seal/Repair	\$7,056	\$0	\$0	\$0	\$0
330 Basketball Eqp - Replace	\$0	\$0	\$0	\$0	\$0
340 Play Equipment - Replace	\$0	\$0	\$0	\$0	\$0
341 Play Chips - Replenish	\$0	\$8,305	\$0	\$0	\$0
342 Play Equipment - Replace	\$0	\$0	\$0	\$0	\$30,252
343 Play Chips - Replenish	\$0	\$0	\$0	\$0	\$1,361
346 Outdoor Furniture - Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$232,162	\$8,305	\$0	\$0	\$39,176
Ending Reserve Balance	\$1,031,444	\$1,320,600	\$1,629,622	\$1,950,621	\$2,244,610

Fiscal Year	2035	2036	2037	2038	2039
Starting Reserve Balance	\$2,244,610	\$2,313,585	\$240,231	\$585,505	\$944,534
Annual Reserve Contribution	\$321,564	\$331,211	\$341,148	\$351,382	\$361,924
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$22,781	\$12,764	\$4,127	\$7,647	\$10,462
Total Income	\$2,588,956	\$2,657,560	\$585,505	\$944,534	\$1,316,920
# Component					
Site & Grounds					
100 Concrete - Local Repair/Replace	\$0	\$0	\$0	\$0	\$8,768
112 Metal Fence - Repair/Replace	\$0	\$27,280	\$0	\$0	\$0
120 Asphalt - Resurface	\$0	\$2,086,118	\$0	\$0	\$0
121 Asphalt - Seal/Repair	\$253,170	\$0	\$0	\$0	\$0
135 Entry Gates - Repair/Replace	\$0	\$32,896	\$0	\$0	\$0
136 Entry Gate Operators - Replace	\$0	\$24,873	\$0	\$0	\$0
137 Gate Access Panels - Replace	\$0	\$16,047	\$0	\$0	\$0
140 Wood Fence - Replace	\$0	\$0	\$0	\$0	\$0
141 Wood Fence - Replace	\$0	\$0	\$0	\$0	\$157,816
142 Wood Fence - Stain	\$0	\$0	\$0	\$0	\$0
145 Split Rail Fence - Replace	\$0	\$0	\$0	\$0	\$0
155 Chain Link Fence - Replace	\$0	\$87,457	\$0	\$0	\$0
160 Pole Lights - Replace	\$0	\$0	\$0	\$0	\$0
164 Landscape Lights - Replace	\$0	\$5,376	\$0	\$0	\$0
170 Landscape - Refurbish	\$7,790	\$0	\$0	\$0	\$0
176 Irrigation Timedlocks - Replace	\$0	\$10,511	\$0	\$0	\$0
185 Stormwater Ponds - Clean/Refurbish	\$0	\$40,920	\$0	\$0	\$0
205 Mailboxes - Replace	\$0	\$0	\$0	\$0	\$0
210 Required Signage - Replace	\$0	\$0	\$0	\$0	\$0
Recreation					
320 Sport Court - Seal/Repair/Stripe	\$6,232	\$0	\$0	\$0	\$0
323 Asphalt Path - Seal/Repair	\$8,179	\$0	\$0	\$0	\$0
330 Basketball Eqp - Replace	\$0	\$0	\$0	\$0	\$0
340 Play Equipment - Replace	\$0	\$76,224	\$0	\$0	\$0
341 Play Chips - Replenish	\$0	\$9,628	\$0	\$0	\$0
342 Play Equipment - Replace	\$0	\$0	\$0	\$0	\$0
343 Play Chips - Replenish	\$0	\$0	\$0	\$0	\$1,578
346 Outdoor Furniture - Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$275,371	\$2,417,330	\$0	\$0	\$168,161
Ending Reserve Balance	\$2,313,585	\$240,231	\$585,505	\$944,534	\$1,148,759

Fiscal Year	2040	2041	2042	2043	2044
Starting Reserve Balance	\$1,148,759	\$1,221,380	\$1,608,326	\$2,021,953	\$2,451,660
Annual Reserve Contribution	\$372,781	\$383,965	\$395,484	\$407,348	\$419,569
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$11,846	\$14,143	\$18,144	\$22,359	\$26,677
Total Income	\$1,533,386	\$1,619,487	\$2,021,953	\$2,451,660	\$2,897,905
# Component					
Site & Grounds					
100 Concrete - Local Repair/Replace	\$0	\$0	\$0	\$0	\$10,164
112 Metal Fence - Repair/Replace	\$0	\$0	\$0	\$0	\$0
120 Asphalt - Resurface	\$0	\$0	\$0	\$0	\$0
121 Asphalt - Seal/Repair	\$293,493	\$0	\$0	\$0	\$0
135 Entry Gates - Repair/Replace	\$0	\$0	\$0	\$0	\$0
136 Entry Gate Operators - Replace	\$0	\$0	\$0	\$0	\$0
137 Gate Access Panels - Replace	\$0	\$0	\$0	\$0	\$0
140 Wood Fence - Replace	\$0	\$0	\$0	\$0	\$0
141 Wood Fence - Replace	\$0	\$0	\$0	\$0	\$0
142 Wood Fence - Stain	\$0	\$0	\$0	\$0	\$0
145 Split Rail Fence - Replace	\$0	\$0	\$0	\$0	\$0
155 Chain Link Fence - Replace	\$0	\$0	\$0	\$0	\$0
160 Pole Lights - Replace	\$0	\$0	\$0	\$0	\$0
164 Landscape Lights - Replace	\$0	\$0	\$0	\$0	\$0
170 Landscape - Refurbish	\$9,031	\$0	\$0	\$0	\$0
176 Irrigation Timedlocks - Replace	\$0	\$0	\$0	\$0	\$0
185 Stormwater Ponds - Clean/Refurbish	\$0	\$0	\$0	\$0	\$0
205 Mailboxes - Replace	\$0	\$0	\$0	\$0	\$0
210 Required Signage - Replace	\$0	\$0	\$0	\$0	\$0
Recreation					
320 Sport Court - Seal/Repair/Stripe	\$0	\$0	\$0	\$0	\$0
323 Asphalt Path - Seal/Repair	\$9,482	\$0	\$0	\$0	\$0
330 Basketball Eqp - Replace	\$0	\$0	\$0	\$0	\$0
340 Play Equipment - Replace	\$0	\$0	\$0	\$0	\$0
341 Play Chips - Replenish	\$0	\$11,162	\$0	\$0	\$0
342 Play Equipment - Replace	\$0	\$0	\$0	\$0	\$0
343 Play Chips - Replenish	\$0	\$0	\$0	\$0	\$1,830
346 Outdoor Furniture - Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$312,006	\$11,162	\$0	\$0	\$11,993
Ending Reserve Balance	\$1,221,380	\$1,608,326	\$2,021,953	\$2,451,660	\$2,885,912

Fiscal Year	2045	2046	2047	2048	2049
Starting Reserve Balance	\$2,885,912	\$2,977,296	\$1,511,683	\$1,987,646	\$2,482,215
Annual Reserve Contribution	\$432,156	\$445,120	\$458,474	\$472,228	\$486,395
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$29,304	\$22,435	\$17,489	\$22,340	\$27,073
Total Income	\$3,347,371	\$3,444,852	\$1,987,646	\$2,482,215	\$2,995,682
# Component					
Site & Grounds					
100 Concrete - Local Repair/Replace	\$0	\$0	\$0	\$0	\$11,783
112 Metal Fence - Repair/Replace	\$0	\$0	\$0	\$0	\$0
120 Asphalt - Resurface	\$0	\$0	\$0	\$0	\$0
121 Asphalt - Seal/Repair	\$340,239	\$0	\$0	\$0	\$0
135 Entry Gates - Repair/Replace	\$0	\$0	\$0	\$0	\$0
136 Entry Gate Operators - Replace	\$0	\$0	\$0	\$0	\$0
137 Gate Access Panels - Replace	\$0	\$0	\$0	\$0	\$0
140 Wood Fence - Replace	\$0	\$970,466	\$0	\$0	\$0
141 Wood Fence - Replace	\$0	\$0	\$0	\$0	\$0
142 Wood Fence - Stain	\$0	\$38,819	\$0	\$0	\$0
145 Split Rail Fence - Replace	\$0	\$312,706	\$0	\$0	\$0
155 Chain Link Fence - Replace	\$0	\$0	\$0	\$0	\$0
160 Pole Lights - Replace	\$0	\$431,318	\$0	\$0	\$0
164 Landscape Lights - Replace	\$0	\$0	\$0	\$0	\$0
170 Landscape - Refurbish	\$10,469	\$0	\$0	\$0	\$0
176 Irrigation Timedlocks - Replace	\$0	\$0	\$0	\$0	\$0
185 Stormwater Ponds - Clean/Refurbish	\$0	\$0	\$0	\$0	\$0
205 Mailboxes - Replace	\$0	\$107,830	\$0	\$0	\$0
210 Required Signage - Replace	\$0	\$25,663	\$0	\$0	\$0
Recreation					
320 Sport Court - Seal/Repair/Stripe	\$8,375	\$0	\$0	\$0	\$0
323 Asphalt Path - Seal/Repair	\$10,992	\$0	\$0	\$0	\$0
330 Basketball Eqp - Replace	\$0	\$5,391	\$0	\$0	\$0
340 Play Equipment - Replace	\$0	\$0	\$0	\$0	\$0
341 Play Chips - Replenish	\$0	\$12,940	\$0	\$0	\$0
342 Play Equipment - Replace	\$0	\$0	\$0	\$0	\$47,131
343 Play Chips - Replenish	\$0	\$0	\$0	\$0	\$2,121
346 Outdoor Furniture - Replace	\$0	\$28,036	\$0	\$0	\$0
Total Expenses	\$370,075	\$1,933,168	\$0	\$0	\$61,035
Ending Reserve Balance	\$2,977,296	\$1,511,683	\$1,987,646	\$2,482,215	\$2,934,647

Accuracy, Limitations, and Disclosures

"The reserve study should be reviewed carefully. It may not include all common and limited common element components that will require major maintenance, repair or replacement in future years, and may not include regular contributions to a reserve account for the cost of such maintenance, repair, or replacement. The failure to include a component in a reserve study, or to provide contributions to a reserve account for a component, may, under some circumstances, require you to pay on demand as a special assessment your share of common expenses for the cost of major maintenance, repair or replacement of a reserve component."

Association Reserves and its employees have no ownership, management, or other business relationships with the client other than this Reserve Study engagement. James Talaga, company President, is a credentialed Reserve Specialist (#066). All work done by Association Reserves WA, LLC 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.

In this engagement our compensation is not contingent upon our conclusions, and our liability in any matter involving this Reserve Study is limited to our fee for services rendered.

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 Component Details appendix is to provide the reader with the basis of our funding assumptions resulting from our research and analysis. The information presented here represents a wide range of components that were observed and measured against National Reserve Study Standards to determine if they meet the criteria for reserve funding.

- 1) Common area repair & replacement responsibility
- 2) Component must have a limited useful life
- 3) Life limit must be predictable
- 4) Above a minimum threshold cost (board's discretion – typically ½ to 1% of Annual operating expenses).

Not all your components may have been found appropriate for reserve funding. In our judgment, the components meeting the above four criteria are shown with the Useful Life (how often the project is expected to occur), Remaining Useful Life (when the next instance of the expense will be) and representative market cost range termed “Best Cost” and “Worst Cost”. There are many factors that can result in a wide variety of potential costs, and we have attempted to present the cost range in which your actual expense will occur.

Where no Useful Life, Remaining Useful Life, or pricing exists, the component was deemed inappropriate for Reserve Funding.

Site & Grounds

Comp #: 100 Concrete - Local Repair/Replace**Quantity: Extensive square feet**

Location: Sidewalks, curbing, roadway gutters, etc...

Funded?: Yes. Useful life not predictable

History: None known

Comments: Common area concrete at sidewalks, curbing and roadway gutters is in stable condition, with no significant damage or deterioration observed. Some lifting, discoloration and cracking were observed.

All concrete surfaces within individual unit boundaries is reportedly the responsibility of individual unit owners to maintain, repair and replace. Sidewalks, curbs and gutters adjacent to roadways and any concrete within parks are association responsibility.

Due to general age and eventual wear and tear / typical local larger repair needs after the 15-year mark of life, we suggest a rotating funding allowance in reserves to supplement the operating budget.

As routine maintenance utilizing operating funds, inspect regularly, and pressure wash for appearance. Repair promptly as needed to prevent water penetrating into the base, which can cause further damage. Factors affecting the quality of the concrete include; the preparation of the underlying soil and drainage, thickness and strength of concrete used, steel reinforcement (none likely), and amount and weight of vehicle traffic, if any.

Useful Life:
5 years

Remaining Life:
4 years



Best Case: \$ 4,000

Worst Case: \$ 6,000

Lower Allowance

Higher Allowance

Cost Source: Budget Allowance

Comp #: 112 Metal Fence - Repair/Replace

Quantity: ~ 230 linear feet

Location: Adjacent to main entry gates

Funded?: Yes.

History: No major projects known

Comments: Generally stable condition of metal fencing and pedestrian gates noted with no significant damage or instability evident at this time. Sturdy item that can typically last for an extended period with ordinary care and maintenance, but expected to eventually deteriorate (finish and connections).

In our experience, however, eventual replacement is warranted due to constant wear, usage and exposure over time. Plan to replace at roughly the time frame below. No anticipation of refinishing of this type of powder coated fencing at this time.

As routine maintenance, inspect regularly to ensure stability of fencing and repair promptly as needed from general operating funds.

Useful Life:
30 years

Remaining Life:
16 years



Best Case: \$ 14,000

Worst Case: \$ 20,000

Lower Allowance

Higher Allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 120 Asphalt - Resurface**Quantity: ~ 650,000 square ft**

Location: Roadways throughout community

Funded?: Yes.

History: Repairs 2019 ~\$115,000

Comments: Generally stable condition, with no widespread problems (cracking, excessive wear, alligator cracking) observed during our limited visual review. Some limited cracking and raveling observed throughout community.

Useful life below assumes regular seal coating and repairs (see component #121). The lack of seal coating and repairs can greatly decrease the asphalt's useful life. Resurfacing is typically one of the larger expense items in a reserve study. When need to resurface is apparent within a couple of years, consult with geotechnical engineer for recommendations, specifications/scope of work and project oversight.

As routine maintenance, keep surfaces clean and free of debris, ensure that drains are free flowing, repair cracks, and clean oil stains promptly. Assuming proactive maintenance, plan to resurface at roughly the time frame below.

Further resources:

Pavement Surface Condition Field Rating Manual for Asphalt Pavement.

<http://www.wsdot.wa.gov/NR/rdonlyres/4FE2F96D-BFE0-4484-812E-DD5164EB34F5/0/AsphaltPavementBook.pdf>

Washington Asphalt Pavement Association

<http://www.asphaltwa.com/>

Useful Life:

30 years

Remaining Life:

16 years



Best Case: \$ 1,200,000

Worst Case: \$ 1,400,000

Lower Allowance

Higher Allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 121 Asphalt - Seal/Repair

Quantity: ~ 650,000 square ft

Location: Roadways throughout community

Funded?: Yes.

History: Repairs 2019 ~\$115,000

Comments: Generally, the surface condition of the asphalt coating appeared to be in stable condition during our visual review. Repairs were made to problem areas in 2019; locations of repairs not provided.

Regular cycles of seal coating, along with needed repairs is a best practice for the long term care of lower traffic asphalt areas to extend the useful life. Annual cost for small routine repairs, best handled in operational budget

The State of Washington Department of Transportation (WSDOT) recommends regular cycles of seal coating for the long-term care of asphalt paving with low traffic and low speed. The primary reason to seal coat asphalt pavement is to protect the pavement from the deteriorating effects of sun and water. When asphalt pavement is exposed, the asphalt oxidizes or hardens, and this causes the pavement to become increasingly brittle. As a result, the pavement will become more likely to crack, as it is unable to bend and flex when subjected to traffic (weight) and temperature changes (thermal expansion and contraction). A seal coat combats this situation by providing a waterproof membrane, which not only slows down the oxidation process, but also helps the pavement shed water. Seal coating also provides uniform appearance, and conceals the inevitable patching and repairs which accumulate over time, ultimately extending the useful life of asphalt before more costly resurfacing is needed (see component #120).

Repairing asphalt before seal coating is imperative. Surface preparation and dry weather during and following application is key to lasting performance.

For further resources:

Best Practices Handbook on Asphalt Pavement Maintenance

<http://www.cee.mtu.edu/~balkire/CE5403/AsphaltPaveMaint.pdf>

For a general overview of Asphalt Seal Coat Treatments review this publication:

<http://www.wsdot.wa.gov/NR/rdonlyres/4A21ECE8-114B-434D-B967-0927541CE042/0/AsphaltSealCoats.pdf>

Other references:

<http://www.pavementinteractive.org/article/bituminous-surface-treatments/>

Useful Life:
5 years

Remaining Life:
0 years



Best Case: \$ 130,000

Worst Case: \$ 195,000

Lower Allowance

Higher Allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 135 Entry Gates - Repair/Replace**Quantity: (2) 30' swing gates**

Location: Community entrance/exit

Funded?: Yes.

History: No major projects known

Comments: Metal gates appeared to be in stable and operational condition during our site review. No damage or corrosion was observed.

We recommend planning for the eventual replacement. Typically vehicle or other damage not covered by insurance (or prohibitive due to high deductible), and / or failure of hinges & welds, lead to eventual need for repair/replacement.

Inspect periodically, and repair locally as needed using general maintenance budget.

Useful Life:
30 years

Remaining Life:
16 years



Best Case: \$ 16,000

Worst Case: \$ 25,000

Lower Allowance

Higher Allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 136 Entry Gate Operators - Replace**Quantity: (4) Chamberlain Elite**

Location: Adjacent to entry/exit gates

Funded?: Yes.

History: In 2013, one gate motor was reportedly replaced

Comments: Fair condition noted with no functional/operational problems observed during our site inspection and no reported problems. As routine maintenance, we recommend regular professional inspections including service and repair as needed from the operating budget. Even with ongoing maintenance, plan for replacement at typical life expectancy indicated below. Monitor actual expenses closely for future reserve study updates.

Useful Life:
15 years

Remaining Life:
1 years



Best Case: \$ 13,000

Worst Case: \$ 18,000

Lower Allowance

Higher Allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 137 Gate Access Panels - Replace

Quantity: (2) Elite panels

Location: Adjacent to entry/exit location

Funded?: Yes.

History: Planned replacement \$9,800

Comments: Reportedly the north access panel is not functioning. The system is outdated and the association plans to upgrade the system in conjunction with the repairs/replacement if the non-functioning panel.

We recommend regular, professional inspections and maintenance funded from the operating budget; wipe down surfaces periodically with an appropriate cleaner for appearance, being careful to avoid control buttons. Best to plan for replacement at typical interval below, due to constant usage and exposure to weather elements.

Useful Life:
15 years

Remaining Life:
1 years



Best Case: \$ 9,000

Worst Case: \$ 11,000

Lower Allowance

Higher Allowance

Cost Source: Vendor estimate provided by client

Comp #: 140 Wood Fence - Replace

Quantity: ~ 15,000 linear feet

Location: Perimeter fencing throughout community

Funded?: Yes.

History: No major projects known

Comments: 6 foot tall wood fence appeared in generally fair to poor condition with aging apparent. Fence appears to have never been stained or treated and is being allowed to gray naturally. Multiple sections of the fence were collapsed from a previous wind storm, reportedly. The association has began projects to replace the fence as represented in component #141.

Plan to replace at roughly the time frame below. Typical failures occur from deterioration through end grains, contact with ground and surrounding landscape.

As routine maintenance, inspect regularly for any damage, and repair as needed. Avoid unnecessary contact with ground, sprinkler patterns, and surrounding vegetation. Regular cycles of stain/paint will help to maintain appearance. Painting or staining the fence has a higher overall life cycle cost, but may extend life somewhat in addition to aesthetic benefit.

Useful Life:
20 years

Remaining Life:
6 years



Best Case: \$ 375,000

Worst Case: \$ 525,000

Lower Allowance

Higher Allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 141 Wood Fence - Replace

Quantity: ~ 3,000 linear feet

Location: Perimeter fencing throughout community
Funded?: Yes.
History: 2019 ~\$90,000
Comments: 6 foot tall wood fence appeared in generally good condition with no aging apparent.

Plan to replace at roughly the time frame below. Typical failures occur from deterioration through end grains, contact with ground and surrounding landscape.

As routine maintenance, inspect regularly for any damage, and repair as needed. Avoid unnecessary contact with ground, sprinkler patterns, and surrounding vegetation. Regular cycles of stain/paint will help to maintain appearance. Painting or staining the fence has a higher overall life cycle cost, but may extend life somewhat in addition to aesthetic benefit.

Useful Life:
20 years

Remaining Life:
19 years



Best Case: \$ 75,000

Worst Case: \$ 105,000

Lower Allowance

Higher Allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 142 Wood Fence - Stain

Quantity: ~ 3,000 linear feet

Location: Perimeter fencing throughout community

Funded?: Yes.

History: No major projects known

Comments: The finish on the wood fence appeared in generally good condition.

Regular sealer applications are recommended for the appearance, protection, and maximum useful life of the wood. Actual timing of staining will vary based on exposure, and quality of material and application. In our experience, quality solid-bodied stain typically produces best result. Remove any unnecessary contact with ground, and surrounding landscape and sprinkler patterns. Repair as needed, and clean prior to sealer application.

There are three general options for finishing wood fences. The first, and least expensive, option is to leave it unfinished. The second option is regular cycles of penetrating water repellent (typically clear or semi-transparent). The third option is painting or staining. The second option typically has a shorter useful life, and perhaps a lower life-cycle cost than staining/painting. Left unfinished, the wood will “gray” from its exposure to weather and often exhibit mildew - the lesser appearance may adversely affect marketability however. The third option to apply a penetrating stain is similar to painting, in that it will extend the life of the wood fence. The costs for applying the penetrating water repellent can be much less than staining, but needs to be done more often (every two to three years). Using a quality solid-bodied stain is often thought to best balance the objectives of the association and is therefore factored below.

If the wood is cedar, the Western Red Cedar Lumber Association (WRCLA) has additional information available on their website at www.wrcla.org.

Useful Life:
20 years

Remaining Life:
6 years



Best Case: \$ 15,000

Worst Case: \$ 21,000

Lower Allowance

Higher Allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 145 Split Rail Fence - Replace

Quantity: ~ 7,500 linear feet

Location: Perimeter of wetlands and stormwater ponds at Tracts C, D and H

Funded?: Yes.

History: No major projects known

Comments: Split rail wood fence appeared in generally stable condition. Organic growth was present and splitting wood was observed in limited areas.

Plan to replace at roughly the time frame below.

As routine maintenance, inspect regularly for any damage and repair locally as needed using maintenance funds. Avoid unnecessary contact with ground, sprinkler patterns and surrounding vegetation. Typically split rail fences are left to weather naturally, but can be stained for appearance and protection.

Useful Life:
20 years

Remaining Life:
6 years



Best Case: \$ 130,000

Worst Case: \$ 160,000

Lower Allowance

Higher Allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 155 Chain Link Fence - Replace

Quantity: ~ 2.050 linear feet

Location: Partial perimeter of parks at Tracts B, E, L and R

Funded?: Yes.

History: No major projects known

Comments: Chain link fence appeared in generally stable condition. Chain link had vinyl coating. No reports of previous large scale repairs. Damage was observed to the section at the NW community park as well as organic growth in most areas.

For financial planning purposes, plan on replacing at roughly the time frame shown below. Evaluate fence as remaining useful life approaches zero years, and adjust life accordingly.

Chain link fencing is generally a low maintenance item. Inspect periodically, and repair as needed. If corrosion is observed, apply rust inhibitor to prevent corrosion from decreasing the useful life.

Useful Life:
30 years

Remaining Life:
16 years



Best Case: \$ 47,000

Worst Case: \$ 62,000

Lower Allowance

Higher Allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 160 Pole Lights - Replace**Quantity: ~ (90) assemblies**

Location: Adjacent to roadways within community

Funded?: Yes.

History: No major projects known

Comments: Pole lights appear to be in good, stable condition, no problems or concerns reported. Observed during daylight hours; assumed to be in functional operating condition.

As routine maintenance, inspect, repair/change bulbs as needed. Best to plan for large scale replacement at roughly the time frame below for cost efficiency and consistent quality/appearance throughout association.

Useful Life:
20 years

Remaining Life:
6 years



Best Case: \$ 170,000

Worst Case: \$ 230,000

Lower Allowance

Higher Allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 164 Landscape Lights - Replace**Quantity: ~ (38) lights**

Location: Landscaped areas at main entrances

Funded?: Yes.

History: No major projects known

Comments: Mostly stable condition with no significant damage/deterioration noted during our site inspection; observed during daylight hours and assumed to be functional.

Inspect regularly and change bulbs as needed. Plan on cycles of full replacement at roughly the time frame indicated below due to constant exposure to the elements.

Useful Life:
15 years

Remaining Life:
1 years



Best Case: \$ 2,900

Worst Case: \$ 3,800

Lower Allowance

Higher Allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 170 Landscape - Refurbish

Quantity: Plantings, Shrubs, Turf

Location: Common area open space tracts throughout community
Funded?: Yes.
History: None known
Comments: Common area landscape is in generally good condition, mature and healthy.

Currently, landscaping maintenance is funded out of the operating budget; however, we recommend the below reserve allowance to supplement expenses needs beyond typical operating budgets, not in contract. In our experience, many similar communities find the need or desire for larger scale refurbish projects not covered within the maintenance contract, and they allocate funds within reserves. These types of projects can include: bed renovations, major replanting, large scale bark or mulch replacements, turf renovations, drainage improvements, irrigation system extensions/replacement, etc.

Walk area each year with landscape contractor, and perhaps a landscape architect, to assess the overall health, function, and future needs of maintenance and refurbishments.

Useful Life:
5 years

Remaining Life:
5 years



Best Case: \$ 4,000

Worst Case: \$ 6,000

Lower Allownace

Higher Allowance

Cost Source: Budget Allowance

Comp #: 175 Irrigation System - Repair/Replace

Quantity: Controls, Valves, Heads

Location: Throughout common area landscaping

Funded?: No. Useful life not predictable for large scale repairs

History: 2013 water sensors, ongoing local repair

Comments: Our visual observation of the irrigation system was limited as the majority of system components are below grade. No reports of repairs or problems. At the time of this study, no information (plans and/or specifications) was provided to us regarding the extent of the irrigation system.

No predictable large-scale costs at this time. Have your landscaper or irrigation specialist periodically unearth sections to check lines for any damage or deterioration. PVC can eventually become brittle and leak (typically not before the 40 year mark of life).

As routine maintenance, inspect, test, and repair the system as needed from the operating budget. Follow proper winterization and spring startup procedures. If properly installed and bedded without defect, the lines could last for many years. Controls for the system can vary greatly in number, cost, and life expectancy - typically each controller is less than \$500. Other elements (i.e. sprinkler heads, valves) within this system are generally lower cost, and have a failure rate that is difficult to predict. These elements are better suited to be handled through the maintenance and operating budget, not reserves.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 176 Irrigation Timeclocks - Replace

Quantity: (13) Hunter controllers

Location: Scattered throughout common area open space tracts

Funded?: Yes.

History: No major projects known

Comments: No problems observed or reported of irrigation timeclocks throughout community. Inspect regularly and repair/replace as needed. Expect intermittent failures and necessary replacement due to parts obsolescence, technological upgrades, etc... Plan on replacement at roughly the timeframe indicated below.

Useful Life:
15 years

Remaining Life:
1 years



Best Case: \$ 4,900

Worst Case: \$ 8,200

Lower Allowance

Higher Allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 182 Drainage/Stormwater Sys - Maintain

Quantity: Basins, conveyance

Location: Throughout common areas

Funded?: No. Useful life not predictable

History: None known

Comments: Analysis of the drainage system is beyond the scope of a reserve study as the vast majority of the drainage systems are located below ground. Observations were very limited to catch basin areas. No problems were reported to us.

No predictable large-scale repairs/replacement at this time. Local repairs should be performed as part of general maintenance. If problems become known from professional evaluation, funding can be included in future reserve studies.

As routine maintenance, inspect regularly, and keep drains/grates free of debris to ensure water drains as intended. Maintenance schedules on stormwater systems depend on the condition of the system itself, and the amount of sediment and debris moving around on site. Stormwater inspections usually consist of inspecting the catch basins and manholes, ensuring vaults and control structures are properly functioning. Evaluation of drainage can include the visual review of interior drain lines by use of miniature remote camera. Clean out drain lines and basins as often as needed in order to prevent decreased drainage capacity. Repair as needed. The responsibility of keeping the stormwater system in good working order falls on the association.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 185 Stormwater Ponds - Clean/Refurbish

Quantity: (3) assorted sizes

Location: Tracts D, F and P

Funded?: Yes.

History: No major projects known

Comments: Stormwater pond generally appeared in stable condition during our limited visual review with no excess vegetation; ongoing maintenance assumed.

The state Department of Ecology and local (i.e. county or city) stormwater resources have standards for maintaining, and constructing or reconstructing the pond(s) to engineer's design parameters. Sediment must be removed when the governing authority has determined a maximum reduction in pond volume. Pond may also be tested for any contaminants, and acceptable turbidity level. Timing is difficult to predict, but in our experience and research, it may be in the 15-year range. Regular maintenance and inspection are keys to extending useful life. Have the pond periodically assessed by a professional engineer, in addition to the overseeing governmental authority.

Costs for larger scale non-routine maintenance such as sediment removal and structural repairs can vary widely depending upon a number of factors, including but not limited to: contractor selection and mobilization fees, engineering and oversight, disposal options for excavated material per pond testing, liner type, etc. A general budget allowance range below - work with the governing authority and local contractor(s) to define.

Useful Life:
15 years

Remaining Life:
1 years



Best Case: \$ 19,000

Worst Case: \$ 32,000

Lower Allowance

Higher Allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 188 Native Growth Area - Maintain

Quantity: ~ (57) acres

Location: Wetlands A, B and buffers in Tracts C and H

Funded?: No. Annual costs, best handled in operational budget

History: None known

Comments: Native growth areas are typically a low maintenance item, as they are designed to be left permanently undisturbed in a substantially natural state.

No basis for reserve funding at this time, incorporate into future reserve study updates if funding basis emerges.

Comply with any and all governmental regulations regarding these areas. Activities that may be allowed in a native growth area are very limited, but may include maintenance of the drainage basin, and removal of trees deemed hazardous by the local jurisdiction.

Washington State's Growth Management Act (GMA) was established by the state legislature in 1990. The GMA requires the State and local governments to identify and protect critical areas and natural resource lands. Native growth areas are typically either recorded as an easement, or as a separate tract/parcel of land.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 190 Trees - Trim/Remove

Quantity: Extensive, assorted

Location: Throughout common areas

Funded?: No. Useful life not predictable

History: None known

Comments: No specific problems observed or reported at this time of trees throughout community. It is our understanding that the maintenance of trees on individual lots is the responsibility of the individual homeowner and the Association is only responsible for trees at common area open space tracts.

In similar communities, we have seen trees planted in planter strips between roadway and sidewalks needing to be replaced at roughly the 10-year mark of life. The main reason for replacement being the wrong species of trees planted for a small growth area and generally less than favorable planting location. If the wrong species are planted, the root systems can cause damage to the nearby concrete and asphalt, or the trees themselves may die prematurely due to confined root systems.

If the community has not already done so, consult with a qualified arborist for a long-term plan for the care and management of the trees within the community, balancing aesthetics with protection of association assets. Tree trimming/removal expenses can be incorporated into future reserve study updates as needed.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 200 Entry Monuments - Replace**Quantity: (4) stone monoliths**

Location: Entry locations

Funded?: No. Useful life not predictable

History: None known

Comments: Good condition of entry monuments consisting of stone/masonry monoliths with attached metal lettering. Organic growth was present, especially as the south gate.

As routine maintenance, inspect regularly, clean for appearance and repair as needed from operating budget. Long-lasting material, no expectation of cyclical large scale expenses impacting reserves at this time, no reserve funding suggested.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 205 Mailboxes - Replace**Quantity: (28) metal cluster stands**

Location: Adjacent to roadways within community

Funded?: Yes.

History: No major projects known

Comments: Good condition of metal cluster stands/boxes with no functional problems reported. Inspect regularly, clean by wiping down for appearance, change lock cylinders, lubricate hinges and repair as needed from operating budget. Best to plan for total replacement at roughly the time frame below due to constant exposure, usage and wear over time.

Note: USPS has a limited budget for replacement and should not be relied upon for purposes of long term planning.

Useful Life:
20 yearsRemaining Life:
6 years

Best Case: \$ 43,000

Worst Case: \$ 57,000

Lower Allowance

Higher Allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 210 Required Signage - Replace

Quantity: ~ (77) signs

Location: Adjacent to roadways within community
Funded?: Yes.
History: No major projects known
Comments: During our site visit, we noted that the common area signage was in stable condition.

Reserve funding recommended for regular intervals of replacement to maintain a consistent, quality appearance.

As routine maintenance, inspect regularly, clean, and touch up for appearance. Repair from operating budget.

Useful Life:
20 years

Remaining Life:
6 years



Best Case: \$ 9,800

Worst Case: \$ 14,000

Lower Allowance

Higher Allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Recreation

Comp #: 320 Sport Court - Seal/Repair/Stripe**Quantity: ~ 3,950 square feet**

Location: Community Parks

Funded?: Yes.

History:

Comments: Generally stable condition throughout with no significant damage observed.

We recommend regular inspections, repair and cleaning of asphalt courts to help extend useful life cycles.

Resurface these areas as part of roadway resurface project (see component #120), no need for separate funding.

Useful Life:
10 yearsRemaining Life:
5 years

Best Case: \$ 3,000

Worst Case: \$ 5,000

Lower Allowance

Higher Allowance

Cost Source: Budget Allowance

Comp #: 323 Asphalt Path - Seal/Repair**Quantity: ~ 5,250 square feet**

Location: Basketball courts and pathways at common area parks in Tracts B, E, L and R

Funded?: Yes. Resurface areas as part of roadway resurface project

History: None known

Comments: Generally stable condition at majority. However, local areas of upheaval, significant cracking and broken material along the edge of the paths was noted.

We recommend regular inspections, repair and cleaning of asphalt pathways to help extend useful life cycles and unsure safety. Repair allowance for periodic larger repairs, within reserves, is suggested.

Resurface these areas as part of roadway resurface project (see component #120), no need for separate funding.

Useful Life:
5 years

Remaining Life:
0 years



Best Case: \$ 4,000

Worst Case: \$ 6,500

Lower Allowance

Higher Allowance

Cost Source: Budget Allowance

Comp #: 330 Basketball Eqp - Replace**Quantity: (2) assemblies**

Location: Common area Tracts B and L

Funded?: Yes.

History: No major projects known

Comments: Fair, playable condition observed. Inspect regularly and repair/replace net/hoop as needed within annual operating budget. Although sturdy materials/equipment, plan for eventual replacement at the time frame below if not damaged or abused.

Useful Life:
20 years

Remaining Life:
6 years



Best Case: \$ 2,000

Worst Case: \$ 3,000

Lower Allowance

Higher Allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 340 Play Equipment - Replace
Location: Park areas at Tracts B, E, L and R
Funded?: Yes.
History: No major projects known
Comments: Stable condition with no significant damage or unusual wear observed.

Quantity: Extensive, assorted

Replacement cycles vary depending on the amount of use/abuse, however, expect extensive park area renovation at roughly the time frame listed below. Inspect for stability, damage and excessive wear, and utilize maintenance funds for any repairs needed between replacement cycles.

Resource (although not public, this document is a good guideline):
<http://www.cpsc.gov/PageFiles/122149/325.pdf>

Useful Life:
15 years

Remaining Life:
1 years



Best Case: \$ 40,000

Worst Case: \$ 55,000

Lower Allowance

Higher Allowance

Cost Source: Vendor Research

Comp #: 341 Play Chips - Replenish

Quantity: ~ 150 cubic yards

Location:

Funded?: Yes.

History:

Comments: This component represents the play chips at community parks. The play chips appeared inadequate at most park locations.

Periodic replenishment is required for adequate coverage, insurance regulations for depth / safety requirements. Recommended time frame listed below.

Useful Life:
5 years

Remaining Life:
1 years



Best Case: \$ 5,000

Worst Case: \$ 7,000

Lower Allowance

Higher Allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 342 Play Equipment - Replace

Quantity: (1) Challengers® 350-1715

Location: Park areas at Tracts B, E, L and R

Funded?: Yes.

History: 2019 ~\$19,372

Comments: Good condition with no significant damage or unusual wear observed.

Replacement cycles vary depending on the amount of use/abuse, however, expect extensive park area renovation at roughly the time frame listed below. Inspect for stability, damage and excessive wear, and utilize maintenance funds for any repairs needed between replacement cycles.

Resource (although not public, this document is a good guideline):

<http://www.cpsc.gov/PageFiles/122149/325.pdf>

Useful Life:
15 years

Remaining Life:
14 years



Best Case: \$ 17,000

Worst Case: \$ 23,000

Lower Allowance

Higher Allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 343 Play Chips - Replenish**Quantity: ~ 16 cubic yards**

Location:

Funded?: Yes.

History:

Comments: This component represents the play chips at the Mount Rainier Park. Recently replenished and coverage appears adequate.

Periodic replenishment is required for adequate coverage. Recommended time frame listed below.

Useful Life:
5 years

Remaining Life:
4 years



Best Case: \$ 800

Worst Case: \$ 1,000

Lower Allowance

Higher Allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 346 Outdoor Furniture - Replace**Quantity: (22) assorted pieces**

Location: Parks at Tracts B, E, L and R

Funded?: Yes.

History: No major projects known

Comments: Generally stable condition of benches, tables and trash bins with no significant damage or deterioration observed. One of the concrete tables located at Mount St. Helens Park was observed to have a broken leg with exposed rebar.

Inspect regularly, and repair as needed. Clean with an appropriate cleaner (refinish if desired) using general maintenance funds.

Useful Life:
20 years

Remaining Life:
6 years



Best Case: \$ 10,000

Worst Case: \$ 16,000

Lower Allowance

Higher Allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 350 Horseshoe Pits - Maintain

Quantity: (6) pits

Location: Park area at Tract R

Funded?: No. Annual costs, best handled in operational budget

History: None known

Comments: Horseshoe pits appear to be in stable, usable condition. These items are a minor expense and should be maintained out of the operating budget, not reserves.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Systems

Comp #: 905 Electrical Systems - Repair/Replace**Quantity: Main, branch systems**

Location: Throughout common areas of association

Funded?: No. Useful life not predictable

History: None known

Comments: Analysis of electrical system(s), beyond visual inspection, is not within the scope of a reserve study. No reported issues or problems at this time.

Typically, if installed per architectural specifications, building codes, and electric codes, without defect, there is no predictable time frame for large scale repair/replacement expenses within the scope of our review. Treat minor repairs as ongoing maintenance expense.

Some electrical system components used historically are known to be life limited. Manufacturing defects can become apparent from time to time and certain site conditions can contribute to premature deterioration of system components. Periodic inspections and maintenance by an electrician may be wise operating expense. Some associations employ infrared or other testing methodologies to identify potential trouble spots.

A good resource book available for purchase is NFPA 70B Recommended Practices for Electrical Equipment Maintenance. Funding may be incorporated into future reserve study updates if conditions change. No basis for reserve funding at this time.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 999 Reserve Study - Update**Quantity: Annual update**

Location: Common areas of association

Funded?: No. Annual costs, best handled in operational budget

History:

Comments: Per Washington law (RCW), reserve studies are to be updated annually, with site inspections to occur no less than every three years to assess changes in condition (i.e., physical, economic, governmental, etc...) and the resulting effect on the community's long-term reserve plan. Most appropriately factored within operating budget, not as reserve component.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source: