RESERVE DATA ANALYSIS

Villages of Garrison Creek HOA
Walla Walla, WA
Account 15551-- Version FINAL
September 29, 2016

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Prepared By

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Reviewed By

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Introduction

Thank you for utilizing the services of Reserve Data Analysis for your reserve analysis study. We strive to create a comprehensive report that can be utilized for your budgeting needs and for future replacement schedules but above all else place an emphasis on a high level of customer service. If there are any questions, concerns, corrections or revisions needed please do not hesitate to call or email us. While this study does have some explanations of the methodology used we have kept it to a minimum for brevity. More detailed explanations of how to read this reserve study as well as more in depth methodology & concepts are explained in our Reserve Study Guidebook which can be found on our website at www.rdanorthwest.com

Summary Page - This reserve study has a Summary Page which is a brief outline of the findings and recommendations found after the due diligence was conducted by the reserve analyst. On this Summary Page you will find the Recommended Allocation Rate, Baseline Allocation Rate, Current Allocation Rate and additional funding method requested or deemed appropriate.

Component List - Perhaps the most important section of the study is the Component List which is the basis for the recommendations found on the Summary Page. It is important that this list is comprehensive and accurate so that the recommendations are accurate and catered to each Client. Just preceding the Component List we have provided some comments about what components are included and excluded based on National Reserve Study Standards which are outlined in the aforementioned Reserve Study Guidebook (link above).

Funding Plans & Percent Funded - Following the Component List are the Funding Plans, Percent Funded Calculations and Projections. These are based on the component list developed earlier and each have a different goal in mind. For an explanation of the different funding plans and percent funded calculations please refer to the "How Much To Reserve" and "About Percent Funded" pages which can be found in the Tables of Contents of this report and just precede the funding plans pages.

Annual Expenditures - Following the Funding Plans is the Annual Expenditure Report which shows the projected replacement schedule of the components each year for the next 30 years. Note that this replacement schedule is based on the research and experience of the reserve analyst for similar components in other communities. Additionally, historical records of the Client and cost & architectural manuals are utilized for the components useful life averages. These projections are estimates & averages; actual useful lives' will vary; some components will fail earlier than expected and others will last longer. As the components deteriorate over time the updates to the reserve study will become more accurate as component remaining useful lifes can be adjusted to reflect actual on site conditions.

Component Details - At the end of this study is a Component Index Page which alphabetically lists the components and the pages in which they can be found in the Component Details section of the study. The Component Details section of this study gives recommendations for each component as well as shows the specifics of the component (e.g. – quantity, location, special considerations, etc.).

Villages of Garrison Creek HOA
Summary Page

Profile

Name	Villages of Garrison Creek HOA
Location	Walla Walla, WA 99324
# of Units	207
Base Year / Age	June, 1 1997
Fiscal Year Ends	December, 31 2017

Parameters

Level of Service	Level I Full Reserve Study (With Site-Visit)
Prepared for Fiscal Year	2017
On Site Inspection Date	September, 29 2016
Allocation Increase Rate	ref Funding Model Summary
Contingency Rate	ref Component Detail Report
Inflation Rate	3%
Interest Rate	1%
Tax Rate	30% on interest income
Funding Plan - Method	Cash Flow – achieve 100% funded in 30 years

Summary

***Current Reserve Allocation**	$27,456 per year
***Estimated FY Start Balance**	$106,697
Fully Funded Balance	$767,049 *(ideal amount in reserve account)*
Percent Funded	---------> **14%** 0-30% Low | 31-70% Fair | 71-100% Good
(Deficit) or Surplus Per Unit	(-$3,190) per unit

*Supplied by Client

	per year	per month	per unit a month
Recommended Funding -Achieve 100% funded in 30 years-	$126,800	$10,567	$51
Baseline Funding -Keeps account above $0 in the 30 year timeline of this study-	$102,903	$8,575	$41
Current Funding -Current data supplied by Client	$27,456	$2,288	$11

The below special assessment / loan information has been supplied by the Client and has not been independently verified. The amount and timing of them have been based on the Client's information supplied to the reserve analyst.

Special Assessments

The Board has stated there are no approved special assessments planned or approved for fiscal year 2017.

Loans

The Board has stated there are no plans to obtain any type of loan for fiscal year 2017.

Included Components

Reserve expenses for components are major expenses that occur other than annually and which must be budgeted for in advance in order to provide the necessary funds in time for their occurrence. Reserve expenses are reasonably predictable both in terms of frequency and cost. However, they may include significant assets which have an indeterminable but potential liability which may be demonstrated as a likely occurrence. They are expenses that when incurred would have a significant impact on the smooth operation of the budgetary process from one year to the next if they were not reserved for in advance.

A common concern when beginning this process is what components are to be included and funded for in the Reserve Study. Nationally recognized Reserve Study Standards indicates reserve components need to meet the following criteria:

- The component is owned and maintained by the Association/Organization
- The component is not already covered in a maintenance contract
- The component has a limited life expectancy
- The component has a reasonably defined remaining useful life
- The cost is above the minimum Client imposed expense threshold

Excluded Common Area Components

Some common area components may have been left out of the study or included in the component list as an "excluded item" and not been funded for. These components will typically fall into one or more of the categories listed below.

- Below Threshold Costs - Component repair and/or replacement costs that are deemed too small to be considered capital expenses and are typically included in the operational or maintenance budget have not been funded for in this study. Minimal threshold costs are determined by the Client or by the Reserve Analyst as deemed appropriate and typical.

- Operational Expenses - These occur at least annually and can be effectively budgeted for each year. They are characterized as being reasonably predictable both in terms of frequency and cost. Operational expenses include all minor expenses which would not otherwise adversely affect an operational budget from one year to the next.

- Very Long or Unpredictable Useful Life Expectancy - Components which, when properly maintained, have a very long useful life and which cannot be accurately predicted, have been excluded from this reserve report.

- Unit Improvements - Improvements made to the property that fall within the Governing Documents' unit description summary (owners responsibility), are not typically considered to be community owned or the responsibility of the association.

- Other Non-Association/Organization Owned - Improvements installed on the property but which are owned by other parties such as governmental agencies, utility companies, the US Postal Service, etc., are not included in this reserve study. The replacement and maintenance of these improvements are not typically the responsibility of the Association/Organization.

*Note that details regarding each component can be found in the Component Detail section of this reserve study. Additionally at the end of this report is a Component Index which alphabetically list the component and their respective page in the report.

Description	Date in Service	Replacement Year	Useful Life	Adjustment	Remaining	Units	Unit Cost	Current Cost
Pond Large- Liner- Install	1997	2018	20	0	1	18,131 sf	2.75	49,860
INVALID_CATGROUP- Total								$49,860
Master								
Benches- Repair/Replacement	1997	2022	25	0	5	8 ea	350.00	2,800
Bridge Pond Replace	2014	2039	25	0	22		5,775.00	5,775
Bridges 1 2 and 3 Replace	2014	2039	25	0	22		23,925.00	23,925
Bridges Paint Wood Surfaces	2014	2019	5	0	2		1,260.00	1,260
Clock Tower Paint / Repair Contingency	2016	2019	3	0	2	1 ls	2,500.00	2,500
Creel Pump Creek- Refurbish	2014	2029	15	0	12	1 ls	11,869.00	11,869
Entry Larch Sign & Monument- Refurbish	1997	2022	25	0	5	1 ls	1,500.00	1,500
Fence- Metal/Brick- Ph. X- Replace	1997	2037	40	0	20		12,450.00	12,450
Fence- Wood- Paint/Stain	*Unfunded*							
Fences Along Lions Park (Two Sides) Replace	1997	2019	22	0	2	1,118 lf	27.00	30,186
GVW & Walking Paths Concrete Surfaces 5..	1997	2017	5	0	0	1,974 sf	12.00	23,699
Gate Entry Access- Ph. X- Replace	2007	2031	24	0	14	2 ea	2,800.00	5,600
Gate Operators- Ph. X- Replace	2007	2019	12	0	2	4 ea	4,000.00	16,000
Gates- Ph. X- Replace	2007	2031	24	0	14	2 ea	12,000.00	24,000
Gazebo- Major Renovation	2000	2030	30	0	13	1 ls	23,927.00	23,927
Gazebo- Paint	2012	2018	6	0	1	1 ls	1,722.00	1,722
Gazebo Roof- Replace	2007	2030	23	0	13	6 squares	440.00	2,640
Irrigation Controllers 20% Replace	2016	2019	3	0	2	4 ea	700.00	2,940
Irrrigation Backflow Devices- 11% replace	1997	2017	2	0	0	1 ea	750.00	751
Lights Pole Fixtures Phases I & II- Replace	1997	2017	20	0	0	6 ea	750.00	4,500
Lights Pole Phases I & II- Replace	1997	2037	40	0	20	6 ea	1,750.00	10,500
Pavement Overlay Master	1997	2025	30	-2	8	54,275 sf	2.20	119,405
Pavement Seal Coat Master	2013	2019	6	0	2	54,275 sf	0.23	12,483
Pond Fountain Pump- Replace	2014	2017	3	0	0	1 ea	1,259.00	1,259
Pond Circulation Pump 1 HP	2008	2020	12	0	3	1 ea	5,245.00	5,245
Pond Small- Liner- Remove and Replace	1997	2018	20	0	1	3,510 sf	2.75	9,652
Slope- Maintenance	*Unfunded*							
South Creekside Tree Project- Cottonwood..	2017	2018	1	0	1	1 ls	14,077.00	14,077
South Creekside Tree Project- Cottonwood..	2018	2018	1	0	1	1 ls	14,000.00	14,000
South Creekside Tree Project- Cottonwood..	2019	2019	1	0	2	1 ls	12,750.00	12,750
South Creekside Tree Project- Cottonwood..	2020	2020	1	0	3	1 ls	11,900.00	11,900
South Creekside Tree Project- Cottonwood..	2021	2021	1	0	4	1 ls	11,050.00	11,050
South Creekside Tree Project- Cottonwood..	2022	2022	1	0	5	1 ls	10,200.00	10,200
South Creekside Tree Project- Replacemen..	2018	2018	1	0	1	1 ls	2,000.00	2,000
South Creekside Tree Project- Replacemen..	2017	2018	1	0	1	1 ls	2,000.00	2,000
South Creekside Tree Project- Replacemen..	2019	2019	1	0	2	1 ls	2,000.00	2,000
South Creekside Tree Project- Replacemen..	2020	2020	1	0	3	1 ls	2,000.00	2,000

Description	Date in Service	Replacement Year	Useful Life	Adjustment	Remaining	Units	Unit Cost	Current Cost
Master continued...								
South Creekside Tree Project- Replacemen..	2021	2021	1	0	4	1 ls	2,000.00	2,000
South Creekside Tree Project- Replacemen..	2022	2022	1	0	5	1 ls	2,000.00	2,000
South Creekside Tree Project- Willow Tree ..	2017	2018	1	0	1	1 ls	2,000.00	2,000
South Creekside Tree Project- Willow Tree ..	2018	2018	1	0	1	1 ls	2,000.00	2,000
South Creekside Tree Project- Willow Tree ..	2019	2019	1	0	2	1 ls	2,000.00	2,000
South Creekside Tree Project- Willow Tree ..	2020	2020	1	0	3	1 ls	2,000.00	2,000
Storm Water System Drains & Catch Basins..	1997	2018	3	0	1	1 ls	8,000.00	8,000
Streetside Signs- Replace	2006	2031	25	0	14		39,900.00	39,900
Sump Pump 2 HP- High Water / Ground W..	2015	2027	12	0	10		11,817.00	11,817
Sump Pump 3/4 HP- Pond Fill- Replace	2007	2019	12	0	2	1 ea	5,317.00	5,317
Sump Pump Backup Generator- Replace	2007	2027	20	0	10	1 ea	9,500.00	9,500
Tree Care- Roots and Trimming, etc	2016	2019	3	0	2	1 ls	40,000.00	40,000
Underground Sprinkler Pipe Master Areas ..	1997	2022	5	20	5		1,002,321.48	50,116
Walking Paths Bark Dust & Chip Rock Repla..	2016	2019	3	0	2	1 ls	3,300.00	3,300
Well Clock Tower-Repair Contingency	2016	2022	6	0	5	1 ls	2,000.00	2,000
Well Pump- Replace	2009	2019	10	0	2	1 ea	11,349.00	11,349
Master- Total								$631,864
Phase I								
Mailbox Structures- Ph. I- Replace	1997	2021	24	0	4	2 ea	1,200.00	2,400
Pavement Overlay Phase I	1997	2029	30	2	12	26,424 sf	2.20	58,133
Pavement Seal Coat Phase I	2011	2017	6	0	0	26,424 sf	0.23	6,078
UG Sprinkler Pipe- Ph. I- Replace 10%	1997	2022	5	20	5	988 sf	2.50	2,470
Phase I- Total								$69,080
Phase II								
Mailbox Structures- Ph. II- Replace	1998	2022	24	0	5	3 ea	1,200.00	3,600
Pavement Overlay Phase II	1998	2029	30	1	12	12,508 sf	2.20	27,518
Pavement Seal Coat Phase II	2011	2017	6	0	0	12,508 sf	0.23	2,877
UG Sprinkler Pipe- Ph. II- Replace 10%	1998	2023	5	20	6	1,150 sf	2.50	2,875
Phase II- Total								$36,869
Phase V								
Mailbox Structures- Ph. V- Replace	1999	2023	24	0	6	2 ea	1,200.00	2,400
Pavement Overlay Phase V	1999	2028	30	-1	11	39,584 sf	2.20	87,085
Pavement Seal Coat Phase V	2016	2022	6	0	5	39,584 sf	0.23	9,104
UG Sprinkler Pipe- V- Replace 10%	1999	2024	5	20	7	1,711 sf	2.50	4,278
Phase V- Total								$102,867

Villages of Garrison Creek HOA
The Component List

Description	Date in Service	Replacement Year	Useful Life	Adjustment	Remaining	Units	Unit Cost	Current Cost
Phase VI								
Mailbox Structures- Ph. VI- Replace	2000	2024	24	0	7	2 ea	1,200.00	2,400
Pavement Overlay Phase VI	2000	2023	30	-7	6	44,112 sf	2.20	97,046
Pavement Seal Coat Phase VI	2011	2017	6	0	0	44,112 sf	0.23	10,146
UG Sprinkler Pipe- VI- Replace 10%	2000	2025	5	20	8	2,620 sf	2.50	6,550
Phase VI- Total								$116,142
Phase VII								
Mailbox Structures- Ph. VII- Replace	2003	2027	24	0	10	3 ea	1,200.00	3,600
Pavement Overlay Phase VII	2003	2030	30	-3	13	46,140 sf	2.20	101,508
Pavement Seal Coat Phase VII	2012	2018	6	0	1	46,140 sf	0.23	10,612
UG Sprinkler Pipe- VII- Replace 10%	2003	2028	5	20	11	2,655 sf	2.50	6,638
Phase VII- Total								$122,358
Phase VIII								
Mailbox Structures- Ph. VIII- Replace	2010	2034	24	0	17	3 ea	1,200.00	3,600
Pavement Overlay Phase VIII	2010	2041	30	1	24	44,380 sf	2.20	97,636
Pavement Seal Coat Phase VIII	2010	2017	6	0	0	44,380 sf	0.23	10,207
UG Sprinkler Pipe- VIII- Replace 10%	2010	2035	5	20	18	1,696 sf	2.50	4,242
Phase VIII- Total								$115,686
Phase IX								
Bus Stop- Ph. IX- Replace	2015	2055	40	0	38	1 ls	1,600.00	0
Concete- Curb Ph. IX- Repair	2015	2055	40	0	38	0 lf	25.00	0
Mailbox Clusters- Ph. IX- Replace	2015	2040	25	0	23	3 ea	1,500.00	4,500
Pavement Overlay Phase IX	2015	2045	30	0	28	43,822 sf	2.20	96,408
Pavement Seal Coat Phase IX	2015	2021	6	0	4	43,822 sf	0.23	10,079
UG Sprinkler Pipe- IX- Replace 10%	2015	2040	5	20	23	1,700 sf	2.50	4,250
Phase IX- Total								$115,237
Phase X								
Concrete Surfaces- Ph. X- 3% Repair	2007	2027	5	15	10	122 sf	12.00	1,471
Gates- Ph. X- Refurbish	2016	2017	1	0	0	1 ls	1,300.00	1,300
Mailbox Clusters- Ph. X- Replace	2007	2032	25	0	15	2 ea	1,750.00	3,500
Pavement Overlay Phase X	2007	2036	30	-1	19	20,964 sf	2.20	46,121
Pavement Seal Coat Phase X	2012	2018	6	0	1	20,964 sf	0.23	4,822
Sign- Entry- Ph. X- Replace	2007	2020	13	0	3	2 ea	900.00	1,800
UG Sprinkler Pipe- X- Replace 10%	2007	2032	5	20	15	2,400 sf	2.50	6,000
Phase X- Total								$65,013

Villages of Garrison Creek HOA
The Component List

Description	Date in Service	Replacement Year	Useful Life	Adjustment	Remaining	Units	Unit Cost	Current Cost
Total Asset Summary								$1,424,978

The below components have been excluded from funding in this reserve study. Note that the inclusion of any of these items at a later date via a revision or update to this study will impact the funding strategies developed by the Reserve Analyst.

Long Life Components

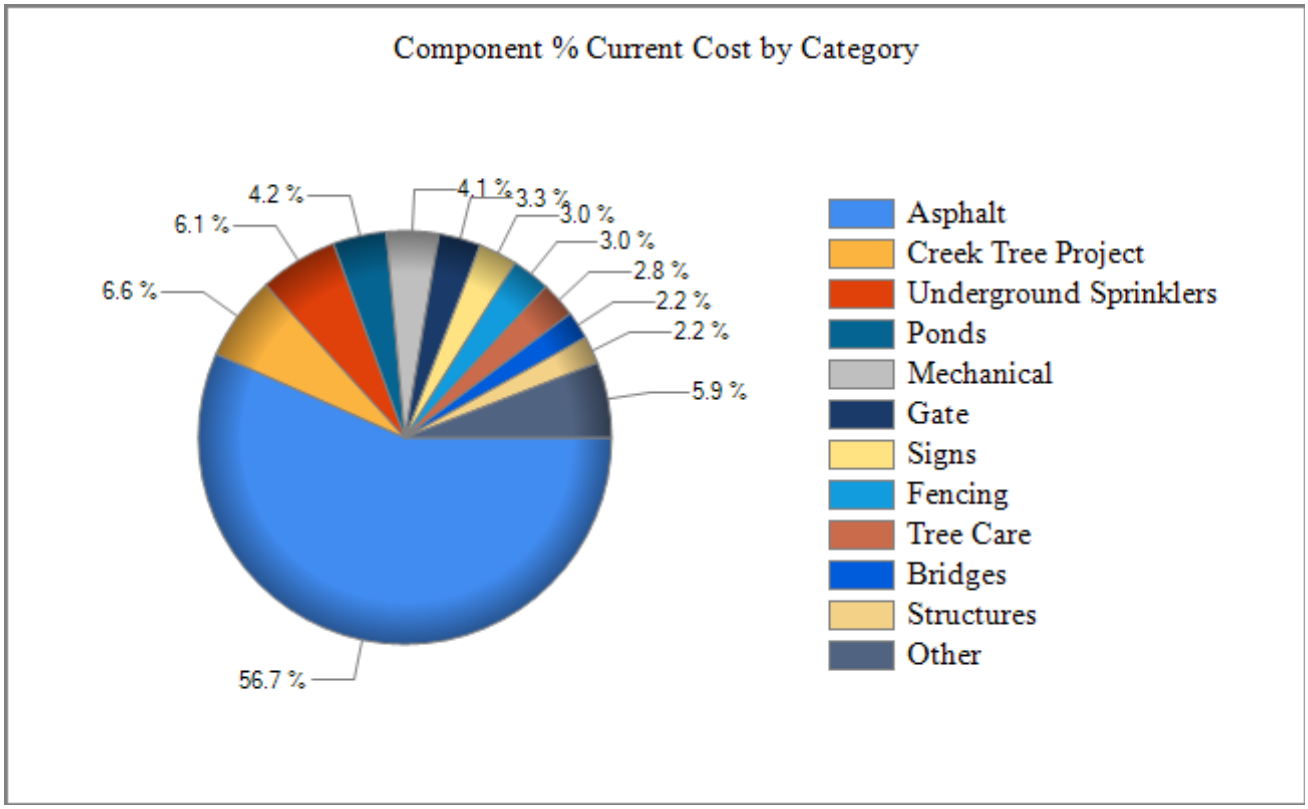
The below components are long life components at this time, have no predictable useful life, predictable remaining useful life or associated costs within the timeframe of this reserve study.

1. Electrical System - If at a future date updates to the electrical system appear needed we recommend updating future reserve studies with the estimated cost to do so after bids have been obtained.

2. Plumbing System - The Client has indicated there have been no issues with the plumbing in community. Due to the unpredictability of the useful life of plumbing (water & sewer lines) and the lack of a historical repair record this has not been funded for at this time. Should a pattern of repairs emerge in the future we suggest incorporating this into future reserve studies.

3. Retaining Walls - If properly installed rock/concrete/paver retaining walls are a long life component with no predictable useful life. We suggest inspecting retaining walls annually and consult with a qualified professional if there appears to be areas of failure. Should a history of expenses occur we suggest incorporating them into future reserve studies.

Villages of Garrison Creek HOA
Current Cost by Category Chart



The above chart illustrates the current cost breakdown percentage of the Component Categories in this reserve study. Special attention should be given to those component categories which take up a bulk of the % of the current cost as these may require significant planning to adequately budget for their replacement. These large expenses may be well into the future during "Peak Year" cycles. Refer to the Cash Flow Projections and the Annual Expenditure Report for the projected timeline of expected expenditures.

There is no right or wrong answer to “How Much Should We Reserve? as the reserve contributions in all the funding plans in this study are based on different funding goals. Each Client has different risk tolerances and challenges in enacting whatever funding plan is most appropriate to them. This being said any funding plan that projects the reserve account balance to dip to a deficit would not be appropriate or fiscally responsible as future special assessments, loans or deferred maintains are typically the outcome of any funding plan that projects a deficit in the reserve account or a Percent Funded that remains in a Low 0-30% funded range for an extended period of time. While a reserve account balance may remain in a low funding level for many years or even decades the large expense years known as Peak Expense Years, when infrequent but large component projects are projected, will typically bring to light the true financial health of the reserve account. There are four basic funding plans most commonly utilized and accepted in the reserve study industry, they are outlined below.

Full Funding Plan

Given that the basis of funding for reserves is to distribute the costs of the replacements over the lives of the components in question, it follows that the ideal level of reserves would be proportionately related to those lives and costs. Example - If there is a component with an expected estimated useful life of ten years, the Client would set aside approximately one-tenth of the replacement cost each year (ignoring interest and inflation for this example). At the end of three years, one would expect that three-tenths of the replacement cost to have accumulated, and if so, that component would be "fully-funded." This model is important in that it is a measure of the adequacy of reserves at any one point of time, and is independent of any particular method which may have been used for past funding or may be under consideration for future funding. The formula is based on current replacement cost, and is a measure in time, independent of future inflationary or investment factors. When the total accumulated reserves for all components meet this criteria, its reserves are "fully-funded."

Baseline Funding Plan

The goal of this funding method is to keep the reserve cash balance above zero and is considered a minimum suggested allocation rate as anything less will likely lead to a deficit in the reserve account at some point in the future. This means that while each individual component may not be fully funded, the reserve balance overall does not drop below zero during the projected period. Following this funding method carries a higher risk for reliance on loans and special assessments as even a minor reduction in a component's remaining useful life can result in a deficit in the reserve cash balance specifically in years when cost are substantial.

Threshold Funding Plan

This method is based on the baseline funding concept. The minimum reserve cash balance for threshold funding, however, is set at any predetermined dollar amount by the Client or Reserve Analyst. Any funding plan between a Baseline and Full Funding is considered a Threshold Funding Plan.

Statutory Funding Plans

This method is based on local statutes. Per Washington State statutory requirements all reserve studies for common interest communities must include a Baseline Funding Plan, a Reserve Analyst ‘s Recommended Funding Plan and a Funding Plan that results in a 100% funded reserve balance within 30 years. Note that reserve studies completed for other types of Organizations/Clients are not bound by these laws.

Percent funded is a calculation of how much is in the reserve account versus an ideal amount known as the Fully Funded Balance. The different ranges in levels of funding are explained below.

71-100 % Funded - Good

At this level, the the reserve balance is considered to be at a good level of funding. The risk for reliance on special assessments, loans and deferred maintenance is minimized. While the goal is to reach and remain at the 100% funded mark the actual funding level will likely fluctuate above and below 100% due to changing component expenses in any given period of time covered in this reserve study.

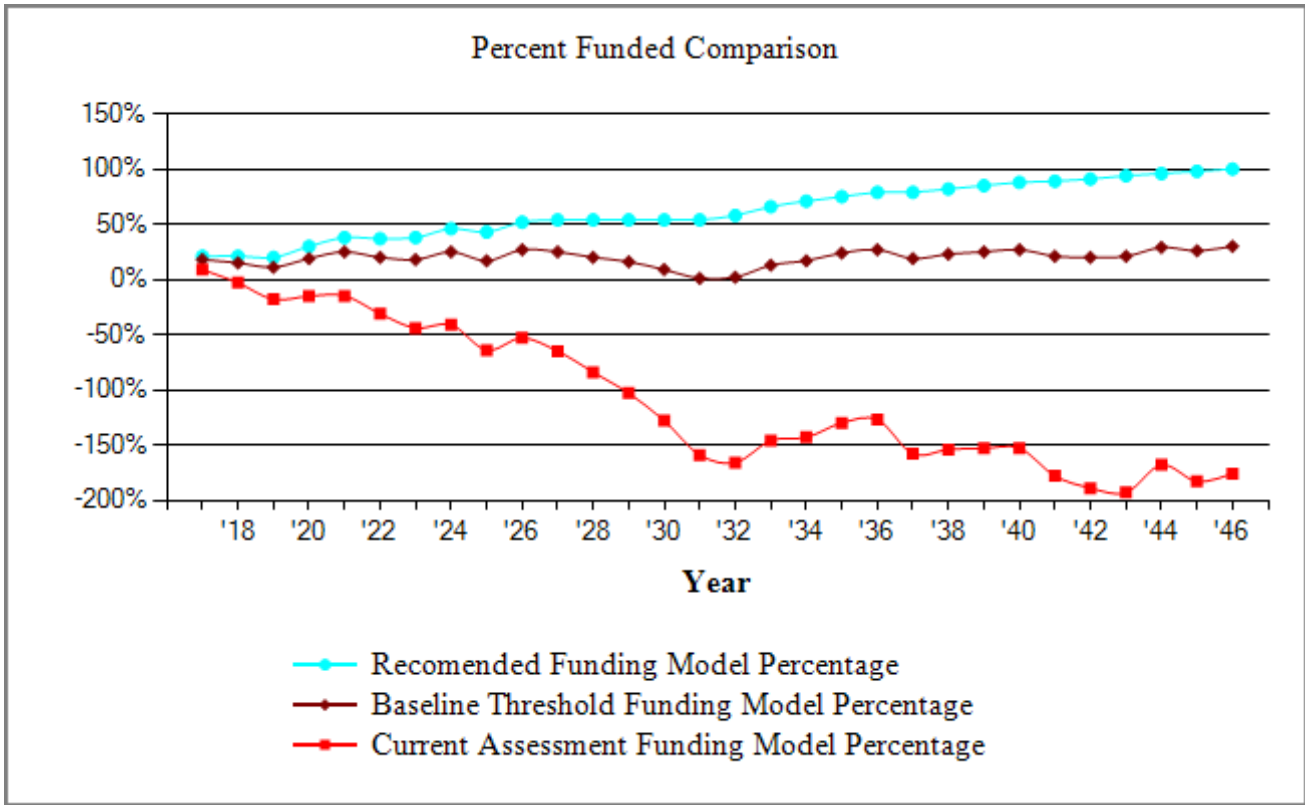
31 – 70 % Funded - Fair

A fairly funded reserve account is typically one on the right path to becoming fully funded but one that can also run into trouble if large expenses arise such as unexpected component failures or rapidly rising costs, specifically in years when large expenditures come to fruition. Additionally it is important that the Client is vigilant with their goal to reach a higher percent funded level as there is often pressure to reduce the reserve allocation rate or utilize money elsewhere as the reserve account balance grows to a level which is perceived to be large. Boards often have difficulties in continuing with the longer term goals in years of economic downturn when when there is greater difficulty in continuing to allocation to the reserve account with regular annual increases to offset inflationary factors.

0 – 30 % Funded – Low

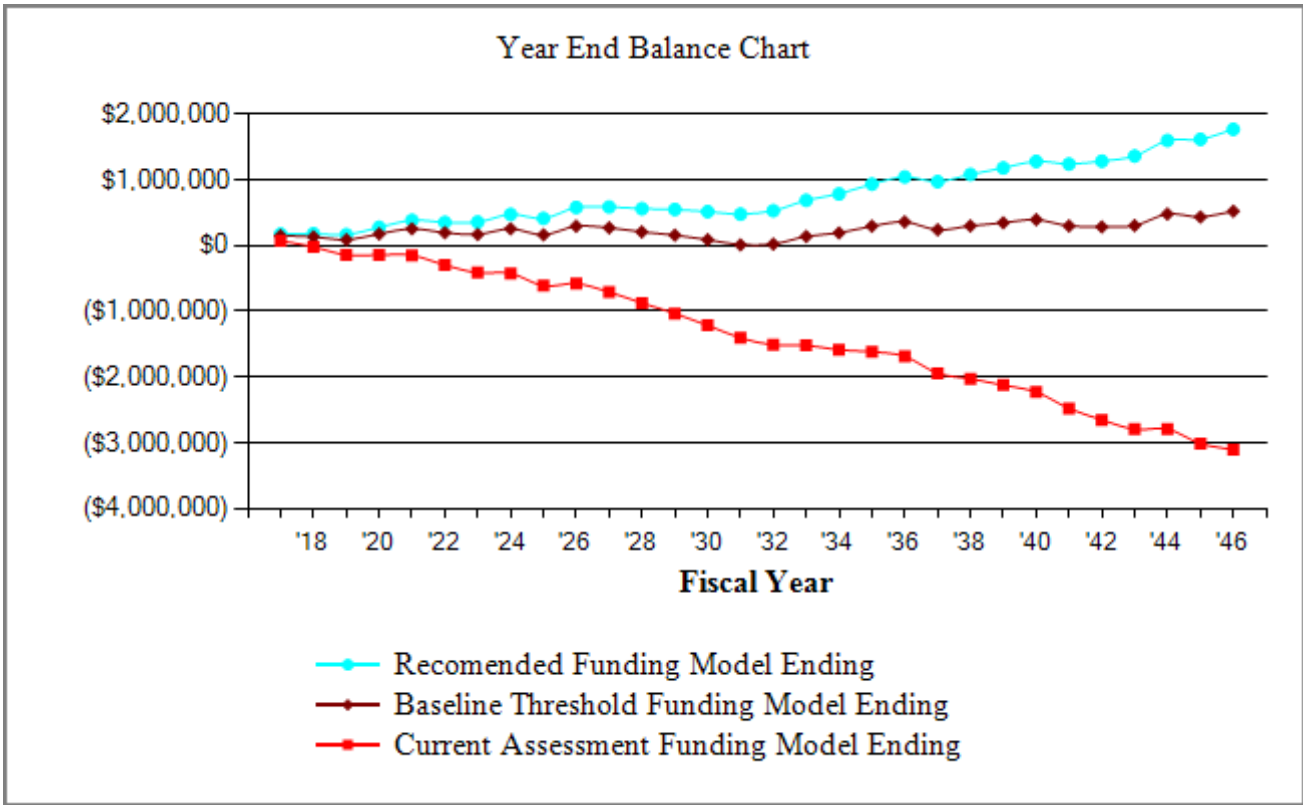
A low funding level often forces an Association/Organization to rely on special assessments and/or loans. With insufficient funds the Client may not be able to meet predictable component project expenditures. At this level of funding many Clients choose to defer component projects which results in condition deficiencies and over time will cause significant deferred maintenance issues which in turn hurt property values and aestetic appeal of the property. Note that Associations/Organizations can often stay within a poor funding range for many years before any apparent negative impact. The reality of the financial position of the Association/Organization will often become apparent in "peak" expense years when one or several large expense component projects occur (e.g. roofing, asphalt, siding, windows) which will require special assessments to be implemented or loans secured.

Villages of Garrison Creek HOA
Percent Funded Chart



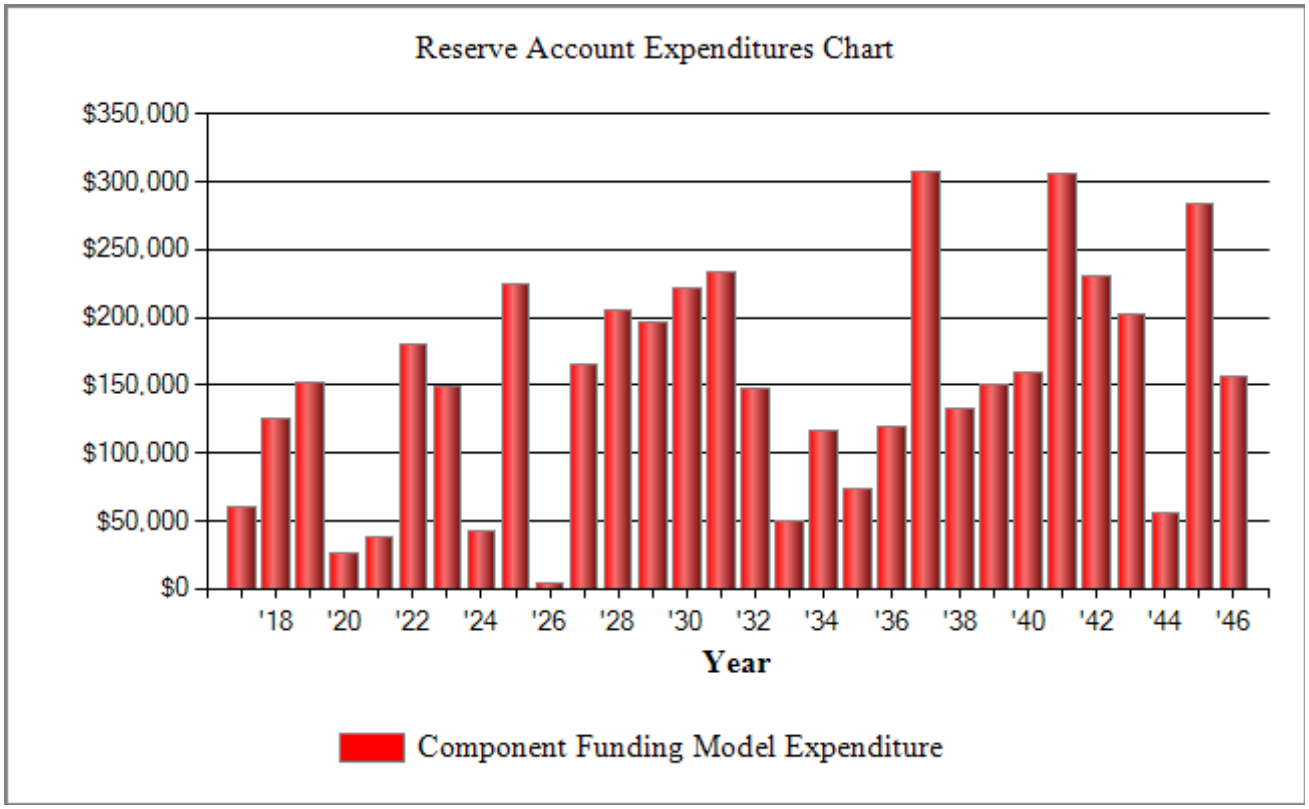
The chart above compares three funding models (Recommended Funding Model, Baseline Funding Model and the Current Funding Model) by the percentage funded, annually over the 30 year timeframe of this reserve study. Note that the Recommended Funding Plan increases the Client's reserve account Percent Funded Level to 100% funding within the timeframe of this study. Once this 100% funded level is reached it is a good indicator that the Client is on track to meet its future obligations with minimal risk of reliance on loans/special assessments.

Villages of Garrison Creek HOA
Reserve Acct. Balance Chart



The chart above compares the annual year end balance of the funding models (Recommended, Baseline & Current Funding Models) over the 30 years covered in this reserve study. Note than even though balances cannot realistically be in the negative territory these have been shown as a visual for the level of deficiency.

Villages of Garrison Creek HOA
Reserve Account Expenditures Chart



The above chart provides a visual of the reserve account projected expenditures over the 30 years covered in this study. We suggest making a note of large expenditure years (peak years) when there will be significant projected expenditures related to one or more costly component that will require repair/replacement. These large but infrequent component expenses during "peak" years are typically the most difficult to budget for as they are often overlooked or ignored due to the perception that the expenses are far in the future and there will be time to budget for them at a later date.

Villages of Garrison Creek HOA
Recommended Funding- Summary

Report Date	September 29, 2016
Account Number	15551
Version	FINAL
Budget Year Beginning	January 01, 2017
Budget Year Ending	December 31, 2017
Total Units	207

Report Parameters

Inflation	3.00%
Annual Assessment Increase	3.00%
Interest Rate on Reserve Deposit	0.70%
Tax Rate Included in Interest Rate	
2017 Beginning Balance	$106,697

We have developed a funding plan which will help steer the community into a high funded range over a period of 30 years. This funding plan is very realistic for the community and helps to guide the community out of the current poor/fair funding range in a relatively short period of time. This Recommended Funding Plan requires the Association to allocate the recommended allocation amount into the reserve account with annual increases over the 30 years covered in this study. In the following pages you will find the recommended allocation rates to the reserve account, expenditures expected and the percent funded of the community if following this Recommended Funding Plan.

This Recommended Funding Plan Takes into Account 4 Basic Principles:

1. There are adequate reserves when needed
2. The budget should remain stable across years of changing Membership and Boards
3. The costs are fairly distributed to the membership
4. The funding plan must allow the Association / Board to be fiscally responsible

Recomended Funding Model Summary of Calculations

Required Month Contribution	$10,566.67
$51.05 per unit monthly	
Average Net Month Interest Earned	$67.00
Total Month Allocation to Reserves	$10,633.67
$51.37 per unit monthly	

Villages of Garrison Creek HOA
Recommended Funding- Projections

Beginning Balance: $106,697

Year	Current Cost	Annual Contribution	Annual Interest	Annual Expenditures	Projected Ending Reserves	Fully Funded Reserves	Percent Funded
2017	1,424,978	126,800	804	60,816	173,485	817,919	21%
2018	1,464,908	130,604	839	124,625	180,304	856,004	21%
2019	1,469,959	134,522	711	151,894	163,643	813,527	20%
2020	1,495,571	138,558	1,490	26,395	277,296	915,689	30%
2021	1,523,303	142,715	2,220	38,407	383,824	1,009,721	38%
2022	1,555,195	146,996	1,985	180,676	352,128	962,887	37%
2023	1,589,285	151,406	2,002	149,009	356,527	936,736	38%
2024	1,636,963	155,948	2,799	42,300	472,974	1,035,544	46%
2025	1,686,072	160,626	2,359	223,896	412,064	953,363	43%
2026	1,736,654	165,445	3,499	3,339	577,669	1,100,601	52%
2027	1,788,754	170,409	3,545	165,036	586,587	1,089,675	54%
2028	1,842,417	175,521	3,341	205,749	559,700	1,041,639	54%
2029	1,897,689	180,786	3,235	196,854	546,868	1,006,723	54%
2030	1,954,620	186,210	2,996	220,968	515,106	949,452	54%
2031	2,013,258	191,796	2,709	233,076	476,535	882,563	54%
2032	2,073,656	197,550	3,057	148,100	529,043	907,720	58%
2033	2,135,866	203,477	4,134	50,456	686,197	1,038,740	66%
2034	2,199,942	209,581	4,799	116,166	784,412	1,111,975	71%
2035	2,265,940	215,869	5,810	73,902	932,189	1,238,289	75%
2036	2,333,918	222,345	6,557	118,809	1,042,281	1,325,640	79%
2037	2,403,936	229,015	6,034	307,002	970,328	1,228,532	79%
2038	2,476,054	235,885	6,775	133,169	1,079,820	1,312,939	82%
2039	2,550,335	242,962	7,450	150,479	1,179,753	1,387,590	85%
2040	2,626,845	250,251	8,117	159,242	1,278,879	1,459,130	88%
2041	2,705,651	257,758	7,816	305,390	1,239,063	1,390,080	89%
2042	2,786,820	265,491	8,090	230,758	1,281,886	1,402,747	91%
2043	2,870,425	273,456	8,616	202,944	1,361,014	1,450,703	94%
2044	2,956,538	281,659	10,235	56,001	1,596,907	1,657,896	96%
2045	3,045,234	290,109	10,326	283,477	1,613,865	1,643,644	98%
2046	3,136,591	298,813	11,368	156,816	1,767,229	1,766,266	100%

Villages of Garrison Creek HOA
Baseline Funding- Summary

Report Date	September 29, 2016
Account Number	15551
Version	FINAL
Budget Year Beginning	January 01, 2017
Budget Year Ending	December 31, 2017
Total Units	207

Report Parameters

Inflation	3.00%
Annual Assessment Increase	3.00%
Interest Rate on Reserve Deposit	0.70%
Tax Rate Included in Interest Rate	
2017 Beginning Balance	$106,697

The Baseline funding plan has been included as it is a requirement of Washington State RCW's for the Reserve Study contents.

This is a bare minimum approach which has a goal of only keeping the reserve account balance above $0 and long term does not place the community in a good funding range (above 70%) for much of the time period over the 30 years covered in this reserve study. We do not suggest following this funding method due to the higher risk for reliance on special assessments and loans to fund these expected expenditures.

Baseline Threshold Funding Model Summary of Calculations

Required Month Contribution	$8,575.21
$41.43 per unit monthly	
Average Net Month Interest Earned	$59.43
Total Month Allocation to Reserves	$8,634.65
$41.71 per unit monthly	

Villages of Garrison Creek HOA
Baseline Funding- Projections

Beginning Balance: $106,697

Year	Current Cost	Annual Contribution	Annual Interest	Annual Expenditures	Projected Ending Reserves	Fully Funded Reserves	Percent Funded
2017	1,424,978	102,903	713	60,816	149,497	817,919	18%
2018	1,464,908	105,990	577	124,625	131,439	856,004	15%
2019	1,469,959	109,169	271	151,894	88,986	813,527	11%
2020	1,495,571	112,444	867	26,395	175,903	915,689	19%
2021	1,523,303	115,818	1,406	38,407	254,719	1,009,721	25%
2022	1,555,195	119,292	973	180,676	194,308	962,887	20%
2023	1,589,285	122,871	785	149,009	168,955	936,736	18%
2024	1,636,963	126,557	1,370	42,300	254,582	1,035,544	25%
2025	1,686,072	130,354	711	223,896	161,751	953,363	17%
2026	1,736,654	134,265	1,623	3,339	294,299	1,100,601	27%
2027	1,788,754	138,292	1,433	165,036	268,989	1,089,675	25%
2028	1,842,417	142,441	985	205,749	206,666	1,041,639	20%
2029	1,897,689	146,714	626	196,854	157,154	1,006,723	16%
2030	1,954,620	151,116	126	220,968	87,427	949,452	9%
2031	2,013,258	155,649		233,076	10,000	882,563	1%
2032	2,073,656	160,319		148,100	22,220	907,720	2%
2033	2,135,866	165,128	429	50,456	137,321	1,038,740	13%
2034	2,199,942	170,082	795	116,166	192,032	1,111,975	17%
2035	2,265,940	175,185	1,495	73,902	294,811	1,238,289	24%
2036	2,333,918	180,440	1,922	118,809	358,364	1,325,640	27%
2037	2,403,936	185,854	1,067	307,002	238,282	1,228,532	19%
2038	2,476,054	191,429	1,466	133,169	298,008	1,312,939	23%
2039	2,550,335	197,172	1,785	150,479	346,487	1,387,590	25%
2040	2,626,845	203,087	2,087	159,242	392,419	1,459,130	27%
2041	2,705,651	209,180	1,406	305,390	297,615	1,390,080	21%
2042	2,786,820	215,455	1,288	230,758	283,600	1,402,747	20%
2043	2,870,425	221,919	1,410	202,944	303,985	1,450,703	21%
2044	2,956,538	228,576	2,610	56,001	479,170	1,657,896	29%
2045	3,045,234	235,434	2,269	283,477	433,396	1,643,644	26%
2046	3,136,591	242,497	2,864	156,816	521,940	1,766,266	30%

Report Date	September 29, 2016
Account Number	15551
Version	FINAL
Budget Year Beginning	January 01, 2017
Budget Year Ending	December 31, 2017
Total Units	207

Report Parameters

Inflation	3.00%
Annual Assessment Increase	3.00%
Interest Rate on Reserve Deposit	0.70%
Tax Rate Included in Interest Rate	
2017 Beginning Balance	$106,697

The Current Funding Model does not adequately fund the reserve account within the timeframe of this reserve study. This funding model assumes a 3% increase to the Current reserve allocation rate annually which still does not meet the projected obligations over the 30 years of this study. Continuing with this funding model will likely lead to a high risk for reliance on special assessments, loans and/or deferred maintenance. Note that while reserve account balance and percent funded could not realistically be in a negative territory it has been reported this way as a visual representation of the amount that the community is projected to be in shortfall.

Current Assessment Funding Model Summary of Calculations

Required Month Contribution	$2,288.00
$11.05 per unit monthly	
Average Net Month Interest Earned	$35.54
Total Month Allocation to Reserves	$2,323.54
$11.22 per unit monthly	

Villages of Garrison Creek HOA
Current Funding- Projections

Beginning Balance: $106,697

Year	Current Cost	Annual Contribution	Annual Interest	Annual Expenditures	Projected Ending Reserves	Fully Funded Reserves	Percent Funded
2017	1,424,978	27,456	427	60,816	73,764	817,919	9%
2018	1,464,908	28,280		124,625	-22,581	856,004	-3%
2019	1,469,959	29,128		151,894	-145,347	813,527	-18%
2020	1,495,571	30,002		26,395	-141,740	915,689	-15%
2021	1,523,303	30,902		38,407	-149,245	1,009,721	-15%
2022	1,555,195	31,829		180,676	-298,092	962,887	-31%
2023	1,589,285	32,784		149,009	-414,318	936,736	-44%
2024	1,636,963	33,767		42,300	-422,850	1,035,544	-41%
2025	1,686,072	34,780		223,896	-611,966	953,363	-64%
2026	1,736,654	35,824		3,339	-579,481	1,100,601	-53%
2027	1,788,754	36,899		165,036	-707,618	1,089,675	-65%
2028	1,842,417	38,006		205,749	-875,362	1,041,639	-84%
2029	1,897,689	39,146		196,854	-1,033,070	1,006,723	-103%
2030	1,954,620	40,320		220,968	-1,213,718	949,452	-128%
2031	2,013,258	41,530		233,076	-1,405,265	882,563	-159%
2032	2,073,656	42,776		148,100	-1,510,589	907,720	-166%
2033	2,135,866	44,059		50,456	-1,516,986	1,038,740	-146%
2034	2,199,942	45,381		116,166	-1,587,772	1,111,975	-143%
2035	2,265,940	46,742		73,902	-1,614,931	1,238,289	-130%
2036	2,333,918	48,144		118,809	-1,685,596	1,325,640	-127%
2037	2,403,936	49,589		307,002	-1,943,009	1,228,532	-158%
2038	2,476,054	51,076		133,169	-2,025,101	1,312,939	-154%
2039	2,550,335	52,609		150,479	-2,122,971	1,387,590	-153%
2040	2,626,845	54,187		159,242	-2,228,026	1,459,130	-153%
2041	2,705,651	55,812		305,390	-2,477,604	1,390,080	-178%
2042	2,786,820	57,487		230,758	-2,650,876	1,402,747	-189%
2043	2,870,425	59,211		202,944	-2,794,608	1,450,703	-193%
2044	2,956,538	60,988		56,001	-2,789,621	1,657,896	-168%
2045	3,045,234	62,817		283,477	-3,010,281	1,643,644	-183%
2046	3,136,591	64,702		156,816	-3,102,395	1,766,266	-176%

Villages of Garrison Creek HOA
Annual Expenditure Report

Description	Expenditures
Replacement Year 2017	
Gates- Ph. X- Refurbish	1,300
GVW & Walking Paths Concrete Surfaces 5% Repair	23,699
Irrrigation Backflow Devices- 11% replace	751
Lights Pole Fixtures Phases I & II- Replace	4,500
Pavement Seal Coat Phase I	6,078
Pavement Seal Coat Phase II	2,877
Pavement Seal Coat Phase VI	10,146
Pavement Seal Coat Phase VIII	10,207
Pond Fountain Pump- Replace	1,259
Total for 2017	**$60,816**
Replacement Year 2018	
Gates- Ph. X- Refurbish	1,339
Gazebo- Paint	1,774
Pavement Seal Coat Phase VII	10,931
Pavement Seal Coat Phase X	4,966
Pond Large- Liner- Install	51,356
Pond Small- Liner- Remove and Replace	9,942
South Creekside Tree Project- Cottonwood Tree Removal	14,077
South Creekside Tree Project- Cottonwood Tree Removal	14,000
South Creekside Tree Project- Replacement Tree Planting	2,000
South Creekside Tree Project- Replacement Tree Planting	2,000
South Creekside Tree Project- Willow Tree Thinning	2,000
South Creekside Tree Project- Willow Tree Thinning	2,000
Storm Water System Drains & Catch Basins Maintenance	8,240
Total for 2018	**$124,625**
Replacement Year 2019	
Bridges Paint Wood Surfaces	1,337
Clock Tower Paint / Repair Contingency	2,652
Fences Along Lions Park (Two Sides) Replace	32,024
Gate Operators- Ph. X- Replace	16,974
Gates- Ph. X- Refurbish	1,379
Irrigation Controllers 20% Replace	3,119

Description	Expenditures
Replacement Year 2019 continued...	
Irrrigation Backflow Devices- 11% replace	796
Pavement Seal Coat Master	13,243
South Creekside Tree Project- Cottonwood Tree Removal	12,750
South Creekside Tree Project- Replacement Tree Planting	2,000
South Creekside Tree Project- Willow Tree Thinning	2,000
Sump Pump 3/4 HP- Pond Fill- Replace	5,641
Tree Care- Roots and Trimming, etc	42,436
Walking Paths Bark Dust & Chip Rock Replacement 1/4 per yr	3,501
Well Pump- Replace	12,040
Total for 2019	**$151,894**
Replacement Year 2020	
Gates- Ph. X- Refurbish	1,421
Pond Fountain Pump- Replace	1,376
Pond Circulation Pump 1 HP	5,731
Sign- Entry- Ph. X- Replace	1,967
South Creekside Tree Project- Cottonwood Tree Removal	11,900
South Creekside Tree Project- Replacement Tree Planting	2,000
South Creekside Tree Project- Willow Tree Thinning	2,000
Total for 2020	**$26,395**
Replacement Year 2021	
Gates- Ph. X- Refurbish	1,463
Irrrigation Backflow Devices- 11% replace	845
Mailbox Structures- Ph. I- Replace	2,701
Pavement Seal Coat Phase IX	11,344
South Creekside Tree Project- Cottonwood Tree Removal	11,050
South Creekside Tree Project- Replacement Tree Planting	2,000
Storm Water System Drains & Catch Basins Maintenance	9,004
Total for 2021	**$38,407**
Replacement Year 2022	
Benches- Repair/Replacement	3,246

Description	Expenditures
Replacement Year 2022 continued...	
Clock Tower Paint / Repair Contingency	2,898
Entry Larch Sign & Monument- Refurbish	1,739
Gates- Ph. X- Refurbish	1,507
GVW & Walking Paths Concrete Surfaces 5% Repair	27,473
Irrigation Controllers 20% Replace	3,408
Mailbox Structures- Ph. II- Replace	4,173
Pavement Seal Coat Phase V	10,554
South Creekside Tree Project- Cottonwood Tree Removal	10,200
South Creekside Tree Project- Replacement Tree Planting	2,000
Tree Care- Roots and Trimming, etc	46,371
UG Sprinkler Pipe- Ph. I- Replace 10%	2,863
Underground Sprinkler Pipe Master Areas 5%	58,098
Walking Paths Bark Dust & Chip Rock Replacement 1/4 per yr	3,826
Well Clock Tower-Repair Contingency	2,319
Total for 2022	**$180,676**
Replacement Year 2023	
Gates- Ph. X- Refurbish	1,552
Irrrigation Backflow Devices- 11% replace	896
Mailbox Structures- Ph. V- Replace	2,866
Pavement Overlay Phase VI	115,878
Pavement Seal Coat Phase I	7,257
Pavement Seal Coat Phase II	3,435
Pavement Seal Coat Phase VIII	12,188
Pond Fountain Pump- Replace	1,503
UG Sprinkler Pipe- Ph. II- Replace 10%	3,433
Total for 2023	**$149,009**
Replacement Year 2024	
Bridges Paint Wood Surfaces	1,550
Gates- Ph. X- Refurbish	1,599
Gazebo- Paint	2,118
Mailbox Structures- Ph. VI- Replace	2,952
Pavement Seal Coat Phase VII	13,052

Description	Expenditures
Replacement Year 2024 continued...	
Pavement Seal Coat Phase X	5,930
Storm Water System Drains & Catch Basins Maintenance	9,839
UG Sprinkler Pipe- V- Replace 10%	5,261
Total for 2024	**$42,300**
Replacement Year 2025	
Clock Tower Paint / Repair Contingency	3,167
Gates- Ph. X- Refurbish	1,647
Irrigation Controllers 20% Replace	3,724
Irrrigation Backflow Devices- 11% replace	951
Pavement Overlay Master	151,259
Tree Care- Roots and Trimming, etc	50,671
UG Sprinkler Pipe- VI- Replace 10%	8,297
Walking Paths Bark Dust & Chip Rock Replacement 1/4 per yr	4,180
Total for 2025	**$223,896**
Replacement Year 2026	
Gates- Ph. X- Refurbish	1,696
Pond Fountain Pump- Replace	1,643
Total for 2026	**$3,339**
Replacement Year 2027	
Concrete Surfaces- Ph. X- 3% Repair	1,976
Gates- Ph. X- Refurbish	1,747
GVW & Walking Paths Concrete Surfaces 5% Repair	31,849
Irrrigation Backflow Devices- 11% replace	1,009
Mailbox Structures- Ph. VII- Replace	4,838
Pavement Seal Coat Phase IX	13,545
Storm Water System Drains & Catch Basins Maintenance	10,751
Sump Pump 2 HP- High Water / Ground Water	15,881
Sump Pump Backup Generator- Replace	12,767
UG Sprinkler Pipe- Ph. I- Replace 10%	3,319
Underground Sprinkler Pipe Master Areas 5%	67,352
Total for 2027	**$165,036**

Description	Expenditures
Replacement Year 2028	
Clock Tower Paint / Repair Contingency	3,461
Gates- Ph. X- Refurbish	1,800
Irrigation Controllers 20% Replace	4,070
Pavement Overlay Phase V	120,546
Tree Care- Roots and Trimming, etc	55,369
UG Sprinkler Pipe- Ph. II- Replace 10%	3,980
UG Sprinkler Pipe- VII- Replace 10%	9,189
Walking Paths Bark Dust & Chip Rock Replacement 1/4 per yr	4,568
Well Clock Tower-Repair Contingency	2,768
Total for 2028	**$205,749**
Replacement Year 2029	
Bridges Paint Wood Surfaces	1,796
Creel Pump Creek- Refurbish	16,922
Gates- Ph. X- Refurbish	1,853
Irrrigation Backflow Devices- 11% replace	1,070
Pavement Overlay Phase I	82,883
Pavement Overlay Phase II	39,234
Pavement Seal Coat Phase VI	14,465
Pavement Seal Coat Phase VIII	14,553
Pond Fountain Pump- Replace	1,795
UG Sprinkler Pipe- V- Replace 10%	6,099
Well Pump- Replace	16,181
Total for 2029	**$196,854**
Replacement Year 2030	
Gates- Ph. X- Refurbish	1,909
Gazebo- Major Renovation	35,138
Gazebo- Paint	2,529
Gazebo Roof- Replace	3,877
Pavement Overlay Phase VII	149,068
Pavement Seal Coat Phase X	7,081
Storm Water System Drains & Catch Basins Maintenance	11,748
UG Sprinkler Pipe- VI- Replace 10%	9,619
Total for 2030	**$220,968**

Villages of Garrison Creek HOA
Annual Expenditure Report

Description	Expenditures
Replacement Year 2031	
Clock Tower Paint / Repair Contingency	3,781
Gate Entry Access- Ph. X- Replace	8,471
Gate Operators- Ph. X- Replace	24,201
Gates- Ph. X- Refurbish	1,966
Gates- Ph. X- Replace	36,302
Irrigation Controllers 20% Replace	4,447
Irrrigation Backflow Devices- 11% replace	1,135
Pavement Seal Coat Master	18,882
Streetside Signs- Replace	60,352
Sump Pump 3/4 HP- Pond Fill- Replace	8,042
Tree Care- Roots and Trimming, etc	60,504
Walking Paths Bark Dust & Chip Rock Replacement 1/4 per yr	4,992
Total for 2031	**$233,076**
Replacement Year 2032	
Concrete Surfaces- Ph. X- 3% Repair	2,291
Gates- Ph. X- Refurbish	2,025
GVW & Walking Paths Concrete Surfaces 5% Repair	36,922
Mailbox Clusters- Ph. X- Replace	5,453
Pond Fountain Pump- Replace	1,961
Pond Circulation Pump 1 HP	8,172
UG Sprinkler Pipe- Ph. I- Replace 10%	3,848
UG Sprinkler Pipe- X- Replace 10%	9,348
Underground Sprinkler Pipe Master Areas 5%	78,079
Total for 2032	**$148,100**
Replacement Year 2033	
Gates- Ph. X- Refurbish	2,086
Irrrigation Backflow Devices- 11% replace	1,204
Pavement Seal Coat Phase IX	16,174
Sign- Entry- Ph. X- Replace	2,888
Storm Water System Drains & Catch Basins Maintenance	12,838
UG Sprinkler Pipe- Ph. II- Replace 10%	4,614
UG Sprinkler Pipe- VII- Replace 10%	10,652
Total for 2033	**$50,456**

Description	Expenditures
Replacement Year 2034	
Bridges Paint Wood Surfaces	2,083
Clock Tower Paint / Repair Contingency	4,132
Gates- Ph. X- Refurbish	2,149
Irrigation Controllers 20% Replace	4,859
Mailbox Structures- Ph. VIII- Replace	5,950
Pavement Seal Coat Phase V	15,048
Tree Care- Roots and Trimming, etc	66,114
UG Sprinkler Pipe- V- Replace 10%	7,071
Walking Paths Bark Dust & Chip Rock Replacement 1/4 per yr	5,454
Well Clock Tower-Repair Contingency	3,306
Total for 2034	**$116,166**
Replacement Year 2035	
Gates- Ph. X- Refurbish	2,213
Irrrigation Backflow Devices- 11% replace	1,278
Pavement Seal Coat Phase I	10,347
Pavement Seal Coat Phase II	4,898
Pavement Seal Coat Phase VI	17,272
Pavement Seal Coat Phase VIII	17,377
Pond Fountain Pump- Replace	2,143
UG Sprinkler Pipe- VI- Replace 10%	11,151
UG Sprinkler Pipe- VIII- Replace 10%	7,222
Total for 2035	**$73,902**
Replacement Year 2036	
Gates- Ph. X- Refurbish	2,280
Gazebo- Paint	3,020
Pavement Overlay Phase X	80,873
Pavement Seal Coat Phase VII	18,609
Storm Water System Drains & Catch Basins Maintenance	14,028
Total for 2036	**$118,809**
Replacement Year 2037	
Clock Tower Paint / Repair Contingency	4,515

Description	Expenditures
Replacement Year 2037 continued...	
Concrete Surfaces- Ph. X- 3% Repair	2,656
Fence- Metal/Brick- Ph. X- Replace	22,486
Gates- Ph. X- Refurbish	2,348
GVW & Walking Paths Concrete Surfaces 5% Repair	42,803
Irrigation Controllers 20% Replace	5,310
Irrrigation Backflow Devices- 11% replace	1,356
Lights Pole Phases I & II- Replace	18,964
Pavement Seal Coat Master	22,546
Tree Care- Roots and Trimming, etc	72,244
UG Sprinkler Pipe- Ph. I- Replace 10%	4,461
UG Sprinkler Pipe- X- Replace 10%	10,837
Underground Sprinkler Pipe Master Areas 5%	90,515
Walking Paths Bark Dust & Chip Rock Replacement 1/4 per yr	5,960
Total for 2037	**$307,002**
Replacement Year 2038	
Gates- Ph. X- Refurbish	2,418
Pond Fountain Pump- Replace	2,342
Pond Large- Liner- Install	92,755
Pond Small- Liner- Remove and Replace	17,956
UG Sprinkler Pipe- Ph. II- Replace 10%	5,348
UG Sprinkler Pipe- VII- Replace 10%	12,349
Total for 2038	**$133,169**
Replacement Year 2039	
Bridge Pond Replace	11,065
Bridges 1 2 and 3 Replace	45,843
Bridges Paint Wood Surfaces	2,414
Gates- Ph. X- Refurbish	2,491
Irrrigation Backflow Devices- 11% replace	1,438
Pavement Seal Coat Phase IX	19,313
Storm Water System Drains & Catch Basins Maintenance	15,329
Sump Pump 2 HP- High Water / Ground Water	22,643
UG Sprinkler Pipe- V- Replace 10%	8,197

Description	Expenditures
Replacement Year 2039 continued...	
Well Pump- Replace	21,746
Total for 2039	**$150,479**
Replacement Year 2040	
Clock Tower Paint / Repair Contingency	4,934
Gates- Ph. X- Refurbish	2,566
Irrigation Controllers 20% Replace	5,802
Mailbox Clusters- Ph. IX- Replace	8,881
Pavement Seal Coat Phase V	17,968
Tree Care- Roots and Trimming, etc	78,943
UG Sprinkler Pipe- IX- Replace 10%	8,388
UG Sprinkler Pipe- VI- Replace 10%	12,927
UG Sprinkler Pipe- VIII- Replace 10%	8,372
Walking Paths Bark Dust & Chip Rock Replacement 1/4 per yr	6,513
Well Clock Tower-Repair Contingency	3,947
Total for 2040	**$159,242**
Replacement Year 2041	
Fences Along Lions Park (Two Sides) Replace	61,362
Gates- Ph. X- Refurbish	2,643
Irrrigation Backflow Devices- 11% replace	1,526
Pavement Overlay Phase VIII	198,474
Pavement Seal Coat Phase I	12,354
Pavement Seal Coat Phase II	5,848
Pavement Seal Coat Phase VI	20,624
Pond Fountain Pump- Replace	2,559
Total for 2041	**$305,390**
Replacement Year 2042	
Concrete Surfaces- Ph. X- 3% Repair	3,079
Gates- Ph. X- Refurbish	2,722
Gazebo- Paint	3,605
GVW & Walking Paths Concrete Surfaces 5% Repair	49,620

Description	Expenditures
Replacement Year 2042 continued...	
Pavement Seal Coat Phase VII	22,220
Pavement Seal Coat Phase X	10,096
Storm Water System Drains & Catch Basins Maintenance	16,750
UG Sprinkler Pipe- Ph. I- Replace 10%	5,172
UG Sprinkler Pipe- X- Replace 10%	12,563
Underground Sprinkler Pipe Master Areas 5%	104,932
Total for 2042	**$230,758**
Replacement Year 2043	
Clock Tower Paint / Repair Contingency	5,391
Gate Operators- Ph. X- Replace	34,505
Gates- Ph. X- Refurbish	2,804
Irrigation Controllers 20% Replace	6,340
Irrrigation Backflow Devices- 11% replace	1,619
Pavement Seal Coat Master	26,921
Sump Pump 3/4 HP- Pond Fill- Replace	11,467
Tree Care- Roots and Trimming, etc	86,264
UG Sprinkler Pipe- Ph. II- Replace 10%	6,200
UG Sprinkler Pipe- VII- Replace 10%	14,315
Walking Paths Bark Dust & Chip Rock Replacement 1/4 per yr	7,117
Total for 2043	**$202,944**
Replacement Year 2044	
Bridges Paint Wood Surfaces	2,799
Creel Pump Creek- Refurbish	26,364
Gates- Ph. X- Refurbish	2,888
Pond Fountain Pump- Replace	2,797
Pond Circulation Pump 1 HP	11,651
UG Sprinkler Pipe- V- Replace 10%	9,503
Total for 2044	**$56,001**
Replacement Year 2045	
Gates- Ph. X- Refurbish	2,974

Description	Expenditures
Replacement Year 2045 continued...	
Irrrigation Backflow Devices- 11% replace	1,717
Mailbox Structures- Ph. I- Replace	5,491
Pavement Overlay Phase IX	220,575
Storm Water System Drains & Catch Basins Maintenance	18,303
UG Sprinkler Pipe- IX- Replace 10%	9,724
UG Sprinkler Pipe- VI- Replace 10%	14,986
UG Sprinkler Pipe- VIII- Replace 10%	9,706
Total for 2045	**$283,477**
Replacement Year 2046	
Clock Tower Paint / Repair Contingency	5,891
Gates- Ph. X- Refurbish	3,064
Irrigation Controllers 20% Replace	6,928
Mailbox Structures- Ph. II- Replace	8,484
Pavement Seal Coat Phase V	21,455
Sign- Entry- Ph. X- Replace	4,242
Tree Care- Roots and Trimming, etc	94,263
Walking Paths Bark Dust & Chip Rock Replacement 1/4 per yr	7,777
Well Clock Tower-Repair Contingency	4,713
Total for 2046	**$156,816**

Villages of Garrison Creek HOA
Distribution of Accumulated Reserves

Description	Remaining Life	Replacement Year	Assigned Reserves	Fully Funded Reserves
GVW & Walking Paths Concrete Surfaces 5% ..	0	2017	23,699	23,699
Gates- Ph. X- Refurbish	0	2017	1,300	1,300
Irrrigation Backflow Devices- 11% replace	0	2017	751	751
Lights Pole Fixtures Phases I & II- Replace	0	2017	4,500	4,500
Pavement Seal Coat Phase I	0	2017	6,078	6,078
Pavement Seal Coat Phase II	0	2017	2,877	2,877
Pavement Seal Coat Phase VI	0	2017	10,146	10,146
Pavement Seal Coat Phase VIII	0	2017	10,207	10,207
Pond Fountain Pump- Replace	0	2017	1,259	1,259
Pond Large- Liner- Install	1	2018	* D 45,881	47,486
Pond Small- Liner- Remove and Replace	1	2018	D	9,193
South Creekside Tree Project- Cottonwood T..	1	2018	D	7,038
South Creekside Tree Project- Replacement ..	1	2018	D	1,000
South Creekside Tree Project- Willow Tree T..	1	2018	D	1,000
Storm Water System Drains & Catch Basins ..	1	2018	D	6,000
Gazebo- Paint	1	2018		1,435
Pavement Seal Coat Phase VII	1	2018		8,843
Pavement Seal Coat Phase X	1	2018		4,018
South Creekside Tree Project- Cottonwood T..	1	2018		7,000
South Creekside Tree Project- Replacement ..	1	2018		1,000
South Creekside Tree Project- Willow Tree T..	1	2018		1,000
Bridges Paint Wood Surfaces	2	2019		756
Clock Tower Paint / Repair Contingency	2	2019		833
Fences Along Lions Park (Two Sides) Replace	2	2019		27,442
Gate Operators- Ph. X- Replace	2	2019		13,333
Irrigation Controllers 20% Replace	2	2019		980
Pavement Seal Coat Master	2	2019		8,322
South Creekside Tree Project- Cottonwood T..	2	2019		4,250
South Creekside Tree Project- Replacement ..	2	2019		667
South Creekside Tree Project- Willow Tree T..	2	2019		667
Sump Pump 3/4 HP- Pond Fill- Replace	2	2019		4,431
Tree Care- Roots and Trimming, etc	2	2019		13,333
Walking Paths Bark Dust & Chip Rock Replac..	2	2019		1,100
Well Pump- Replace	2	2019		9,079
Pond Circulation Pump 1 HP	3	2020		3,934
Sign- Entry- Ph. X- Replace	3	2020		1,385

Description	Remaining Life	Replacement Year	Assigned Reserves	Fully Funded Reserves
South Creekside Tree Project- Cottonwood T..	3	2020		2,975
South Creekside Tree Project- Replacement ..	3	2020		500
South Creekside Tree Project- Willow Tree T..	3	2020		500
Mailbox Structures- Ph. I- Replace	4	2021		2,000
Pavement Seal Coat Phase IX	4	2021		3,360
South Creekside Tree Project- Cottonwood T..	4	2021		2,210
South Creekside Tree Project- Replacement ..	4	2021		400
Benches- Repair/Replacement	5	2022		2,240
Entry Larch Sign & Monument- Refurbish	5	2022		1,200
Mailbox Structures- Ph. II- Replace	5	2022		2,850
Pavement Seal Coat Phase V	5	2022		1,517
South Creekside Tree Project- Cottonwood T..	5	2022		1,700
South Creekside Tree Project- Replacement ..	5	2022		333
UG Sprinkler Pipe- Ph. I- Replace 10%	5	2022		1,976
Underground Sprinkler Pipe Master Areas 5%	5	2022		40,093
Well Clock Tower-Repair Contingency	5	2022		333
Mailbox Structures- Ph. V- Replace	6	2023		1,800
Pavement Overlay Phase VI	6	2023		71,730
UG Sprinkler Pipe- Ph. II- Replace 10%	6	2023		2,185
Mailbox Structures- Ph. VI- Replace	7	2024		1,700
UG Sprinkler Pipe- V- Replace 10%	7	2024		3,080
Pavement Overlay Master	8	2025		85,289
UG Sprinkler Pipe- VI- Replace 10%	8	2025		4,454
Concrete Surfaces- Ph. X- 3% Repair	10	2027		735
Mailbox Structures- Ph. VII- Replace	10	2027		2,100
Sump Pump 2 HP- High Water / Ground Wat..	10	2027		1,969
Sump Pump Backup Generator- Replace	10	2027		4,750
Pavement Overlay Phase V	11	2028		54,053
UG Sprinkler Pipe- VII- Replace 10%	11	2028		3,717
Creel Pump Creek- Refurbish	12	2029		2,374
Pavement Overlay Phase I	12	2029		36,333
Pavement Overlay Phase II	12	2029		16,866
Gazebo- Major Renovation	13	2030		13,559
Gazebo Roof- Replace	13	2030		1,148
Pavement Overlay Phase VII	13	2030		52,634
Gate Entry Access- Ph. X- Replace	14	2031		2,333

Villages of Garrison Creek HOA
Distribution of Accumulated Reserves

Description	Remaining Life	Replacement Year	Assigned Reserves	Fully Funded Reserves
Gates- Ph. X- Replace	14	2031		10,000
Streetside Signs- Replace	14	2031		17,556
Mailbox Clusters- Ph. X- Replace	15	2032		1,400
UG Sprinkler Pipe- X- Replace 10%	15	2032		2,400
Mailbox Structures- Ph. VIII- Replace	17	2034		1,050
UG Sprinkler Pipe- VIII- Replace 10%	18	2035		1,188
Pavement Overlay Phase X	19	2036		15,904
Fence- Metal/Brick- Ph. X- Replace	20	2037		6,225
Lights Pole Phases I & II- Replace	20	2037		5,250
Bridge Pond Replace	22	2039		693
Bridges 1 2 and 3 Replace	22	2039		2,871
Mailbox Clusters- Ph. IX- Replace	23	2040		360
UG Sprinkler Pipe- IX- Replace 10%	23	2040		340
Pavement Overlay Phase VIII	24	2041		22,047
Pavement Overlay Phase IX	28	2045		6,427
Bus Stop- Ph. IX- Replace	38	2055		
Concete- Curb Ph. IX- Repair	38	2055		
Slope- Maintenance		Unfunded		
Fence- Wood- Paint/Stain		Unfunded		
Total Asset Summary			$106,697	$767,049

Percent Fully Funded	14%
Current Average Liability per Unit (Total Units: 207)	-$3,190

'' Indicates Partially Funded*
'D' Indicates Deferred Funding

Pond Large- Liner- Install- 2018

		18,131 sf	@ $2.75
		Asset Cost	$49,860.25
		Percent Replacement	100%
Category	Ponds	Future Cost	$51,356.06
Placed in Service	June 1997		
Useful Life	20		
Replacement Year	Deferred 2018		
Remaining Life	1		

Per the Board there is no plastic liner installed in this larger community pond, however on the date of the site inspection there appeared to be a pond liner visible in numerous areas around the pond. We are recommending funding for replacement of this liner at this time due to issues with maintaining the water level of this pond and what appeared to be tears in the liner where visible.

Since there appears to be a difference in opinion on whether a liner is installed or not we recommend having a pond assessment completed to determine the type of liner installed and what condition it is in (remaining useful life). The finding should be incorporated into future reserve studies. For this reserve study we are assuming a plastic liner is to be replaced at this time.

Benches- Repair/Replacement- 2022

	Master	8 ea	@ $350.00
Category	Grounds Components	Asset Cost	$2,800.00
Placed in Service	June 1997	Percent Replacement	100%
Useful Life	25	Future Cost	$3,245.97
Replacement Year	2022		
Remaining Life	5		

Wood benches appear to be deteriorating at a rate in line with their age. Expect for eventual replacement due to deterioration from constant exposure to the elements. We recommend inspecting annually and painting regularly (from operating account) to maximize the useful life of these wood benches.

*Note that there is also one concrete bench along one of the walking paths. This bench has not been included in the replacement count as it is a long life component with no predictable useful life at this time.

Bridge Pond Replace- 2039

		Asset Cost	$5,775.00
	Master	Percent Replacement	100%
Category	Bridges	Future Cost	$11,065.50
Placed in Service	June 2014		
Useful Life	25		
Replacement Year	2039		
Remaining Life	22		



Pedestrian bridges were all reportedly refurbished in 2014. Current bridges are a mix of composite and wood built on a wood frame. We recommend budgeting for replacement at the timeframe indicated due to deterioration from constant exposure to the elements. This component includes replacement of the railing on the bridges as well. Cost estimate based on total replacement of these bridges and not just refurbishment as deterioration to the bridges is likely to be too great to safely and cost effectively refurbish (concrete footing/foundation excluded). Cost estimate includes disposal and installation of the new bridges.

105 sf - Bridge 3 with 42 lf railing	@	$55.00 =	$5,775.00
		Total =	$5,775.00

Bridges 1 2 and 3 Replace- 2039

		Asset Cost	$23,925.00
	Master	Percent Replacement	100%
Category	Bridges	Future Cost	$45,842.77
Placed in Service	June 2014		
Useful Life	25		
Replacement Year	2039		
Remaining Life	22		



Pedestrian bridges were all reportedly refurbished in 2014. Current bridges are a mix of composite and wood built on a wood frame. We recommend budgeting for replacement at the timeframe indicated due to deterioration from constant exposure to the elements. This component includes replacement of the railing on the bridges as well. Cost estimate based on total replacement of these bridges and not just refurbishment as deterioration to the bridges is likely to be too great to safely and cost effectively refurbish (concrete footing/foundation excluded). Cost estimate includes disposal and installation of the new bridges.

330 sf - Bridge 1 with 32 lf railing	@	$40.00 =	$13,200.00
80 sf - Bridge 2 with 40 lf railing	@	55.00 =	4,400.00
115 sf - Bridge 4 with 42 lf railing	@	55.00 =	6,325.00
		Total =	$23,925.00

Bridges Paint Wood Surfaces- 2019

		Asset Cost	$1,260.00
	Master	Percent Replacement	100%
Category	Bridges	Future Cost	$1,336.73
Placed in Service	June 2014		
Useful Life	5		
Replacement Year	2019		
Remaining Life	2		



Pedestrian bridges were all reportedly refurbished/painted in 2014. Current bridges and railings are a mix of composite and wood built on a wood frame. We recommend regularly painting/staining the wood surfaces of these bridges to maximize their useful life.

330 - Bridge 1 with 32 lf railing	@	$2.00 =	$660.00
80 - Bridge 2 with 40 lf railing	@	2.00 =	160.00
105 - Bridge 3 with 42 lf railing	@	2.00 =	210.00
115 - Bridge 4 with 42 lf railing	@	2.00 =	230.00
		Total =	$1,260.00

Clock Tower Paint / Repair Contingency- 2019

		1 ls	@ $2,500.00
		Asset Cost	$2,500.00
	Master	Percent Replacement	100%
Category	Structures	Future Cost	$2,652.25
Placed in Service	June 2016		
Useful Life	3		
Replacement Year	2019		
Remaining Life	2		

This component is for a repair contingency for the clock tower which has roofing, paint, siding, a door and clock components which will require ongoing maintenance and upkeep. We suggest budgeting at the amount and timeframe indicated to make ongoing repairs and maintenance of this component. If properly cared for we currently have no estimation for full replacement of this component. As a history of expenses occur over time we suggest incorporating these costs into future reserve studies.

Creel Pump Creek- Refurbish- 2029

		1 ls	@ $11,869.00
		Asset Cost	$11,869.00
	Master	Percent Replacement	100%
Category	Mechanical	Future Cost	$16,922.36
Placed in Service	June 2014		
Useful Life	15		
Replacement Year	2029		
Remaining Life	12		

This component is for the refurbishment of the irrigation system in Garrison Creek. This system includes a deep well and a system to pump the water to irrigation zones in the community. The cost estimate and useful life of this component has been obtained from the Client records.

Entry Larch Sign & Monument- Refurbish- 2022

		1 ls	@ $1,500.00
		Asset Cost	$1,500.00
	Master	Percent Replacement	100%
Category	Signs	Future Cost	$1,738.91
Placed in Service	June 1997		
Useful Life	25		
Replacement Year	2022		
Remaining Life	5		

This component is for the refurbishment of the cement/mortar and replacement of the plastic/fiberglass sign on the entry monument. Most of the monument is concrete (faux rock) and is a long life component which has no predictable remaining useful life but which will require cement/mortar repairs . Note that these long life entry monument are most often replaced after vehicle damage (accidents) rather than deterioration. We recommend cleaning the monument annually to retain the aesthetic appeal of the monument.

Fence- Metal/Brick- Ph. X- Replace- 2037

		Asset Cost	$12,450.00
	Master	Percent Replacement	100%
Category	Fencing	Future Cost	$22,486.08
Placed in Service	June 1997		
Useful Life	40		
Replacement Year	2037		
Remaining Life	20		

The metal and brick pillar fence at both entrances to this phase appears to be deteriorating at a rate in line with its age. The metal over time will deteriorate due to constant exposure so we recommend planning for replacement at the timeframe indicated. If properly installed the brick pillars are a long life component but which will likely require repointing of some of the brickwork in areas over time. We recommend planning for repointing/repairing a portion of the brickwork on these pillars at the amount indicated below. Over time should it appear thee pillars are deteriorating more rapidly than expected we suggest updating future reserve studies according to actual cost and on site inspection estimates.

*We recommend inspecting annually and painting the metal surfaces as needed (paid for from the operating account).

82 - lf metal fencing	@	$75.00 =	$6,150.00
21 - brick posts	@	300.00 =	6,300.00
		Total =	$12,450.00

Fence- Wood- Paint/Stain

		1,657 lf	@ $7.25
		Asset Cost	$12,013.25
	Master	Percent Replacement	100%
Category	Fencing	Future Cost	$12,744.86
Placed in Service	June 2019		
Useful Life	5		
Replacement Year	2019		
Remaining Life	2		

Currently there is no stain/paint/seal on the wood fence. Regular cycles of stain/paint will help to maintain appearance and maximize life (longer than current useful life estimate). Cost estimate includes 1 primer coat and 1 top coat.

Measurement include:

1118 lf along Lions Park

323 lf along Larch Ave (South of entry is Owner Responsibility per the Board)

216 lf along Larch Ave (North of Entry is Owner Responsibility per the Board)

**Board has requested this component not be funded for as they have historically not painted, stained or sealed the fence.

Fences Along Lions Park (Two Sides) Replace- 2019

		1,118 lf	@ $27.00
		Asset Cost	$30,186.00
	Master	Percent Replacement	100%
Category	Fencing	Future Cost	$32,024.33
Placed in Service	June 1997		
Useful Life	22		
Replacement Year	2019		
Remaining Life	2		

Wood fencing appears to be deteriorating at a rate typical of its age and is nearing the end of its useful life. There are numerous areas of failure and warping wood but no large scale instability observed at this time. As routine maintenance, inspect regularly for any damage, repair as needed. Avoid contact with ground and surrounding vegetation. Regular cycles of stain/paint will help to maintain appearance and maximize life (longer than current useful life estimate). Plan to replace at roughly the time frame indicated.

Measurement include:

1118 lf along Lions Park

323 lf along Larch Ave (South of entry is Owner Responsibility per the Board)

216 lf along Larch Ave (North of Entry is Owner Responsibility per the Board)

GVW & Walking Paths Concrete Surfaces 5% Repair- 2017

		39,498 sf	@ $12.00
		Asset Cost	$23,698.80
	Master	Percent Replacement	5%
Category	Concrete / Pavers	Future Cost	$23,698.80
Placed in Service	June 1997		
Useful Life	5		
Replacement Year	2017		
Remaining Life	0		



5% Repair contingency for the concrete walkways, curbs and paver path-(only 108 sf). Amount and cycle to be reviewed annually. Widespread areas of cracking and numerous areas of repairs noted. Due to root intrusion it is likely that this is going to be on ongoing expense into the foreseeable future. We recommend repairing trip hazards immediately to minimize liability for the Association.

We suggest consulting with a licensed arborist to develop an appropriate plan for tree care to minimize further damage to concrete and maximize cost efficiencies.

Gate Entry Access- Ph. X- Replace- 2031

		2 ea	@ $2,800.00
		Asset Cost	$5,600.00
	Master	Percent Replacement	100%
Category	Gate	Future Cost	$8,470.50
Placed in Service	June 2007		
Useful Life	24		
Replacement Year	2031		
Remaining Life	14		

Fair appearance with no significant damage observed and no reported problems at this time. We recommend professional inspections and maintenance. Wipe down surfaces periodically with an appropriate cleaner, being careful to avoid control buttons. Plan for replacement at approximately the typical life expectancy interval indicated, due to constant usage and exposure to weather elements.

Typically right about 20-25 year these components will begin to have issues and will require replacement along with some wiring upgrades/repairs. The replacement cycles has been times to coincide with the gate replacement.

Gate Operators- Ph. X- Replace- 2019

		4 ea	@ $4,000.00
		Asset Cost	$16,000.00
	Master	Percent Replacement	100%
Category	Gate	Future Cost	$16,974.40
Placed in Service	June 2007		
Useful Life	12		
Replacement Year	2019		
Remaining Life	2		

Fair, operating condition of gate observed during our inspection, however they do appear to be near the end of their useful life . The life of these operators can vary significantly based on usage, bumps, etc. and that typically the entry/exit operators don't always fail at the same time. A useful life of 10-12 years is a rough estimate for replacement (entire unit assumed). Regular maintenance should continue through the operating budget which includes annual inspections, service and maintenance which can extend useful life. We are funding here for regular replacements of gate operators at 12 year intervals as has been our experience with similar operators and since the current operators are still in service since this phase was constructed in 2007.

Replacement cost estimate assumes some minor electrical rewiring and as it typical of our experience with past operator replacement bids and invoices.

Gates- Ph. X- Replace- 2031

		2 ea	@ $12,000.00
		Asset Cost	$24,000.00
	Master	Percent Replacement	100%
Category	Gate	Future Cost	$36,302.15
Placed in Service	June 2007		
Useful Life	24		
Replacement Year	2031		
Remaining Life	14		

Fair condition with areas of rust and peeling paint noted at the time of the site inspection. We recommend regular professional inspections, maintenance and repairs to help extend useful life cycles and paid for from the operating account. Metal gates are typically durable, however, we recommend setting aside funding for intervals of replacement due to constant usage and the typical damage not covered by insurance seen in similar associations.

*Cost estimate includes vehicle and pedestrian gates at the two entrances to this phase.

Gazebo- Major Renovation- 2030

		1 ls	@ $23,927.00
		Asset Cost	$23,927.00
	Master	Percent Replacement	100%
Category	Structures	Future Cost	$35,137.61
Placed in Service	June 2000		
Useful Life	30		
Replacement Year	2030		
Remaining Life	13		

This component is for a major refurbishment of the gazebo which, with time, will see significant deterioration due to exposure to the elements. Currently the structure appears to have been well maintained and has received regular cycles of paint/sealing. With continued regular cycles of maintenance/painting/sealing this component will likely have a useful life of 30 years.

-Wood surfaces (eaves, ceiling)

- 6 wood benches

- 544 sf composite decking over wood

Gazebo- Paint- 2018

		1 ls	@ $1,722.00
		Asset Cost	$1,722.00
	Master	Percent Replacement	100%
Category	Structures	Future Cost	$1,773.66
Placed in Service	June 2012		
Useful Life	6		
Replacement Year	2018		
Remaining Life	1		

This component is for the painting and sealing (caulking where needed) of the gazebo which we recommend regular paint cycles of every 6 years to maintain the aesthetic appeal of the community as well as extend the useful life of this component.

Gazebo Roof- Replace- 2030

		6 squares	@ $440.00
		Asset Cost	$2,640.00
	Master	Percent Replacement	100%
Category	Structures	Future Cost	$3,876.93
Placed in Service	June 2007		
Useful Life	23		
Replacement Year	2030		
Remaining Life	13		

Appears to be deteriorating at a rate typical of its age based our limited scope visual inspection. Reportedly installed in 2007. As routine maintenance, we recommend professional inspections at least twice annually and after windstorms. Promptly replace any damaged/missing shingles or any other repair needed to ensure waterproof integrity of roof. Keep gutters and downspouts clear and free of debris. Plan for replacement at roughly the time frame indicated. Cost estimates include removal of old roofing materials and replacement of flashing.

Roof replacement has been timed to coincide with the major refurbishment project of this component.

*1 square = 100 Square Feet

Irrigation Controllers 20% Replace- 2019

		21 ea	@ $700.00
		Asset Cost	$2,940.00
	Master	Percent Replacement	20%
Category	Landscaping	Future Cost	$3,119.05
Placed in Service	June 2016		
Useful Life	3		
Replacement Year	2019		
Remaining Life	2		

Reported to be functioning properly with no significant repair/replacement history. It is not known when each controller was last replaced so this component has been set for 20% of them to be replaced every 3 years; there will be a full cycle of replacement every 15 years which is the typical useful life of irrigation controllers.

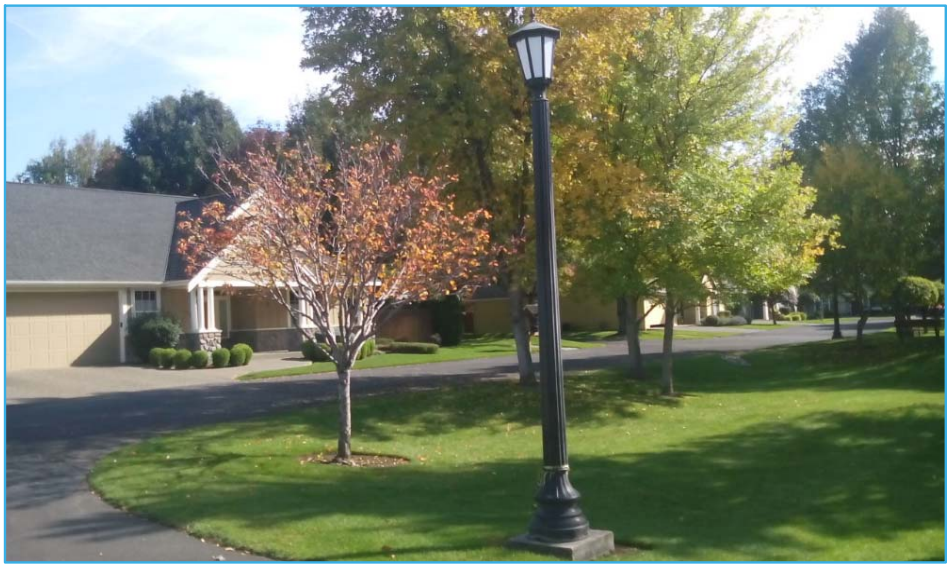
Irrrigation Backflow Devices- 11% replace- 2017

		9 ea	@ $750.00
		Asset Cost	$750.60
	Master	Percent Replacement	11.12%
Category	Plumbing	Future Cost	$750.60
Placed in Service	June 1997		
Useful Life	2		
Replacement Year	2017		
Remaining Life	0		

Board reports functional and in operating condition. As routine maintenance, inspect regularly, test system, repair as needed from operating budget. Follow proper winterization and spring start up procedures. Since we have no historical record of installation dates or replacement we suggest budgeting for replacement of one backflow device every 2 years which will so that all backflow devices are replaced every 18 years which is the approximate useful life of this component.

Lights Pole Fixtures Phases I & II- Replace- 2017

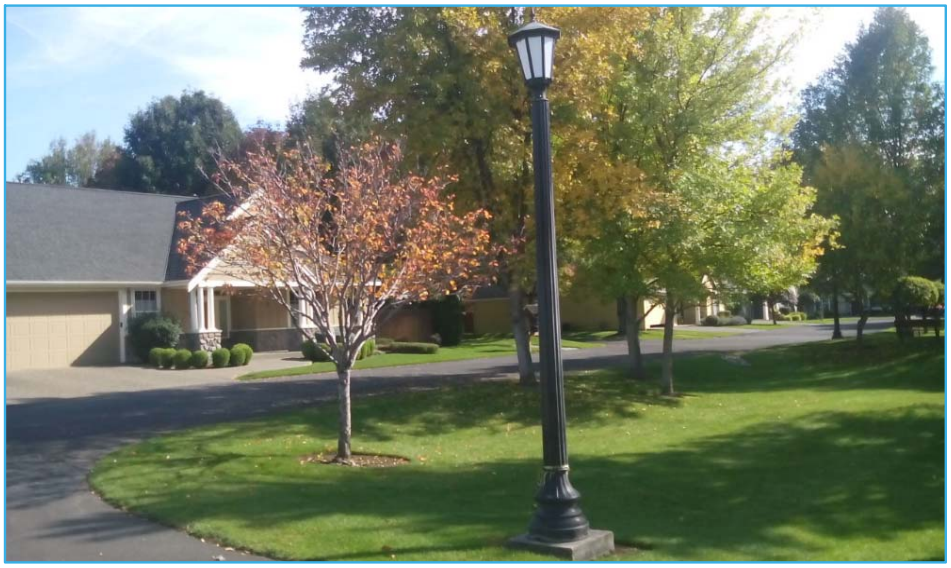
		6 ea	@ $750.00
		Asset Cost	$4,500.00
	Master	Percent Replacement	100%
Category	Lighting	Future Cost	$4,500.00
Placed in Service	June 1997		
Useful Life	20		
Replacement Year	2017		
Remaining Life	0		



Pole light fixtures appear to be deteriorating at a rate typical of a component of this age. This component is for replacement of the ballast and pole mounted fixtures which will typically deteriorate with time.

Lights Pole Phases I & II- Replace- 2037

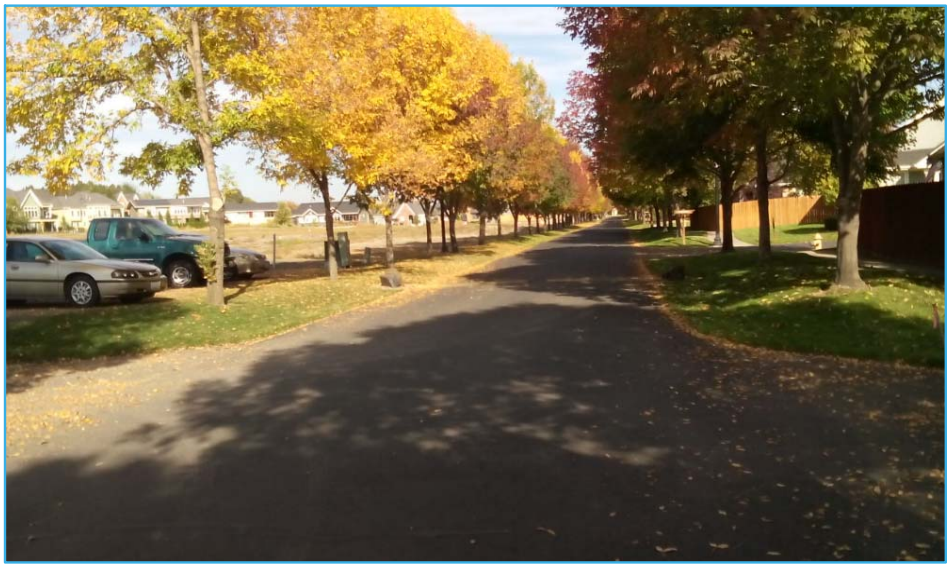
		6 ea	@ $1,750.00
		Asset Cost	$10,500.00
	Master	Percent Replacement	100%
Category	Lighting	Future Cost	$18,964.17
Placed in Service	June 1997		
Useful Life	40		
Replacement Year	2037		
Remaining Life	20		



Pole lights appear to be deteriorating at a rate typical of a component of this age. The exterior paint on the lights have significant fading and wear. This component is for full replacement of the metal poles and fixtures which will typically deteriorate with time due to constant exposure to the elements.

Pavement Overlay Master- 2025

		54,275 sf	@ $2.20
		Asset Cost	$119,405.00
	Master	Percent Replacement	100%
Category	Asphalt	Future Cost	$151,258.68
Placed in Service	June 1997		
Useful Life	30		
Adjustment	-2		
Replacement Year	2025		
Remaining Life	8		



Appears to be deteriorating at a rate typical of its age. As routine maintenance, keep surface clean, ensure that drains are clean and free flowing, repair cracks and clean oils stains promptly. Best to plan for eventual intervals of resurface (overlay).

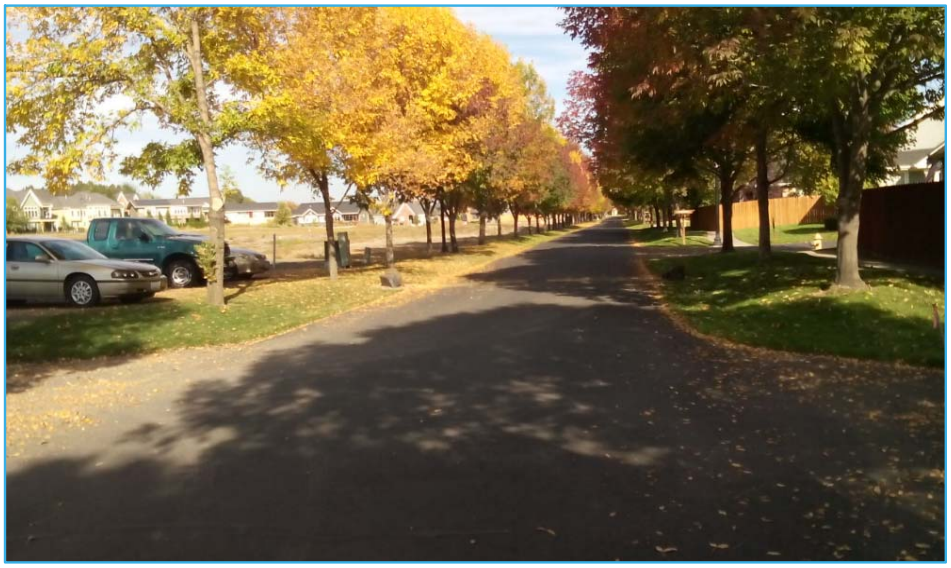
Most asphalt areas can be expected to last approximately 25-30 years before it will become necessary for an overlay to be applied or other major rehabilitation to be completed. It will be necessary to adjust manhole and valve covers at the time the overlay is applied or other major rehabilitation is completed.

If properly built, the road deteriorates from the top down, which only requires the replacement of a layer of asphalt, or preferably the application of a thin layer on top of the existing asphalt (overlay). The asphalt overlay not only provides a new paving surface for a fraction of the cost of rebuilding the entire roadway, but it is the only preventive maintenance technique that adds structural value while extending a pavement's service life.

*Cost estimate based on a 2 inch overlay and includes expectation for minor repairs to areas of the asphalt surfaces at the time of the overlay.

Pavement Seal Coat Master- 2019

		54,275 sf	@ $0.23
		Asset Cost	$12,483.25
	Master	Percent Replacement	100%
Category	Asphalt	Future Cost	$13,243.48
Placed in Service	June 2013		
Useful Life	6		
Replacement Year	2019		
Remaining Life	2		



The primary reason to sealcoat is to protect the pavement from the deteriorating effects of sun and water, which causes the asphalt to harden, or oxidize. The pavement turns brittle. The sealcoat provides a waterproof membrane which slows the oxidation process and helps the pavement shed water, preventing the water to infiltrate the base material.

Without regular applications of a seal coat, an asphalt surfaces might need an overlay in 15 years. If the lot is regularly sealed, asphalt areas can last as much as 25-30 years if properly installed.

Proper drainage is vital for the longevity of the road. Standing water can seep through the asphalt and get into the subbase and subgrade below, significantly weakening the structural integrity of the road and causing premature failure.

Oil spills eat through the asphalt seal and should be cleaned up between seal coats. Power washing is recommended annually and treated as an operating expense.

**Life Adjustment of -2 years to coincide with the regular sealcoat cycle for cost efficiency.

Pond Fountain Pump- Replace- 2017

		1 ea	@ $1,259.00
		Asset Cost	$1,259.00
	Master	Percent Replacement	100%
Category	Mechanical	Future Cost	$1,259.00
Placed in Service	June 2014		
Useful Life	3		
Replacement Year	2017		
Remaining Life	0		

Pond fountain pump reportedly in working order and last replaced in 2014. We recommend budgeting for replacement at the timeframe indicated.

Pond Circulation Pump 1 HP- 2020

		1 ea	@ $5,245.00
		Asset Cost	$5,245.00
	Master	Percent Replacement	100%
Category	Mechanical	Future Cost	$5,731.35
Placed in Service	June 2008		
Useful Life	12		
Replacement Year	2020		
Remaining Life	3		

Circulation pump reportedly in working order and last replaced in 2008. We recommend budgeting for replacement at the timeframe indicated.

Pond Small- Liner- Remove and Replace- 2018

		3,510 sf	@ $2.75
		Asset Cost	$9,652.50
	Master	Percent Replacement	100%
Category	Ponds	Future Cost	$9,942.07
Placed in Service	June 1997		
Useful Life	20		
Replacement Year	Deferred 2018		
Remaining Life	1		

Pond liners at the small and large pond are in poor condition with numerous areas of rips and tears visible. We recommend a pond assessment be conducted on each pond to determine the most appropriate and cost efficient method to replace these liners which complying with all required government regulations. The cost estimate in this study is based on removal of the old liner and replacement with a new one in each pond.

We suggest obtaining bids and replacing these liners per the pond assessment recommendations and incorporating actual costs and useful life estimates, which will depend on the mill (thickness) of the new membrane liner, into future reserve studies. Note that the current liners have lasted 20 years which likely indicates a lower mill (thickness).

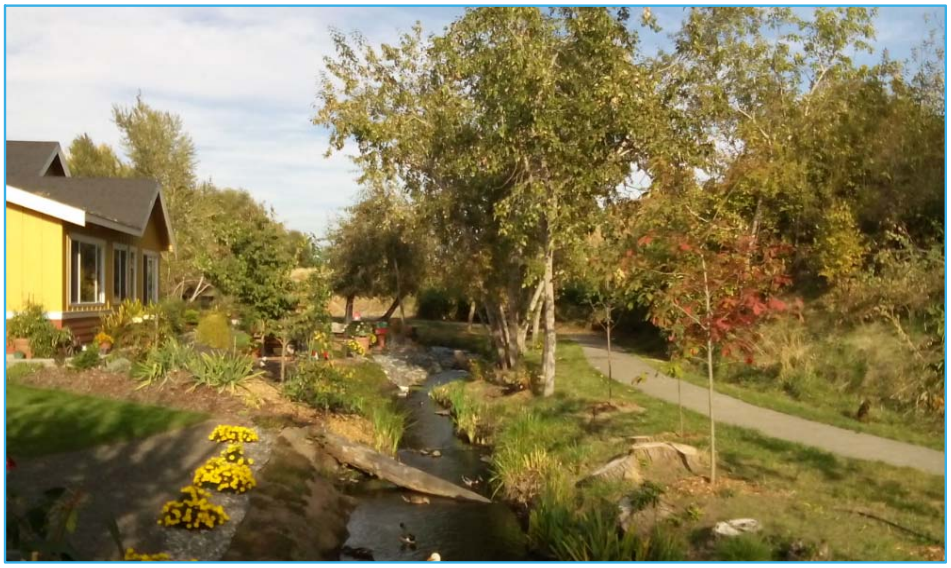
Slope- Maintenance

		1 ls	
		Asset Cost	
	Master	Percent Replacement	100%
Category	Landscaping	Future Cost	
Placed in Service	June 1997		
No Useful Life			

The parcel maps indicate areas of the slope South of Garrison Creek are the responsibility of the Association. Currently there is no historical record of expenses or issues with this slope so there is no current recommendation for funding in this reserve study. We suggest inspecting annually and should it appear there are slope issues (drainage, slippage, etc.) we recommend consulting with a qualified professional and incorporating bids into future reserve studies.

South Creekside Tree Project- Cottonwood Tree Removal- 2018

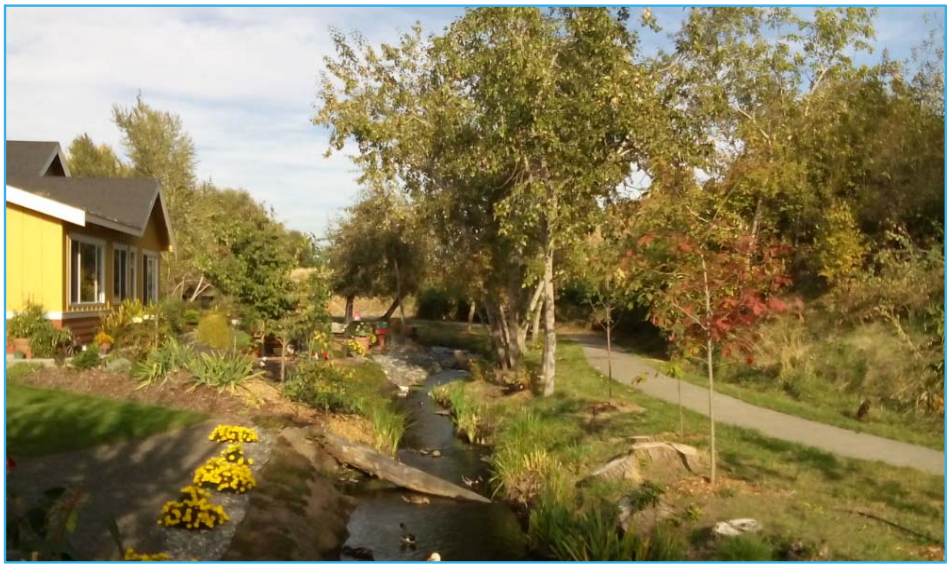
		1 ls	@ $14,077.00
		Asset Cost	$14,077.00
	Master	Percent Replacement	100%
Category	Creek Tree Project	Future Cost	$14,077.00
Placed in Service	June 2017		
Useful Life	1		
Replacement Year	Deferred 2018		
Remaining Life	1		



This component is for the current VGC South Creekside Tree Removal Project - Remove Cottonwoods. The cost estimates and timeframe have been provided by the Client based on their current bids and timeframe for completion of these projects.

South Creekside Tree Project- Cottonwood Tree Removal- 2018

		1 ls	@ $14,000.00
		Asset Cost	$14,000.00
	Master	Percent Replacement	100%
Category	Creek Tree Project	Future Cost	$14,000.00
Placed in Service	June 2018		
Useful Life	1		
Replacement Year	2018		
Remaining Life	1		



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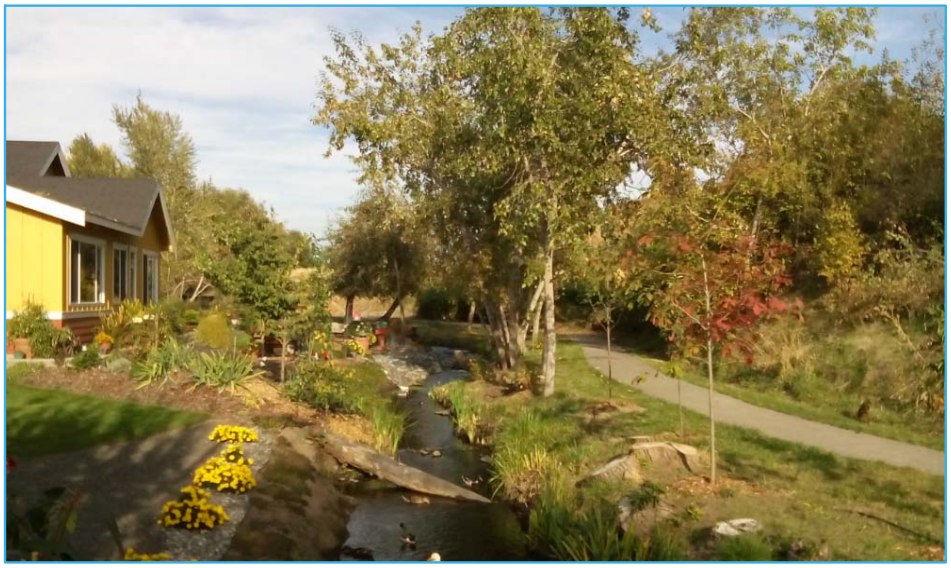
South Creekside Tree Project- Cottonwood Tree Removal- 2019

		1 ls	@ $12,750.00
		Asset Cost	$12,750.00
	Master	Percent Replacement	100%
Category	Creek Tree Project	Future Cost	$12,750.00
Placed in Service	June 2019		
Useful Life	1		
Replacement Year	2019		
Remaining Life	2		



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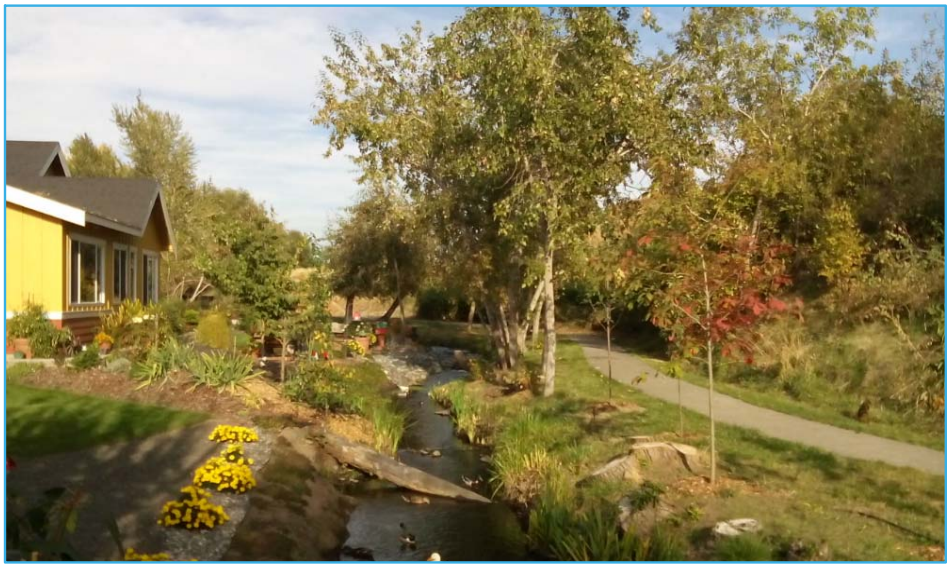
South Creekside Tree Project- Cottonwood Tree Removal- 2020

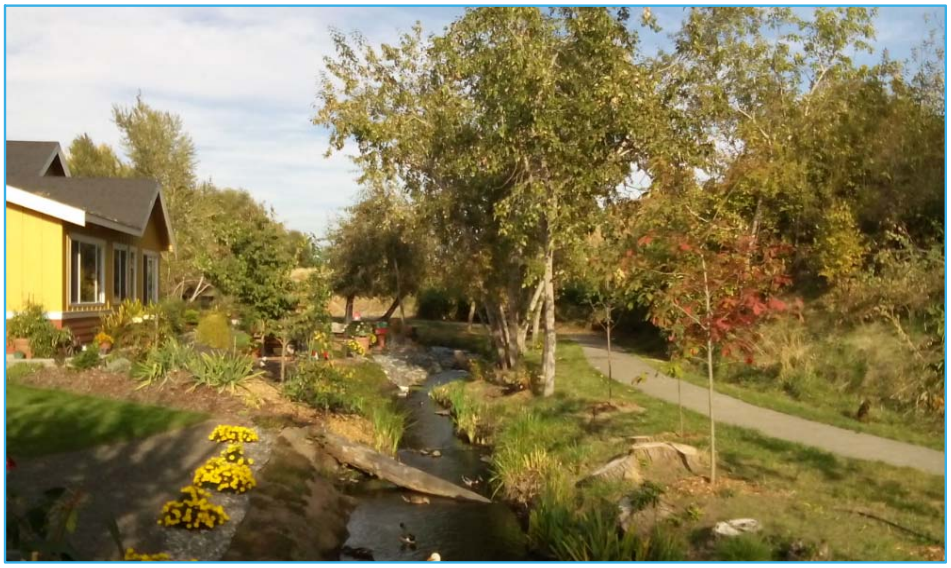
		1 ls	@ $11,900.00
		Asset Cost	$11,900.00
	Master	Percent Replacement	100%
Category	Creek Tree Project	Future Cost	$11,900.00
Placed in Service	June 2020		
Useful Life	1		
Replacement Year	2020		
Remaining Life	3		



This component is for the current VGC South Creekside Tree Removal Project - Remove Cottonwoods. The cost estimates and timeframe have been provided by the Client based on their current bids and timeframe for completion of these projects.

South Creekside Tree Project- Cottonwood Tree Removal- 2021

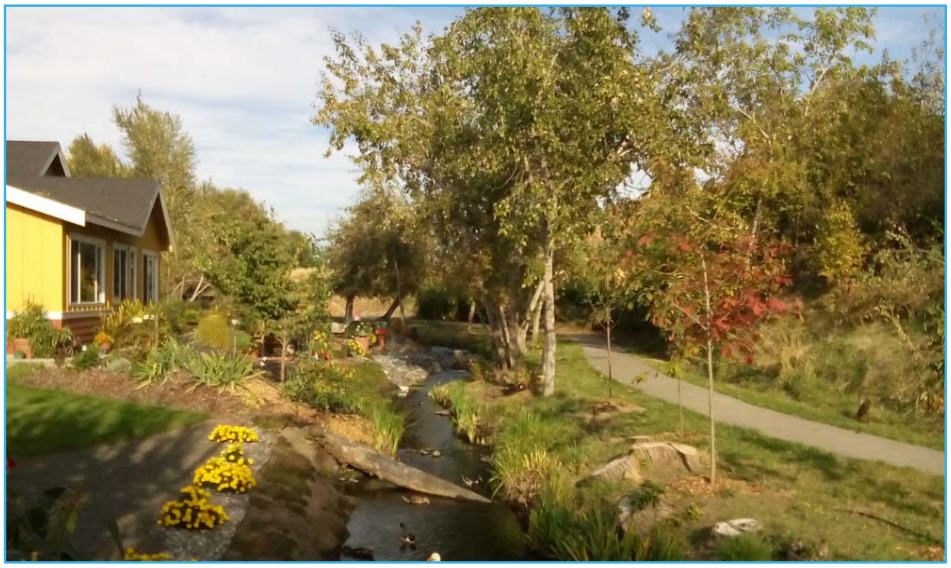
		1 ls	@ $11,050.00
		Asset Cost	$11,050.00
	Master	Percent Replacement	100%
Category	Creek Tree Project	Future Cost	$11,050.00
Placed in Service	June 2021		
Useful Life	1		
Replacement Year	2021		
Remaining Life	4		



This component is for the current VGC South Creekside Tree Removal Project - Remove Cottonwoods. The cost estimates and timeframe have been provided by the Client based on their current bids and timeframe for completion of these projects.

South Creekside Tree Project- Cottonwood Tree Removal- 2022

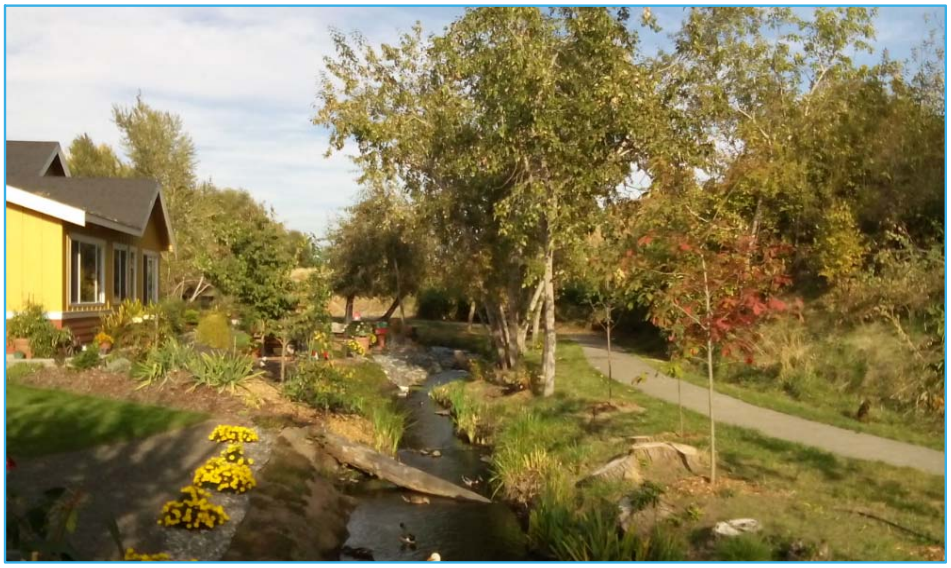
		1 ls	@ $10,200.00
		Asset Cost	$10,200.00
	Master	Percent Replacement	100%
Category	Creek Tree Project	Future Cost	$10,200.00
Placed in Service	June 2022		
Useful Life	1		
Replacement Year	2022		
Remaining Life	5		



This component is for the current VGC South Creekside Tree Removal Project - Remove Cottonwoods. The cost estimates and timeframe have been provided by the Client based on their current bids and timeframe for completion of these projects.

South Creekside Tree Project- Replacement Tree Planting- 2018

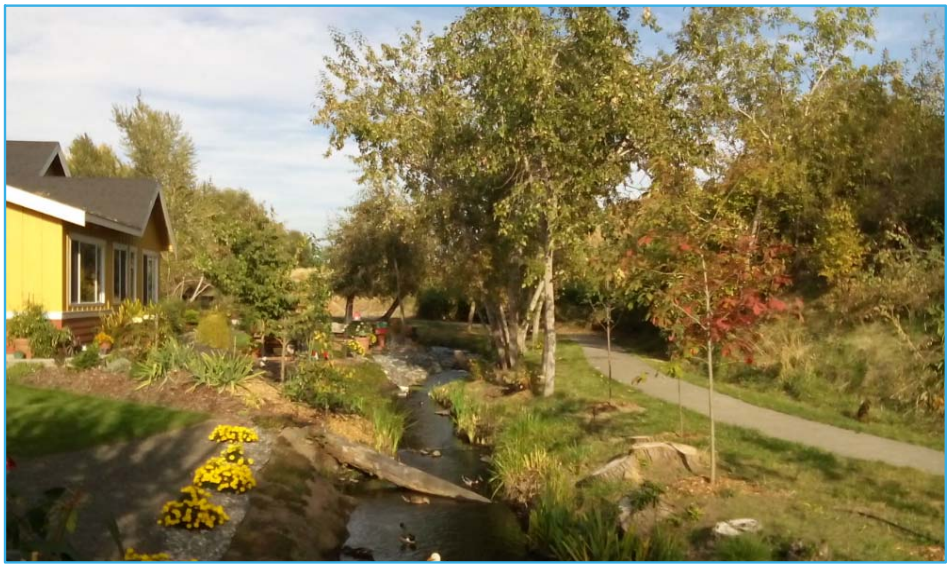
		1 ls	@ $2,000.00
		Asset Cost	$2,000.00
	Master	Percent Replacement	100%
Category	Creek Tree Project	Future Cost	$2,000.00
Placed in Service	June 2018		
Useful Life	1		
Replacement Year	2018		
Remaining Life	1		



This component is for the current VGC South Creekside Tree Removal Project - Replacement Tree Planting. The cost estimates and timeframe have been provided by the Client based on their current bids and timeframe for completion of these projects.

South Creekside Tree Project- Replacement Tree Planting- 2018

		1 ls	@ $2,000.00
		Asset Cost	$2,000.00
	Master	Percent Replacement	100%
Category	Creek Tree Project	Future Cost	$2,000.00
Placed in Service	June 2017		
Useful Life	1		
Replacement Year	Deferred 2018		
Remaining Life	1		



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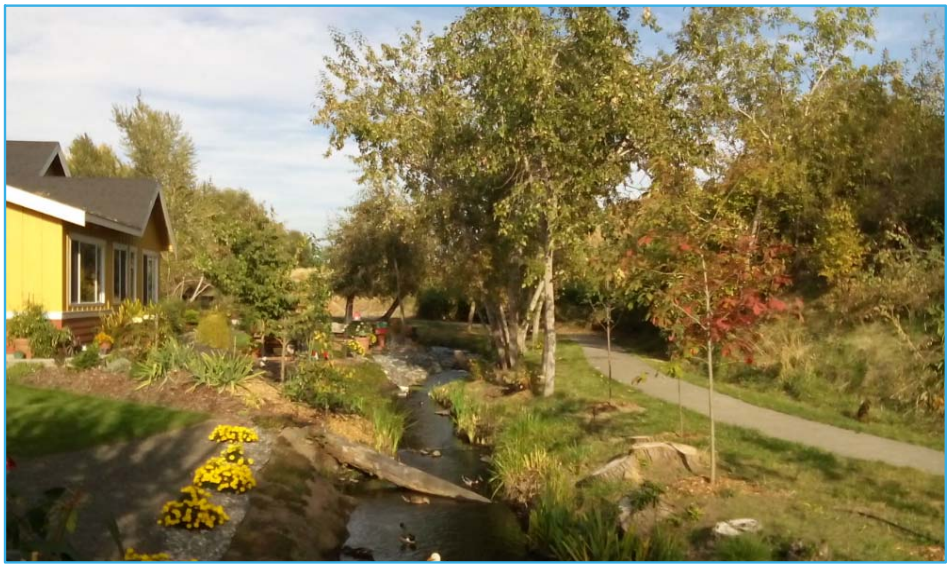
South Creekside Tree Project- Replacement Tree Planting- 2019

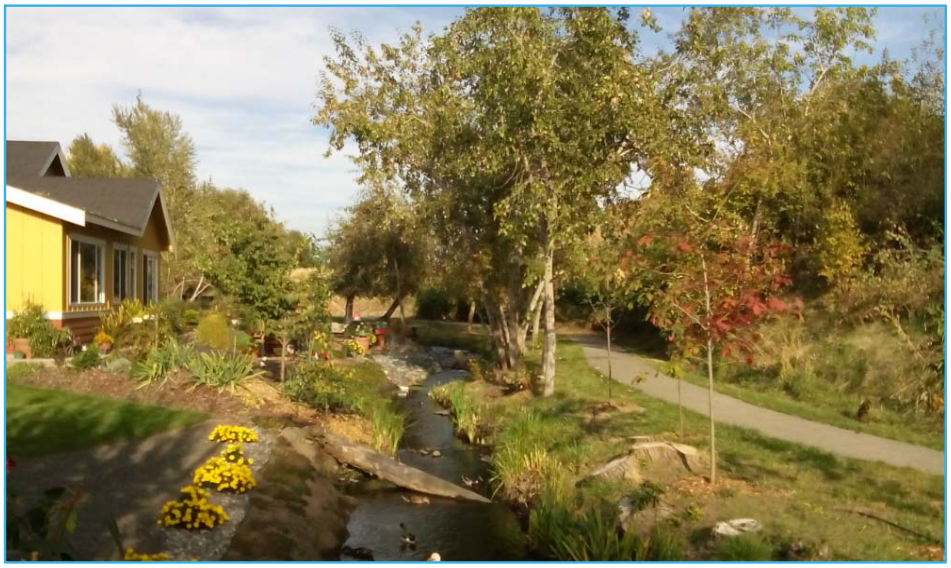
		1 ls	@ $2,000.00
		Asset Cost	$2,000.00
	Master	Percent Replacement	100%
Category	Creek Tree Project	Future Cost	$2,000.00
Placed in Service	June 2019		
Useful Life	1		
Replacement Year	2019		
Remaining Life	2		



This component is for the current VGC South Creekside Tree Removal Project - Replacement Tree Planting. The cost estimates and timeframe have been provided by the Client based on their current bids and timeframe for completion of these projects.

South Creekside Tree Project- Replacement Tree Planting- 2020

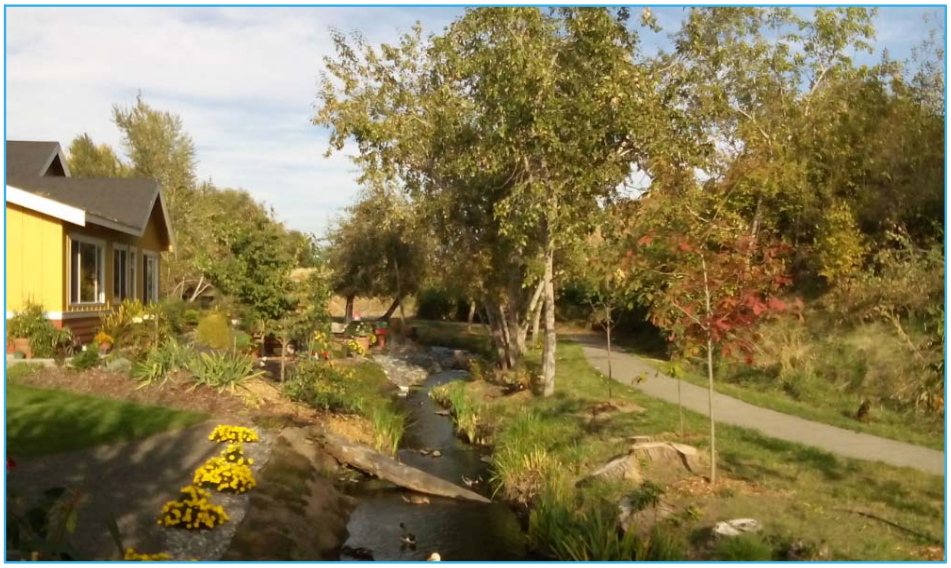
		1 ls	@ $2,000.00
		Asset Cost	$2,000.00
	Master	Percent Replacement	100%
Category	Creek Tree Project	Future Cost	$2,000.00
Placed in Service	June 2020		
Useful Life	1		
Replacement Year	2020		
Remaining Life	3		



This component is for the current VGC South Creekside Tree Removal Project - Replacement Tree Planting. The cost estimates and timeframe have been provided by the Client based on their current bids and timeframe for completion of these projects.

South Creekside Tree Project- Replacement Tree Planting- 2021

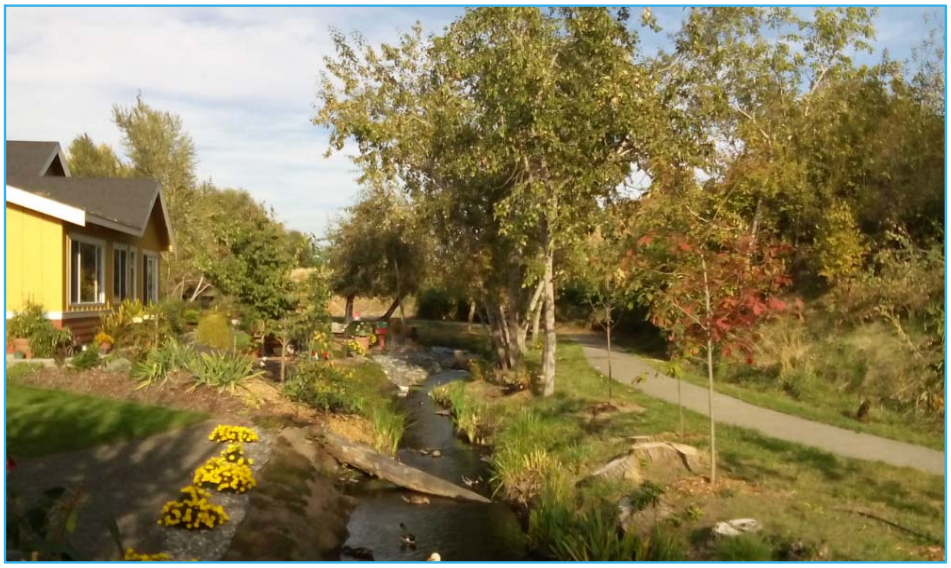
		1 ls	@ $2,000.00
		Asset Cost	$2,000.00
	Master	Percent Replacement	100%
Category	Creek Tree Project	Future Cost	$2,000.00
Placed in Service	June 2021		
Useful Life	1		
Replacement Year	2021		
Remaining Life	4		



This component is for the current VGC South Creekside Tree Removal Project - Replacement Tree Planting. The cost estimates and timeframe have been provided by the Client based on their current bids and timeframe for completion of these projects.

South Creekside Tree Project- Replacement Tree Planting- 2022

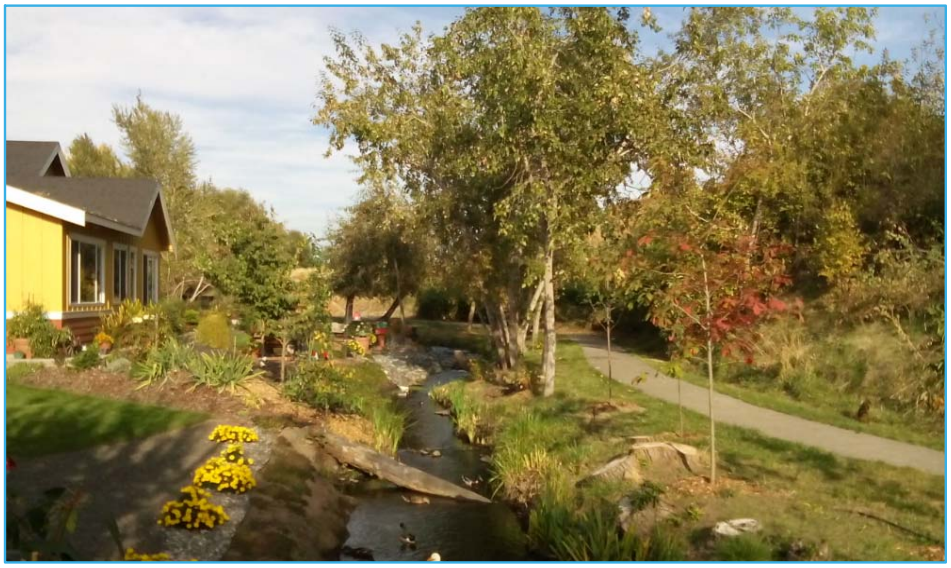
		1 ls	@ $2,000.00
		Asset Cost	$2,000.00
	Master	Percent Replacement	100%
Category	Creek Tree Project	Future Cost	$2,000.00
Placed in Service	June 2022		
Useful Life	1		
Replacement Year	2022		
Remaining Life	5		



This component is for the current VGC South Creekside Tree Removal Project - Replacement Tree Planting. The cost estimates and timeframe have been provided by the Client based on their current bids and timeframe for completion of these projects.

South Creekside Tree Project- Willow Tree Thinning- 2018

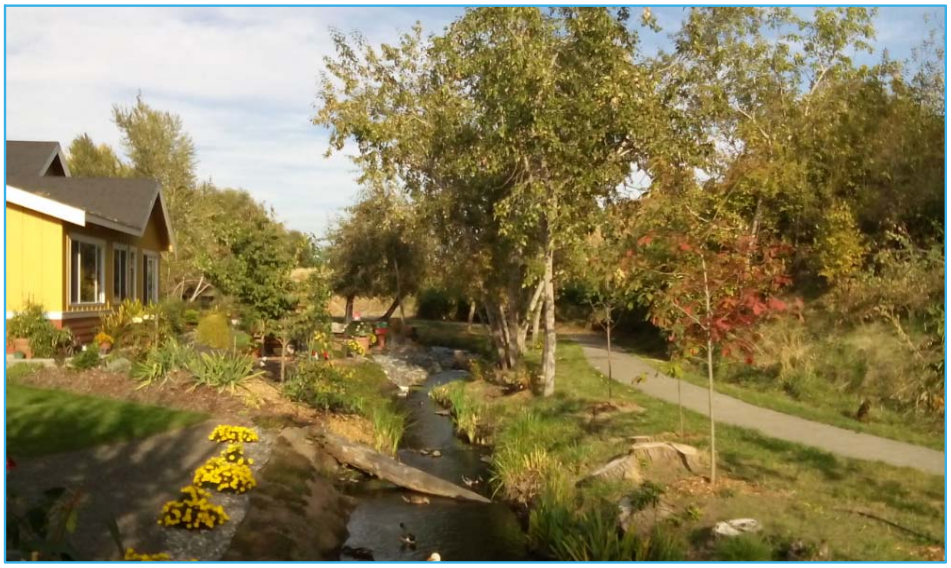
		1 ls	@ $2,000.00
		Asset Cost	$2,000.00
	Master	Percent Replacement	100%
Category	Creek Tree Project	Future Cost	$2,000.00
Placed in Service	June 2017		
Useful Life	1		
Replacement Year	Deferred 2018		
Remaining Life	1		



This component is for the current VGC South Creekside Tree Removal Project - Willow Tree Thinning. The cost estimates and timeframe have been provided by the Client based on their current bids and timeframe for completion of these projects.

South Creekside Tree Project- Willow Tree Thinning- 2018

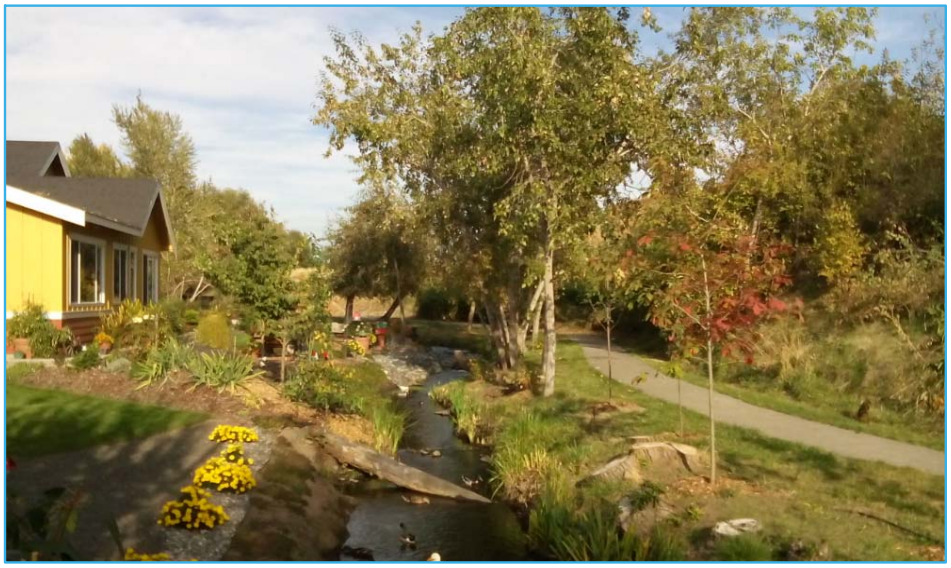
		1 ls	@ $2,000.00
		Asset Cost	$2,000.00
	Master	Percent Replacement	100%
Category	Creek Tree Project	Future Cost	$2,000.00
Placed in Service	June 2018		
Useful Life	1		
Replacement Year	2018		
Remaining Life	1		



This component is for the current VGC South Creekside Tree Removal Project - Willow Tree Thinning. The cost estimates and timeframe have been provided by the Client based on their current bids and timeframe for completion of these projects.

South Creekside Tree Project- Willow Tree Thinning- 2019

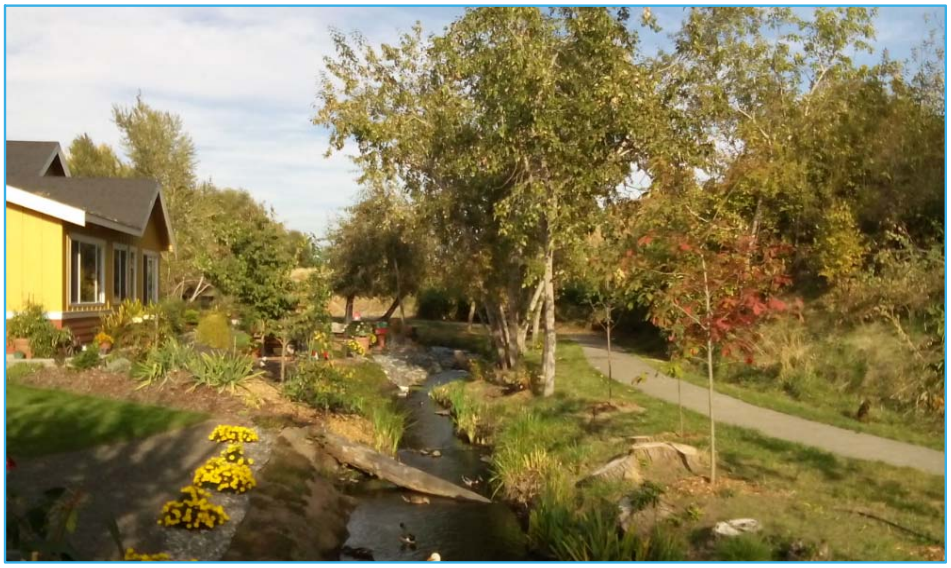
		1 ls	@ $2,000.00
		Asset Cost	$2,000.00
	Master	Percent Replacement	100%
Category	Creek Tree Project	Future Cost	$2,000.00
Placed in Service	June 2019		
Useful Life	1		
Replacement Year	2019		
Remaining Life	2		



This component is for the current VGC South Creekside Tree Removal Project - Willow Tree Thinning. The cost estimates and timeframe have been provided by the Client based on their current bids and timeframe for completion of these projects.

South Creekside Tree Project- Willow Tree Thinning- 2020

		1 ls	@ $2,000.00
		Asset Cost	$2,000.00
	Master	Percent Replacement	100%
Category	Creek Tree Project	Future Cost	$2,000.00
Placed in Service	June 2020		
Useful Life	1		
Replacement Year	2020		
Remaining Life	3		



This component is for the current VGC South Creekside Tree Removal Project - Willow Tree Thinning. The cost estimates and timeframe have been provided by the Client based on their current bids and timeframe for completion of these projects.

Storm Water System Drains & Catch Basins Maintenance- 2018

		1 ls	@ $8,000.00
		Asset Cost	$8,000.00
	Master	Percent Replacement	100%
Category	Plumbing	Future Cost	$8,240.00
Placed in Service	June 1997		
Useful Life	3		
Replacement Year	Deferred 2018		
Remaining Life	1		

We suggest consulting with a qualified and licensed vendor to set up an annual maintenance paid for from the Operating Account. Currently the Board has stated there has been no maintenance (debris/sediment removal) from the storm water systems in the community. We have given an estimate for this first time service but actual costs may be higher if there is significant amounts of debris/sediment which requires removal.

We also suggest that these systems be inspected annually at the time of service to make sure the components are functioning as designed. Update future reserve studies with either actual costs or remove from the study if the community decides to set up an annual contract.

Streetside Signs- Replace- 2031

		Asset Cost	$39,900.00
	Master	Percent Replacement	100%
Category	Signs	Future Cost	$60,352.33
Placed in Service	June 2006		
Useful Life	25		
Replacement Year	2031		
Remaining Life	14		

The street signs in the community are deteriorating at a rate in line with their age. We recommend funding for replacement of the signs as the timeframe indicated due to constant exposure to the elements.

36 - street signs	@	$600.00 =	$21,600.00
26 - medium signs (stop/community)	@	300.00 =	7,800.00
70 - small signs (parking, etc.)	@	150.00 =	10,500.00
		Total =	$39,900.00

Sump Pump 2 HP- High Water / Ground Water- 2027

		Asset Cost	$11,817.00
	Master	Percent Replacement	100%
Category	Mechanical	Future Cost	$15,881.06
Placed in Service	June 2015		
Useful Life	12		
Replacement Year	2027		
Remaining Life	10		

Sump pumps reportedly in working order. Replacement year and cost obtained form client records. We recommend budgeting for replacement of these sump pumps at the timeframe indicated.

1 - each 2 HP High Water / Ground Water	@ $6,500.00 =	$6,500.00
1 - each 3/4 HP High Water / Ground Water	@ 5,317.00 =	5,317.00
	Total =	$11,817.00

Sump Pump 3/4 HP- Pond Fill- Replace- 2019

		1 ea	@ $5,317.00
		Asset Cost	$5,317.00
	Master	Percent Replacement	100%
Category	Mechanical	Future Cost	$5,640.81
Placed in Service	June 2007		
Useful Life	12		
Replacement Year	2019		
Remaining Life	2		

Sump pump reportedly in working order. Replacement year and cost obtained form client records. We recommend budgeting for replacement of these sump pumps at the timeframe indicated.

Sump Pump Backup Generator- Replace- 2027

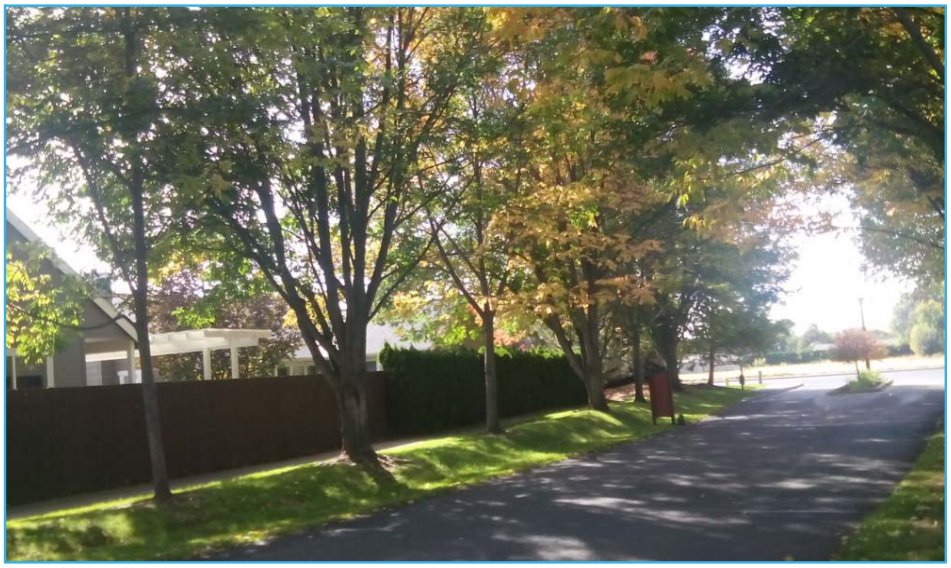
		1 ea	@ $9,500.00
		Asset Cost	$9,500.00
	Master	Percent Replacement	100%
Category	Mechanical	Future Cost	$12,767.21
Placed in Service	June 2007		
Useful Life	20		
Replacement Year	2027		
Remaining Life	10		

Gas generator reportedly in working condition and was installed in 2007. We recommend planning for replacement at the timeframe indicated.

Tree Care- Roots and Trimming, etc- 2019

	Master
Category	Tree Care
Placed in Service	June 2016
Useful Life	3
Replacement Year	2019
Remaining Life	2

1 ls	@ $40,000.00
Asset Cost	$40,000.00
Percent Replacement	100%
Future Cost	$42,436.00



This component is for tree care of the large trees in the community. These large trees require regular trimming/thinning/root control to prevent damage to nearby walkways, roads and underground piping. The provided cost estimate is based on our estimation for the total expected cost for all the trees in the community and is based on the historical records provided by the Board.

We recommend consulting with a qualified arborist to determine an appropriate long term strategy for adequate tree care as well as develop a plan which is most cost efficient for the Association. We suggest updating future reserve studies with actual cost figures and timeframes for projects.

Note that there is likely going to be a significant amount of tree care for the trees along Garrison Village Way and there are already areas in need of repair. As these trees continue to grow with age they will become more costly to maintain and will likely continue to cause damage to other common area components.

Underground Sprinkler Pipe Master Areas 5%- 2022

		Asset Cost	$50,116.07
	Master	Percent Replacement	5%
Category	Underground Sprinklers	Future Cost	$58,098.26
Placed in Service	June 1997		
Useful Life	5		
Adjustment	20		
Replacement Year	2022		
Remaining Life	5		

Underground sprinkler piping, over time, will deteriorate as well as become damaged from root intrusion by trees and shrubs. Due to the age of the community and likelihood of underground sprinkler issues in the near future we recommend for replacement of these pipes at the timeframe indicated which is typical of this type of component. There have reportedly been some areas of repair already required due to root intrusion issues. This cost estimate includes replacement of the underground piping and the landscaping which will be torn up in the process. Since this type of component does not typically fail all at once we recommend funding for a repair contingency of 5% per cycle so that over time the whole system will be replaced as each begins to fail.

We suggest consulting with a qualified landscaping company to create a long term plan which covers the communities needs while being as cost efficient as possible. Update future reserve studies with the actual cost estimates and timeframes of projects.

**Useful life has been adjusted +20 years so this component begins cycles of 5 year intervals at the component's age of 25 years from installation date.

11,748	- Park Ph I	@	$2.50 =	$29,370.00

Underground Sprinkler Pipe Master Areas 5% continued...

7,326	- Park Ph. II	@	2.50 =	18,315.00
21,583	- Park Ph. V	@	2.50 =	53,957.50
7,104	- Park Ph. VI	@	2.50 =	17,760.00
10,880	- Park Ph VII	@	2.50 =	27,200.00
47,004	- Five Parks Ph. VIII	@	2.50 =	117,510.00
23,280	- Gazebo	@	2.50 =	58,200.00
23,280	- Clock Tower	@	2.50 =	58,200.00
20,466	- Garrison Village Way	@	2.50 =	51,165.00
196,608	- Garrison Creek Parcel - Above Ground	@	0.06 =	11,796.48
146,211	- Ponds and Concrete Walkways	@	2.50 =	365,527.50
71,928	- North of Phase 9	@	2.50 =	179,820.00
5,400	- Along Larch Avenue	@	2.50 =	13,500.00
			Total =	$1,002,321.48

Walking Paths Bark Dust & Chip Rock Replacement 1/4 per yr- 2019

		1 ls	@ $3,300.00
		Asset Cost	$3,300.00
	Master	Percent Replacement	100%
Category	Landscaping	Future Cost	$3,500.97
Placed in Service	June 2016		
Useful Life	3		
Replacement Year	2019		
Remaining Life	2		

This component is for the replacement of the bark and chip rock in the common areas of the community. The cost figures have been provide by the Board and the timeframe of the useful life is based on their estimation to retain the aesthetic appeal of these landscaped areas. While landscaping is often paid for from the Operating Account these large scale projects that do to occur annually can be include in the reserve study.

Well Clock Tower-Repair Contingency- 2022

		1 ls	@ $2,000.00
		Asset Cost	$2,000.00
	Master	Percent Replacement	100%
Category	Mechanical	Future Cost	$2,318.55
Placed in Service	June 2016		
Useful Life	6		
Replacement Year	2022		
Remaining Life	5		

This component is for a repair contingency to the 400' deep well (located in clock tower) that services the community. While this component has no predictable useful life and is reportedly in operational condition wells with typically require repairs over time. We recommend inspecting annually and should the well require replacement or large scale refurbishment to update future reserve studies.

Well Pump- Replace- 2019

		1 ea	@ $11,349.00
		Asset Cost	$11,349.00
	Master	Percent Replacement	100%
Category	Mechanical	Future Cost	$12,040.15
Placed in Service	June 2009		
Useful Life	10		
Replacement Year	2019		
Remaining Life	2		

10HP well pump reportedly in working order and last replaced in 2009. We recommend budgeting for replacement at the timeframe indicated. Cost and useful life provided by Client and Vendor (Lee's Pump).

Mailbox Structures- Ph. I- Replace- 2021

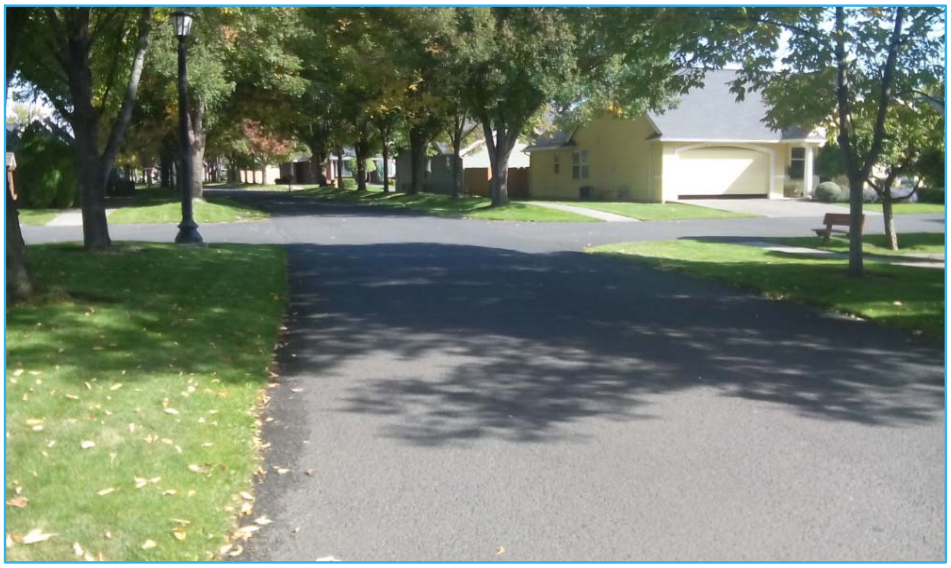
		2 ea	@ $1,200.00
		Asset Cost	$2,400.00
	Phase I	Percent Replacement	100%
Category	Mailboxes	Future Cost	$2,701.22
Placed in Service	June 1997		
Useful Life	24		
Replacement Year	2021		
Remaining Life	4		

Appears to be deteriorating at a rate typical of their age based on our visual inspection of this component. As routine maintenance, inspect regularly, paint/stain and complete minor repairs as needed from operating budget. Best to plan for total replacement at roughly the time frame indicated due to constant usage, exposure to the elements and wear over time.

*Note this component is for replacement of the wood mailbox structures only. The Board has stated the metal mailboxes are the responsibility of each owner.

Pavement Overlay Phase I- 2029

		26,424 sf	@ $2.20
		Asset Cost	$58,132.80
	Phase I	Percent Replacement	100%
Category	Asphalt	Future Cost	$82,883.47
Placed in Service	June 1997		
Useful Life	30		
Adjustment	2		
Replacement Year	2029		
Remaining Life	12		



Appears to be deteriorating at a rate typical of its age. As routine maintenance, keep surface clean, ensure that drains are clean and free flowing, repair cracks and clean oils stains promptly. Best to plan for eventual intervals of resurface (overlay).

Most asphalt areas can be expected to last approximately 25-30 years before it will become necessary for an overlay to be applied or other major rehabilitation to be completed. It will be necessary to adjust manhole and valve covers at the time the overlay is applied or other major rehabilitation is completed.

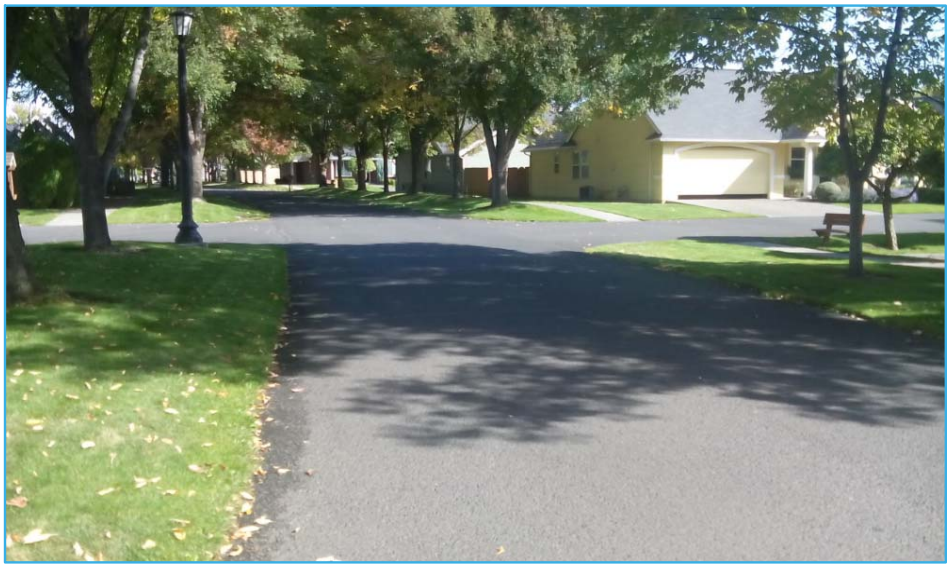
If properly built, the road or parking lot deteriorates from the top down, which only requires the replacement of a layer of asphalt, or preferably the application of a thin layer on top of the existing asphalt (overlay). The asphalt overlay not only provides a new paving surface for a fraction of the cost of rebuilding the entire roadway, but it is the only preventive maintenance technique that adds structural value while extending a pavement's service life.

*Cost estimate based on a 2 inch overlay and includes expectation for minor repairs to areas of the asphalt surfaces at the time of the overlay.

**Life Adjustment of +2 years to coincide with the regular sealcoat cycle for cost efficiency.

Pavement Seal Coat Phase I- 2017

		26,424 sf	@ $0.23
		Asset Cost	$6,077.52
	Phase I	Percent Replacement	100%
Category	Asphalt	Future Cost	$6,077.52
Placed in Service	January 2011		
Useful Life	6		
Replacement Year	2017		
Remaining Life	0		



The primary reason to sealcoat is to protect the pavement from the deteriorating effects of sun and water, which causes the asphalt to harden, or oxidize. The pavement turns brittle. The sealcoat provides a waterproof membrane which slows the oxidation process and helps the pavement shed water, preventing the water to infiltrate the base material.

Without regular applications of a seal coat, an asphalt parking lot might need an overlay in 15 years. If the lot is regularly sealed, asphalt areas can last as much as 25-30 years if properly installed.

Seal coats should be installed on warm sunny day with low humidity with a minimum of 50 degrees Fahrenheit and rising.

Oil spills eat through the asphalt seal and should be cleaned up between seal coats. Power washing is recommended annually and treated as an operating expense.

UG Sprinkler Pipe- Ph. I- Replace 10%- 2022

		9,880 sf	@ $2.50
		Asset Cost	$2,470.00
	Phase I	Percent Replacement	10%
Category	Underground Sprinklers	Future Cost	$2,863.41
Placed in Service	June 1997		
Useful Life	5		
Adjustment	20		
Replacement Year	2022		
Remaining Life	5		

The Board has stated the Association is responsible for the repair & replacement of the front yard underground sprinkler systems.

Underground sprinkler piping, over time, will deteriorate as well as become damaged from root intrusion by trees and shrubs. Due to the age of the community and likelihood of underground sprinkler issues in the near future we recommend for replacement of these pipes at the timeframe indicated which is typical of this type of component. There have reportedly been some areas of repair already required due to root intrusion issues. This cost estimate includes replacement of the underground piping and the landscaping which will be torn up in the process. Since this type of component does not typically fail all at once we recommend funding for a repair contingency of 10% per cycle so that over time the whole system will be replaced.

We suggest consulting with a qualified landscaping company to create a long term plan which covers the communities needs while being as cost efficient as possible. Update future reserve studies with the actual cost estimates and timeframes of projects.

*Cost estimates assumes there will be no need to remove & replace areas of concrete (porches and driveways) on each parcel in the process of installing new underground sprinkler piping.

UG Sprinkler Pipe - Ph. I - Replace 10% continued...

**Useful life has been adjusted +20 years so this component begins cycles of 5 year intervals at the component's age of 25 years from installation date.

Mailbox Structures- Ph. II- Replace- 2022

		3 ea	@ $1,200.00
		Asset Cost	$3,600.00
	Phase II	Percent Replacement	100%
Category	Mailboxes	Future Cost	$4,173.39
Placed in Service	June 1998		
Useful Life	24		
Replacement Year	2022		
Remaining Life	5		

Appears to be deteriorating at a rate typical of their age based on our visual inspection of this component. As routine maintenance, inspect regularly, paint/stain and complete minor repairs as needed from operating budget. Best to plan for total replacement at roughly the time frame indicated due to constant usage, exposure to the elements and wear over time.

*Note this component is for replacement of the wood mailbox structures only. The Board has stated the metal mailboxes are the responsibility of each owner.

Pavement Overlay Phase II- 2029

		12,508 sf	@ $2.20
		Asset Cost	$27,517.60
	Phase II	Percent Replacement	100%
Category	Asphalt	Future Cost	$39,233.52
Placed in Service	June 1998		
Useful Life	30		
Adjustment	1		
Replacement Year	2029		
Remaining Life	12		

Appears to be deteriorating at a rate typical of its age. As routine maintenance, keep surface clean, ensure that drains are clean and free flowing, repair cracks and clean oils stains promptly. Best to plan for eventual intervals of resurface (overlay).

Most asphalt areas can be expected to last approximately 25-30 years before it will become necessary for an overlay to be applied or other major rehabilitation to be completed. It will be necessary to adjust manhole and valve covers at the time the overlay is applied or other major rehabilitation is completed.

If properly built, the road or parking lot deteriorates from the top down, which only requires the replacement of a layer of asphalt, or preferably the application of a thin layer on top of the existing asphalt (overlay). The asphalt overlay not only provides a new paving surface for a fraction of the cost of rebuilding the entire roadway, but it is the only preventive maintenance technique that adds structural value while extending a pavement's service life.

*Cost estimate based on a 2 inch overlay and includes expectation for minor repairs to areas of the asphalt surfaces at the time of the overlay.

**Life Adjustment of +1 years to coincide with the regular sealcoat cycle for cost efficiency.

Pavement Seal Coat Phase II- 2017

		12,508 sf	@ $0.23
		Asset Cost	$2,876.84
	Phase II	Percent Replacement	100%
Category	Asphalt	Future Cost	$2,876.84
Placed in Service	January 2011		
Useful Life	6		
Replacement Year	2017		
Remaining Life	0		

The primary reason to sealcoat is to protect the pavement from the deteriorating effects of sun and water, which causes the asphalt to harden, or oxidize. The pavement turns brittle. The sealcoat provides a waterproof membrane which slows the oxidation process and helps the pavement shed water, preventing the water to infiltrate the base material.

Without regular applications of a seal coat, an asphalt parking lot might need an overlay in 15 years. If the lot is regularly sealed, asphalt areas can last as much as 25-30 years if properly installed.

Seal coats should be installed on warm sunny day with low humidity with a minimum of 50 degrees Fahrenheit and rising.

Oil spills eat through the asphalt seal and should be cleaned up between seal coats. Power washing is recommended annually and treated as an operating expense.

UG Sprinkler Pipe- Ph. II- Replace 10%- 2023

		11,500 sf	@ $2.50
		Asset Cost	$2,875.00
	Phase II	Percent Replacement	10%
Category	Underground Sprinklers	Future Cost	$3,432.90
Placed in Service	June 1998		
Useful Life	5		
Adjustment	20		
Replacement Year	2023		
Remaining Life	6		

The Board has stated the Association is responsible for the repair & replacement of the front yard underground sprinkler systems.

Underground sprinkler piping, over time, will deteriorate as well as become damaged from root intrusion by trees and shrubs. Due to the age of the community and likelihood of underground sprinkler issues in the near future we recommend for replacement of these pipes at the timeframe indicated which is typical of this type of component. There have reportedly been some areas of repair already required due to root intrusion issues. This cost estimate includes replacement of the underground piping and the landscaping which will be torn up in the process. Since this type of component does not typically fail all at once we recommend funding for a repair contingency of 10% per cycle so that over time the whole system will be replaced.

We suggest consulting with a qualified landscaping company to create a long term plan which covers the communities needs while being as cost efficient as possible. Update future reserve studies with the actual cost estimates and timeframes of projects.

*Cost estimates assumes there will be no need to remove & replace areas of concrete (porches and driveways) on each parcel in the process of installing new underground sprinkler piping.

UG Sprinkler Pipe - Ph. II - Replace 10% continued...

**Useful life has been adjusted +20 years so this component begins cycles of 5 year intervals at the component's age of 25 years from installation date.

Mailbox Structures- Ph. V- Replace- 2023

		2 ea	@ $1,200.00
		Asset Cost	$2,400.00
	Phase V	Percent Replacement	100%
Category	Mailboxes	Future Cost	$2,865.73
Placed in Service	June 1999		
Useful Life	24		
Replacement Year	2023		
Remaining Life	6		

Appears to be deteriorating at a rate typical of their age based on our visual inspection of this component. As routine maintenance, inspect regularly, paint/stain and complete minor repairs as needed from operating budget. Best to plan for total replacement at roughly the time frame indicated due to constant usage, exposure to the elements and wear over time.

*Note this component is for replacement of the wood mailbox structures only. The Board has stated the metal mailboxes are the responsibility of each owner.

Pavement Overlay Phase V- 2028

		39,584 sf	@ $2.20
		Asset Cost	$87,084.80
	Phase V	Percent Replacement	100%
Category	Asphalt	Future Cost	$120,545.73
Placed in Service	June 1999		
Useful Life	30		
Adjustment	-1		
Replacement Year	2028		
Remaining Life	11		

Appears to be deteriorating at a rate typical of its age. As routine maintenance, keep surface clean, ensure that drains are clean and free flowing, repair cracks and clean oils stains promptly. Best to plan for eventual intervals of resurface (overlay).

Most asphalt areas can be expected to last approximately 25-30 years before it will become necessary for an overlay to be applied or other major rehabilitation to be completed. It will be necessary to adjust manhole and valve covers at the time the overlay is applied or other major rehabilitation is completed.

If properly built, the road or parking lot deteriorates from the top down, which only requires the replacement of a layer of asphalt, or preferably the application of a thin layer on top of the existing asphalt (overlay). The asphalt overlay not only provides a new paving surface for a fraction of the cost of rebuilding the entire roadway, but it is the only preventive maintenance technique that adds structural value while extending a pavement's service life.

*Cost estimate based on a 2 inch overlay and includes expectation for minor repairs to areas of the asphalt surfaces at the time of the overlay.

**Life Adjustment of -1 years to coincide with the regular sealcoat cycle for cost efficiency.

Pavement Seal Coat Phase V- 2022

		39,584 sf	@ $0.23
		Asset Cost	$9,104.32
	Phase V	Percent Replacement	100%
Category	Asphalt	Future Cost	$10,554.40
Placed in Service	August 2016		
Useful Life	6		
Replacement Year	2022		
Remaining Life	5		

The primary reason to sealcoat is to protect the pavement from the deteriorating effects of sun and water, which causes the asphalt to harden, or oxidize. The pavement turns brittle. The sealcoat provides a waterproof membrane which slows the oxidation process and helps the pavement shed water, preventing the water to infiltrate the base material.

Without regular applications of a seal coat, an asphalt parking lot might need an overlay in 15 years. If the lot is regularly sealed, asphalt areas can last as much as 25-30 years if properly installed.

Seal coats should be installed on warm sunny day with low humidity with a minimum of 50 degrees Fahrenheit and rising.

Oil spills eat through the asphalt seal and should be cleaned up between seal coats. Power washing is recommended annually and treated as an operating expense.

UG Sprinkler Pipe- V- Replace 10%- 2024

		17,112 sf	@ $2.50
		Asset Cost	$4,278.00
	Phase V	Percent Replacement	10%
Category	Underground Sprinklers	Future Cost	$5,261.40
Placed in Service	June 1999		
Useful Life	5		
Adjustment	20		
Replacement Year	2024		
Remaining Life	7		

The Board has stated the Association is responsible for the repair & replacement of the front yard underground sprinkler systems.

Underground sprinkler piping, over time, will deteriorate as well as become damaged from root intrusion by trees and shrubs. Due to the age of the community and likelihood of underground sprinkler issues in the near future we recommend for replacement of these pipes at the timeframe indicated which is typical of this type of component. There have reportedly been some areas of repair already required due to root intrusion issues. This cost estimate includes replacement of the underground piping and the landscaping which will be torn up in the process. Since this type of component does not typically fail all at once we recommend funding for a repair contingency of 10% per cycle so that over time the whole system will be replaced.

We suggest consulting with a qualified landscaping company to create a long term plan which covers the communities needs while being as cost efficient as possible. Update future reserve studies with the actual cost estimates and timeframes of projects.

*Cost estimates assumes there will be no need to remove & replace areas of concrete (porches and driveways) on each parcel in the process of installing new underground sprinkler piping.

**Useful life has been adjusted +20 years so this component begins cycles of 5 year intervals at the component's age of 25 years from installation date.

Mailbox Structures- Ph. VI- Replace- 2024

		2 ea	@ $1,200.00
		Asset Cost	$2,400.00
	Phase VI	Percent Replacement	100%
Category	Mailboxes	Future Cost	$2,951.70
Placed in Service	June 2000		
Useful Life	24		
Replacement Year	2024		
Remaining Life	7		

Appears to be deteriorating at a rate typical of their age based on our visual inspection of this component. As routine maintenance, inspect regularly, paint/stain and complete minor repairs as needed from operating budget. Best to plan for total replacement at roughly the time frame indicated due to constant usage, exposure to the elements and wear over time.

*Note this component is for replacement of the wood mailbox structures only. The Board has stated the metal mailboxes are the responsibility of each owner.

Pavement Overlay Phase VI- 2023

		44,112 sf	@ $2.20
		Asset Cost	$97,046.40
	Phase VI	Percent Replacement	100%
Category	Asphalt	Future Cost	$115,878.48
Placed in Service	June 2000		
Useful Life	30		
Adjustment	-7		
Replacement Year	2023		
Remaining Life	6		

Reportedly areas which were not installed to appropriately. We have reduced the useful life of the asphalt roads in this phase as it is not likely this will last a full 30 years. As routine maintenance, keep surface clean, ensure that drains are clean and free flowing, repair cracks and clean oils stains promptly. Best to plan for eventual intervals of resurface (overlay).

Most asphalt areas can be expected to last approximately 25-30 years before it will become necessary for an overlay to be applied or other major rehabilitation to be completed. It will be necessary to adjust manhole and valve covers at the time the overlay is applied or other major rehabilitation is completed.

*Cost estimate based on a 2 inch overlay and includes expectation for minor repairs to areas of the asphalt surfaces at the time of the overlay.

**Life Adjustment of -7 years due to a a poor install and to coincide with the regular sealcoat cycle for cost efficiency.

Pavement Seal Coat Phase VI- 2017

		44,112 sf	@ $0.23
		Asset Cost	$10,145.76
	Phase VI	Percent Replacement	100%
Category	Asphalt	Future Cost	$10,145.76
Placed in Service	June 2011		
Useful Life	6		
Replacement Year	2017		
Remaining Life	0		

The primary reason to sealcoat is to protect the pavement from the deteriorating effects of sun and water, which causes the asphalt to harden, or oxidize. The pavement turns brittle. The sealcoat provides a waterproof membrane which slows the oxidation process and helps the pavement shed water, preventing the water to infiltrate the base material.

Without regular applications of a seal coat, an asphalt parking lot might need an overlay in 15 years. If the lot is regularly sealed, asphalt areas can last as much as 25-30 years if properly installed.

Seal coats should be installed on warm sunny day with low humidity with a minimum of 50 degrees Fahrenheit and rising.

Oil spills eat through the asphalt seal and should be cleaned up between seal coats. Power washing is recommended annually and treated as an operating expense.

UG Sprinkler Pipe- VI- Replace 10%- 2025

		26,200 sf	@ $2.50
		Asset Cost	$6,550.00
	Phase VI	Percent Replacement	10%
Category	Underground Sprinklers	Future Cost	$8,297.34
Placed in Service	June 2000		
Useful Life	5		
Adjustment	20		
Replacement Year	2025		
Remaining Life	8		

The Board has stated the Association is responsible for the repair & replacement of the front yard underground sprinkler systems.

Underground sprinkler piping, over time, will deteriorate as well as become damaged from root intrusion by trees and shrubs. Due to the age of the community and likelihood of underground sprinkler issues in the near future we recommend for replacement of these pipes at the timeframe indicated which is typical of this type of component. There have reportedly been some areas of repair already required due to root intrusion issues. This cost estimate includes replacement of the underground piping and the landscaping which will be torn up in the process. Since this type of component does not typically fail all at once we recommend funding for a repair contingency of 10% per cycle so that over time the whole system will be replaced.

We suggest consulting with a qualified landscaping company to create a long term plan which covers the communities needs while being as cost efficient as possible. Update future reserve studies with the actual cost estimates and timeframes of projects.

*Cost estimates assumes there will be no need to remove & replace areas of concrete (porches and driveways) on each parcel in the process of installing new underground sprinkler piping.

**Useful life has been adjusted +20 years so this component begins cycles of 5 year intervals at the component's age of 25 years from installation date.

Mailbox Structures- Ph. VII- Replace- 2027

		3 ea	@ $1,200.00
		Asset Cost	$3,600.00
	Phase VII	Percent Replacement	100%
Category	Mailboxes	Future Cost	$4,838.10
Placed in Service	June 2003		
Useful Life	24		
Replacement Year	2027		
Remaining Life	10		

Appears to be deteriorating at a rate typical of their age based on our visual inspection of this component. As routine maintenance, inspect regularly, paint/stain and complete minor repairs as needed from operating budget. Best to plan for total replacement at roughly the time frame indicated due to constant usage, exposure to the elements and wear over time.

*Note this component is for replacement of the wood mailbox structures only. The Board has stated the metal mailboxes are the responsibility of each owner.

Pavement Overlay Phase VII- 2030

		46,140 sf	@ $2.20
		Asset Cost	$101,508.00
	Phase VII	Percent Replacement	100%
Category	Asphalt	Future Cost	$149,067.92
Placed in Service	June 2003		
Useful Life	30		
Adjustment	-3		
Replacement Year	2030		
Remaining Life	13		

Appears to be deteriorating at a rate typical of its age. As routine maintenance, keep surface clean, ensure that drains are clean and free flowing, repair cracks and clean oils stains promptly. Best to plan for eventual intervals of resurface (overlay).

Most asphalt areas can be expected to last approximately 25-30 years before it will become necessary for an overlay to be applied or other major rehabilitation to be completed. It will be necessary to adjust manhole and valve covers at the time the overlay is applied or other major rehabilitation is completed.

If properly built, the road or parking lot deteriorates from the top down, which only requires the replacement of a layer of asphalt, or preferably the application of a thin layer on top of the existing asphalt (overlay). The asphalt overlay not only provides a new paving surface for a fraction of the cost of rebuilding the entire roadway, but it is the only preventive maintenance technique that adds structural value while extending a pavement's service life.

*Cost estimate based on a 2 inch overlay and includes expectation for minor repairs to areas of the asphalt surfaces at the time of the overlay.

**Life Adjustment of -3 years to coincide with the regular sealcoat cycle for cost efficiency.

Pavement Seal Coat Phase VII- 2018

		46,140 sf	@ $0.23
		Asset Cost	$10,612.20
	Phase VII	Percent Replacement	100%
Category	Asphalt	Future Cost	$10,930.57
Placed in Service	June 2012		
Useful Life	6		
Replacement Year	2018		
Remaining Life	1		

The primary reason to sealcoat is to protect the pavement from the deteriorating effects of sun and water, which causes the asphalt to harden, or oxidize. The pavement turns brittle. The sealcoat provides a waterproof membrane which slows the oxidation process and helps the pavement shed water, preventing the water to infiltrate the base material.

Without regular applications of a seal coat, an asphalt parking lot might need an overlay in 15 years. If the lot is regularly sealed, asphalt areas can last as much as 25-30 years if properly installed.

Seal coats should be installed on warm sunny day with low humidity with a minimum of 50 degrees Fahrenheit and rising.

Oil spills eat through the asphalt seal and should be cleaned up between seal coats. Power washing is recommended annually and treated as an operating expense.

UG Sprinkler Pipe- VII- Replace 10%- 2028

		26,552 sf	@ $2.50
		Asset Cost	$6,638.00
	Phase VII	Percent Replacement	10%
Category	Underground Sprinklers	Future Cost	$9,188.54
Placed in Service	June 2003		
Useful Life	5		
Adjustment	20		
Replacement Year	2028		
Remaining Life	11		

The Board has stated the Association is responsible for the repair & replacement of the front yard underground sprinkler systems.

Underground sprinkler piping, over time, will deteriorate as well as become damaged from root intrusion by trees and shrubs. Due to the age of the community and likelihood of underground sprinkler issues in the near future we recommend for replacement of these pipes at the timeframe indicated which is typical of this type of component. There have reportedly been some areas of repair already required due to root intrusion issues. This cost estimate includes replacement of the underground piping and the landscaping which will be torn up in the process. Since this type of component does not typically fail all at once we recommend funding for a repair contingency of 10% per cycle so that over time the whole system will be replaced.

We suggest consulting with a qualified landscaping company to create a long term plan which covers the communities needs while being as cost efficient as possible. Update future reserve studies with the actual cost estimates and timeframes of projects.

*Cost estimates assumes there will be no need to remove & replace areas of concrete (porches and driveways) on each parcel in the process of installing new underground sprinkler piping.

**Useful life has been adjusted +20 years so this component begins cycles of 5 year intervals at the component's age of 25 years from installation date.

Mailbox Structures- Ph. VIII- Replace- 2034

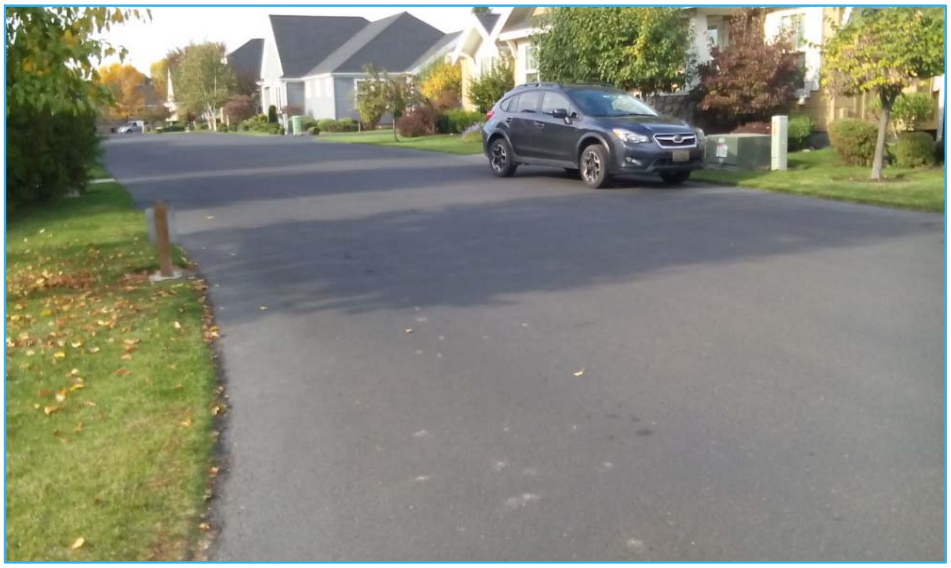
		3 ea	@ $1,200.00
		Asset Cost	$3,600.00
	Phase VIII	Percent Replacement	100%
Category	Mailboxes	Future Cost	$5,950.25
Placed in Service	June 2010		
Useful Life	24		
Replacement Year	2034		
Remaining Life	17		

Appears to be deteriorating at a rate typical of their age based on our visual inspection of this component. As routine maintenance, inspect regularly, paint/stain and complete minor repairs as needed from operating budget. Best to plan for total replacement at roughly the time frame indicated due to constant usage, exposure to the elements and wear over time.

*Note this component is for replacement of the wood mailbox structures only. The Board has stated the metal mailboxes are the responsibility of each owner.

Pavement Overlay Phase VIII- 2041

		44,380 sf	@ $2.20
		Asset Cost	$97,636.00
	Phase VIII	Percent Replacement	100%
Category	Asphalt	Future Cost	$198,473.88
Placed in Service	June 2010		
Useful Life	30		
Adjustment	1		
Replacement Year	2041		
Remaining Life	24		



Appears to be deteriorating at a rate typical of its age. As routine maintenance, keep surface clean, ensure that drains are clean and free flowing, repair cracks and clean oils stains promptly. Best to plan for eventual intervals of resurface (overlay).

Most asphalt areas can be expected to last approximately 25-30 years before it will become necessary for an overlay to be applied or other major rehabilitation to be completed. It will be necessary to adjust manhole and valve covers at the time the overlay is applied or other major rehabilitation is completed.

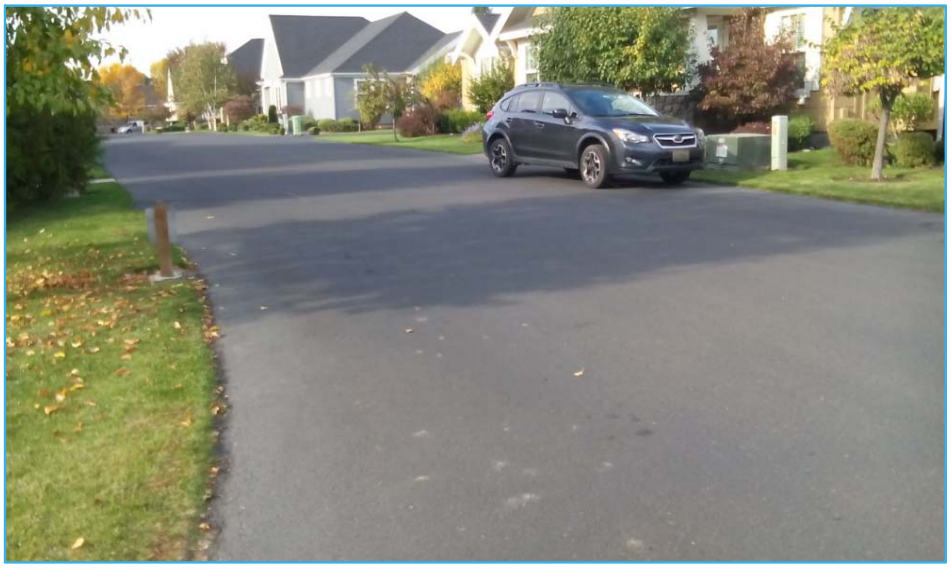
If properly built, the road or parking lot deteriorates from the top down, which only requires the replacement of a layer of asphalt, or preferably the application of a thin layer on top of the existing asphalt (overlay). The asphalt overlay not only provides a new paving surface for a fraction of the cost of rebuilding the entire roadway, but it is the only preventive maintenance technique that adds structural value while extending a pavement's service life.

*Cost estimate based on a 2 inch overlay and includes expectation for minor repairs to areas of the asphalt surfaces at the time of the overlay.

**Life Adjustment of +1 years to coincide with the regular sealcoat cycle for cost efficiency.

Pavement Seal Coat Phase VIII- 2017

		44,380 sf	@ $0.23
		Asset Cost	$10,207.40
	Phase VIII	Percent Replacement	100%
Category	Asphalt	Future Cost	$10,207.40
Placed in Service	June 2010		
Useful Life	6		
Replacement Year	2017		
Remaining Life	0		



The primary reason to sealcoat is to protect the pavement from the deteriorating effects of sun and water, which causes the asphalt to harden, or oxidize. The pavement turns brittle. The sealcoat provides a waterproof membrane which slows the oxidation process and helps the pavement shed water, preventing the water to infiltrate the base material.

Without regular applications of a seal coat, an asphalt parking lot might need an overlay in 15 years. If the lot is regularly sealed, asphalt areas can last as much as 25-30 years if properly installed.

Seal coats should be installed on warm sunny day with low humidity with a minimum of 50 degrees Fahrenheit and rising.

Oil spills eat through the asphalt seal and should be cleaned up between seal coats. Power washing is recommended annually and treated as an operating expense.

UG Sprinkler Pipe- VIII- Replace 10%- 2035

		16,969 sf	@ $2.50
		Asset Cost	$4,242.25
	Phase VIII	Percent Replacement	10%
Category	Underground Sprinklers	Future Cost	$7,222.15
Placed in Service	June 2010		
Useful Life	5		
Adjustment	20		
Replacement Year	2035		
Remaining Life	18		

The Board has stated the Association is responsible for the repair & replacement of the front yard underground sprinkler systems.

Underground sprinkler piping, over time, will deteriorate as well as become damaged from root intrusion by trees and shrubs. Due to the age of the community and likelihood of underground sprinkler issues in the near future we recommend for replacement of these pipes at the timeframe indicated which is typical of this type of component. There have reportedly been some areas of repair already required due to root intrusion issues. This cost estimate includes replacement of the underground piping and the landscaping which will be torn up in the process. Since this type of component does not typically fail all at once we recommend funding for a repair contingency of 10% per cycle so that over time the whole system will be replaced.

We suggest consulting with a qualified landscaping company to create a long term plan which covers the communities needs while being as cost efficient as possible. Update future reserve studies with the actual cost estimates and timeframes of projects.

*Cost estimates assumes there will be no need to remove & replace areas of concrete (porches and driveways) on each parcel in the process of installing new underground sprinkler piping.

**Useful life has been adjusted +20 years so this component begins cycles of 5 year intervals at the component's age of 25 years from installation date.

Bus Stop- Ph. IX- Replace- 2055

1 ls @ $1,600.00
Asset Cost

	Phase IX
Category	Grounds Components
Placed in Service	June 2015
Useful Life	40
Replacement Year	2055
Remaining Life	38

Future Cost

The metal bus top cover appear to be in good overall condition. If properly maintained with regular intervals of cleaning and painting (paid for from the operating budget) this component is a long life item which will not have a replacement cycle within the timeframe of this reserve study. if at a future date this structure appears to be deteriorating more rapidly then expected we recommend incorporating into future reserve studies for replacement.

Structure: 9' wide by 8.5' high.

Concete- Curb Ph. IX- Repair- 2055

		327 lf	@ $25.00
		Asset Cost	
	Phase IX		
Category	Concrete / Pavers	Future Cost	
Placed in Service	June 2015		
Useful Life	40		
Replacement Year	2055		
Remaining Life	38		

Good condition with no areas of cracking or damage noted. No instability observed at this time. Inspect regularly, pressure wash for appearance and repair as needed from operating budget. No expectation for large scale replacement at this time, if patterns of deterioration emerge, incorporate funding into future reserve study updates as conditions merit.

Mailbox Clusters- Ph. IX- Replace- 2040

		3 ea	@ $1,500.00
		Asset Cost	$4,500.00
	Phase IX	Percent Replacement	100%
Category	Mailboxes	Future Cost	$8,881.14
Placed in Service	June 2015		
Useful Life	25		
Replacement Year	2040		
Remaining Life	23		

Appears to be deteriorating at a rate typical of its age based on our visual inspection of this component. As routine maintenance, 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 indicated due to constant usage, exposure to the elements and wear over time.

Pavement Overlay Phase IX- 2045

		43,822 sf	@ $2.20
		Asset Cost	$96,408.40
	Phase IX	Percent Replacement	100%
Category	Asphalt	Future Cost	$220,575.44
Placed in Service	June 2015		
Useful Life	30		
Replacement Year	2045		
Remaining Life	28		

Appears to be deteriorating at a rate typical of its age. As routine maintenance, keep surface clean, ensure that drains are clean and free flowing, repair cracks and clean oils stains promptly. Best to plan for eventual intervals of resurface (overlay).

Most asphalt areas can be expected to last approximately 25-30 years before it will become necessary for an overlay to be applied or other major rehabilitation to be completed. It will be necessary to adjust manhole and valve covers at the time the overlay is applied or other major rehabilitation is completed.

If properly built, the road or parking lot deteriorates from the top down, which only requires the replacement of a layer of asphalt, or preferably the application of a thin layer on top of the existing asphalt (overlay). The asphalt overlay not only provides a new paving surface for a fraction of the cost of rebuilding the entire roadway, but it is the only preventive maintenance technique that adds structural value while extending a pavement's service life.

*Cost estimate based on a 2 inch overlay and includes expectation for minor repairs to areas of the asphalt surfaces at the time of the overlay.

**Measurements include the 4,300 square foot asphalt walking path in this phase.

Pavement Seal Coat Phase IX- 2021

		43,822 sf	@ $0.23
		Asset Cost	$10,079.06
	Phase IX	Percent Replacement	100%
Category	Asphalt	Future Cost	$11,344.07
Placed in Service	June 2015		
Useful Life	6		
Replacement Year	2021		
Remaining Life	4		

The primary reason to sealcoat is to protect the pavement from the deteriorating effects of sun and water, which causes the asphalt to harden, or oxidize. The pavement turns brittle. The sealcoat provides a waterproof membrane which slows the oxidation process and helps the pavement shed water, preventing the water to infiltrate the base material.

Without regular applications of a seal coat, an asphalt parking lot might need an overlay in 15 years. If the lot is regularly sealed, asphalt areas can last as much as 25-30 years if properly installed.

Seal coats should be installed on warm sunny day with low humidity with a minimum of 50 degrees Fahrenheit and rising.

Oil spills eat through the asphalt seal and should be cleaned up between seal coats. Power washing is recommended annually and treated as an operating expense.

*Measurements include the 4,300 square foot asphalt walking path in this phase.

UG Sprinkler Pipe- IX- Replace 10%- 2040

		17,000 sf	@ $2.50
		Asset Cost	$4,250.00
	Phase IX	Percent Replacement	10%
Category	Underground Sprinklers	Future Cost	$8,387.74
Placed in Service	June 2015		
Useful Life	5		
Adjustment	20		
Replacement Year	2040		
Remaining Life	23		

The Board has stated the Association is responsible for the repair & replacement of the front yard underground sprinkler systems.

Underground sprinkler piping, over time, will deteriorate as well as become damaged from root intrusion by trees and shrubs. Due to the age of the community and likelihood of underground sprinkler issues in the near future we recommend for replacement of these pipes at the timeframe indicated which is typical of this type of component. There have reportedly been some areas of repair already required due to root intrusion issues. This cost estimate includes replacement of the underground piping and the landscaping which will be torn up in the process. Since this type of component does not typically fail all at once we recommend funding for a repair contingency of 10% per cycle so that over time the whole system will be replaced.

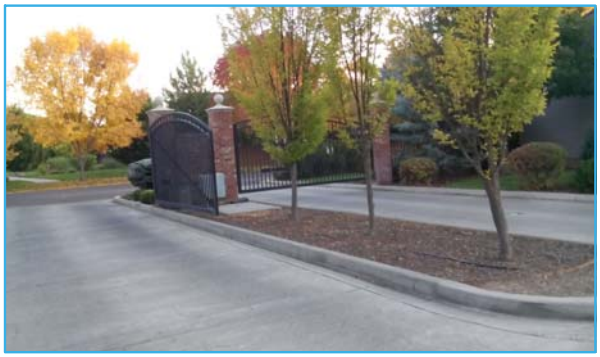
We suggest consulting with a qualified landscaping company to create a long term plan which covers the communities needs while being as cost efficient as possible. Update future reserve studies with the actual cost estimates and timeframes of projects.

*Cost estimates assumes there will be no need to remove & replace areas of concrete (porches and driveways) on each parcel in the process of installing new underground sprinkler piping.

**Useful life has been adjusted +20 years so this component begins cycles of 5 year intervals at the component's age of 25 years from installation date.

Concrete Surfaces- Ph. X- 3% Repair- 2027

		4,085 sf	@ $12.00
		Asset Cost	$1,470.60
	Phase X	Percent Replacement	3%
Category	Concrete / Pavers	Future Cost	$1,976.36
Placed in Service	June 2007		
Useful Life	5		
Adjustment	15		
Replacement Year	2027		
Remaining Life	10		



3% Repair contingency for the concrete walkways, curbs in this phase (at both entrances). Amount and cycle to be reviewed annually. We recommend repairing trip hazards immediately to minimize liability for the Association.

The useful life has been adjusted +15 years as concrete rarely requires repairs until approximately 20 years old (vehicle damage and root intrusion). this component has it's first cycle start in 2027.

Gates- Ph. X- Refurbish- 2017

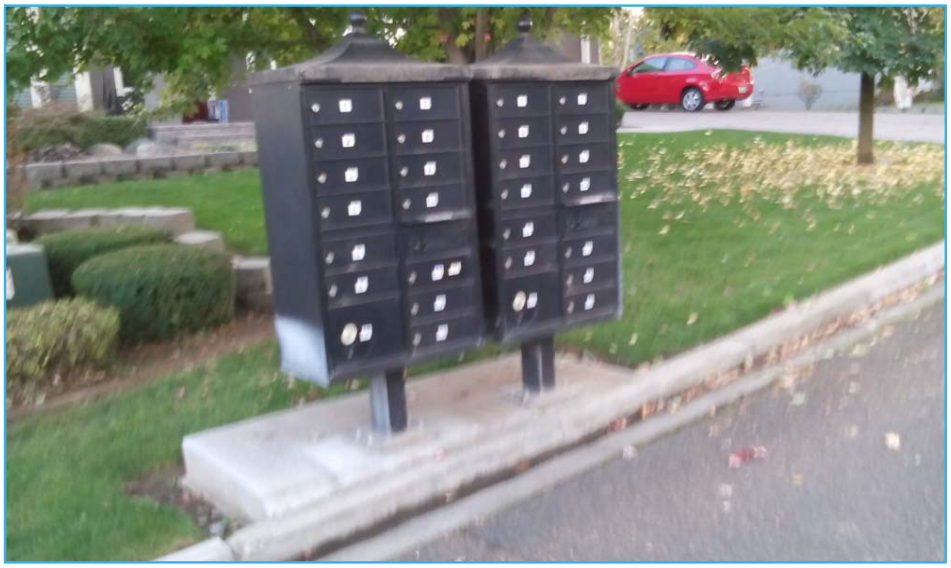
		1 ls	@ $1,300.00
		Asset Cost	$1,300.00
	Phase X	Percent Replacement	100%
Category	Gate	Future Cost	$1,300.00
Placed in Service	June 2016		
Useful Life	1		
Replacement Year	2017		
Remaining Life	0		

Vehicle and pedestrian entry gates currently have areas in need of paint. This annual refurbish contingency component has been included based on estimated costs associated with the ongoing repair expenses related to these entry gates. Due to constant usage and exposure to the elements we recommend for funding of regular cycles of refurbishment to the gates and their mechanical/electrical/sensor systems. Inspect annually and clean/paint/repair covered under this repair contingency component.

Gates expenses are very specific to a community due to usage differences and we recommend updated future reserve studies with cost estimated based on actual repair costs for this component.

Mailbox Clusters- Ph. X- Replace- 2032

		2 ea	@ $1,750.00
		Asset Cost	$3,500.00
	Phase X	Percent Replacement	100%
Category	Mailboxes	Future Cost	$5,452.89
Placed in Service	June 2007		
Useful Life	25		
Replacement Year	2032		
Remaining Life	15		



Appears to be deteriorating at a rate typical of its age based on our visual inspection of this component. As routine maintenance, 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 indicated due to constant usage, exposure to the elements and wear over time.

Pavement Overlay Phase X- 2036

		20,964 sf	@ $2.20
		Asset Cost	$46,120.80
	Phase X	Percent Replacement	100%
Category	Asphalt	Future Cost	$80,873.10
Placed in Service	June 2007		
Useful Life	30		
Adjustment	-1		
Replacement Year	2036		
Remaining Life	19		

Appears to be deteriorating at a rate typical of its age. As routine maintenance, keep surface clean, ensure that drains are clean and free flowing, repair cracks and clean oils stains promptly. Best to plan for eventual intervals of resurface (overlay).

Most asphalt areas can be expected to last approximately 25-30 years before it will become necessary for an overlay to be applied or other major rehabilitation to be completed. It will be necessary to adjust manhole and valve covers at the time the overlay is applied or other major rehabilitation is completed.

If properly built, the road or parking lot deteriorates from the top down, which only requires the replacement of a layer of asphalt, or preferably the application of a thin layer on top of the existing asphalt (overlay). The asphalt overlay not only provides a new paving surface for a fraction of the cost of rebuilding the entire roadway, but it is the only preventive maintenance technique that adds structural value while extending a pavement's service life.

*Cost estimate based on a 2 inch overlay and includes expectation for minor repairs to areas of the asphalt surfaces at the time of the overlay.

**Life Adjustment of +2 years to coincide with the regular sealcoat cycle for cost efficiency.

Pavement Seal Coat Phase X- 2018

		20,964 sf	@ $0.23
		Asset Cost	$4,821.72
	Phase X	Percent Replacement	100%
Category	Asphalt	Future Cost	$4,966.37
Placed in Service	June 2012		
Useful Life	6		
Replacement Year	2018		
Remaining Life	1		

The primary reason to sealcoat is to protect the pavement from the deteriorating effects of sun and water, which causes the asphalt to harden, or oxidize. The pavement turns brittle. The sealcoat provides a waterproof membrane which slows the oxidation process and helps the pavement shed water, preventing the water to infiltrate the base material.

Without regular applications of a seal coat, an asphalt parking lot might need an overlay in 15 years. If the lot is regularly sealed, asphalt areas can last as much as 25-30 years if properly installed.

Seal coats should be installed on warm sunny day with low humidity with a minimum of 50 degrees Fahrenheit and rising.

Oil spills eat through the asphalt seal and should be cleaned up between seal coats. Power washing is recommended annually and treated as an operating expense.

Sign- Entry- Ph. X- Replace- 2020

		2 ea	@ $900.00
		Asset Cost	$1,800.00
	Phase X	Percent Replacement	100%
Category	Signs	Future Cost	$1,966.91
Placed in Service	June 2007		
Useful Life	13		
Replacement Year	2020		
Remaining Life	3		

Entry signs (with interior light) appear faded and the plastic/fiberglass interior has come unglued inside one of the signs. It is assumed both of these signs are operational as it was daylight hours. We recommend replacement at the timeframe indicated due to constant exposure.

UG Sprinkler Pipe- X- Replace 10%- 2032

		24,000 sf	@ $2.50
		Asset Cost	$6,000.00
	Phase X	Percent Replacement	10%
Category	Underground Sprinklers	Future Cost	$9,347.80
Placed in Service	June 2007		
Useful Life	5		
Adjustment	20		
Replacement Year	2032		
Remaining Life	15		

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We suggest consulting with a qualified landscaping company to create a long term plan which covers the communities needs while being as cost efficient as possible. Update future reserve studies with the actual cost estimates and timeframes of projects.

*Cost estimates assumes there will be no need to remove & replace areas of concrete (porches and driveways) on each parcel in the process of installing new underground sprinkler piping.

**Useful life has been adjusted +20 years so this component begins cycles of 5 year intervals at the component's age of 25 years from installation date.

Villages of Garrison Creek HOA
Spreadsheet- Component Expenditures

Description	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Benches- Repair/Replacement						3,246				
Bridge Pond Replace										
Bridges 1 2 and 3 Replace										
Bridges Paint Wood Surfaces			1,337					1,550		
Bus Stop- Ph. IX- Replace										
Clock Tower Paint / Repair Contingency			2,652			2,898			3,167	
Concete- Curb Ph. IX- Repair										
Concrete Surfaces- Ph. X- 3% Repair										
Creel Pump Creek- Refurbish										
Entry Larch Sign & Monument- Refurbish						1,739				
Fence- Metal/Brick- Ph. X- Replace										
Fence- Wood- Paint/Stain	*Unfunded*									
Fences Along Lions Park (Two Sides) Replace			32,024							
GVW & Walking Paths Concrete Surfaces 5% R..	23,699					27,473				
Gate Entry Access- Ph. X- Replace										
Gate Operators- Ph. X- Replace			16,974							
Gates- Ph. X- Refurbish	1,300	1,339	1,379	1,421	1,463	1,507	1,552	1,599	1,647	1,696
Gates- Ph. X- Replace										
Gazebo- Major Renovation										
Gazebo- Paint		1,774						2,118		
Gazebo Roof- Replace										
Irrigation Controllers 20% Replace			3,119			3,408			3,724	
Irrrigation Backflow Devices- 11% replace	751		796		845		896		951	
Lights Pole Fixtures Phases I & II- Replace	4,500									
Lights Pole Phases I & II- Replace										
Mailbox Clusters- Ph. IX- Replace										
Mailbox Clusters- Ph. X- Replace										
Mailbox Structures- Ph. I- Replace					2,701					
Mailbox Structures- Ph. II- Replace						4,173				
Mailbox Structures- Ph. V- Replace							2,866			

Villages of Garrison Creek HOA
Spreadsheet- Component Expenditures

Description	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Mailbox Structures- Ph. VI- Replace								2,952		
Mailbox Structures- Ph. VII- Replace										
Mailbox Structures- Ph. VIII- Replace										
Pavement Overlay Master									151,259	
Pavement Overlay Phase I										
Pavement Overlay Phase II										
Pavement Overlay Phase IX										
Pavement Overlay Phase V										
Pavement Overlay Phase VI							115,878			
Pavement Overlay Phase VII										
Pavement Overlay Phase VIII										
Pavement Overlay Phase X										
Pavement Seal Coat Master			13,243							
Pavement Seal Coat Phase I	6,078						7,257			
Pavement Seal Coat Phase II	2,877						3,435			
Pavement Seal Coat Phase IX					11,344					
Pavement Seal Coat Phase V						10,554				
Pavement Seal Coat Phase VI	10,146									
Pavement Seal Coat Phase VII		10,931						13,052		
Pavement Seal Coat Phase VIII	10,207						12,188			
Pavement Seal Coat Phase X		4,966						5,930		
Pond Fountain Pump- Replace	1,259			1,376			1,503			1,643
Pond Circulation Pump 1 HP				5,731						
Pond Large- Liner- Install		51,356								
Pond Small- Liner- Remove and Replace		9,942								
Sign- Entry- Ph. X- Replace				1,967						
Slope- Maintenance	*Unfunded*									
South Creekside Tree Project- Cottonwood Tr..		14,000								
South Creekside Tree Project- Cottonwood Tr..		14,077								
South Creekside Tree Project- Cottonwood Tr..			12,750							

Villages of Garrison Creek HOA
Spreadsheet- Component Expenditures

Description	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
South Creekside Tree Project- Cottonwood Tr..				11,900						
South Creekside Tree Project- Cottonwood Tr..					11,050					
South Creekside Tree Project- Cottonwood Tr..						10,200				
South Creekside Tree Project- Replacement Tr..		2,000								
South Creekside Tree Project- Replacement Tr..		2,000								
South Creekside Tree Project- Replacement Tr..			2,000							
South Creekside Tree Project- Replacement Tr..				2,000						
South Creekside Tree Project- Replacement Tr..					2,000					
South Creekside Tree Project- Replacement Tr..						2,000				
South Creekside Tree Project- Willow Tree Thi..		2,000								
South Creekside Tree Project- Willow Tree Thi..		2,000								
South Creekside Tree Project- Willow Tree Thi..			2,000							
South Creekside Tree Project- Willow Tree Thi..				2,000						
Storm Water System Drains & Catch Basins Ma..		8,240			9,004			9,839		
Streetside Signs- Replace										
Sump Pump 2 HP- High Water / Ground Water										
Sump Pump 3/4 HP- Pond Fill- Replace			5,641							
Sump Pump Backup Generator- Replace										
Tree Care- Roots and Trimming, etc			42,436			46,371			50,671	
UG Sprinkler Pipe- IX- Replace 10%										
UG Sprinkler Pipe- Ph. I- Replace 10%						2,863				
UG Sprinkler Pipe- Ph. II- Replace 10%							3,433			
UG Sprinkler Pipe- V- Replace 10%								5,261		
UG Sprinkler Pipe- VI- Replace 10%									8,297	
UG Sprinkler Pipe- VII- Replace 10%										
UG Sprinkler Pipe- VIII- Replace 10%										
UG Sprinkler Pipe- X- Replace 10%										
Underground Sprinkler Pipe Master Areas 5%						58,098				
Walking Paths Bark Dust & Chip Rock Replace..			3,501			3,826			4,180	
Well Clock Tower-Repair Contingency						2,319				

Villages of Garrison Creek HOA
Spreadsheet- Component Expenditures

Description	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Well Pump- Replace			12,040							
Year Total:	60,816	124,625	151,894	26,395	38,407	180,676	149,009	42,300	223,896	3,339

Villages of Garrison Creek HOA
Spreadsheet- Component Expenditures

Description	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Benches- Repair/Replacement										
Bridge Pond Replace										
Bridges 1 2 and 3 Replace										
Bridges Paint Wood Surfaces			1,796					2,083		
Bus Stop- Ph. IX- Replace										
Clock Tower Paint / Repair Contingency		3,461			3,781			4,132		
Concete- Curb Ph. IX- Repair										
Concrete Surfaces- Ph. X- 3% Repair	1,976					2,291				
Creel Pump Creek- Refurbish			16,922							
Entry Larch Sign & Monument- Refurbish										
Fence- Metal/Brick- Ph. X- Replace										
Fence- Wood- Paint/Stain	*Unfunded*									
Fences Along Lions Park (Two Sides) Replace										
GVW & Walking Paths Concrete Surfaces 5% R..	31,849					36,922				
Gate Entry Access- Ph. X- Replace					8,471					
Gate Operators- Ph. X- Replace					24,201					
Gates- Ph. X- Refurbish	1,747	1,800	1,853	1,909	1,966	2,025	2,086	2,149	2,213	2,280
Gates- Ph. X- Replace					36,302					
Gazebo- Major Renovation				35,138						
Gazebo- Paint				2,529						3,020
Gazebo Roof- Replace				3,877						
Irrigation Controllers 20% Replace		4,070			4,447			4,859		
Irrrigation Backflow Devices- 11% replace	1,009		1,070		1,135		1,204		1,278	
Lights Pole Fixtures Phases I & II- Replace										
Lights Pole Phases I & II- Replace										
Mailbox Clusters- Ph. IX- Replace										
Mailbox Clusters- Ph. X- Replace						5,453				
Mailbox Structures- Ph. I- Replace										
Mailbox Structures- Ph. II- Replace										
Mailbox Structures- Ph. V- Replace										

Villages of Garrison Creek HOA
Spreadsheet- Component Expenditures

Description	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Mailbox Structures- Ph. VI- Replace										
Mailbox Structures- Ph. VII- Replace	4,838									
Mailbox Structures- Ph. VIII- Replace								5,950		
Pavement Overlay Master										
Pavement Overlay Phase I			82,883							
Pavement Overlay Phase II			39,234							
Pavement Overlay Phase IX										
Pavement Overlay Phase V		120,546								
Pavement Overlay Phase VI										
Pavement Overlay Phase VII				149,068						
Pavement Overlay Phase VIII										
Pavement Overlay Phase X										80,873
Pavement Seal Coat Master					18,882					
Pavement Seal Coat Phase I									10,347	
Pavement Seal Coat Phase II									4,898	
Pavement Seal Coat Phase IX	13,545						16,174			
Pavement Seal Coat Phase V								15,048		
Pavement Seal Coat Phase VI			14,465						17,272	
Pavement Seal Coat Phase VII										18,609
Pavement Seal Coat Phase VIII			14,553						17,377	
Pavement Seal Coat Phase X				7,081						
Pond Fountain Pump- Replace			1,795			1,961			2,143	
Pond Circulation Pump 1 HP						8,172				
Pond Large- Liner- Install										
Pond Small- Liner- Remove and Replace										
Sign- Entry- Ph. X- Replace							2,888			
Slope- Maintenance	*Unfunded*									
South Creekside Tree Project- Cottonwood Tr..										
South Creekside Tree Project- Cottonwood Tr..										
South Creekside Tree Project- Cottonwood Tr..										

Villages of Garrison Creek HOA
Spreadsheet- Component Expenditures

Description	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
South Creekside Tree Project- Cottonwood Tr..										
South Creekside Tree Project- Cottonwood Tr..										
South Creekside Tree Project- Cottonwood Tr..										
South Creekside Tree Project- Replacement Tr..										
South Creekside Tree Project- Replacement Tr..										
South Creekside Tree Project- Replacement Tr..										
South Creekside Tree Project- Replacement Tr..										
South Creekside Tree Project- Replacement Tr..										
South Creekside Tree Project- Replacement Tr..										
South Creekside Tree Project- Willow Tree Thi..										
South Creekside Tree Project- Willow Tree Thi..										
South Creekside Tree Project- Willow Tree Thi..										
South Creekside Tree Project- Willow Tree Thi..										
Storm Water System Drains & Catch Basins Ma..	10,751			11,748			12,838			14,028
Streetside Signs- Replace					60,352					
Sump Pump 2 HP- High Water / Ground Water	15,881									
Sump Pump 3/4 HP- Pond Fill- Replace					8,042					
Sump Pump Backup Generator- Replace	12,767									
Tree Care- Roots and Trimming, etc		55,369			60,504			66,114		
UG Sprinkler Pipe- IX- Replace 10%										
UG Sprinkler Pipe- Ph. I- Replace 10%	3,319					3,848				
UG Sprinkler Pipe- Ph. II- Replace 10%		3,980					4,614			
UG Sprinkler Pipe- V- Replace 10%			6,099					7,071		
UG Sprinkler Pipe- VI- Replace 10%				9,619					11,151	
UG Sprinkler Pipe- VII- Replace 10%		9,189					10,652			
UG Sprinkler Pipe- VIII- Replace 10%									7,222	
UG Sprinkler Pipe- X- Replace 10%						9,348				
Underground Sprinkler Pipe Master Areas 5%	67,352					78,079				
Walking Paths Bark Dust & Chip Rock Replace..		4,568			4,992			5,454		
Well Clock Tower-Repair Contingency		2,768						3,306		

Villages of Garrison Creek HOA
Spreadsheet- Component Expenditures

Description	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Well Pump- Replace			16,181							
Year Total:	165,036	205,749	196,854	220,968	233,076	148,100	50,456	116,166	73,902	118,809

Villages of Garrison Creek HOA
Spreadsheet- Component Expenditures

Description	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Benches- Repair/Replacement										
Bridge Pond Replace			11,065							
Bridges 1 2 and 3 Replace			45,843							
Bridges Paint Wood Surfaces			2,414					2,799		
Bus Stop- Ph. IX- Replace										
Clock Tower Paint / Repair Contingency	4,515			4,934			5,391			5,891
Concete- Curb Ph. IX- Repair										
Concrete Surfaces- Ph. X- 3% Repair	2,656					3,079				
Creel Pump Creek- Refurbish								26,364		
Entry Larch Sign & Monument- Refurbish										
Fence- Metal/Brick- Ph. X- Replace	22,486									
Fence- Wood- Paint/Stain	*Unfunded*									
Fences Along Lions Park (Two Sides) Replace					61,362					
GVW & Walking Paths Concrete Surfaces 5% R..	42,803					49,620				
Gate Entry Access- Ph. X- Replace										
Gate Operators- Ph. X- Replace							34,505			
Gates- Ph. X- Refurbish	2,348	2,418	2,491	2,566	2,643	2,722	2,804	2,888	2,974	3,064
Gates- Ph. X- Replace										
Gazebo- Major Renovation										
Gazebo- Paint						3,605				
Gazebo Roof- Replace										
Irrigation Controllers 20% Replace	5,310			5,802			6,340			6,928
Irrrigation Backflow Devices- 11% replace	1,356		1,438		1,526		1,619		1,717	
Lights Pole Fixtures Phases I & II- Replace										
Lights Pole Phases I & II- Replace	18,964									
Mailbox Clusters- Ph. IX- Replace				8,881						
Mailbox Clusters- Ph. X- Replace										
Mailbox Structures- Ph. I- Replace									5,491	
Mailbox Structures- Ph. II- Replace										8,484
Mailbox Structures- Ph. V- Replace										

Villages of Garrison Creek HOA
Spreadsheet- Component Expenditures

Description	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Mailbox Structures- Ph. VI- Replace										
Mailbox Structures- Ph. VII- Replace										
Mailbox Structures- Ph. VIII- Replace										
Pavement Overlay Master										
Pavement Overlay Phase I										
Pavement Overlay Phase II										
Pavement Overlay Phase IX									220,575	
Pavement Overlay Phase V										
Pavement Overlay Phase VI										
Pavement Overlay Phase VII										
Pavement Overlay Phase VIII					198,474					
Pavement Overlay Phase X										
Pavement Seal Coat Master	22,546						26,921			
Pavement Seal Coat Phase I					12,354					
Pavement Seal Coat Phase II					5,848					
Pavement Seal Coat Phase IX			19,313							
Pavement Seal Coat Phase V				17,968						21,455
Pavement Seal Coat Phase VI					20,624					
Pavement Seal Coat Phase VII						22,220				
Pavement Seal Coat Phase VIII										
Pavement Seal Coat Phase X						10,096				
Pond Fountain Pump- Replace		2,342			2,559			2,797		
Pond Circulation Pump 1 HP								11,651		
Pond Large- Liner- Install		92,755								
Pond Small- Liner- Remove and Replace		17,956								
Sign- Entry- Ph. X- Replace										4,242
Slope- Maintenance	*Unfunded*									
South Creekside Tree Project- Cottonwood Tr..										
South Creekside Tree Project- Cottonwood Tr..										
South Creekside Tree Project- Cottonwood Tr..										

Villages of Garrison Creek HOA
Spreadsheet- Component Expenditures

Description	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
South Creekside Tree Project- Cottonwood Tr..										
South Creekside Tree Project- Cottonwood Tr..										
South Creekside Tree Project- Cottonwood Tr..										
South Creekside Tree Project- Replacement Tr..										
South Creekside Tree Project- Replacement Tr..										
South Creekside Tree Project- Replacement Tr..										
South Creekside Tree Project- Replacement Tr..										
South Creekside Tree Project- Replacement Tr..										
South Creekside Tree Project- Replacement Tr..										
South Creekside Tree Project- Willow Tree Thi..										
South Creekside Tree Project- Willow Tree Thi..										
South Creekside Tree Project- Willow Tree Thi..										
South Creekside Tree Project- Willow Tree Thi..										
Storm Water System Drains & Catch Basins Ma..			15,329			16,750			18,303	
Streetside Signs- Replace										
Sump Pump 2 HP- High Water / Ground Water			22,643							
Sump Pump 3/4 HP- Pond Fill- Replace							11,467			
Sump Pump Backup Generator- Replace										
Tree Care- Roots and Trimming, etc	72,244			78,943			86,264			94,263
UG Sprinkler Pipe- IX- Replace 10%				8,388					9,724	
UG Sprinkler Pipe- Ph. I- Replace 10%	4,461					5,172				
UG Sprinkler Pipe- Ph. II- Replace 10%		5,348					6,200			
UG Sprinkler Pipe- V- Replace 10%			8,197					9,503		
UG Sprinkler Pipe- VI- Replace 10%				12,927					14,986	
UG Sprinkler Pipe- VII- Replace 10%		12,349					14,315			
UG Sprinkler Pipe- VIII- Replace 10%				8,372					9,706	
UG Sprinkler Pipe- X- Replace 10%	10,837					12,563				
Underground Sprinkler Pipe Master Areas 5%	90,515					104,932				
Walking Paths Bark Dust & Chip Rock Replace..	5,960			6,513			7,117			7,777
Well Clock Tower-Repair Contingency				3,947						4,713

Villages of Garrison Creek HOA
Spreadsheet- Component Expenditures

Description	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Well Pump- Replace			21,746							
Year Total:	307,002	133,169	150,479	159,242	305,390	230,758	202,944	56,001	283,477	156,816

1) **Allocation % =**

Reserve Allocation (Component Method) / Total Reserve Allocation (Component Method) x 100

2) **Current Cost =**

Extended Cost (for a component without subcomponents)

-or-

Sum of subcomponent Extended Costs (for a component with subcomponents)

3) **Extended Cost =**

Quantity x Unit Cost x Replacement % x (1+Contingency Rate)

4) **Fully Funded Balance =**

Current Cost / Useful Life x (Useful Life - Remaining Life)

5) **FY End Balance (same as Next FY Start Balance) =**

Initial or current fiscal year-

Current Reserve Balance + Interest Earned + Reserve Allocation to Fund + Special Assessment to Fund + Funds Due from Operating - Approved Funds to Disburse - Disbursements

Subsequent fiscal years-

FY Start Balance + Interest Earned + (Reserve Allocation (from previous year) x (1 + Reserve Allocation Rate) - Disbursements

6) **Interest Earned=**

Initial fiscal year-

Current Reserve Balance x (Interest Rate (net effective)/12 x Number of funding months remaining in current fiscal year)

Subsequent fiscal years-

FY Start Balance x Interest Rate (net effective)

7) **Percent Funded =**

(FY Start Balance / Fully Funded Balance) x 100

8) **Reserve Allocation (Component Method) =**

Current Cost / Useful Life

Abbreviations

bldgs = buildings	lf or lin ft = lineal feet	sy or sq yd= square yard
ea = each	RL = remaining life	UL = useful life
FY = fiscal year	sf or sq ft = square feet	% = percent
	100 sq ft = 1 square)	

1) **Age**
   The approximate age of the complex. This parameter is provided for information only.

2) **Allocation %**
   A percentage of the total Reserve Allocation. See - Calculations Appendix

3) **Allocation Increase Rate**
   Expressed as a percentage rate that reflects the increase of a given year's Reserve Allocation over the previous year's Reserve Allocation and utilized only in the Cash Flow Analysis.

4) **Base Year**
   The year in which the governing documents were recorded and/or the buildings constructed (average year may be used for phases built over a period of time), and utilized to determine the approximate complex age. This parameter is provided for information only.

5) **Common Interest Development (CID)**
   Defined by shared property and restrictions in the deed on use of the property. A CID is governed by a mandatory Association of homeowners which administers the property and enforces its restrictions. The Association Board is responsible for repairing, replacing, or maintaining the common areas, other than the exclusive use common areas, and the owner of each separate interest is responsible for maintaining that separate interest and any exclusive use common area appurtenant to the separate
   interest. The following are two typical CID subdivision types:
   A) Condominium- In general, the recorded owner has title to the unit (or airspace). They are typically responsible for the interior of their individual unit/garage, all utilities that service their unit and any exclusive use common area associated with their unit (e.g. balcony, doors/windows, patio yard, etc.).
   B) Planned Development- In general, the recorded owner has title to the lot. They are typically responsible for the maintenance and repair of any structure or improvement located on their respective lot.
   *Note- CIDs & subdivision types are general and may not apply or may vary, based on your local.

6) **Component Inventory**
   The task of selecting and quantifying reserve items. This task can be accomplished through on-site visual observations, review of association design and organizational documents, review of established

association precedents, and discussion with appropriate association representatives.

7) Condition Assessment

The task of evaluating the current condition of the component based on observed or reported characteristics and normal documented in the field report for a Level 1 or Level 2 Reserve Study.

8) Contingency Rate

Expressed as a percentage rate that reflects a factor added to the unit cost to prepare for an event that is liable to occur, but not with certainty.

9) Current Cost

The current fiscal year's estimated cost to maintain, replace, repair, or restore a reserve component to its original functional condition. Sources utilized to obtain estimates may include: the association, its contractors, other contractors, specialists and independent consultants, the State department of Real Estate (or other state department as applicable), construction pricing and estimating manuals, and the preparer's own experience and/or database of costs formulated in the preparation of other reserve study reports. See - Calculations Appendix.

10) Disbursement / Expenditures

The funds expected to be paid or expended from the Reserve Balance.

11) Extended Cost

See - Calculations Appendix.

12) Fiscal Year (FY)

A twelve-month period for which an organization plans the use of its funds. There are two distinct types:

A) Calendar Fiscal Year (ends December 31)

B) Non-Calendar Fiscal Year (does not end December 31)

13) Full Funded Balance (FFB)

Total Accrued Depreciation. An indicator against which the FY Start Balance can be compared. The balance that is in direct proportion to the fraction of life "used up" of the cost.
See - Calculations Appendix.

14) Funding Goal

Independent of methodology utilized, the following represents the basic categories of funding plan goals:

A) Baseline Funding- Maintaining a Net Reserve Balance above zero for length of the study.

B) Full Funding- Maintaining a Reserve Balance at or near Percent Funded of 100%.

C) Statutory Funding- Maintaining a specified Reserve Balance/Percent Funded per statutes.

D) Threshold Funding- Establishing and maintaining a set predetermined Reserve Balance or Percent Funded.

15) Funding Method (or Funding Plan)

An association's plan to provide income to the reserve fund to offset expected disbursements from that fund. The following represents two (2) basic methodologies used to fund reserves:

A. Cash Flow Method- A method of developing a reserve funding plan where allocations to the reserve fund are designed to offset the variable annual expenditures from the reserve fund. Different reserve funding plans are tested against the anticipated schedule of reserve expenses until the desired funding goal is achieved.

B. Component Method- The component method develops a reserve-funding plan where the total contribution is based on the sum of contributions for individual components. The component method is the more conservative (typically higher reserve account balance) of the two funding options, and assures that the association will achieve and maintain an ideal level of reserves over time. This method also allows for computations on individual components in the analysis. However this method has also limitations with respects to variations in actual useful life of components and is much more time intensive to accurately follow this funding strategy.

16) Funding Plan

The combined Funding Method & Funding Goal.

17) FY End Balance (same as next FY Start Balance)

The balance in reserves at end of applicable fiscal year. See - Calculations Appendix.

18) FY Start Balance (same as prior year FY End Balance)

The balance in reserves at start of applicable fiscal year.

19) Inflation Rate

Expressed as a percentage rate that reflects the increase of this year's costs over the previous year's costs. Also known as a 'cost increase factor'.

20) Interest Earned

The annual earning of reserve funds that have been deposited into certificates of deposit (CDs), money market accounts or other investment vehicles. See - Calculations Appendix.

21) Interest Rate

The ratio of the gain received from an investment and the investment over a period of time (usually one year), prior to any federal or state imposed taxes.

22) Interest Rate (net effective)

The ratio of the gain received from an investment and the investment over a period of time (usually one year), after any federal or state imposed taxes.

23) Levels of Service

A) Level 1 Reserve Study (Full or Comprehensive)- A Reserve Study in which the following five Reserve Study tasks are performed:

a) Component Inventory
b) Condition Assessment (based upon on-site visual observations)
c) Life and Valuation Estimates
d) Fund Status
e) Funding Plan

B) Level 2 Reserve Study (Update, With-Site-Visit/On-Site Review)- A Reserve Study update in which the following five tasks are performed:

a) Component Inventory (from prior study)
b) Condition Assessment (based upon on-site visual observations)
c) Life and Valuation Estimates
d) Fund Status
e) Funding Plan

*Note- Updates are reliant on the validity of prior Reserve Studies.

C) Level 3 Reserve Study (Update, No-Site-Visit/Off-Site Review)- A Reserve Study update with no on-site visual observations in which the following three tasks are performed:

a) Life and Valuation Estimates (from prior study - updated)
b) Fund Status
c) Funding Plan

*Note- Updates are reliant on the validity of prior Reserve Studies.

24) Percent Funded

A comparison of the Fully Funded Balance (ideal balance) to the Fiscal Year Actual Start Balance expressed as a percentage, and used to provide a 'general indication' of reserve strength. See Calculations Appendix.

25) Quantity

The number or amount of a particular reserve component or subcomponent.

26) Remaining Life (RL)

The estimated time, in years, that a reserve component can be expected to continue to serve its intended function. Projects anticipated to occur in the current fiscal year (but have not

been approved) have a remaining life of "zero".

27) Replacement %

A percentage of the total replacement for a particular reserve component or subcomponent. This parameter is normally 100%.

28) Reserve Allocation

The amount to be annually budgeted towards reserves based on a Funding Plan.

29) Reserve Component (or subcomponent)

The individual line items in the reserve study, developed or updated in the physical analysis that form the building blocks of the reserve study. They typically are:

A) association responsibility,
B) with limited useful life expectancies,
C) predictable remaining useful life expectancies,
D) above a minimum threshold cost,
E) and, as required by statutes.

30) Restoration

Defined as to bring back to an unimpaired or improved condition. General types follow:

A) Building- In general, funding utilized to defray the cost (in whole or part) of major building components that are not necessarily included as line items and may include termite treatment.
B) Irrigation System- In general, funding utilized to defray the cost (in whole or part) of sectional irrigation system areas including modernization to improve water management.
C) Landscape- In general, funding utilized to defray the cost (in whole or part) of sectional landscape areas including modernization to improve water conservation & drainage.

31) Risk Factor (Percent Funded)

The associated risk of the availability of reserves to fund expenditures by interpreting the Percent Funded parameter as follows:

A) 70% and above- LOW
B) 31% to 69%- MODERATE
C) 30% and below- HIGH

*High risk is associated with a higher risk for reliance on special assessments, loans and litigation.

32) Unit Cost

The current fiscal year's estimated cost to maintain, replace, repair, or restore an individual "unit of measure" of a reserve component or subcomponent to its original functional condition.

33) Unit of Measure

A system of units used in measuring a reserve component or subcomponent (i.e. each, lineal feet,

square feet, etc.).

34) **Useful Life (UL)**

Total Useful Life or Depreciable Life. The estimated time, in years, that a reserve item can be expected to serve its intended function if properly constructed and maintained in its present application or installation.

Items Beyond the Scope of this Report

This reserve study has been conducted to outline a financial plan for the proper and adequate budgeting of the Association component repair and/or replacement. This report should not be utilized for any other purpose and should not be considered or deemed appropriate or reliable for, but not limited to, any of the following:

- Building or land appraisals for any purpose
- State or local zoning ordinance violations
- Building code violations
- Soils conditions, soils contamination or geological stability of site
- Engineering analysis or structural stability of site
- Air quality, asbestos, electromagnetic radiation, formaldehyde, lead, mercury, or radon
- Water quality or other environmental hazards
- Invasions by termites and any or all other destroying organisms or insects
- Damage or destruction due to pests, birds, bats or animals to buildings or site
- Adequacy or efficiency of any system or component on site
- Specifically excluded reserve items
- Septic systems and septic tanks
- Buried or concealed portions of swing pools, pool liners, Jacuzzis/spas or similar items
- Items concealed by signs, carpets or other things
- Missing or omitted information supplied by the Association for the purposes of reserve study preparation
- Hidden improvements such as sewer lines, water lines, or other buried or concealed items

Qualifications

We are a professional business in the market to prepare Reserve Studies for Common Interest Development (CID) properties, seeking a budgeting tool to adequately fund for expected future expenditures related to community owned components. All of our Reserve Analysts' are designated with either the RS or PRA designations which are given by the two leading industry organizations which require peer review, continuing education and provide resources to stay on top of industry trends.

Disclosures

The below disclosures are in accordance with reserve study standards developed by CAI, APRA and statutory requirements for reserve studies completed in Washington State.

1. Invasive Testing
   Estimated life expectancies and life cycles are based upon conditions that were readily accessible and visible at the time of the site visit. We did not destroy any landscape work, building walls, or perform any methods of intrusive/invasive testing during the site visit. In these cases, information may have been obtained by contacting the contractor or vendor that has worked on the property. The physical analysis

performed during this site visit is not intended to be exhaustive in nature and may include representative sampling.

2. Representative Sampling
   This study and report is based on observations of the visible and apparent conditions of a reasonable representative sampling of the property's elements at the time of inspection. Although due diligence was performed during the inspection phase, we makes no representations regarding latent or concealed defects that may exist. The inspection did not constitute any invasive investigations and was not intended to determine whether applicable building components, systems, or equipment are adequate or in compliance with any specific or commonly accepted design requirement, building code, or specification. Such tasks as material testing, engineering analysis, destructive testing, or performance testing of building systems, components, or equipment are not considered as part of the scope of work, nor are they considered by the reserve study industry standard.

3. Conflicts of Interests
   As the preparer of this reserve study; the Reserve Analyst certifies that we do not have any vested interests, financial interests, or other interests that would cause a conflict of interest in the preparation of this reserve study.

4. Reliance on Client & Vendor Data Provided
   Information provided to the preparer of a reserve study by an official representative of the association regarding financial, historical, physical, quantitative or reserve project issues will be deemed reliable by the preparer. A reserve study will be a reflection of information provided to the preparer of the reserve study. The total of actual or projected reserves required as presented in the reserve study is based upon information provided that was not audited. A reserve study is not intended to be used to perform an audit, an analysis of quality, a forensic study or a background check of historical records. A site visit conducted in conjunction with a reserve study should not be deemed to be a project audit or quality inspection. The results of this study are based on the independent opinion of the preparer and their experience and research during the course of their career in preparing Reserve Studies. In addition the opinions of experts on certain components have been gathered through research within their industry and with client's actual vendors. There is no implied warrantee or guarantee regarding our life and cost estimates/predictions. There is no implied warrantee or guarantee in any of our work product. Our results and findings will vary from another preparer's results and findings. A Reserve Study is necessarily a work in progress and subsequent Reserve Studies will vary from prior studies.

5. Update to Prior Reserve Studies
   Level II Studies: Quantities of major components as reported in previous reserve studies are deemed to be accurate and reliable. The reserve study relies upon the validity of previous reserve studies. Level III Studies: In addition to the above we have not visited the property when completing a Level III "No Site Visit" study. Therefore we have not verified the current condition of the common area components. It is

assumed all prior study component information related to quantities, condition assessments, useful life and remaining useful life are accurate.

6. Assumption Regarding Ongoing Maintenance
   The projected life expectancy of the major components and the funding needs of the reserves of the association are based upon the association performing appropriate routine and preventative maintenance for each major component. Failure to perform such maintenance can negatively impact the remaining useful life of the major components and dramatically increase the funding needs of the reserves of the association.

7. Assumptions Regarding Defect in Design or Construction
   This Reserve Study assumes that all construction assemblies and components identified herein are built properly and are free from defects in materials and/or workmanship. Defects can lead to reduced useful life and premature failure. It was not the intent of this Reserve Study to inspect for or to identify defects. If defects exist, repairs should be made so that the construction components and assemblies at the community reach their full and expected useful lives. We have assumed any and all components have been properly built and will reach normal, typical life expectancies. In general a reserve study is not intended to identify or fund for construction defects. We did not and will not look for or identify construction defects during our site visit.

8. Basis of Cost Estimates
   Pricing used for the repair or replacement costs indicated in this report are derived from a variety of sources, e.g., recent contractor bids received by subject property HOA or prior clients, construction product vendor catalogs, internet, or national construction cost estimating publishers (RS Means / Marshall & Swift). The material and labor pricing provided are estimates and have been augmented, as necessary, to account for specific site conditions (i.e. material handling, scaffolding, etc.). The total expenses represent a useful guideline whereby reserve funds can be accumulated for future repairs and replacements. The estimated repair and replacement expenses, unless otherwise noted, do not include allowances for architectural, engineering, or permitting fees.

9. Limitations on Report Use
   A reserve study is not intended to be used to perform an audit, an analysis of quality, a forensic study or a background check of historical records. A site visit conducted in conjunction with a reserve study should not be deemed to be a project audit or quality inspection. This Reserve Study is provided as an aid for planning purposes and not as an accounting tool. Since it deals with events yet to take place, there is no assurance that the results enumerated within it will, in fact, occur as described. Additionally, other unanticipated expenses may arise that are not included within this reserve study. This 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.

10. Required Disclosure - RCW 64.34.382
    This 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.

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Component Index

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