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Update "With Site-Visit" Reserve Study

Concord Commons

Issaquah, WA

Report #: 21947-4
For Period Beginning: July 1, 2016
Expires: June 30, 2017

Date Prepared: January 12, 2016

SUSAN OORD
CAI-RS
00191
DESIGNATION
RESERVE SPECIALIST

Hello, and welcome to your Reserve Study!

We don't want you to be surprised. This Report is designed to help you anticipate, and prepare for, the major common area expenses your association will face. Inside you will find:

1) **<u>The Reserve Component List</u> (the "Scope and Schedule" of your Reserve projects) – telling you what your association is Reserving for, what condition they are in now, and what they'll cost to replace.**

2) **<u>An Evaluation of your current Reserve Fund Size and Strength</u> (Percent Funded). This tells you your financial starting point, revealing your risk of deferred maintenance and special assessments.**

3) **<u>A Recommended Multi-Year Reserve Funding Plan</u>, answering the question… "What do we do now?"**

More Questions?

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<u>Relax</u>, it's from

ASSOCIATION RESERVES

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Reserve Studies for Community Associations

Table of Contents

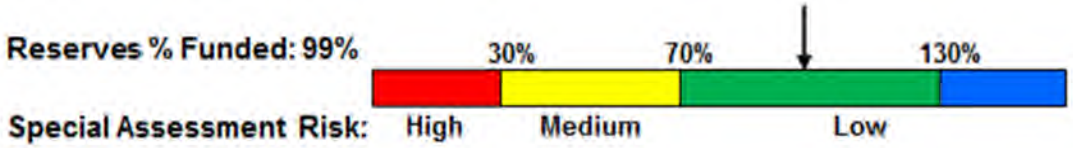
3- Minute Executive Summary

Association: Concord Commons **#: 21947-4**
Location: Issaquah, WA **# of Units: 48**
Report Period: July 1, 2016 through June 30, 2017

Findings/Recommendations as-of 7/1/2016:

Projected Starting Reserve Balance: $270,516
Current Fully Funded Reserve Balance: $273,551
Average Reserve Deficit (Surplus) Per Unit:.....$63
100% 2016 Monthly "Full Funding" Contributions:.....$3,600
70% 2016-17 Monthly "Threshold Funding" Contributions:.....$3,360
Baseline contributions (min to keep Reserves above $0: $2,770
Recommended 2016 Special Assessment:..... $0

Most Recent Budgeted Reserve Contribution Rate: $3,600



Economic Assumptions:
Net Annual "After Tax" Interest Earnings Accruing to Reserves..... 0.15%
Annual Inflation Rate..... 3.00%

- **This is an "Update With-Site-Visit" Reserve Study, based on our site inspection on December 29, 2015 and meets or exceeds all requirements of the RCW. This study was prepared by of a credentialed Reserve Specialist (RS™).**
- **Your Reserve Fund is currently 99% Funded. This means the association's special assessment & deferred maintenance risk is currently low. The objective of your multi-year Funding Plan is to fund your Reserves to a level where you will enjoy a low risk of such Reserve cash flow problems.**
- **Based on this starting point and your anticipated future expenses, in order to maintain this funding level while performing reserve projects as anticipated, our recommendation is to maintain your Reserve contributions within the 70% to 100% level as noted above. No assets appropriate for Reserve designation were excluded. See photo appendix for component details and the basis of our assumptions.**

Table 1: Executive Summary				21947-4
#	Component	Useful Life (yrs)	Rem. Useful Life (yrs)	Current Cost Estimate
	Site / Grounds			
100	Concrete Dwys/Sdwks- Repr/Replace	5	0	$4,400
120	Asphalt Alleyways - Resurface/Ovrly	30	19	$17,150
121	Asphalt - Repair/Sealcoat	5	0	$1,950
140	Wood Trellis - Repair/Replace	20	8	$21,600
165	Path/Site Lights - Replace	20	15	$1,500
175	Drain Lines - Clean/Inspect	5	4	$1,800
180	Irrigation System - Maintain/Repair	20	19	$9,200
335	Site Benches - Replace	20	8	$2,600
	Building Exteriors			
500	Steep Slope Roofs - Repair/Replace	25	13	$130,500
505	Roofs - Inspect/Clean/Repair	3	1	$6,500
510	Gutters/Downspouts - Repair/Replace	25	13	$52,700
520	Ext Surfaces/Siding - Repr/Replace	8	3	$6,000
525	Full Exterior Paint/Caulk	8	3	$76,800
527	Partial Exterior - Paint/Caulk	8	7	$25,200
529	Caulk, etc - Inspect/Repair	4	1	$3,250
540	Elastomeric Deck - Clean/Seal	5	0	$10,400
545	Wood Decks - Repair/Replace	20	8	$75,000
550	Deck Rail - Repair/Replace	20	8	$48,950
560	Bldg. Exterior Lights - Replace	24	11	$12,500
970	Fire Alarm Panels - Repair/Replace	20	8	$6,750
20	Total Funded Components			

Note 1: a Useful Life of “N/A” means a one-time expense, not expected to repeat.
Note 2: Yellow highlighted line items are expected to require attention in the initial year, green highlighted items are expected to occur within the first five years.

Cross reference component numbers with photographic inventory appendix.

Introduction

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

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

RESERVE STUDY RESULTS

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

Methodology

For this Update With-Site-Visit Reserve Study, we started with a review of your prior Reserve Study, then looked into recent Reserve expenditures, evaluated how expenditures are handled (ongoing maintenance vs Reserves), and researched any well-established association precedents. We performed an on-site inspection to evaluate your common areas, *updating and adjusting* your Reserve Component List as appropriate.

Which Physical Assets are Funded by Reserves?

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

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

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

How do we establish Current Repair/Replacement Cost Estimates?

In this order…

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

How much Reserves are enough?

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

Adequacy is measured in a two-step process:

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

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

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

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

How much should we contribute?

RESERVE FUNDING PRINCIPLES

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

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

What is our Recommended Funding Goal?

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

FUNDING OBJECTIVES

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

Site Inspection Notes

During our site visit on December 29, 2015, we visually inspected all visible common areas while compiling a photographic inventory, noting: current condition, make & model information where appropriate, apparent levels of care and maintenance, exposure to weather elements and other factors that may affect the components useful life. We also met with Association Management. We discussed past projects, current concerns and future plans. We were informed which items are being handled from the Operational maintenance budget, not Reserves.

Projected Expenses

While this Reserve Study looks forward 30 years, we have no expectation that all these expenses will all take place as anticipated. This Reserve Study needs to be updated annually because we expect the timing of these expenses to shift and the size of these expenses to change. We do feel more certain of the timing and cost of near-term expenses than expenses many years away. Your *first five years* of projected Reserve expenses total $126,612. Adding the next five years, your *first ten years* of projected Reserve expenses are $391,596. Please be aware of your near-term expenses, which we are able to project more accurately than the more distant projections.

The figure below summarizes the projected future expenses at your association as defined by your Reserve Component List. A summary of these expenses are shown in Table 5, while details of the projects that make up these expenses are shown in Table 6.

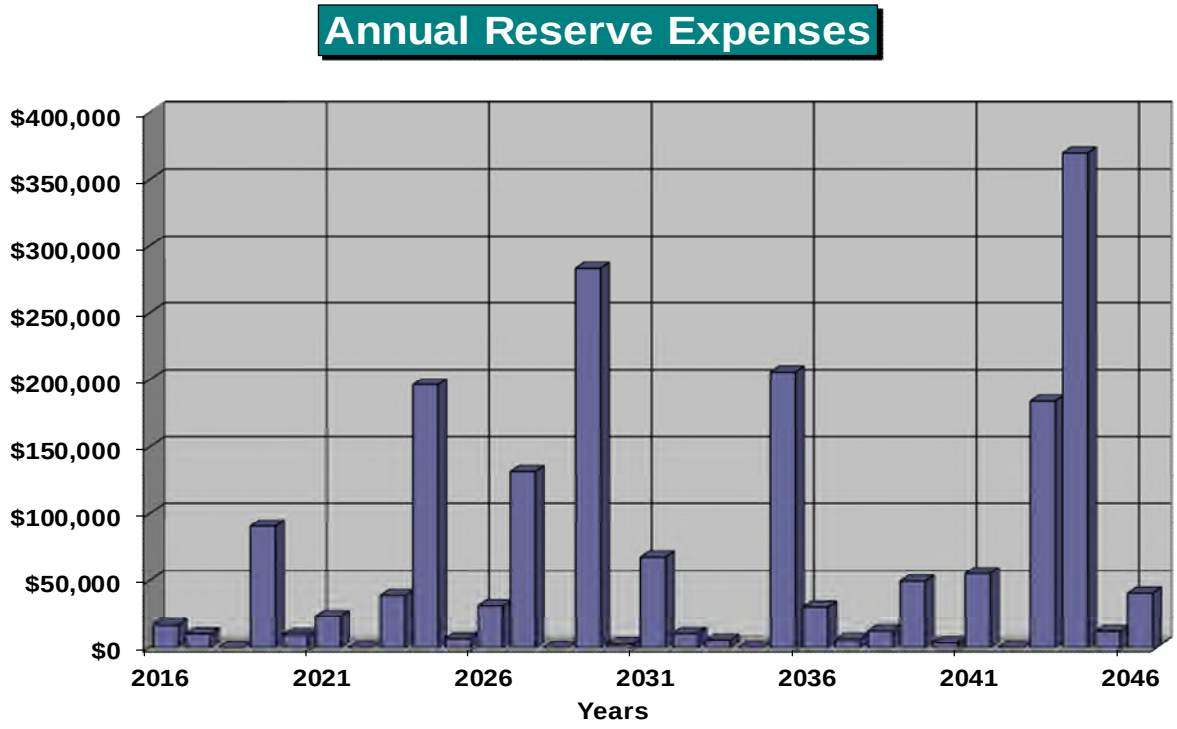


Figure 1

Reserve Fund Status

The starting point for our financial analysis is your Reserve Fund balance, projected to be $270,516 as-of the start of your Fiscal Year on July 1, 2016. As of July 1, 2016, your Fully Funded Balance is computed to be $273,551 (see Table 3). This figure represents the deteriorated value of your common area components. Comparing your Reserve Balance to your Fully Funded Balance indicates your Reserves are 99% Funded. Across the country under 1% of associations in this range experience special assessments or deferred maintenance.

Recommended Funding Plan

Based on your current Percent Funded and your near-term and long-term Reserve needs, we are recommending budgeted contributions of $3,600/month this Fiscal Year. The overall 30-yr plan, in perspective, is shown below. This same information is shown numerically in both Table 5 and Table 6.

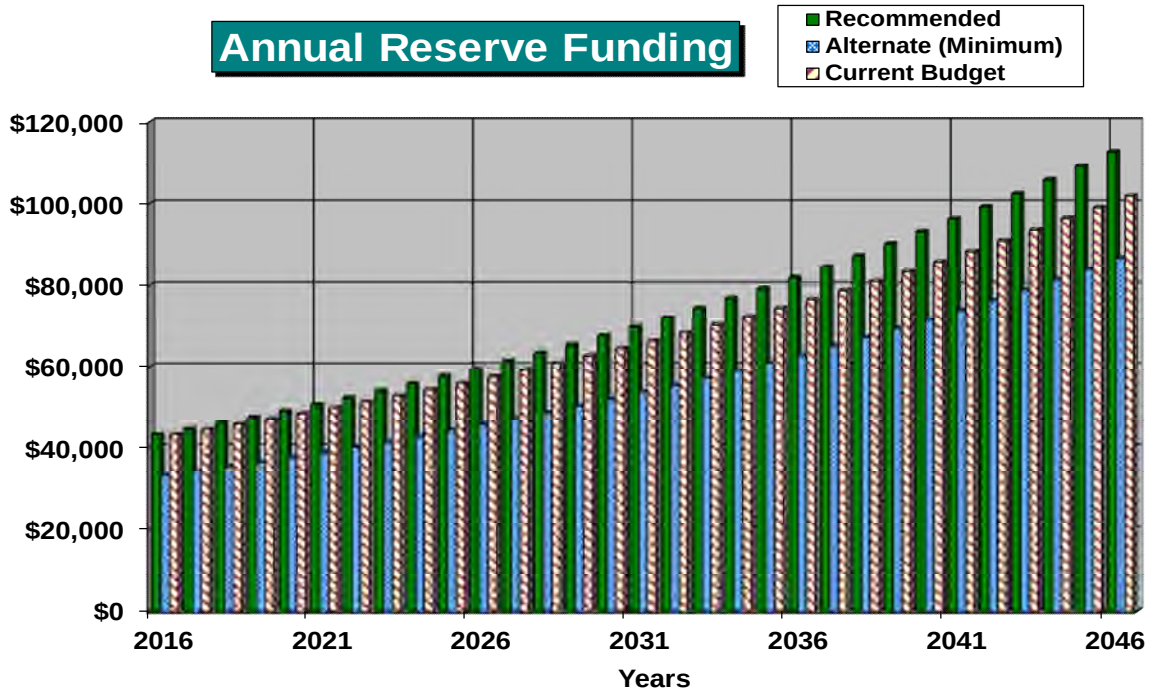


Figure 2

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

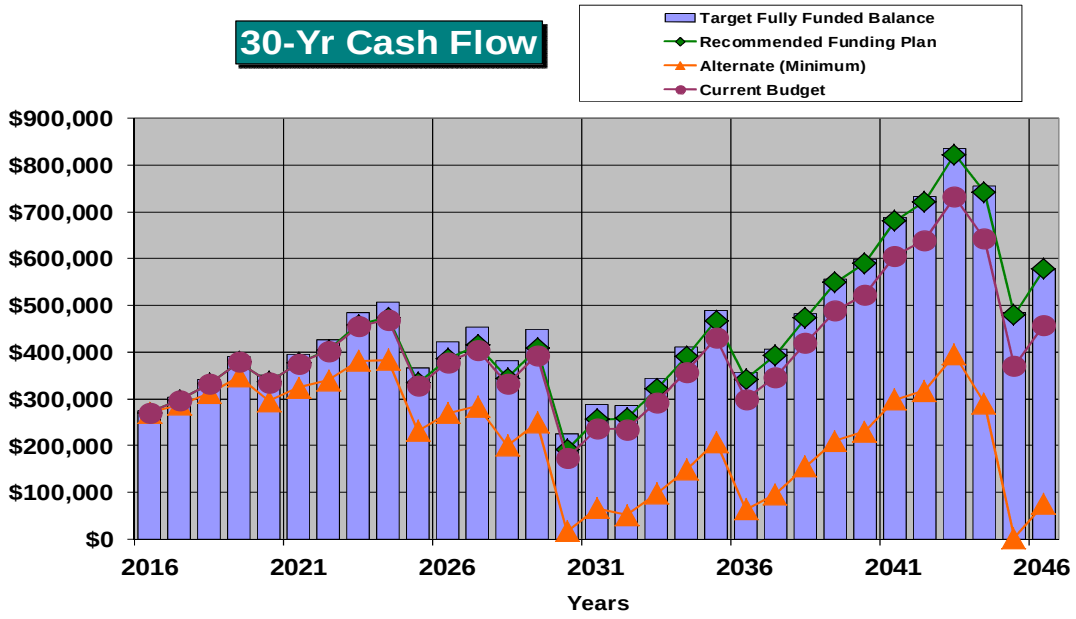


Figure 3

This figure shows this same information, plotted on a Percent Funded scale.

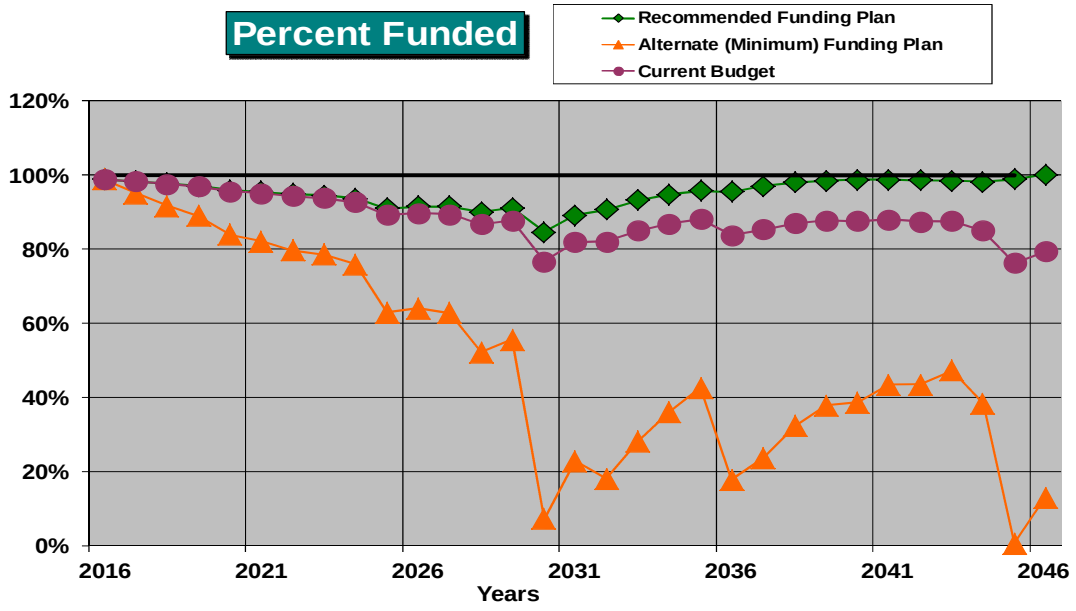


Figure 4

Table Descriptions

The tabular information in this Report is broken down into six tables.

Table 1 is a summary of your Reserve Components (your Reserve Component List), the information found in Table 2.

Table 2 is your Reserve Component List, which forms the foundation of this Reserve Study. This table represents the information from which all other tables are derived.

Table 3 shows the calculation of your Fully Funded Balance, the measure of your current Reserve component deterioration. For each component, the Fully Funded Balance is the fraction of life used up multiplied by its estimated Current Replacement Cost.

Table 4 shows the significance of each component to Reserve needs of the association, helping you see which components have more (or less) influence than others on your total Reserve contribution rate. The deterioration cost/yr of each component is calculated by dividing the estimated Current Replacement Cost by Useful Life, then that component's percentage of the total is displayed.

Table 5: This table provides a one-page 30-year summary of the cash flowing into and out of the Reserve Fund, with a display of the Fully Funded Balance, Percent Funded, and special assessment risk for each year.

Table 6: This table shows the cash flow detail for the next 30 years. This table makes it possible to see which components are projected to require repair or replacement each year, and the size of those individual expenses.

Table 2: Reserve Component List Detail 21947-4

#	Component	Quantity	Useful Life	Rem. Useful Life	[--- Current Cost Estimate ---] Best Case	Worst Case
	Site / Grounds					
100	Concrete Dwys/Sdwks- Repr/Replace	Poured in place	5	0	$3,300	$5,500
120	Asphalt Alleyways - Resurface/Ovrly	~7,800 GSF	30	19	$15,600	$18,700
121	Asphalt - Repair/Sealcoat	~7,800 GSF	5	0	$1,600	$2,300
140	Wood Trellis - Repair/Replace	(8), ~270 linear feet	20	8	$17,600	$25,600
165	Path/Site Lights - Replace	(8) fixtures	20	15	$1,300	$1,700
175	Drain Lines - Clean/Inspect	Storm drains	5	4	$1,400	$2,200
180	Irrigation System - Maintain/Repair	Controls, valves, etc.	20	19	$8,700	$9,700
335	Site Benches - Replace	(4) metal	20	8	$2,200	$3,000
	Building Exteriors					
500	Steep Slope Roofs - Repair/Replace	~29,000 SF, arch shingles	25	13	$116,000	$145,000
505	Roofs - Inspect/Clean/Repair	~29,000 SF, comp shingles	3	1	$6,000	$7,000
510	Gutters/Downspouts - Repair/Replace	~8,100 LF metal	25	13	$44,600	$60,800
520	Ext Surfaces/Siding - Repr/Replace	Extensive GSF	8	3	$4,000	$8,000
525	Full Exterior Paint/Caulk	Extensive GSF	8	3	$62,400	$91,200
527	Partial Exterior - Paint/Caulk	Extensive GSF	8	7	$20,400	$30,000
529	Caulk, etc - Inspect/Repair	Extensive LF	4	1	$2,200	$4,300
540	Elastomeric Deck - Clean/Seal	(9) decks, ~1,300 SF	5	0	$7,800	$13,000
545	Wood Decks - Repair/Replace	(37) decks, ~2,010 SF	20	8	$65,000	$85,000
550	Deck Rail - Repair/Replace	~890 LF, wood picket	20	8	$44,500	$53,400
560	Bldg. Exterior Lights - Replace	~(100) metal/glass	24	11	$10,000	$15,000
970	Fire Alarm Panels - Repair/Replace	(3) panels	20	8	$6,000	$7,500
20	Total Funded Components					

Table 3: Fully Funded Balance 21947-4

#	Component	Current Cost Estimate	X	Effective Age	/	Useful Life	=	Fully Funded Balance
	Site / Grounds							
100	Concrete Dwys/Sdwks- Repr/Replace	$4,400	X	5	/	5	=	$4,400
120	Asphalt Alleyways - Resurface/Ovrly	$17,150	X	11	/	30	=	$6,288
121	Asphalt - Repair/Sealcoat	$1,950	X	5	/	5	=	$1,950
140	Wood Trellis - Repair/Replace	$21,600	X	12	/	20	=	$12,960
165	Path/Site Lights - Replace	$1,500	X	5	/	20	=	$375
175	Drain Lines - Clean/Inspect	$1,800	X	1	/	5	=	$360
180	Irrigation System - Maintain/Repair	$9,200	X	1	/	20	=	$460
335	Site Benches - Replace	$2,600	X	12	/	20	=	$1,560
	Building Exteriors							
500	Steep Slope Roofs - Repair/Replace	$130,500	X	12	/	25	=	$62,640
505	Roofs - Inspect/Clean/Repair	$6,500	X	2	/	3	=	$4,333
510	Gutters/Downspouts - Repair/Replace	$52,700	X	12	/	25	=	$25,296
520	Ext Surfaces/Siding - Repr/Replace	$6,000	X	5	/	8	=	$3,750
525	Full Exterior Paint/Caulk	$76,800	X	5	/	8	=	$48,000
527	Partial Exterior - Paint/Caulk	$25,200	X	1	/	8	=	$3,150
529	Caulk, etc - Inspect/Repair	$3,250	X	3	/	4	=	$2,438
540	Elastomeric Deck - Clean/Seal	$10,400	X	5	/	5	=	$10,400
545	Wood Decks - Repair/Replace	$75,000	X	12	/	20	=	$45,000
550	Deck Rail - Repair/Replace	$48,950	X	12	/	20	=	$29,370
560	Bldg. Exterior Lights - Replace	$12,500	X	13	/	24	=	$6,771
970	Fire Alarm Panels - Repair/Replace	$6,750	X	12	/	20	=	$4,050
								$273,551

Table 4: Component Significance 21947-4

#	Component	Useful Life	Current Cost Estimate	Deterioration Cost/yr	Deterioration Significance
	Site / Grounds				
100	Concrete Dwys/Sdwks- Repr/Replace	5	$4,400	$880	2.4%
120	Asphalt Alleyways - Resurface/Ovrly	30	$17,150	$572	1.5%
121	Asphalt - Repair/Sealcoat	5	$1,950	$390	1.1%
140	Wood Trellis - Repair/Replace	20	$21,600	$1,080	2.9%
165	Path/Site Lights - Replace	20	$1,500	$75	0.2%
175	Drain Lines - Clean/Inspect	5	$1,800	$360	1.0%
180	Irrigation System - Maintain/Repair	20	$9,200	$460	1.2%
335	Site Benches - Replace	20	$2,600	$130	0.4%
	Building Exteriors				
500	Steep Slope Roofs - Repair/Replace	25	$130,500	$5,220	14.2%
505	Roofs - Inspect/Clean/Repair	3	$6,500	$2,167	5.9%
510	Gutters/Downspouts - Repair/Replace	25	$52,700	$2,108	5.7%
520	Ext Surfaces/Siding - Repr/Replace	8	$6,000	$750	2.0%
525	Full Exterior Paint/Caulk	8	$76,800	$9,600	26.0%
527	Partial Exterior - Paint/Caulk	8	$25,200	$3,150	8.5%
529	Caulk, etc - Inspect/Repair	4	$3,250	$813	2.2%
540	Elastomeric Deck - Clean/Seal	5	$10,400	$2,080	5.6%
545	Wood Decks - Repair/Replace	20	$75,000	$3,750	10.2%
550	Deck Rail - Repair/Replace	20	$48,950	$2,448	6.6%
560	Bldg. Exterior Lights - Replace	24	$12,500	$521	1.4%
970	Fire Alarm Panels - Repair/Replace	20	$6,750	$338	0.9%
20	Total Funded Components			$36,890	100.0%

Table 5: 30-Year Reserve Plan Summary 21947-4

Fiscal Year Start: 07/01/16

Interest:	0.2%	Inflation:	3.0%

Reserve Fund Strength Calculations (All values as of Fiscal Year Start Date)					Projected Reserve Balance Changes			
Year	Starting Reserve Balance	Fully Funded Balance	Percent Funded	Special Assmt Risk	Reserve Contribs.	Loans or Special Assmts	Interest Income	Reserve Expenses
2016	$270,516	$273,551	98.9%	Low	$43,200	$0	$426	$16,750
2017	$297,392	$302,501	98.3%	Low	$44,604	$0	$472	$10,043
2018	$332,426	$340,369	97.7%	Low	$46,054	$0	$534	$0
2019	$379,013	$390,890	97.0%	Low	$47,550	$0	$537	$90,478
2020	$336,622	$350,945	95.9%	Low	$49,096	$0	$535	$9,342
2021	$376,911	$394,616	95.5%	Low	$50,691	$0	$586	$23,185
2022	$405,004	$426,622	94.9%	Low	$52,339	$0	$647	$0
2023	$457,990	$484,790	94.5%	Low	$54,040	$0	$699	$38,987
2024	$473,741	$505,908	93.6%	Low	$55,796	$0	$606	$196,223
2025	$333,920	$367,108	91.0%	Low	$57,610	$0	$540	$6,589
2026	$385,480	$420,911	91.6%	Low	$59,482	$0	$600	$31,246
2027	$414,316	$452,419	91.6%	Low	$61,415	$0	$569	$131,917
2028	$344,382	$382,713	90.0%	Low	$63,411	$0	$565	$0
2029	$408,358	$448,368	91.1%	Low	$65,472	$0	$449	$283,354
2030	$190,926	$225,764	84.6%	Low	$67,600	$0	$335	$2,723
2031	$256,138	$287,205	89.2%	Low	$69,797	$0	$386	$67,694
2032	$258,627	$285,294	90.7%	Low	$72,065	$0	$434	$10,431
2033	$320,696	$344,082	93.2%	Low	$74,407	$0	$533	$5,372
2034	$390,265	$411,674	94.8%	Low	$76,825	$0	$643	$0
2035	$467,733	$488,710	95.7%	Low	$79,322	$0	$607	$205,949
2036	$341,713	$357,871	95.5%	Low	$81,900	$0	$552	$30,252
2037	$393,913	$406,073	97.0%	Low	$84,562	$0	$650	$6,046
2038	$473,079	$482,712	98.0%	Low	$87,310	$0	$766	$12,455
2039	$548,701	$557,170	98.5%	Low	$90,148	$0	$854	$49,734
2040	$589,968	$597,648	98.7%	Low	$93,078	$0	$953	$3,659
2041	$680,340	$689,047	98.7%	Low	$96,103	$0	$1,052	$55,485
2042	$722,009	$732,125	98.6%	Low	$99,226	$0	$1,158	$0
2043	$822,393	$836,031	98.4%	Low	$102,451	$0	$1,173	$183,923
2044	$742,094	$756,072	98.2%	Low	$105,780	$0	$916	$369,272
2045	$479,519	$485,338	98.8%	Low	$109,218	$0	$793	$11,901

Table 6: 30-Year Income/Expense Detail (yrs 0 through 4) 21947-4

	Fiscal Year	2016	2017	2018	2019	2020
	Starting Reserve Balance	$270,516	$297,392	$332,426	$379,013	$336,622
	Annual Reserve Contribution	$43,200	$44,604	$46,054	$47,550	$49,096
	Recommended Special Assessments	$0	$0	$0	$0	$0
	Interest Earnings	$426	$472	$534	$537	$535
	Total Income	$314,142	$342,468	$379,013	$427,100	$386,253
#	Component					
	Site / Grounds					
100	Concrete Dwys/Sdwks- Repr/Replace	$4,400	$0	$0	$0	$0
120	Asphalt Alleyways - Resurface/Ovrly	$0	$0	$0	$0	$0
121	Asphalt - Repair/Sealcoat	$1,950	$0	$0	$0	$0
140	Wood Trellis - Repair/Replace	$0	$0	$0	$0	$0
165	Path/Site Lights - Replace	$0	$0	$0	$0	$0
175	Drain Lines - Clean/Inspect	$0	$0	$0	$0	$2,026
180	Irrigation System - Maintain/Repair	$0	$0	$0	$0	$0
335	Site Benches - Replace	$0	$0	$0	$0	$0
	Building Exteriors					
500	Steep Slope Roofs - Repair/Replace	$0	$0	$0	$0	$0
505	Roofs - Inspect/Clean/Repair	$0	$6,695	$0	$0	$7,316
510	Gutters/Downspouts - Repair/Replace	$0	$0	$0	$0	$0
520	Ext Surfaces/Siding - Repr/Replace	$0	$0	$0	$6,556	$0
525	Full Exterior Paint/Caulk	$0	$0	$0	$83,921	$0
527	Partial Exterior - Paint/Caulk	$0	$0	$0	$0	$0
529	Caulk, etc - Inspect/Repair	$0	$3,348	$0	$0	$0
540	Elastomeric Deck - Clean/Seal	$10,400	$0	$0	$0	$0
545	Wood Decks - Repair/Replace	$0	$0	$0	$0	$0
550	Deck Rail - Repair/Replace	$0	$0	$0	$0	$0
560	Bldg. Exterior Lights - Replace	$0	$0	$0	$0	$0
970	Fire Alarm Panels - Repair/Replace	$0	$0	$0	$0	$0
	Total Expenses	$16,750	$10,043	$0	$90,478	$9,342
	Ending Reserve Balance:	$297,392	$332,426	$379,013	$336,622	$376,911

Table 6: 30-Year Income/Expense Detail (yrs 5 through 9) 21947-4

	Fiscal Year	2021	2022	2023	2024	2025
	Starting Reserve Balance	$376,911	$405,004	$457,990	$473,741	$333,920
	Annual Reserve Contribution	$50,691	$52,339	$54,040	$55,796	$57,610
	Recommended Special Assessments	$0	$0	$0	$0	$0
	Interest Earnings	$586	$647	$699	$606	$540
	Total Income	$428,189	$457,990	$512,728	$530,143	$392,069
#	Component					
	Site / Grounds					
100	Concrete Dwys/Sdwks- Repr/Replace	$5,101	$0	$0	$0	$0
120	Asphalt Alleyways - Resurface/Ovrly	$0	$0	$0	$0	$0
121	Asphalt - Repair/Sealcoat	$2,261	$0	$0	$0	$0
140	Wood Trellis - Repair/Replace	$0	$0	$0	$27,362	$0
165	Path/Site Lights - Replace	$0	$0	$0	$0	$0
175	Drain Lines - Clean/Inspect	$0	$0	$0	$0	$2,349
180	Irrigation System - Maintain/Repair	$0	$0	$0	$0	$0
335	Site Benches - Replace	$0	$0	$0	$3,294	$0
	Building Exteriors					
500	Steep Slope Roofs - Repair/Replace	$0	$0	$0	$0	$0
505	Roofs - Inspect/Clean/Repair	$0	$0	$7,994	$0	$0
510	Gutters/Downspouts - Repair/Replace	$0	$0	$0	$0	$0
520	Ext Surfaces/Siding - Repr/Replace	$0	$0	$0	$0	$0
525	Full Exterior Paint/Caulk	$0	$0	$0	$0	$0
527	Partial Exterior - Paint/Caulk	$0	$0	$30,993	$0	$0
529	Caulk, etc - Inspect/Repair	$3,768	$0	$0	$0	$4,241
540	Elastomeric Deck - Clean/Seal	$12,056	$0	$0	$0	$0
545	Wood Decks - Repair/Replace	$0	$0	$0	$95,008	$0
550	Deck Rail - Repair/Replace	$0	$0	$0	$62,008	$0
560	Bldg. Exterior Lights - Replace	$0	$0	$0	$0	$0
970	Fire Alarm Panels - Repair/Replace	$0	$0	$0	$8,551	$0
	Total Expenses	$23,185	$0	$38,987	$196,223	$6,589
	Ending Reserve Balance:	$405,004	$457,990	$473,741	$333,920	$385,480

Table 6: 30-Year Income/Expense Detail (yrs 10 through 14) 21947-4

	Fiscal Year	2026	2027	2028	2029	2030
	Starting Reserve Balance	$385,480	$414,316	$344,382	$408,358	$190,926
	Annual Reserve Contribution	$59,482	$61,415	$63,411	$65,472	$67,600
	Recommended Special Assessments	$0	$0	$0	$0	$0
	Interest Earnings	$600	$569	$565	$449	$335
	Total Income	$445,562	$476,300	$408,358	$474,279	$258,861
#	Component					
	Site / Grounds					
100	Concrete Dwys/Sdwks- Repr/Replace	$5,913	$0	$0	$0	$0
120	Asphalt Alleyways - Resurface/Ovrly	$0	$0	$0	$0	$0
121	Asphalt - Repair/Sealcoat	$2,621	$0	$0	$0	$0
140	Wood Trellis - Repair/Replace	$0	$0	$0	$0	$0
165	Path/Site Lights - Replace	$0	$0	$0	$0	$0
175	Drain Lines - Clean/Inspect	$0	$0	$0	$0	$2,723
180	Irrigation System - Maintain/Repair	$0	$0	$0	$0	$0
335	Site Benches - Replace	$0	$0	$0	$0	$0
	Building Exteriors					
500	Steep Slope Roofs - Repair/Replace	$0	$0	$0	$191,644	$0
505	Roofs - Inspect/Clean/Repair	$8,735	$0	$0	$9,545	$0
510	Gutters/Downspouts - Repair/Replace	$0	$0	$0	$77,392	$0
520	Ext Surfaces/Siding - Repr/Replace	$0	$8,305	$0	$0	$0
525	Full Exterior Paint/Caulk	$0	$106,309	$0	$0	$0
527	Partial Exterior - Paint/Caulk	$0	$0	$0	$0	$0
529	Caulk, etc - Inspect/Repair	$0	$0	$0	$4,773	$0
540	Elastomeric Deck - Clean/Seal	$13,977	$0	$0	$0	$0
545	Wood Decks - Repair/Replace	$0	$0	$0	$0	$0
550	Deck Rail - Repair/Replace	$0	$0	$0	$0	$0
560	Bldg. Exterior Lights - Replace	$0	$17,303	$0	$0	$0
970	Fire Alarm Panels - Repair/Replace	$0	$0	$0	$0	$0
	Total Expenses	$31,246	$131,917	$0	$283,354	$2,723
	Ending Reserve Balance:	$414,316	$344,382	$408,358	$190,926	$256,138

Table 6: 30-Year Income/Expense Detail (yrs 15 through 19) 21947-4

	Fiscal Year	2031	2032	2033	2034	2035
	Starting Reserve Balance	$256,138	$258,627	$320,696	$390,265	$467,733
	Annual Reserve Contribution	$69,797	$72,065	$74,407	$76,825	$79,322
	Recommended Special Assessments	$0	$0	$0	$0	$0
	Interest Earnings	$386	$434	$533	$643	$607
	Total Income	$326,321	$331,126	$395,636	$467,733	$547,663
#	Component					
	Site / Grounds					
100	Concrete Dwys/Sdwks- Repr/Replace	$6,855	$0	$0	$0	$0
120	Asphalt Alleyways - Resurface/Ovrly	$0	$0	$0	$0	$30,073
121	Asphalt - Repair/Sealcoat	$3,038	$0	$0	$0	$0
140	Wood Trellis - Repair/Replace	$0	$0	$0	$0	$0
165	Path/Site Lights - Replace	$2,337	$0	$0	$0	$0
175	Drain Lines - Clean/Inspect	$0	$0	$0	$0	$3,156
180	Irrigation System - Maintain/Repair	$0	$0	$0	$0	$16,132
335	Site Benches - Replace	$0	$0	$0	$0	$0
	Building Exteriors					
500	Steep Slope Roofs - Repair/Replace	$0	$0	$0	$0	$0
505	Roofs - Inspect/Clean/Repair	$0	$10,431	$0	$0	$11,398
510	Gutters/Downspouts - Repair/Replace	$0	$0	$0	$0	$0
520	Ext Surfaces/Siding - Repr/Replace	$0	$0	$0	$0	$10,521
525	Full Exterior Paint/Caulk	$0	$0	$0	$0	$134,669
527	Partial Exterior - Paint/Caulk	$39,261	$0	$0	$0	$0
529	Caulk, etc - Inspect/Repair	$0	$0	$5,372	$0	$0
540	Elastomeric Deck - Clean/Seal	$16,203	$0	$0	$0	$0
545	Wood Decks - Repair/Replace	$0	$0	$0	$0	$0
550	Deck Rail - Repair/Replace	$0	$0	$0	$0	$0
560	Bldg. Exterior Lights - Replace	$0	$0	$0	$0	$0
970	Fire Alarm Panels - Repair/Replace	$0	$0	$0	$0	$0
	Total Expenses	$67,694	$10,431	$5,372	$0	$205,949
	Ending Reserve Balance:	$258,627	$320,696	$390,265	$467,733	$341,713

Table 6: 30-Year Income/Expense Detail (yrs 20 through 24) 21947-4

	Fiscal Year	2036	2037	2038	2039	2040
	Starting Reserve Balance	$341,713	$393,913	$473,079	$548,701	$589,968
	Annual Reserve Contribution	$81,900	$84,562	$87,310	$90,148	$93,078
	Recommended Special Assessments	$0	$0	$0	$0	$0
	Interest Earnings	$552	$650	$766	$854	$953
	Total Income	$424,165	$479,125	$561,156	$639,703	$683,999
#	Component					
	Site / Grounds					
100	Concrete Dwys/Sdwks- Repr/Replace	$7,947	$0	$0	$0	$0
120	Asphalt Alleyways - Resurface/Ovrly	$0	$0	$0	$0	$0
121	Asphalt - Repair/Sealcoat	$3,522	$0	$0	$0	$0
140	Wood Trellis - Repair/Replace	$0	$0	$0	$0	$0
165	Path/Site Lights - Replace	$0	$0	$0	$0	$0
175	Drain Lines - Clean/Inspect	$0	$0	$0	$0	$3,659
180	Irrigation System - Maintain/Repair	$0	$0	$0	$0	$0
335	Site Benches - Replace	$0	$0	$0	$0	$0
	Building Exteriors					
500	Steep Slope Roofs - Repair/Replace	$0	$0	$0	$0	$0
505	Roofs - Inspect/Clean/Repair	$0	$0	$12,455	$0	$0
510	Gutters/Downspouts - Repair/Replace	$0	$0	$0	$0	$0
520	Ext Surfaces/Siding - Repr/Replace	$0	$0	$0	$0	$0
525	Full Exterior Paint/Caulk	$0	$0	$0	$0	$0
527	Partial Exterior - Paint/Caulk	$0	$0	$0	$49,734	$0
529	Caulk, etc - Inspect/Repair	$0	$6,046	$0	$0	$0
540	Elastomeric Deck - Clean/Seal	$18,784	$0	$0	$0	$0
545	Wood Decks - Repair/Replace	$0	$0	$0	$0	$0
550	Deck Rail - Repair/Replace	$0	$0	$0	$0	$0
560	Bldg. Exterior Lights - Replace	$0	$0	$0	$0	$0
970	Fire Alarm Panels - Repair/Replace	$0	$0	$0	$0	$0
	Total Expenses	$30,252	$6,046	$12,455	$49,734	$3,659
	Ending Reserve Balance:	$393,913	$473,079	$548,701	$589,968	$680,340

Table 6: 30-Year Income/Expense Detail (yrs 25 through 29) 21947-4

	Fiscal Year	2041	2042	2043	2044	2045
	Starting Reserve Balance	$680,340	$722,009	$822,393	$742,094	$479,519
	Annual Reserve Contribution	$96,103	$99,226	$102,451	$105,780	$109,218
	Recommended Special Assessments	$0	$0	$0	$0	$0
	Interest Earnings	$1,052	$1,158	$1,173	$916	$793
	Total Income	$777,494	$822,393	$926,017	$848,791	$589,530
#	Component					
	Site / Grounds					
100	Concrete Dwys/Sdwks- Repr/Replace	$9,213	$0	$0	$0	$0
120	Asphalt Alleyways - Resurface/Ovrly	$0	$0	$0	$0	$0
121	Asphalt - Repair/Sealcoat	$4,083	$0	$0	$0	$0
140	Wood Trellis - Repair/Replace	$0	$0	$0	$49,419	$0
165	Path/Site Lights - Replace	$0	$0	$0	$0	$0
175	Drain Lines - Clean/Inspect	$0	$0	$0	$0	$4,242
180	Irrigation System - Maintain/Repair	$0	$0	$0	$0	$0
335	Site Benches - Replace	$0	$0	$0	$5,949	$0
	Building Exteriors					
500	Steep Slope Roofs - Repair/Replace	$0	$0	$0	$0	$0
505	Roofs - Inspect/Clean/Repair	$13,610	$0	$0	$14,872	$0
510	Gutters/Downspouts - Repair/Replace	$0	$0	$0	$0	$0
520	Ext Surfaces/Siding - Repr/Replace	$0	$0	$13,328	$0	$0
525	Full Exterior Paint/Caulk	$0	$0	$170,595	$0	$0
527	Partial Exterior - Paint/Caulk	$0	$0	$0	$0	$0
529	Caulk, etc - Inspect/Repair	$6,805	$0	$0	$0	$7,659
540	Elastomeric Deck - Clean/Seal	$21,775	$0	$0	$0	$0
545	Wood Decks - Repair/Replace	$0	$0	$0	$171,595	$0
550	Deck Rail - Repair/Replace	$0	$0	$0	$111,994	$0
560	Bldg. Exterior Lights - Replace	$0	$0	$0	$0	$0
970	Fire Alarm Panels - Repair/Replace	$0	$0	$0	$15,444	$0
	Total Expenses	$55,485	$0	$183,923	$369,272	$11,901
	Ending Reserve Balance:	$722,009	$822,393	$742,094	$479,519	$577,630

Accuracy, Limitations, and Disclosures

Washington disclosures, per RCW:

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.

Because we have no control over future events, we do not expect that all the events we anticipate will occur as planned. We expect that inflationary trends will continue, and we expect Reserve funds to continue to earn interest, so we believe that reasonable estimates for these figures are much more accurate than ignoring these economic realities. We can control measurements, which we attempt to establish within 5% accuracy through a combination of on-site measurements, drawings, and satellite imagery. The starting Reserve Balance and interest rate earned on deposited Reserve funds that you provided to us were considered reliable and were not confirmed independently. We have considered the association's representation of current and historical Reserve projects reliable, and we have considered the representations made by its vendors and suppliers to also be accurate and reliable. Component Useful Life, Remaining Useful Life, and Current Cost estimates assume a stable economic environment and lack of natural disasters.

Because the physical condition of your components, the association's Reserve balance, the economic environment, and legislative environment change each year, this Reserve Study is by nature a "one-year" document. Because a long-term perspective improves the accuracy of near-term planning, this Report projects expenses for the next 30 years. It is our recommendation and that of the Financial Accounting Standards Board (FASB) that your Reserve Study be updated each year as part of the annual budget process.

Association Reserves and its employees have no ownership, management, or other business relationships with the client other than this Reserve Study engagement. James D. Talaga R.S., company president, is a credentialed Reserve Specialist (#66). All work done by Association Reserves WA, LLC is performed under his Responsible Charge. There are no material issues to our knowledge that have not been disclosed to the client that would cause a distortion of the association's situation.

Component quantities indicated in this Report were found in prior Reserve Studies unless otherwise noted. No destructive or intrusive testing was performed. This Report and this site inspection were accomplished only for Reserve budget purposes (to help identify and address the normal deterioration of properly built and installed components with predictable life expectancies). The Funding Plan in this Report was developed using the cash-flow methodology to achieve the specified Funding Objective.

Association Reserves' liability in any matter involving this Reserve Study is limited to our Fee for services rendered.

Terms and Definitions

BTU	British Thermal Unit (a standard unit of energy)
DIA	Diameter
GSF	Gross Square Feet (area). Equivalent to Square Feet
GSY	Gross Square Yards (area). Equivalent to Square Yards
HP	Horsepower
LF	Linear Feet (length)

Effective Age: The difference between Useful Life and Remaining Useful Life. Note that this is not necessarily equivalent to the chronological age of the component.

Fully Funded Balance (FFB): The value of the deterioration of the Reserve Components. This is the fraction of life "used up" of each component multiplied by its estimated Current Replacement. While calculated for each component, it is summed together for an association total.

FFB = (Current Cost X Effective Age) / Useful Life

Inflation: Cost factors are adjusted for inflation at the rate defined in the Executive Summary and compounded annually. These increasing costs can be seen as you follow the recurring cycles of a component on Table 6.

Interest: Interest earnings on Reserve Funds are calculated using the average balance for the year (taking into account income and expenses through the year) and compounded monthly using the rate defined in the Executive Summary. Annual interest earning assumption appears in the Executive Summary.

Percent Funded: The ratio, at a particular point in time (the first day of the Fiscal Year), of the actual (or projected) Reserve Balance to the Fully Funded Balance, expressed as a percentage.

Remaining Useful Life (RUL): The estimated time, in years, that a common area component can be expected to continue to serve its intended function.

Useful Life (UL): The estimated time, in years, that a common area component can be expected to serve its intended function.

Component Details

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

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

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

Comp # : 100 **Concrete Dwys/Sdwks- Repr/Replace** Quantity: Poured in place

Location : Sidewalks, walkways, stairs, driveways, etc.

Funded? : Yes

History : Unknown

Evaluation : We noted some local cracking but no widespread damage noted at this time. Repair any trip and fall hazards (1/2" or larger displacement) immediately to ensure safety. In our experience, larger repair/replacement expenses can emerge as the community ages. Although difficult to predict timing, cost and scope, we suggest a funding allowance to supplement the operating/maintenance budget for periodic, larger repairs. Adjust as conditions, actual expense history dictates within future reserve study updates. As routine maintenance, inspect regularly, pressure wash for appearance and repair promptly as needed to prevent water penetrating into the base and causing further damage. Monitor tree roots nearby; consult with arborist for best practice.

Useful Life:
5 years

Remaining Life:
0 years

Best Case: $3,300

Lower allowance for periodic local repairs/replacement

Worst Case: $5,500

Higher allowance; more repair needs

Cost Source: ARI Cost Database: Similar Project Cost History

Comp # : 120 **Asphalt Alleyways - Resurface/Ovrly** Quantity: ~7,800 GSF

Location : Private alleys throughout association (Tract RC)

Funded? : Yes

History : None known

Evaluation : Some local cracking/raveling but not widespread or significant at this time. We recommend having surface sealed and repaired regularly as directed in component #121 for maximum design life. Even with ordinary care and maintenance, plan for eventual, large scale resurface (overlay) at roughly the time frame below. As timing draws nearer, consult with asphalt vendor/consultant for recommendations and complete scope. As routine maintenance, keep roadway clean, free of debris and well drained; fill/seal cracks (hot rubberized crack fill) to prevent water from penetrating into the sub-base and accelerating damage.

Useful Life:
30 years

Remaining Life:
19 years

Best Case: $15,600

$2/Sq Ft, Lower allowance to resurface (overlay)

Worst Case: $18,700

$2.40/Sq Ft, Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp # : 121 **Asphalt - Repair/Sealcoat** Quantity: ~7,800 GSF

Location : Private alleys throughout association

Funded? : Yes

History : Last sealcoat in 2011

Evaluation : Sealcoat coverage is faded/worn in many areas; last seal coated in August 2011. Regular cycles of seal coating every 3-5 years (along with any needed repair) has proven to be the best program in our opinion for the long term care of lower traffic asphalt areas such as these. The State of Washington, Department of Transportation recommends regular cycles of seal coating (they use the term bituminous surface treatment, BST) for the long-term care of asphalt paving with low traffic and low speed. The primary reason to seal coat asphalt pavement is to protect the pavement from the deteriorating effects of sun and water. When asphalt pavement is exposed, the asphalt oxidizes, or hardens which causes the pavement to become more brittle. As a result, the pavement will be more likely to crack, because it is unable to bend and flex when subjected to traffic and temperature changes. A seal coat combats this situation by providing a waterproof membrane, which not only slows down the oxidation process but also helps the pavement to shed water, preventing it from entering the base material. Seal coat also provides uniform appearance, concealing the inevitable patching and repairs which accumulate over time. Seal coat ultimately extends useful life of asphalt, postponing the asphalt resurfacing, which can be one of the larger cost items in the reserve study (see component #120 for asphalt resurfacing costs). Repair asphalt before seal coating as needed. Surface preparation and dry weather, during and following application, is key to lasting performance. We recommend two coats or flood application of quality asphalt emulsion. Incorporate any striping and curb repair into this project.

Useful Life:
5 years

Remaining Life:
0 years

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

$0.20/Sq Ft, Lower allowance to clean/sealcoat $0.29/Sq Ft, Higher allowance

Cost Source: Inflated Client Cost History

Comp # : 140 **Wood Trellis - Repair/Replace** Quantity: (8), ~270 linear feet

Location : Scattered locations adjacent to building ends

Funded? : Yes

History : None known

Evaluation : Surfaces are worn/weathered, however no obvious instability observed. With ordinary care and maintenance, plan for replacement at roughly the interval indicated below due to deterioration that will result from constant exposure. Clean and paint/stain along with other larger projects or as general maintenance (not separate reserve item) to preserve the wood and extend the useful life. Local repairs between large scale replacements can be funded as general maintenance item.

Useful Life:
20 years

Remaining Life:
8 years

Best Case: $17,600

$2,200/each (x8), Lower allowance to remove and replace

Worst Case: $25,600

$3,200/each (x8), Higher allowance, upgraded materials, design, etc.

Cost Source: ARI Cost Database: Similar Project Cost History

Comp # : 165 **Path/Site Lights - Replace** Quantity: (8) fixtures

Location : Adjacent to paths near buildings

Funded? : Yes

History : Installed in 2011

Evaluation : Some deterioration of surface finish, however no instability or major damage noted. In March 2011, these low voltage lights were installed replacing previously installed solar powered lights. Observed during daylight hours; assumed to be in functional operating condition. Best to plan for replacement at roughly the time frame below for cost efficiency and consistent quality/appearance throughout association. As routine maintenance, inspect, repair/change bulbs as needed.

Useful Life:
20 years

Remaining Life:
15 years

Best Case: $1,300

$165/each (x8), Lower allowance to replace

Worst Case: $1,700

$215/each (x8); Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp # : 170 **Landscape - Maintain/Refurbish** Quantity: Shrubs, trees, grass

Location : Scattered areas throughout site

Funded? : No Useful life not predictable, repair/replace as needed out of operating budget

History : None known

Evaluation : No widespread issues noted of landscaping and no problems reported to us. Although typically funded as ongoing maintenance item, this component may be utilized for setting aside funds for larger expenses that do not occur on an annual basis, such as large scale plantings, resodding lawn areas, bark/mulch replenishment, etc. Often times these type of projects can be handled within the annual operating budget as a separate line item from the landscape maintenance contract. At this time no specific projects anticipated and no desire by community for refurbishing. Monitor and include funding in reserve study updates if needed / desired.

Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source:

Comp # : 175 **Drain Lines - Clean/Inspect** Quantity: Storm drains

Location : Scattered throughout community

Funded? : Yes

History : Cleaning anticipated in 2015-16 fiscal year subsequent to our site visit; prior to this in 2011

Evaluation : Association Management reports drains will be cleaned in the 2015-16 fiscal year subsequent to our December 2015 site visit. Drainage facilities are typically inspected periodically by governing authority; typically storm system maintenance guidelines can be found on their website. Association management is requesting cyclical drain line cleaning be included within the reserve budget every 5 years for best performance. Local cleaning/inspections can be conducted as part of routine annual maintenance.

Useful Life:
5 years

Remaining Life:
4 years

Best Case: $1,400 Worst Case: $2,200

Lower estimate to inspect/clean drain lines Higher estimate

Cost Source: Estimate Provided by Client per Bid

Comp # : 180 **Irrigation System - Maintain/Repair** Quantity: Controls, valves, etc.

Location : Scattered throughout community

Funded? : Yes

History : Work anticipated in the 2015-16 fiscal year

Evaluation : System was winterized during our site visit therefore we did not observe functioning. If properly installed and bedded without defect, the lines themselves are expected to be long-lived with no predictable expectation for replacement. While large system renovations, repairs, zone reconfiguration, etc. may become necessary, difficult to predict cost/timing. As discussed with Association Management in the past, funding for controllers is included here and anticipated as a 2015-16 project. As routine maintenance, inspect regularly, test system and repair as needed. Follow proper winterization and spring start up procedures.

Useful Life:
20 years

Remaining Life:
19 years

Best Case: $8,700

Lower estimate to replace controllers

Worst Case: $9,700

Higher estimate

Cost Source: Inflated Estimate Provided by Client

Comp # : 335 **Site Benches - Replace** Quantity: (4) metal

Location : Open space areas of site

Funded? : Yes

History : Unknown

Evaluation : Stable condition noted of sturdy, metal benches with no significant or advanced damage/deterioration observed. Best to plan for regular intervals of complete replacement, or transport to commercial refinisher to strip and powder coat at the time frame shown below, to maintain functionality and a quality appearance. Inspect regularly, clean for appearance and repair as needed from general operating funds.

Useful Life:
20 years

Remaining Life:
8 years

Best Case: $2,200

$550/each (x4), Lower allowance to replace with similar materials/style

Worst Case: $3,000

$750/each (x4), Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp # : 500 **Steep Slope Roofs - Repair/Replace** Quantity: ~29,000 SF, arch shingles

Location : Rooftops of buildings

Funded? : Yes

History : Original to installation

Evaluation : Roofing appears to be architectural, laminated shingles with no significant or widespread damage/deterioration observed from our limited visual inspection. We noted some local moss near shaded areas and/or near some siding/roof interfaces with less than 2 inch clearance. We noted ridge vents and roof jacks, however we did not inspect attics for adequate ventilation. Roof shingles appear to be an architectural style with no metal crickets; cut valleys. Roofs were last cleaned/treated during the 2014-15 fiscal year (see component #505).

Plan for replacement at roughly the time frame indicated below with costs shown here for similar shingle to what is currently in place. At time of re-roof we recommend that you hire a professional roof consultant such as Architect, Engineer, or building envelope consultant; to evaluate, design, specify, help bid the project, select best bidder, and observe construction to ensure proper installation. We recommend all Associations seek advice from a qualified consultant whenever they are considering having work performed on any building envelope components (roof, walls, windows, decks, exterior painting and caulking/sealant). As routine maintenance, many manufacturers recommend inspections at least twice annually (once in the fall, before the rainy season, and again in the spring) and after large storm events. Promptly replace any damaged/missing sections or any other repair needed to ensure waterproof integrity of roof. Keep roof surface, gutters and downspouts clear and free of moss or debris. Funding for moss removal/treatment shown in component #505.

Useful Life:
25 years

Remaining Life:
13 years

Best Case: $116,000

$4/Sq Ft, Lower allowance to tear off and reroof

Worst Case: $145,000

$5/Sq Ft, Higher allowance; upgrades, underlying repair needs, metal work, etc.

Cost Source: ARI Cost Database: Similar Project Cost History

Comp # : 505 **Roofs - Inspect/Clean/Repair** Quantity: ~29,000 SF, comp shingles

Location : Rooftops of buildings

Funded? : Yes

History : Inspection/cleaning during 2014-15 fiscal year; previous to this in August 2011

Evaluation : We noted some spot areas of moss in areas that are shaded and/or near roof/siding interfaces with less than a couple inches of clearance. As requested by Association Management, plan for periodic inspections, repairs, cleaning and moss treatment every 3 years as shown here. Moss growth can decrease the life of the roofing shingles and should be removed as soon as possible. Liquid applied fungicide (moss killer) is recommended instead of power washing the living moss off the shingles. Moss roots grow into the shingles. Killing the moss in-place, with a fungicide, allows the roots to gradually release from the shingles where they can be swept away. Do not use high pressure wash. As routine maintenance, many manufacturers recommend inspections at least twice annually (once in the fall, before the rainy season, and again in the spring) and after large storm events. Promptly replace any damaged/missing sections or any other repair needed to ensure waterproof integrity of roof.

Useful Life:
3 years

Remaining Life:
1 years

Best Case: $6,000

Lower allowance to inspect, clean, repair and apply moss treatment

Worst Case: $7,000

Higher allowance

Cost Source: Client Cost History

Comp # : 510 **Gutters/Downspouts - Repair/Replace** Quantity: ~8,100 LF metal

Location : Perimeter of buildings

Funded? : Yes

History : Original to installation

Evaluation : We did not observe any obvious issues such as improper sloping, poor attachment and other damage/deterioration at this time. Inspected on dry day so did not observe functioning, however no problems reported to us. We recommend that the adjacent gutter (and downspouts) be replaced when the roof (#500) is being replaced for cost efficiency/consistency. Evaluate at time of roofing to determine if replacement or re-use is the better value. National Roofing Contractor Association (NRCA) roofing standard includes installing eave flashings at the gutters. As routine maintenance, inspect regularly, keep gutters and downspouts free of debris.

Useful Life:
25 years

Remaining Life:
13 years

Best Case: $44,600

$5.50/Linear Ft, Lower allowance to remove and replace

Worst Case: $60,800

$7.50/Linear Ft, Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp # : 520 **Ext Surfaces/Siding - Repr/Replace** Quantity: Extensive GSF

Location : Exterior of buildings

Funded? : Yes

History : Some local work during the 2015-16 fiscal year

Evaluation : As we have discussed with Association Management currently and in the past, according to the Association declaration, section 3.1. (c) (i), “the exterior façade of the improvements” is maintained by the Association. The word “façade” is not defined in Association documents - interpretations may vary. Building siding assumed to be fiber-cement materials of lap and bat/board style with some brick and wood shingle siding; trim, fascia, door moldings, etc. are painted wood. We noted caulking at trim/siding interfaces, metal flashing at the top of the window trim and at head of other bellyband/trim areas. As discussed with Association Management and observed during our December 2015 site visit, some work being completed at siding including local repairs (see photo) which are primarily at south facing areas at board/bat and trim areas near some windows. There is very little overhang in these areas. We assume all issues will be completed as part of the 2015-16 project underway which includes spot caulking/painting (#527).

Actual manufacturer of siding was not confirmed since we conducted only a limited visual review. The largest manufacturer of fiber-cement siding is James Hardie Company (Hardie Siding). Currently Hardie offers the choice of a 30-year non-prorated or 50-year pro-rated warranty. In our discussion with local Hardie representative, suggestion is to plan for 50 year total service life which includes the underlying waterproofing which degrade over time and may require replacement. Typically we would recommend planning for complete replacement of this type of siding and underlying waterproofing at the 50-year mark of life, however we are not including this large scale replacement funding in this study due to the vague wording as discussed above and consultation with Association Management. However, at the request of the Association Management, based on our observation and history of work, a periodic allowance is included for repairs coinciding with paint projects. We recommend the Association consult with an attorney for definitive interpretation of the documents to clarify which siding components (siding, trim, waterproofing, etc.) if any, are Association responsibility and alter this component in future reserve studies if needed.

Useful Life:
8 years

Remaining Life:
3 years

Best Case: $4,000

Lower periodic allowance for repairs/replacement to siding/facade

Worst Case: $8,000

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp # : 525 **Full Exterior Paint/Caulk** Quantity: Extensive GSF

Location : Exterior of buildings

Funded? : Yes

History : Local painting/caulk 2015-16 fiscal year, also in 2013-14, field areas last in 2011, touch-up in 2008-9

Evaluation : According to the Association declaration Section 3.1.(c) (ii), painting (including staining) of all exterior painted portions of the improvements, including any garage, garage door, exterior doors, shutters, fascia on the improvements, etc. is the responsibility of the Neighborhood Association. For discussion of exterior repairs/replacement, see component #520. According to the Association declaration Section 3.1.(c) (iii), caulking of the exterior portions of all windows and doors is the responsibility of the Neighborhood Association. For discussion of repairs/replacements of windows and doors see #530, #580 and #582. During our December 2015 site visit, some local repairs and partial caulking and painting to be performed (#527). Overall, painted areas at field areas of buildings appeared in fair condition with no widespread fading/deterioration. Siding appears to be primarily fiber-cement materials of lap and bat/board style with some brick and wood shingle siding also. Field areas of siding were last painted in September 2011.

Typical Northwest paint cycles vary greatly depending upon many factors including; type of material painted, surface preparations, quality of primer/paint/stain, application methods, weather conditions during application, moisture beneath paint, and exposure to weather conditions. We recommend planning to paint entire building exterior surfaces (body/field area of siding) and caulk every 8 years as shown here. Association Management is requesting touch-up/partial paint project (#527) at the mid-way point between these cycles (to be completed in 2015-16 fiscal year) as well as inspection/touch-up caulk cycles (#529) between the partial and full paint projects. As routine maintenance, inspect regularly (including sealants) repair locally and touch-up paint as needed. Additional information on painting is available through American Coatings Association at http://www.paint.org/.

Useful Life:
8 years

Remaining Life:
3 years

Best Case: $62,400

$1,300/unit (x48 units), Lower allowance to paint entire building exterior surfaces including caulking

Worst Case: $91,200

$1,900/unit (x48), Higher allowance, includes other things such as benches, small light posts, etc.

Cost Source: ARI Cost Database: Similar Project Cost History/Cost History

Comp # : 527 **Partial Exterior - Paint/Caulk** Quantity: Extensive GSF

Location : Exterior of buildings ; trim, fascia, door moldings, etc. are painted wood

Funded? : Yes

History : Anticipated to be completed during the 2015-16 fiscal year

Evaluation : During our December 2015 site visit, some local repairs were being made to siding/trim and partial caulk/paint project (this component) to occur. We noted some fading/wear at mostly south facing board/bat areas. Blue band areas of building were painted in July 2012; more exhaustive trim, deck, awning, etc. paint project completed in 2008-9 fiscal year. Typical Northwest paint cycles vary greatly depending upon many factors including; type of material painted, surface preparations, quality of primer/paint/stain, application methods, weather conditions during application, moisture beneath paint, and exposure to weather conditions. At the request of Association Management, this component reflects partial paint projects (trim, touch-up) and caulking at the mid-way point between exhaustive paint projects (#525) hence this reflects 8 year cycles which fund 4 years following the full paint project. As routine maintenance, inspect regularly (including sealants) repair locally and touch-up paint as needed. Additional information on painting is available through American Coatings Association at

Useful Life:
8 years

Remaining Life:
7 years

Best Case: $20,400

$425/unit (x48 units), Lower allowance for mid-way touch-up caulk/paint project

Worst Case: $30,000

$625/unit (x48), Higher allowance

Cost Source: Client Cost History

Comp # : 529 **Caulk, etc - Inspect/Repair** Quantity: Extensive LF

Location : Exterior perimeters of windows

Funded? : Yes

History : Spot touch-up being performed in 2015-16 fiscal year, previous to this in 2013-14 fiscal year

Evaluation : According to the Association declaration Section 3.1.(c) (iii), caulking of the exterior portions of all windows and doors is the responsibility of the Neighborhood Association. For discussion of repairs/replacements of windows and doors see #530, #580 and #582. Some local caulking/painting and repairs being completed during our December 2015 site visit. At the request of the Association Management, this component includes funding for inspections/caulking touch-up as needed between the exhaustive paint projects (#525) and the partial paint projects (#527). Caulking and painting during these paint projects is assumed to be included in the costs in those separate components. Proper sealant/caulking is critical to keeping water out of the walls, and preventing water damage. Incorrect installations of sealant are common, and can greatly decrease its useful life. Inspect sealant, more frequently as it ages, to determine if it is failing. Typical sealant problems include failure of sealant to adhere to adjacent materials and tearing/splitting of the sealant itself. As sealants age and are exposure to ultra-violet sunlight, they will dry out, harden, and lose their elastic ability. Remove and replace sealant as signs of failure begin to appear. Proper cleaning, prep work, and installation are critical for a long lasting sealant/caulking - use services of specialty caulking contractor, not painter or other. Do not install sealant in locations that would block water drainage from behind the siding. Repair areas as needed prior to painting/caulking. As routine maintenance, inspect regularly (including sealants) repair locally and touch-up paint as needed.

Useful Life:
4 years

Remaining Life:
1 years

Best Case: $2,200

Lower allowance to inspect and replace some caulking as needed between paint projects

Worst Case: $4,300

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp # : 535 **Windows, Sliders - Repair/Replace** Quantity: Extensive, assorted

Location : Exterior walls

Funded? : No Unit owner responsibility, not Association

History : None known

Evaluation : According to Governing Documents for Concord Commons Neighborhood Article 3.1 (c) (iii), although the residential association is responsible for caulking of the exterior portions of all windows, "The Residential Association shall not be responsible for any maintenance or repairs to any …window" (Article 3.1(i)). With this understanding, no funding for association repair/replacement herein. However, the association should establish specific guidelines and architectural control policies for repairs/replacements to ensure that underlying structure is protected when any work is done in these areas. Note: funding for caulking included within component #529.

Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source:

Comp # : 540 **Elastomeric Deck - Clean/Seal** Quantity: (9) decks, ~1,300 SF

Location : Decks built over garages at rear of structures of Lots 25-33 (these front to Park Dr)

Funded? : Yes

History : Last coated in October 2011

Evaluation : We were not able to view any decktop surfaces as limited access through individual units. Previously reported to us to be a urethane/elastomeric coating which was recoated last in October 2011. These decks are built over garages and sloped to allow for drainage into adjacent gutter/downspout.

Elastomeric deck surfaces are typically a three-coat system. Coatings lose thickness each year due to wear and exposure to ultraviolet sunlight. If more than the topcoat is allowed to wear off, the surface may still appear to be in 'good' condition to the untrained eye, but waterproof integrity may be compromised. Once water gets past the coating, it can damage the substrate and other structural elements of the deck. Evaluate and repair as needed before recoating. Clean with mild solution such as TSP; bleach can be added if mold/mildew become a problem. We recommend planning to clean/topcoat as shown here. Re-application of the topcoat is typically recommended every 5-7 years to maintain waterproof integrity; check for manufacturer's warranty requirements as some specify recoat cycle timeframe. Extending time between coatings runs the risk of increased costs due to wear on the second coat in addition to the topcoat. It also increases the risk of water penetration, which can damage the underlying structure, greatly increasing costs. As part of routine maintenance, clean and repair locally as needed. In future reserve studies, a larger resurface cycle may eventually be needed in order to reapply base layers and aggregate.

Useful Life:
5 years

Remaining Life:
0 years

Best Case: $7,800

$6/Sq Ft, Lower estimate to clean, prime and seal/top coat

Worst Case: $13,000

$10/Sq Ft, Higher estimate, more repairs, etc.

Cost Source: Inflated Client Cost History

Comp # : 541 **Patios/Porches - Repair/Replace** Quantity: Moderate, Concrete

Location : Adjacent to units throughout the community

Funded? : No Useful life not predictable, repair/replace as needed out of operating budget

History : Unknown

Evaluation : Although dirty and soiled in many areas, no significant damage/deterioration observed. Although larger repair/replacement expenses can emerge as the community ages, at this time no predictable basis that this may be needed therefore no reserve funding included at this time. As routine maintenance, inspect regularly, pressure wash for appearance and repair promptly as needed to prevent water penetrating into the base and causing further damage. Repair any trip and fall hazards (1/2" or larger displacement) immediately to ensure safety. Monitor tree roots nearby; consult with arborist for best practice. Repairs/replacements at these areas can be performed as part of general maintenance and/or as part of concrete work (#100).

Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source:

Comp # : 545 **Wood Decks - Repair/Replace** Quantity: (37) decks, ~2,010 SF

Location : Decks throughout association

Funded? : Yes

History : Unknown

Evaluation : The second floor decks are supported by vertical wood posts and have wood plank decking and wood picket railings. Our inspection was limited from ground level only with restricted access to decktops through individual units. In 2015-16 some failed beams were discovered with repairs being performed. Previous to this in 2010, full scale replacement of nails with screws at railings. Other local repairs as needed.

Almost all exterior wood in the Puget Sound area will decay over time and require replacement. Plan for large scale repair/replacement at roughly the interval shown here. Inspect regularly and adjust this component as needed; these uncovered surfaces will require close inspections to detect signs of deterioration. Current building code requires flashing of the ledger joist (at the exterior building wall) to prevent decay from compromising it's structural integrity. Options for a longer lasting deck include such things as using thick wood boards of suitable species or a composite product. Composite materials are available that require less maintenance and lower life cycle costs typically. Funding for replacing existing wood boards with like-kind material is factored below. As routine maintenance, inspect decks/railings annually and repair as needed. As part of maintenance, apply water repellant stain/preservative at least every other year. Any painting is included in larger building exterior paint in this report.

Useful Life:
20 years

Remaining Life:
8 years

Best Case: $65,000

~$32/SF, Lower allowance to replace

Worst Case: $85,000

~$42/SF, Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp # : 550 **Deck Rail - Repair/Replace** Quantity: ~890 LF, wood picket

Location : Adjacent to elastomeric and wood decks

Funded? : Yes

History : Some repairs but assumed original

Evaluation : No problems observed from our ground level inspection and no problems reported to us; some recent repairs evident and reportedly will be painted locally during the 2015-16 fiscal year . As detailed in prior deck component (# 545), in summer 2010 original nail attachments at railings were replaced with screws.

We suggest reserve funding for regular intervals of total replacement as indicated below. This component coincides with other deck component (#545) for cost efficiency/consistency. As routine maintenance, inspect regularly to ensure safety and stability; repair promptly as needed using general operating/maintenance funds.

Useful Life:
20 years

Remaining Life:
8 years

Best Case: $44,500 Worst Case: $53,400

$50/LF, Lower allowance to remove and replace $60/LF, Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp # : 552 **Metal Railings - Repair/Replace** Quantity: Moderate Linear Feet

Location : Adjacent to entry stair areas of units

Funded? : No Useful life not predictable, repair/replace as needed out of operating budget

History : None known

Evaluation : Some wear of surface finish, however no obvious instability observed of metal railing. Sturdy item that can typically last for an extended period with ordinary care and maintenance. At this time no predictable basis for large scale reserve funding. Inspect regularly, clean for appearance and repair promptly as needed to ensure safety and maintain waterproofing. If needed, paint along with larger building paint projects or part of general maintenance, operating budget funding.

Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source:

Comp # : 560 **Bldg. Exterior Lights - Replace** Quantity: ~(100) metal/glass

Location : Near doors throughout exteriors; entry, decks, etc. plus at covered passageways

Funded? : Yes

History : None known

Evaluation : No major damage/deterioration observed of light fixtures. Observed during daylight hours and assumed to be in functional condition. Best to plan for large scale replacement, timed to coincide with exterior paint cycles (#525), if possible, for cost efficiency and consistent quality/appearance throughout association. A mid-range replacement allowance is factored below for planning purposes. As routine maintenance, inspect, repair/change bulbs as needed.

Useful Life:
24 years

Remaining Life:
11 years

Best Case: $10,000

$100/each (x100), Lower allowance to remove and replace

Worst Case: $15,000

$150/each (x100), Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp # : 570 **Entry Awnings - Replace** Quantity: (52) steel/metal

Location : Above door

Funded? : No Useful life not predictable, repair/replace as needed out of operating budget

History : None known

Evaluation : No widespread or significant problem with awnings observed; reportedly last painted in 2008-9 fiscal year. Assuming proactive maintenance, sturdy component with no predictable basis for large scale repair/replacement project. Inspect regularly for stability, repair promptly as needed from operating funds. Clean and refinish along with other exterior building surfaces as needed, no need for separate funding.

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

Comp # : 580 **Unit/Garage Doors - Replace** Quantity: Extensive, assorted

Location : Entries to units and garages

Funded? : No Unit owner responsibility

History : None known

Evaluation : Although some local dings/dents of metal/aluminum garage doors and metal/glass entry/porch doors, no significant damage or deterioration observed. We assume installed without defect of material and/or workmanship. As with windows (#535), according to Governing Documents for Concord Commons Neighborhood Article 3.1 (c) (iii), although the residential association is responsible for caulking of the exterior portions of all ..doors, "The Residential Association shall not be responsible for any maintenance or repairs to any … door" (Article 3.1(i)). With this understanding, no funding for association repair/replacement however association should establish specific guidelines to provide to homeowners for repairs/replacements to ensure adequate waterproofing, consistent appearance, etc. throughout community. These door types should have long life. Note: for information on association doors, see component #582.

Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source:

Comp # : 582 **Utility Doors - Replace** Quantity: (3) steel

Location : Ends of select buildings

Funded? : No Useful life not predictable, repair/replace as needed out of operating budget

History : None known

Evaluation : Stable condition of steel doors with no significant damage or deterioration observed. We assume installed without defect of material and/or workmanship. These door types should have long life with no anticipation for complete replacement at single time. Anticipate some repairs and/or periodic replacement best funded within the annual operating budget as needed, not large scale reserves.

Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source:

Comp # : 900 **Side Sewers - Repair/Replace** Quantity: Moderate areas

Location : Throughout community

Funded? : No Useful life not predictable, repair/replace as needed out of operating budget

History : None known

Evaluation : According to the Association declaration Section 3.1.(v), maintenance, repair and replacement as necessary of all side sewers connecting Concord Commons Neighborhood Units with public sewer lines are the responsibility of the Neighborhood Association. No problems reported to us. Analysis of these system(s) beyond visual inspection and is not within the scope of a reserve study. The association may want to have camera scope from time to time to look for blockages or other problems. No predictable basis for reserve funding at this time.

Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source:

Comp # : 905 **Resd. Water Lines - Repair/Replace** Quantity: Moderate areas

Location : Throughout community

Funded? : No Useful life not predictable, repair/replace as needed out of operating budget

History : None known

Evaluation : According to the Association declaration Section 3.1.(vi), maintenance, repair and replacement as necessary of all residential water lines connecting Concord Commons Neighborhood Units with residential water lines are the responsibility of the Neighborhood Association. No problems reported to us. Analysis of these system(s) beyond visual inspection and is not within the scope of a reserve study. No predictable basis for reserve funding at this time.

Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source:

Comp # : 910 **Electrical - Maintain/Repair** Quantity: Moderate

Location : Common areas/association responsibility

Funded? : No Useful life not predictable, repair/replace as needed out of operating budget

History : None known

Evaluation : Very small amount of Association maintained electrical (site lighting, irrigation, etc). No problems reported to us. Analysis of electrical system(s) beyond visual inspection is not within the scope of a reserve study. Typically, if installed per architectural specifications and local building codes, there is no predictable time frame for large scale repair/replacement expenses within the scope of our report. Service life typically lasts well beyond rated life of components. Treat minor repairs as ongoing maintenance expense. Periodic inspections of distribution system by qualified electrician are wise to clean and tighten, exercise breakers, etc… Some associations employ infrared or other testing methodologies to ward off trouble spots and potential hazards. A good resource book available for purchase is NFPA 70B Recommended Practices for Electrical Equipment Maintenance. Funding may be incorporated into future reserve study updates if conditions dictate. No basis for reserve funding at this time. Some electrical system components used historically are known to be life limited. Manufacturing defects become apparent from time to time and certain site conditions can contribute to premature deterioration of system components.

Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source:

Comp # : 970 **Fire Alarm Panels - Repair/Replace** Quantity: (3) panels

Location : At select building locations

Funded? : Yes

History : None known

Evaluation : We were not provided access to these locked closets that house panels, however no problems reported to us. Manufacturers can periodically discontinue support of panel and parts/service availability may therefore be limited in coming years. ADA work may need to be performed periodically (e.g. strobes) and devices (e.g. speakers, detectors) in common areas and units as well. Research and experience suggests planning for replacement at roughly the time frame shown here. As routine maintenance, have professionally inspected/tested.

Useful Life:
20 years

Remaining Life:
8 years

Best Case: $6,000

$2,000/each (x3), Lower allowance to replace

Worst Case: $7,500

$2,500/each (x3), Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp # : 997 **Association Annual Inspection** Quantity: Every year

Location : Common elements of association

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

History : None known

Evaluation : Many Associations are required to have annual inspections by a qualified engineer or architect to assess the physical condition of the improvements. The inspection typically covers, at a minimum, the building envelope, including: roofs, exterior, decks, waterproofing / sealants, flashings, glazing systems and doors. Forensic evaluation, building drops, etc…are beyond the scope of a typical reserve study. Although your Associations governing documents do not appear to have such a requirement, we recommend the Board provide for periodic building envelope inspections, funded from the operating budget, to help ensure critical areas are functioning properly.

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

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

Location : Common elements of association

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

History : Association Reserves completed 2015-16 fiscal year study

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

Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source: