RESERVE ANALYSIS REPORT

Cooper Commons: Parcel 5

Chandler, Arizona Version 004 May 23, 2019





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

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♦ ♦ ♦ INTRODUCTION TO RESERVE BUDGETING ● ♦ ♦ ♦

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

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

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

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

♦ ♦ ♦ UNDERSTANDING THE RESERVE ANALYSIS ♦ ♦

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

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

Budget

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

Percent Funded

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

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

Projections

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

Inventory

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

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

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

Full Funding

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

Baseline Funding

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

Threshold Funding

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

Statutory Funding

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

♦ ♦ ♦ RESERVE FUNDING CALCULATION METHODS

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

Component Calculation Method

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

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

Step 1: Calculation of fully funded balance for each component

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

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

Step 2: Distribution of current reserve funds

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

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

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

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

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

Step 3: Developing a funding plan

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

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

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

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

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

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

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

Cash Flow Calculation Method

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

This calculation method tests reserve contributions against reserve expenditures through time to determine the minimum contribution necessary (baseline funding) or some other defined goal/objective (full funding, threshold funding or statutory funding). Unlike the component calculation method, this calculation method cannot precisely calculate the reserve funding for any single component (or group of components). In order to work-around this issue to provide this bookkeeping information, a formula has been applied to component method results to calculate a reasonable breakdown. This information is displayed on the Management / Accounting Summary and Charts as well as elsewhere within the report.

The **Directed Cash Flow Calculation Method** is our primary calculation method. It allows for several funding strategies to be manually tested until the optimal funding strategy accomplishing three goals is created:

Goal #1: Ensures that all scheduled reserve expenditures are covered by keeping the reserve cash balance above zero during the projected period (typically 30 years)

Goal #2: Uniformly distributes the costs of replacements over time to benefit both current & future members of the association by using consistent, incremental contribution increases

Goal #3: Provides for the lowest reserve funding recommendation as possible over time with the goal of approaching, reaching and/or maintaining a 100% fully funded reserve balance

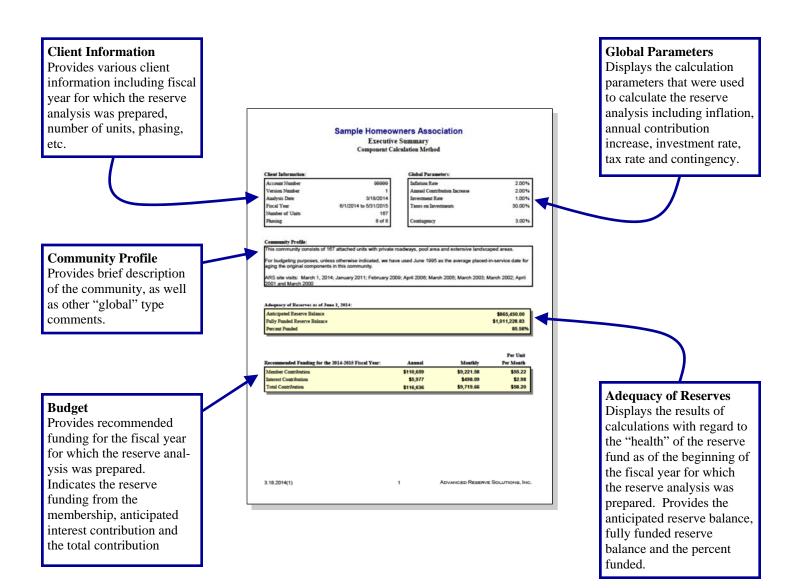
These very important aspects of the **Directed Cash Flow Calculation Method** will greatly aid the board of directors during the annual budgeting process.

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

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

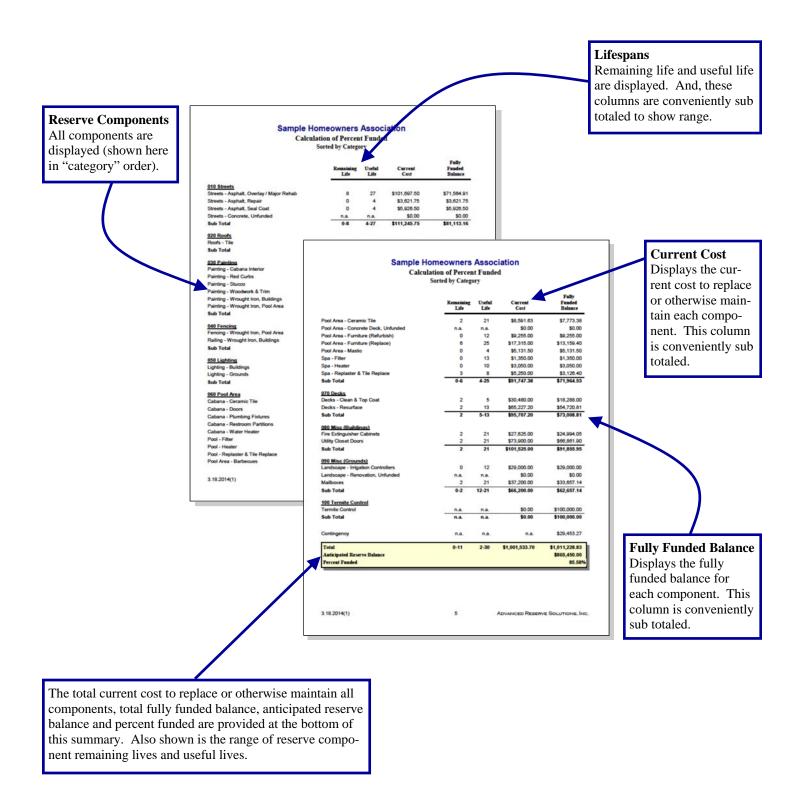
Executive Summary

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



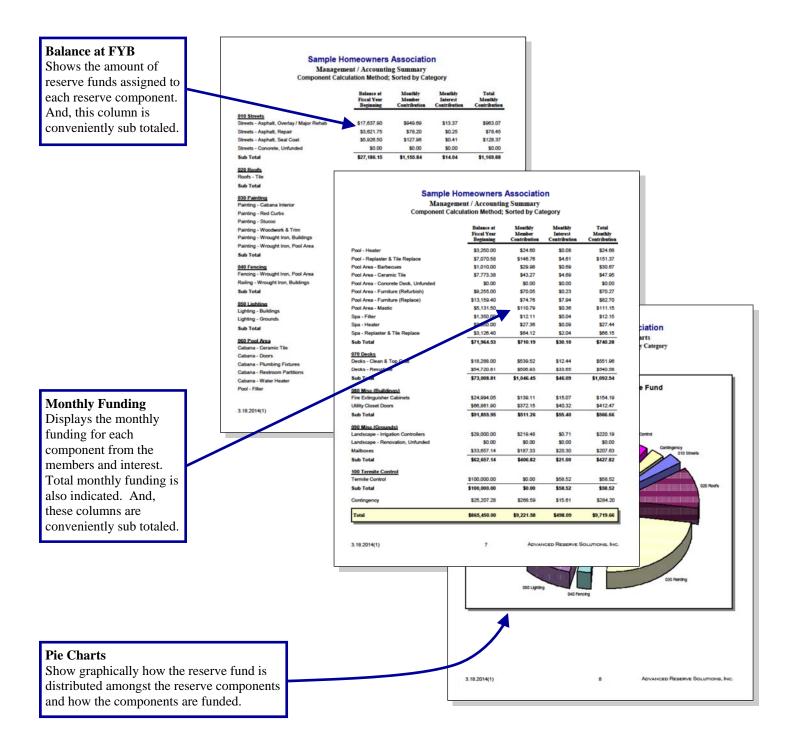
Calculation of Percent Funded

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



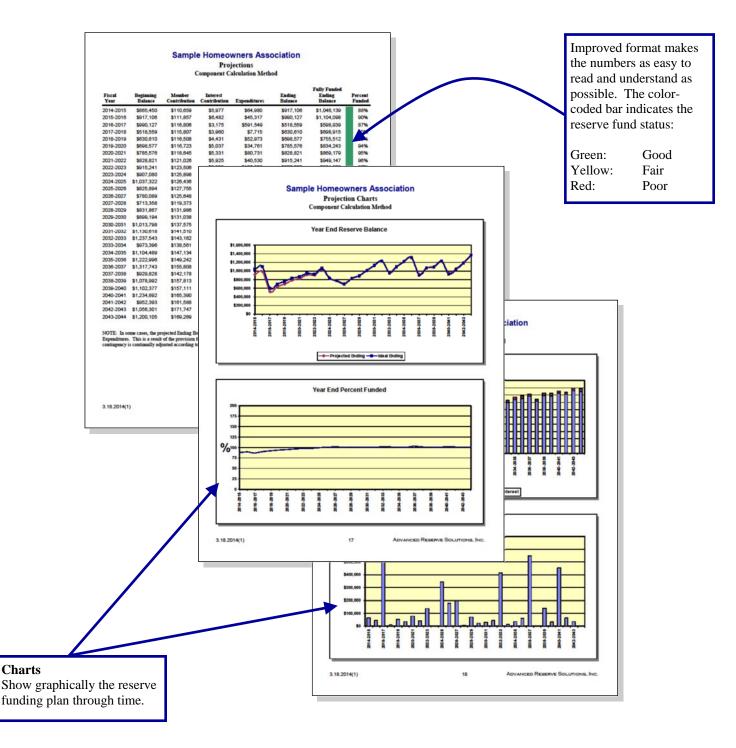
Management / Accounting Summary and Charts

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



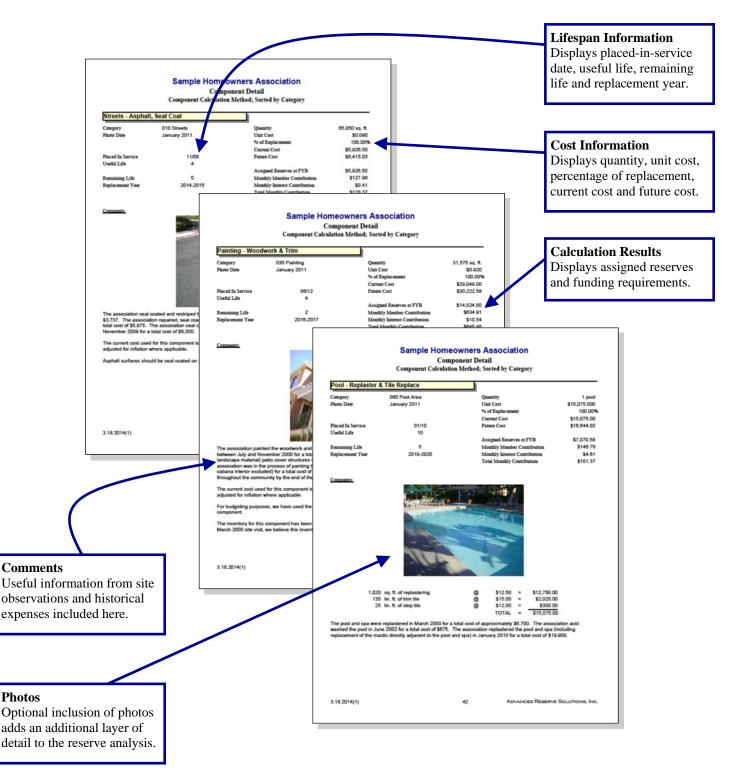
Projections and Charts

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



Component Detail

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



♦ ♦ ♦ GLOSSARY OF KEY TERMS ♦ ♦

Annual Contribution Increase Parameter

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

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

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

Anticipated Reserve Balance (or Reserve Funds)

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

Assigned Funds (and "Fixed" Assigned Funds)

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

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

Cash Flow Calculation Method

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

Component Calculation Method

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

Contingency Parameter

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

Current Replacement Cost

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

Fiscal Year

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

Fully Funded Reserve Balance (or Ideal Reserves)

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

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

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

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

Future Replacement Cost

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

Global Parameters

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

Inflation Parameter

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

Interest Contribution

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

Investment Rate Parameter

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

Membership Contribution

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

Monthly Contribution (and "Fixed" Monthly Contribution)

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

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

Number of Units (or other assessment basis)

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

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

One-Time Replacement

Used for components that will be budgeted for only once.

Percent Funded

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

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

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

Percentage of Replacement

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

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

Phasing

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

Placed-In-Service Date

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

Remaining Life

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

Remaining Life Adjustment

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

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

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

Replacement Year

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

Reserve Components

Line items included in the reserve analysis.

Taxes on Investments Parameter

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

Total Contribution

The sum of the membership contribution and interest contribution.

<u>Useful Life</u>

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

♦ ♦ ♦ LIMITATIONS OF RESERVE ANALYSIS

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

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

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

Executive Summary Directed Cash Flow Calculation Method

Client Information:

| Account Number | 2203 |
|-----------------|------------------------|
| Version Number | 004 |
| Analysis Date | 05/23/2019 |
| Fiscal Year | 1/1/2020 to 12/31/2020 |
| Number of Units | 225 |
| Phasing | 1 of 1 |

Global Parameters:

| Inflation Rate | 2.55 % |
|------------------------------|--------|
| Annual Contribution Increase | 2.55 % |
| Investment Rate | 1.50 % |
| Taxes on Investments | 0.00 % |
| | |
| Contingency | 0.00 % |

Community Profile:

Unless otherwise indicated in this report, we have used 2001 as the basis for aging the original components examined in this analysis.

Reserve Balance as of March 31, 2019: \$212,284

Remaining 2019 Reserve Contributions: \$28,350 (\$3,150/month x 9 months)

Remaining 2019 Interest to be Earned (1.50%): \$2,548

Remaining 2019 Reserve Expenditures: None Planned or Anticipated

Projected January 1, 2020 Reserve Balance: \$243,182

REPORTS: 2004. Updated 2010, 2015 & 2019.

Adequacy of Reserves as of January 1, 2020:

| Anticipated Reserve Balance | \$243,182.00 |
|------------------------------|--------------|
| Fully Funded Reserve Balance | \$44,309.49 |
| Percent Funded | 548.83% |

| | | | Per Unit |
|---|----------|----------|-----------|
| Recommended Funding for the 2020 Fiscal Year: | Annual | Monthly | Per Month |
| Member Contribution | \$8,065 | \$672.08 | \$2.99 |
| Interest Contribution | \$3,593 | \$299.39 | \$1.33 |
| Total Contribution | \$11,658 | \$971.47 | \$4.32 |

Distribution of Current Reserve Funds

Sorted by Remaining Life

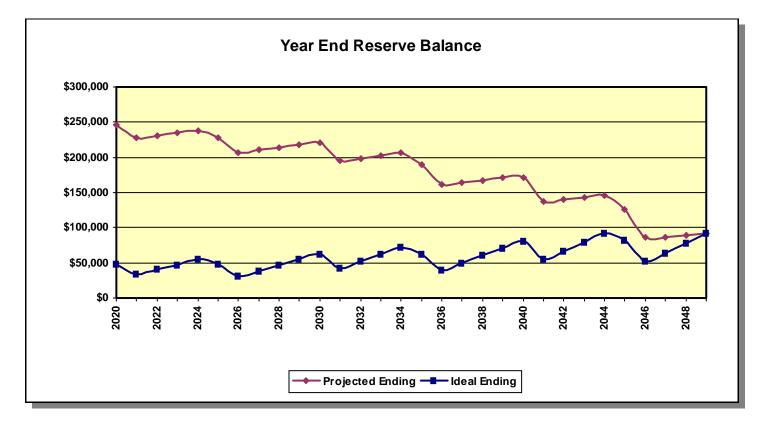
| | Remaining Life | Fully Funded Balance | Assigned Reserves |
|--|-------------------|----------------------------|---------------------------|
| Grounds: Irrigation Controllers Grounds: Site Improvements | 0 0 | \$1,500.00 \$7,500.00 | \$3,000.00 \$15,000.00 |
| Driveways: Concrete Pavers (Repairs) | 1 | \$20,752.75 | \$21,845.00 |
| Park Equipment: Pet Waste Stations | 3 | \$750.00 | \$1,000.00 |
| Block Walls: Repair/Replace | 5 | \$5,134.74 | \$10,840.00 |
| Block Walls: Repaint | 6 | \$8,672.00 | \$21,680.00 |
| Grounds: Concrete Components (Unfunded) Grounds: Irrigation System (Unfunded) | n.a. n.a. | \$0.00 \$0.00 | \$0.00 \$0.00 |
| Contingency | n.a. | \$0.00 | \$0.00 |
| Total Percent Funded | 0-6 | \$44,309.49 | \$243,182.00 548.83% |

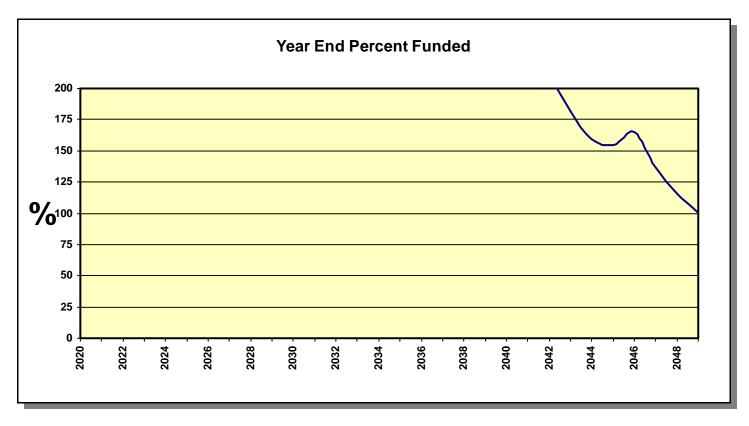
Includes excess reserves of \$169,817

Projections Directed Cash Flow Calculation Method

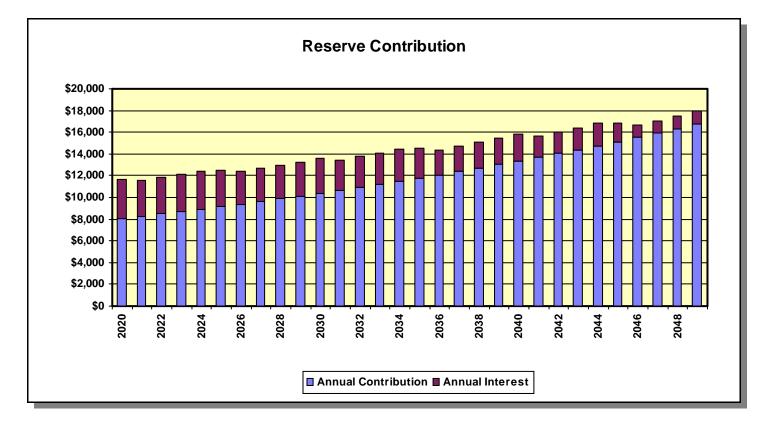
| Fiscal Year | Beginning Balance | Member Contribution | Interest Contribution | Expenditures | Ending Balance | Fully Funded Ending Balance | Percent Funded |
|----------------|----------------------|------------------------|--------------------------|--------------|-------------------|-----------------------------------|-------------------|
| 2020 | \$243,182 | \$8,065 | \$3,593 | \$9,000 | \$245,840 | \$48,808 | 504% |
| 2021 | \$245,840 | \$8,271 | \$3,316 | \$30,093 | \$227,333 | \$33,260 | 684% |
| 2022 | \$227,333 | \$8,482 | \$3,373 | \$7,887 | \$231,300 | \$40,446 | 572% |
| 2023 | \$231,300 | \$8,698 | \$3,415 | \$9,167 | \$234,246 | \$46,871 | 500% |
| 2024 | \$234,246 | \$8,920 | \$3,474 | \$8,295 | \$238,345 | \$54,731 | 435% |
| 2025 | \$238,345 | \$9,147 | \$3,323 | \$22,502 | \$228,313 | \$48,543 | 470% |
| 2026 | \$228,313 | \$9,380 | \$3,000 | \$33,939 | \$206,755 | \$30,864 | 670% |
| 2027 | \$206,755 | \$9,620 | \$3,054 | \$8,946 | \$210,483 | \$38,770 | 543% |
| 2028 | \$210,483 | \$9,865 | \$3,109 | \$9,174 | \$214,283 | \$47,058 | 455% |
| 2029 | \$214,283 | \$10,116 | \$3,164 | \$9,408 | \$218,155 | \$55,745 | 391% |
| 2030 | \$218,155 | \$10,374 | \$3,192 | \$11,577 | \$220,144 | \$62,865 | 350% |
| 2031 | \$220,144 | \$10,639 | \$2,814 | \$38,710 | \$194,887 | \$42,789 | 455% |
| 2032 | \$194,887 | \$10,910 | \$2,866 | \$10,146 | \$198,517 | \$51,954 | 382% |
| 2033 | \$198,517 | \$11,188 | \$2,918 | \$10,405 | \$202,219 | \$61,558 | 328% |
| 2034 | \$202,219 | \$11,474 | \$2,972 | \$10,670 | \$205,995 | \$71,619 | 288% |
| 2035 | \$205,995 | \$11,766 | \$2,733 | \$30,404 | \$190,090 | \$62,194 | 306% |
| 2036 | \$190,090 | \$12,066 | \$2,295 | \$43,657 | \$160,794 | \$39,446 | 408% |
| 2037 | \$160,794 | \$12,374 | \$2,340 | \$11,507 | \$164,002 | \$49,609 | 331% |
| 2038 | \$164,002 | \$12,690 | \$2,386 | \$11,801 | \$167,277 | \$60,264 | 278% |
| 2039 | \$167,277 | \$13,013 | \$2,434 | \$12,101 | \$170,622 | \$71,431 | 239% |
| 2040 | \$170,622 | \$13,345 | \$2,444 | \$14,892 | \$171,519 | \$80,583 | 213% |
| 2041 | \$171,519 | \$13,685 | \$1,933 | \$49,795 | \$137,343 | \$54,752 | 251% |
| 2042 | \$137,343 | \$14,034 | \$1,974 | \$13,051 | \$140,300 | \$66,533 | 211% |
| 2043 | \$140,300 | \$14,392 | \$2,016 | \$13,384 | \$143,324 | \$78,880 | 182% |
| 2044 | \$143,324 | \$14,759 | \$2,059 | \$13,725 | \$146,418 | \$91,814 | 159% |
| 2045 | \$146,418 | \$15,135 | \$1,754 | \$37,233 | \$126,073 | \$81,607 | 154% |
| 2046 | \$126,073 | \$15,521 | \$1,163 | \$56,158 | \$86,600 | \$52,386 | 165% |
| 2047 | \$86,600 | \$15,917 | \$1,164 | \$16,776 | \$86,906 | \$63,477 | 137% |
| 2048 | \$86,906 | \$16,323 | \$1,196 | \$15,180 | \$89,245 | \$77,175 | 116% |
| 2049 | \$89,245 | \$16,739 | \$1,228 | \$15,567 | \$91,646 | \$91,530 | 100% |

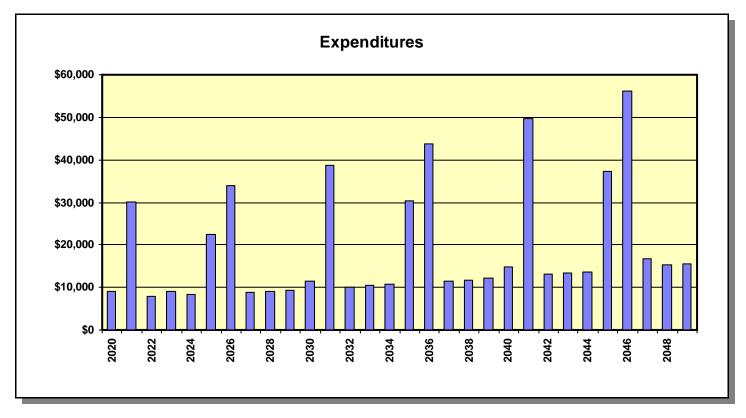
Projection Charts Directed Cash Flow Calculation Method





Projection Charts Directed Cash Flow Calculation Method





Annual Expenditure Detail

Sorted by Description

| 2020 Fiscal Year | |
|--------------------------------------|-------------|
| Grounds: Irrigation Controllers | \$1,500.00 |
| Grounds: Site Improvements | \$7,500.00 |
| Sub Total | \$9,000.00 |
| 2021 Fiscal Year | |
| Driveways: Concrete Pavers (Repairs) | \$22,402.05 |
| Grounds: Site Improvements | \$7,691.25 |
| Sub Total | \$30,093.30 |
| 2022 Fiscal Year | |
| Grounds: Site Improvements | \$7,887.38 |
| Sub Total | \$7,887.38 |
| 2023 Fiscal Year | |
| Grounds: Site Improvements | \$8,088.51 |
| Park Equipment: Pet Waste Stations | \$1,078.47 |
| Sub Total | \$9,166.97 |
| 2024 Fiscal Year | |
| Grounds: Site Improvements | \$8,294.76 |
| Sub Total | \$8,294.76 |
| 2025 Fiscal Year | |
| Block Walls: Repair/Replace | \$12,294.41 |
| Grounds: Irrigation Controllers | \$1,701.26 |
| Grounds: Site Improvements | \$8,506.28 |
| Sub Total | \$22,501.94 |
| 2026 Fiscal Year | |
| Block Walls: Repaint | \$25,215.83 |
| Grounds: Site Improvements | \$8,723.19 |
| Sub Total | \$33,939.02 |
| 2027 Fiscal Year | |
| Grounds: Site Improvements | \$8,945.63 |
| Sub Total | \$8,945.63 |
| 2028 Fiscal Year | |
| Grounds: Site Improvements | \$9,173.74 |
| Sub Total | \$9,173.74 |

Annual Expenditure Detail Sorted by Description

| 2029 Fiscal Year | |
|--------------------------------------|--------------------|
| Grounds: Site Improvements | \$9,407.67 |
| Sub Total | \$9,407.67 |
| 2030 Fiscal Year | |
| Grounds: Irrigation Controllers | \$1,929.51 |
| Grounds: Site Improvements | \$9,647.57 |
| Sub Total | \$11,577.08 |
| 2031 Fiscal Year | |
| Driveways: Concrete Pavers (Repairs) | \$28,816.71 |
| Grounds: Site Improvements | \$9,893.58 |
| Sub Total | \$38,710.29 |
| 2032 Fiscal Year | 0 40,445,07 |
| Grounds: Site Improvements | \$10,145.87 |
| Sub Total | \$10,145.87 |
| 2033 Fiscal Year | |
| Grounds: Site Improvements | \$10,404.59 |
| Sub Total | \$10,404.59 |
| 2034 Fiscal Year | |
| Grounds: Site Improvements | \$10,669.91 |
| Sub Total | \$10,669.91 |
| 2035 Fiscal Year | |
| Block Walls: Repair/Replace | \$15,814.82 |
| Grounds: Irrigation Controllers | \$2,188.40 |
| Grounds: Site Improvements | \$10,941.99 |
| Park Equipment: Pet Waste Stations | \$1,458.93 |
| Sub Total | \$30,404.14 |
| 2036 Fiscal Year | |
| Block Walls: Repaint | \$32,436.20 |
| Grounds: Site Improvements | \$11,221.01 |
| Sub Total | \$43,657.20 |
| 2037 Fiscal Year | |
| Grounds: Site Improvements | \$11,507.14 |
| Sub Total | \$11,507.14 |

Annual Expenditure Detail

Sorted by Description

| 2038 Fiscal Year | |
|--|--------------------|
| Grounds: Site Improvements | \$11,800.58 |
| Sub Total | \$11,800.58 |
| 2039 Fiscal Year | |
| Grounds: Site Improvements | \$12,101.49 |
| Sub Total | \$12,101.49 |
| | |
| 2040 Fiscal Year | |
| Grounds: Irrigation Controllers | \$2,482.02 |
| Grounds: Site Improvements | \$12,410.08 |
| Sub Total | \$14,892.10 |
| 2041 Fiscal Year | |
| Driveways: Concrete Pavers (Repairs) | \$37,068.16 |
| Grounds: Site Improvements | \$12,726.54 |
| Sub Total | \$49,794.69 |
| | |
| 2042 Fiscal Year | |
| Grounds: Site Improvements | \$13,051.06 |
| Sub Total | \$13,051.06 |
| 2043 Fiscal Year | |
| Grounds: Site Improvements | \$13,383.87 |
| Sub Total | \$13,383.87 |
| | |
| 2044 Fiscal Year Grounds: Site Improvements | \$13,725.15 |
| Sub Total | \$13,725.15 |
| | <i>Q</i> 10,720.10 |
| 2045 Fiscal Year | |
| Block Walls: Repair/Replace | \$20,343.28 |
| Grounds: Irrigation Controllers | \$2,815.03 |
| Grounds: Site Improvements | \$14,075.15 |
| Sub Total | \$37,233.45 |
| 2046 Fiscal Year | |
| Block Walls: Repaint | \$41,724.06 |
| Grounds: Site Improvements | \$14,434.06 |
| Sub Total | \$56,158.12 |
| | 400,100112 |

Annual Expenditure Detail

Sorted by Description

| 2047 Fiscal Year | |
|------------------------------------|-------------|
| Grounds: Site Improvements | \$14,802.13 |
| Park Equipment: Pet Waste Stations | \$1,973.62 |
| Sub Total | \$16,775.75 |
| 2048 Fiscal Year | |
| Grounds: Site Improvements | \$15,179.58 |
| Sub Total | \$15,179.58 |
| 2049 Fiscal Year | |
| Grounds: Site Improvements | \$15,566.66 |
| Sub Total | \$15,566.66 |

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

| Driveways: Con | crete Pavers (Repairs) | | |
|-------------------|------------------------|-------------------------------|-----------------|
| Category | 010 Driveways | Quantity | 109,225 sq. ft. |
| | | Unit Cost | \$8.000 |
| | | % of Replacement | 2.50% |
| | | Current Cost | \$21,845.00 |
| Placed In Service | 01/01 | Future Cost | \$22,402.05 |
| Useful Life | 10 | | |
| Adjustment | +10 | Assigned Reserves at FYB | \$21,845.00 |
| Remaining Life | 1 | Monthly Member Contribution | \$17.79 |
| Replacement Year | 2021 | Monthly Interest Contribution | \$110.86 |
| | | Total Monthly Contribution | \$128.65 |

Comments:



This component will accumulate funds for 20 years, and then on a continuous 10 year cycle, for the maintenance & repair of the concrete pavers making up the common area driveways throughout Parcel 5. The condition of the pavers should be monitored over time, and the useful life & cost estimates adjusted accordingly.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Block Walls: Repaint Category 040 Block Walls 54,200 sq. ft. Quantity Unit Cost \$0.400 100.00% % of Replacement Current Cost \$21,680.00 Placed In Service 01/16 Future Cost \$25,215.83 Useful Life 10 Assigned Reserves at FYB \$21,680.00 6 **Remaining Life** Monthly Member Contribution \$17.65 2026 \$110.06 Replacement Year Monthly Interest Contribution **Total Monthly Contribution** \$127.71

Comments:



The block walls throughout Parcel 5 have been repainted since our last reserve study in 2015. However, no information on this painting project was provided by the client. For budgeting purposes we have used 2016 as the basis for aging this component. We are budgeting to repaint the block walls every 10 years.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

| Block Walls: Repair/Replace | | | |
|-----------------------------|-----------------|-------------------------------|----------------|
| Category | 040 Block Walls | Quantity | 54,200 sq. ft. |
| | | Unit Cost | \$20.000 |
| | | % of Replacement | 1.00% |
| | | Current Cost | \$10,840.00 |
| Placed In Service | 07/15 | Future Cost | \$12,294.41 |
| Useful Life | 10 | | |
| | | Assigned Reserves at FYB | \$10,840.00 |
| Remaining Life | 5 | Monthly Member Contribution | \$8.83 |
| Replacement Year | 2025 | Monthly Interest Contribution | \$55.03 |
| | | Total Monthly Contribution | \$63.86 |

Comments:



\$3,395 was spent in 2015 on block wall repairs. Going forward, this component will accumulate funds on a 10 year cycle for block wall repairs on an "as needed" basis. The condition of the walls should be monitored over time, and the percent budgeted for repair/replacement should be adjusted over time. For budgeting purposes we have used mid-2015 as the basis for agint this component.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

| Park Equipment: | Pet Waste Stations | | |
|-------------------|--------------------|-------------------------------|----------------------|
| Category | 060 Park Equipment | Quantity | 2 pet waste stations |
| | | Unit Cost | \$500.000 |
| | | % of Replacement | 100.00% |
| | | Current Cost | \$1,000.00 |
| Placed In Service | 01/11 | Future Cost | \$1,078.47 |
| Useful Life | 12 | | |
| | | Assigned Reserves at FYB | \$1,000.00 |
| Remaining Life | 3 | Monthly Member Contribution | \$0.81 |
| Replacement Year | 2023 | Monthly Interest Contribution | \$5.06 |
| | | Total Monthly Contribution | \$5.87 |

Comments:



This component budgets to replace the pet waste stations located at the center park/greenbelt areas.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

Grounds: Concrete Components (Unfunded) Category 100 Grounds 1 comment **Ouantity** Unit Cost \$0.000 0.00% % of Replacement \$0.00 Current Cost Placed In Service 01/01 \$0.00 Future Cost Useful Life n.a. Assigned Reserves at FYB \$0.00 **Remaining Life** Monthly Member Contribution \$0.00 n.a. Replacement Year Monthly Interest Contribution \$0.00 n.a. **Total Monthly Contribution** \$0.00

Comments:



We are not budgeting for repair or replacement of concrete components in this analysis. It is anticipated that any repairs/replacements required will be addressed immediately due to safety concerns. There should not be a need for complete replacement at a single point in time, and good maintenance practice won't allow the need for repairs to accumulate to a point of major expense. We recommend that a line item be set up in the annual operating budget to account for potential concrete repairs/replacements on an "as needed" basis. However, should the client wish to include budgeting for concrete components as a reserve expense, we will do so at their request (cost and useful life to be provided by client).

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

| Grounds: Irrigat | ion Controllers | | |
|-------------------|-----------------|-------------------------------|-------------|
| Category | 100 Grounds | Quantity | 1 total |
| | | Unit Cost | \$1,500.000 |
| | | % of Replacement | 100.00% |
| | | Current Cost | \$1,500.00 |
| Placed In Service | 01/12 | Future Cost | \$1,701.26 |
| Useful Life | 5 | | |
| | | Assigned Reserves at FYB | \$3,000.00 |
| Remaining Life | 0 | Monthly Member Contribution | \$24.59 |
| Replacement Year | 2020 | Monthly Interest Contribution | \$0.72 |
| | | Total Monthly Contribution | \$25.31 |

Comments:



There are six irrigation controllers servicing the Parcel 5 common areas. At the time of the May 2019 field inspection, we were unable to open any of the irrigation controller boxes to inspect the controllers. We weren't provided any information on irrigation controller replacements since 2015, but that doesn't necessarily mean that there weren't any. Going forward, using 2012 as the basis for agin, this component will accumulate funds on a five year cycle for the replacement of the irrigation controllers on an "as needed" basis.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

| Grounds: Irrigat | ion System (Unfunded) | | |
|-------------------|-----------------------|-------------------------------|-----------|
| Category | 100 Grounds | Quantity | 1 comment |
| | | Unit Cost | \$0.000 |
| | | % of Replacement | 0.00% |
| | | Current Cost | \$0.00 |
| Placed In Service | 01/01 | Future Cost | \$0.00 |
| Useful Life | n.a. | | |
| | | Assigned Reserves at FYB | \$0.00 |
| Remaining Life | n.a. | Monthly Member Contribution | \$0.00 |
| Replacement Year | n.a. | Monthly Interest Contribution | \$0.00 |
| | | Total Monthly Contribution | \$0.00 |

Comments:



Irrigation systems are one of the most difficult items to budget for without specific information provided by an expert who is familiar with the system inventory and system condition. We have been advised by irrigation system experts that most system components (piping, sprinkler heads, valves, etc) have a useful life of 20+ years. However, budgeting for the replacement of an irrigation system requires evaluation of the present condition (to identify remaining useful life) and replacement cost - both of which call for expert evaluation, but fall outside the scope of a reserve study.

Therefore, we recommend that the Association board and/or management company have the system evaluated to determine the appropriate scope of work, projected replacement cost and remaining life, all of which are necessary so that budgeting can be included in a revision or future update of this analysis.

Component Detail Directed Cash Flow Calculation Method; Sorted by Category

| Grounds: Site Improvements | | | |
|----------------------------|-------------|-------------------------------|-------------|
| Category | 100 Grounds | Quantity | 1 total |
| | | Unit Cost | \$7,500.000 |
| | | % of Replacement | 100.00% |
| | | Current Cost | \$7,500.00 |
| Placed In Service | 01/19 | Future Cost | \$7,691.25 |
| Useful Life | 1 | | |
| | | Assigned Reserves at FYB | \$15,000.00 |
| Remaining Life | 0 | Monthly Member Contribution | \$602.41 |
| Replacement Year | 2020 | Monthly Interest Contribution | \$17.62 |
| | | Total Monthly Contribution | \$620.03 |

Comments:



At the time of the 2004 reserve study, the client advised us to budget \$5,000 annually for site improvements, and we have continued to budget an annual amount for site improvements in each subsequent reserve study update. However, we have yet to be provided any information pertaining to reserve expenditures for site improvements in Parcel 5 from 2004 - 2019. Given that no direction has been provided by the client regarding site improvements going forward, we have continue to budget for such as an annual reserve expense, and have used a current budgeted amount of \$7,500.

NOTE: The term "Site Improvements" hase never been defined by the client.

Cooper Commons: Parcel 5 Detail Report Index

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Number of components included in this reserve analysis is 8.