



MASON & MASON
CAPITAL RESERVE ANALYSTS, INC.



(Final Report, Revised March 23, 2023)

**Condition Assessment
&
Reserve Fund Plan
2023**

ROLLING RIDGE

Sterling, Virginia



Prepared for:
The Board of Directors
&
Spectrum Property Management



MASON & MASON
CAPITAL RESERVE ANALYSTS, INC.



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March 23, 2023

Ms. Lisa Cornaire, Managing Agent
Spectrum Property Management
P.O. Box 1562
Great Falls, Virginia 22066

RE: **CONDITION ASSESSMENT AND RESERVE FUND PLAN 2023**
Rolling Ridge Condominium Association
(Final Report, Revised March 23, 2023)
Sterling, Virginia
Project No. 9713

Dear Ms. Cornaire:

Mason & Mason Capital Reserve Analysts, Inc. has completed the final report for Rolling Ridge.

We have revised the report to reflect changes that you and the Board requested via email on March 1, 2023.

We genuinely appreciate the opportunity to work with you and the Condominium.

Sincerely,

Mason & Mason Capital Reserve Analysts, Inc.

James G. Mason III, R.S.
Vice President

James G. Mason, R.S.
Principal



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FOREWORD

PLEASE READ THIS FIRST

This report contains information the Board requires to fulfill its fiduciary responsibilities with respect to the financial health of the Association. Even if you are already familiar with the concepts of capital reserve planning, it requires some study. The information in this report is vital to your Association's financial health. Unless you understand it, your Association may not follow it. This may lead to underfunding and financial stress at some time in the future.

Our years of experience providing reserve analysis to both first-time and multi-update return clients have compelled us to develop a logical funding approach, which is based on generational equity and fairness to common-interest property owners that helps ensure realistic reserve funding levels.

Our approach is neither standard, nor is it necessarily easy to understand without first becoming familiar with some basic concepts. Section 2 explains these concepts in more detail. We want you to understand them because a well-informed Association makes the best decisions for its common-property owners.

SUMMARY OF KEY ISSUES

Different readers will look for different things from this report. Perhaps the homeowner will just be looking for the high points. A prospective buyer may be looking at the general financial condition of the Association's reserves. A Board member should probe deeper in order to understand the financial tools that will be helpful in fulfilling their fiduciary responsibilities to the Association.

The Summary of Key Issues presents a recapitulation of the most important findings of Rolling Ridge's Reserve Fund Plan. Each is discussed in greater detail in the body of the report. We encourage the reader to 'go deeper' into the report, and we have written it in a way that is understandable to a first-time reader.

Analyzing the capital reserves reveals that:

- The fund is approximately **44%** funded through 2022, **See Paragraph 2.1**. Our goal is to become fully funded by the end of the 20-year period (2042).

To achieve this goal, the Board should:

- Step increase the annual contribution beginning in **2024** by **\$35,000** for each of **three years**, or from **\$88,435** to **\$123,435**, followed by annual adjustments of **4%** to reflect inflation thereafter.
- This represents a **2024** adjustment from **\$40.94** to **\$57.15** (a net adjustment of **\$16.21**) per residence, per month (based on **180** units).

Supporting data are contained in the body of this report, and we encourage the reader to take the time to understand it.

VISUAL EVALUATION METHODOLOGY

The first step in the process is collection of specific data on each of your community's commonly held components. This information includes quantity and condition of each included component. We collect most of this data during the on-site field survey. When this information is not available in the field, we may obtain it by discussion with those knowledgeable through management or service activities.

The field survey or condition assessment is visual and non-invasive. We do not perform destructive testing to uncover hidden conditions; perform operational testing of mechanical, electrical, plumbing, fire, and life safety protection; or perform code compliance analysis.

We make no warranty that every defect has been identified. Our scope of work does not include an evaluation of moisture penetration, mold, indoor air quality, or other environmental issues. While we may identify, pedestrian hazards observed during the course of the field survey, this report should not be considered a safety evaluation of components.

Replacement costs are sometimes based on published references, such as R. S. Means. However, our opinions of replacement costs usually include removal and disposal and are usually based on experience with similar projects including information provided by local contractors and reported client experience. Actual construction costs can vary significantly due to seasonal considerations, material availability, labor, economy of scale, and other factors beyond our control.

Projected useful service lives are based on statistical data and our opinion of their current visual condition. No guarantee of component service life expectancies is expressed or implied and none should be inferred by this report. Your actual experience in replacing components may differ significantly from the projections in the report, because of conditions beyond our control or that were not visually apparent at the time of the survey.

Visual Condition Ratings Definitions

Excellent Condition - No problems noted, like new condition.

Good Condition - No deterioration.

Fair Condition - Minor deterioration, but still serviceable.

Poor Condition - Significant deterioration, reaching the end of its service life.

Failed Condition - Beyond repair, must be removed and replaced.

1. INTRODUCTION

1.1 Background: Rolling Ridge Condominium Association is comprised of 180 condominiums in 27, two-story, townhome style buildings located on Summit Terrace in Sterling, Virginia. The community was constructed in 1991. 10 private streets, Calamary Circle, Atwood Square, Comstock Circle, Marigold Circle, Fielding Terrace, Canopy Terrace, Aster Terrace, Hazelnut Square, Summit Terrace, and Macaw Square are within the community. Common elements include an entrance monument, street signage, mailbox modules, timber retaining walls, light poles and fixtures, a pedestrian bridge, tot lot, and storm water drainage system. Building components include asphalt roofing, vinyl siding, and brick veneer. The street layout includes concrete sidewalks, curbs, and gutters, and 45 parking bays providing 453 spaces.

We are providing the Condition Assessment and Reserve Fund Plan based on Proposal Acceptance Agreement No. 9713 dated August 17, 2022. Our services are subject to all terms and conditions specified therein.

Mason & Mason did not review the declarations, covenants, or other organization documents pertaining to the establishment and governance of the Condominium Unit Owner Association. Ultimately, the establishment, management, and expenditure of reserves are within the discretion of the Condominium Unit Owner Association and its Board of Directors pursuant to their organizational documents and subject to the laws of the applicable jurisdiction. We are not otherwise financially associated with the Management Company, or the Condominium Unit Owner Association and we therefore do not have any conflicts of interest that would bias this report. Information provided by Management is deemed reliable. This report is not intended to be an audit or a forensic investigation. This report is not a mandate but is intended to be a guide for future planning.

James G. Mason III, R. S. and Maxamus G. Mason, R. S. I. T. conducted the field evaluation for this report on January 13, 2023. We met Ms. Lisa Cornaire, Managing Agent with Spectrum Property Management for a brief tour and discussion of all components. The sky was clear, and the temperature was approximately 47 degrees F. Precipitation had occurred for several days prior to the site visit. The pavements, walkways, and grounds were generally wet, but clean of debris.

1.2 Principal Findings: The common assets appear to be in overall fair to good condition. The community is now reaching a 30-year benchmark in terms of replacement of major systems. The driveways and parking bays restoration dates range from 2012 to 2020 and range from fair to good condition. Because of the wide range of dates, we are providing for a three phased approach for future restoration. Phase 1 includes the oldest pavements, Calamary Circle and Marigold Circle. Moderate deflected cracking (indicative of sub-base damage) and wide area random cracking was observed. The Phase 2 pavements include Atwood Square, Comstock Circle, Fielding Terrace, and Canopy Terrace. These pavements were restored around 2017 and range from fair to good condition. The Phase 3 pavements were restored around 2020 and include Aster Terrace, Hazelnut Square, Summit Terrace, and Macaw Square. No deflected pavement and only minor cracking were observed. All asphalt driveways and parking bays should receive pavement maintenance every six years, including full-depth repair to deflected asphalt, crack filling, and continued asphalt rejuvenation. The asphalt footpaths are in generally good condition. However, we did observe a few areas of root heave, which are potential tripping hazards, requiring expeditious repair.

There is a significant quantity of cracked, settled, and/or heaved concrete sidewalks, which are potential tripping hazards. The liability and costs associated with personal injury lawsuits resulting primarily from sidewalk and footpath tripping hazards are too great to defer repair. It is our opinion that deficiencies which pose a hazard to pedestrians should be corrected expeditiously.

Site features such as the entrance monument, street signage, most mailbox modules, timber retaining walls, light poles and fixtures, and the storm water drainage system range from fair to good condition. The pedestrian footbridge leading to the next community is in fair condition. However, the wood treads will require near-term replacement and the entire bridge will require replacement mid-term. The tot lot play modules metal landings are rusting and may become a potential safety hazard soon, if not replaced. Most of the outdoor furniture and the jungle gym bars are in generally good condition.

The roofing ranges from fair to good condition. We understand that the original 3-tab roofing was installed between 2002 and 2007. There have been recent problems with roofing and some leaks reported. These problem roofs (a total of eight units) were replaced by Prime Exteriors, L.L.C. in 2022 and 2023. Management provided pricing to us, as we have used an average of \$5,650 per unit. Management also requested that we phase the future building roofing. We have provided for approximately 172-unit roofing replacements over the next six years, or about 28 to 29 unit replacements each year.

Other external building components, including the vinyl siding (restored between 2005 and 2009), aluminum or PVC trim, brick veneer, and the chimney caps range from fair to generally good condition.

Financially, the Association requires an increase in contributions to reserves. We have stepped the increases over three years to minimize the impact on individual homeowners, but have established a sufficient contribution schedule to eventually achieve the fully funded goal by the end of the 20-year period.

In order to maintain the physical attributes that preserve property values and provide a safe environment for occupants and guests, a series of capital expenditures should be anticipated. Consequently, we have scheduled near-, mid-, and late-term restoration and replacement projects based on anticipated need from our experience with similar properties.

Generally, our approach is to group appropriately related component replacement items into projects. This creates a more realistic model and allows a grouping timeline that is more convenient to schedule and logical to accomplish. Please see the Table 1 Discussion, Column 18, and the Asphalt Pavement Report in Section 8, for specific information.

2. METHODS OF FUNDING

Once the data are compiled, our proprietary software produces two distinct funding methods. These are the **Component Method and Cash Flow Method**. Each of these methods is used in analyzing your Association's reserve status and each plays a role in the Board's decision on how to fund reserves. While we provide the guidance, the choice of funding method is ultimately the prerogative of the Board. Considering the vulnerability of the Association's assets, its risk tolerance, and its ability to fund contributions, the Board should decide how the Association will fund its reserves and at what level.

2.1 Component Method: As reserve analysts, we recognize the value of Component Method calculations as they address both future replacement costs and the time remaining to fund them. **This is the foundation of the savings concept. You will see the term 'fully funded.' This simply means you are on schedule, in any given year, to accrue sufficient funds by the component's replacement date. It does not mean you must have 100% of the funds ahead of time.** Simplified Example: A component projected to cost \$1,000 at the end of its 10-year life cycle would require a \$100 annual contribution in each of the 10 years. As long as you follow this contribution plan, the component is 'fully funded.'

Prior to determining the actual required annual contribution, a complex calculation apportions the existing reserve fund to each component. Each component's remaining unfunded balance forms the basis for the required contribution going forward.

Funds set aside for replacement of individual components are not normally used for the replacement of other components, even though the funds reside in the same bank account. In rare cases where a reserve fund is actually overfunded, \$0 will be displayed on the Component Method tables, indicating that the component is fully funded for that cycle.

While the time basis for the report is a 20-year period, the Component Method allows for inclusion of long-life components that may require replacement after the specified period. **This allows for funding of long-life components contemporaneously, which is fundamentally fair if they are serving the current owners. This is in contrast to saying, 'if it doesn't require replacement within our 20-year period, we're going to ignore it.'**

Due to replacement cycle time and cost differentials, the Component Method typically results in annual contribution fluctuations, which often makes it difficult for a Board to implement. **However, its guidance is essential and invaluable for understanding funding liabilities and making informed recommendations.** Table 4 shows these calculations, as well as projects interest income, expenses with inflation, and yearly balances, which will be 'fully funded.'

2.2 Cash Flow Method: The Cash Flow Method is easier to implement. It is a simple 20-year spread sheet that includes the starting balance, current contribution, interest income, inflation rate, projected expenses, and resulting yearly balances. The Cash Flow Method pools the contributions allocated to each of the Association's common components into a single 'account.'

Table 3 shows these calculations. This table reflects the information you provided on your reserve fund balance and current contribution. It also shows projected yearly positive or negative balances. **The Cash Flow Method does not include replacement funding for anything beyond the 20-year period, thus leaving a potential shortfall in funding and failing to address generational equity if not specifically set to do so.** It does not provide any real guidance beyond the basic information. There are several variations on cash flow goals such as Threshold Funding (just enough to stay positive) and Percentage Funding (a predetermined level based on some arbitrary percentage), but these schemes do not address the reality of fully funding, and typically are just a way of passing the obligation on to the next generation.

2.3 Hybrid Approach: Please note that this is not a method, rather a way (approach) for us to utilize the Cash Flow Method, while ensuring the appropriate funding levels are achieved long-term. Our Hybrid Approach uses the projected fully funded balance at the end of the 20-year period from Table 4 as a funding goal. We then set up Cash Flow funding plans. Table 3 is your 'where we are now' Cash Flow spreadsheet modeling your reserve balance and current contribution. Table 3.1 (and possibly others) provides alternative(s) to this that meet the fully funded goal from Table 4.

We usually establish a new Cash Flow contribution that requires only small annual inflationary increases to reach the fully funded goal at the end of the 20-year period. This has the added effect of establishing a funding plan that addresses inflation. The contribution in the first year, adjusted for inflation, is equal to the contribution in the last year, based on inflated dollars (future value of money). This approach will also allow underfunded Associations the time to catch up, mitigating undue hardships. It balances the risk of temporary underfunding with the benefit of consistent predictable increasing contributions. The combination of the Component and Cash Flow Methods (Hybrid Approach) provides the advantages of both methods.

3. FINANCIAL ANALYSIS

We have tracked the annual inflation rate among our clients based on their reported costs for typical services for over 20 years. The average rate of inflation since the 2008 recession was 1.46% according to the U.S. Labor Department and is similar in our experience with clients. Substantially higher inflation rates did not materialize until recently. It is impossible to predict what these rates will do in the coming years, but the reported annual rate of 9.5% for the previous 12 months we are currently experiencing, in our opinion, is unsustainable, but may persist for a while. It appears that the Covid 19 impact on the world and U.S. economies, and a war in Europe are exerting significant upward pressure on inflation. We have programmed starting base costs in most cases higher than normal in anticipation that near-term high inflation will continue. Unless otherwise directed, we are using a **4.00% long-term annual rate of inflation**, with the assumption that higher inflation will not be too long lived. The next five years will be a critical time in this regard. Interest income is expected to rise as Federal Reserve rates rise to combat inflation. Unless otherwise directed, we are using a **2.0% long-term annual rate of return** on investments. However, unlike reserves, interest income can be taxable, which may reduce the net gain even further. Annual Administrative Updates are increasingly important to respond to rapidly changing inflationary pressures during these unprecedented times. It is prudent to keep a close watch on the economy and be ready to respond by updating the reserve fund plan as economic changes dictate.

3.1 Calculation Basics: The Condominium Unit Owner Association is on a calendar fiscal year. Management reported that the reserve fund balance, including cash and securities as of **December 31, 2022**, was **\$451,053**. We have used **4%** inflation factor and **2%** annual interest income in our calculations. The total expenditures for the twenty-year period for both the **Cash Flow Method** and **Component Method** are projected to be **\$2,763,486**.

3.2 Current Funding Analysis, Cash Flow Method (Table 3): The **2023** annual contribution to reserves has been set at **\$88,435** with a presumed **4%** annual increase. At this level, the total for all annual contributions for the twenty-year period would be **\$2,633,424**, and the total interest income is projected to be **\$66,120**. **This contribution level does not provide adequate funding and the reserve fund is depleted by 2028.**

3.3 Alternative Funding Analysis, Cash Flow Method, Hybrid Approach (Table 3.1): This stepped plan provides the annual contributions necessary to maintain balances more consistent with the **fully funded goal by increasing the annual contribution by \$35,000 beginning in 2024**, for each of three years, followed by annual adjustments of **4%**, matching inflation thereafter. **This alternative allows for a gradual increase over time after the initial series of stepped increases and addresses generational equity issues.** The total for all annual contributions for the twenty-year period would be **\$4,954,233**, and the total interest income is projected to be **\$446,395**. **Approximate fully funded balance in 2042 is \$3,088,195.**

3.4 Funding Analysis, Component Method (Table 4): This method of funding would require variable annual contributions, averaging **\$235,343** over the twenty-year period. The total for all annual contributions would be **\$4,706,857**, and the total interest income is projected to be **\$700,725**. **The fully funded balance in 2042 is \$3,095,149.** The Component Method model considers the current reserve fund balance in computing individual component contributions for current cycles.

4. TYPES OF RESERVE STUDIES

4.1 Full Reserve Study, Level I, the analyst develops a component inventory and condition assessment which is based upon on-site visual observations and is the basis for the estimated remaining-useful-life of the components as well as their replacement cost. This information is used to develop the Financial Analysis which includes the fund status and funding plan.

4.2 Full Update, With-Site-Visit, Level II, the analyst conducts an onsite verification of the component inventory included within the study being updated (not quantification) as well as performing a condition assessment), which is the basis for the estimated remaining-useful-life of the components and their replacement costs. This information is used to develop the Financial Plan which includes the fund status and funding plan.

4.3 Administrative Update, Level III, the analyst updates the remaining-useful-life of the components based on information provided by Management and not condition as a site visit is not performed. The replacement costs and other pertinent information are also updated. This information is used to develop the Financial Plan which includes the fund status and funding plan.

4.4 Residential and Commercial Development Services, before construction an analyst develops budget estimates based on design documents such as the architectural and engineering plans, and developer founding documents.

5. RESERVE PROGRAMMING

The Mason & Mason proprietary software used to produce the financial tables (Tables 1 through 4) have been under continual refinement for over a decade. It is unique in the industry as it provides comprehensive modeling through Microsoft Access and Excel that addresses the many challenges of reserve funding, allows analysts and clients to run 'what if' scenarios, provides an easy-to-understand matrix of views and functions, and is easily provided to clients through e-mail.

5.1 Interest Income on Reserve Funds: Most Associations invest at least part of their reserve funds. Small Associations may simply use a savings account or certificates of deposit, while large Associations may have multiple investments with short-, medium-, and long-term instruments. One issue that is difficult to quantify is the percentage of funds invested. Some Associations invest a fairly substantial portion, while others hold back due to current cash outflow obligations. Some Associations do not reinvest the investment proceeds in their reserves; rather they divert the cash into their operations fund. We do not agree with this approach as it has the effect of requiring additional reserve contributions to make up for the difference. There is also the issue of changing rates over the 20-year period. In the recent past we have seen large swings in relatively short time periods. While reserve funds are not usually taxable by the IRS, the investment income generated by the reserve fund is taxable in most situations. Even with all these potential pitfalls, investment income still represents a substantial source of additional funds and for this reason should not be ignored. There is no way to make 'one size fits all' with any accuracy for the individual Association. Our approach to this dilemma is to use lower approximations that compensate for less than 100% of funds invested. We feel this is still better than not recognizing it, and periodic updates allow for adjustments based on experience. The rate can be set at any level, including zero, for Associations desiring to not recognize interest. **The rate should reflect, as accurately as possible, the actual composite rate of return on all securities and other instruments of investment including allowances for taxes.**

The interest income displayed on Table 3 and Table 4 is the summation of the beginning reserve fund interest accrual and the interest earned on the contributions minus the interest lost by withdrawing the capital expenditures. This method of calculation, while not exact, approximates the averages of the three principal components of a reserve fund for each twelve-month period.

5.2 Future Replacement Costs (Inflation): Inflation is a fact of life. In order to replicate future financial conditions as accurately as possible, inflation on replacement costs should be recognized. The financial tables have been programmed to calculate inflation based upon a pre-determined rate. This rate can be set at any level, including zero. **A plan that does not include inflation is a 1-year plan, and any data beyond that first year will not reflect reality.**

5.3 Simultaneous Funding: This is a method of calculating funding for multiple replacement cycles of a single component over a period of time from the same starting date. Simple Example: Funding for a re-roofing project, while, at the same time, funding for a second, subsequent re-roofing project. This method serves a special purpose if multiple-phase projects are all near-term but will result in higher annual contribution requirements and leads to generational equity issues otherwise. We use this type of programming only in special circumstances.

5.4 Sequential Funding: This is a method of calculating funding for multiple replacement cycles of a single component over a period of time where each funding cycle begins when the previous cycle ends. Simple Example: Funding for the second re-roofing project begins after the completion of the initial re-roofing project. This method of funding appears to be fundamentally equitable. We use this type of programming except in special circumstances.

5.5 Normal Replacement: Components are scheduled for complete replacement at the end of their useful service lives. Simple Example: An entrance sign is generally replaced all at once.

5.6 Cyclic Replacement: Components are replaced in stages over a period of time. Simple Example: Deficient sidewalk panels are typically replaced individually as a small percentage, rather than the complete system.

5.7 Minor Components: A minimum component value is usually established for inclusion in the reserve fund. Components of insignificant value in relation to the scale of the Association should not be included and should be deferred to the operations budget. A small Association might exclude components with aggregate values less than \$1,000, while a large Association might exclude components with aggregate values of less than \$10,000. Including many small components tends to over complicate the plan and does not provide any relative value or utility.

5.8 Long Life Components: Almost all Associations have some components with long or very long useful service lives typically ranging between thirty and sixty years. Traditionally, this type of component has been ignored completely. Simple Example: Single replacement components such as entrance monuments should be programmed for full replacement at their statistical service life. This allows for all common property owners to pay their fair share during the time the component serves them. This also has the added effect of reducing the funding burden significantly as it is carried over many years.

5.9 Projected Useful Service Life: Useful service lives of components are established using construction industry standards and our local experience as a guideline. Useful service lives can vary greatly due to initial quality and installation, inappropriate materials, maintenance practices or lack thereof, environment, parts attrition, and obsolescence. By visual observation, the projected useful service life may be shortened or extended due to the present condition. The projected useful service life is not a mandate, but a guideline, for anticipating when a component will require replacement and how many years remain to fund it.

5.10 Generational Equity: As the term applies to reserves, it is the state of fairness between and over the generations relating to responsibility for assets you are utilizing during your time of ownership. It is neither reasonable, nor good business to defer current liabilities to future owners. This practice is not only unfair; it can also have a very negative impact on future property values.

6. UPDATING THE RESERVE FUND PLAN

A reserve fund plan should be periodically updated to remain a viable planning tool. Changing financial conditions and widely varying aging patterns of components dictate that revisions should be undertaken periodically from one to five years, depending upon the complexity of the common assets and the age of the community. Weather, which is unpredictable, plays a large part in the aging process.

Full Updates (Level II) include a site visit to observe current conditions. These updates include adjustments to the component inventory, replacement schedules, annual contributions, balances, replacement costs, inflation rates, and interest income.

We encourage Associations that are undergoing multiple simultaneous or sequential costly restoration projects (usually high-rise buildings) to perform Level III Administrative Updates. Administrative updates do not include a condition assessment. They are accomplished by comparing original projections with actual experience during the interim period as reported by Management. These updates can be performed annually and include adjustments to the replacement schedules, contributions, balances, replacement costs, inflation rates, and interest income. The Level III Administrative Update can be a cost-effective way of keeping current between Level II Full Update cycles. Full Updates (Level II) and Administrative Updates (Level III) help to ensure the integrity of the reserve fund plan.

7. PREVENTIVE MAINTENANCE

The following preventive maintenance practices are suggested to assist the Association in the development of a routine maintenance program. The recommendations are not to be considered the only maintenance required but should be included in an overall program. The development of a maintenance checklist and an annual condition survey will help extend the useful service lives of the Association's assets.

This section includes best maintenance practices or life-extension maintenance for many, but not necessarily all, components in the report. Items for which no maintenance is necessary, appropriate or beyond the purview of this report are not included in this section. We typically include them for townhomes and garden condominiums while mid- and high-rise buildings are generally too complex.

7.1 Asphalt Pavement: Cyclic pavement maintenance is the routine work performed to keep a pavement, subjected to normal traffic and the ordinary forces of nature, as close as possible to its as-constructed condition. Asphalt overlays may be used to correct both surface deficiencies and structural deficiencies. Surface deficiencies in asphalt pavement usually are corrected by thin resurfacing, but structural deficiencies require overlays designed on factors such as pavement properties and traffic loading. Any needed full-depth repairs and crack filling should be accomplished prior to overlaying. The edgemill and overlay process includes milling the edges of the pavement at the concrete gutter and feathering the depth of cut toward the center of the drive lane. Milling around meter heads and utility features is sometimes required. The typical useful life for an asphalt overlay is eighteen years.

7.2 Mill and Replace Asphalt: This method is employed when asphalt is in total or nearly total failure. Extensive alligator cracking, deflection, and potholes indicates that water infiltration has allowed clay and soil beneath the pavement to intrude into the sub-base gravel, causing it to lose its co-efficient of friction allowing the breakdown of the pavement structure. In this case, the pavement is completely milled off, the sub-base removed, replaced, and compacted, prior to installation of the sub-base layer of asphalt, followed by the wear course asphalt.

7.3 Asphalt Seal Coating: The purpose is to seal and add new life to a roadway surface. It protects the existing pavement but does not add significant structural strength. A surface treatment can range from a single, light application of emulsified asphalt as a 'fog' seal, to a multiple-surface course made up of alternate applications of asphalt and fine aggregate 'chip seal.' Seal coating of all asphalt pavements should be performed at approximately six-year intervals, or approximately twice during the service life of the asphalt pavement. Seal coating more often is generally not cost-effective. The material used should be impervious to petroleum products and should be applied after crack filling, oil-spot cleaning, and full-depth repairs have been accomplished. Seal coating is a cost-effective way of extending the life of asphaltic concrete pavement. Seal coating is generally not scheduled for up to five years after an asphalt restoration project.

7.4 Asphalt Full-Depth Repairs: In areas where significant alligator cracking, potholes, or deflection of the pavement surface develops, the existing asphalt surface should be removed to the stone base course and the pavement section replaced with new asphalt. Generally, this type of failure is directly associated with the strength of the base course. When the pavement is first constructed, the stone base consists of a specific grain size distribution that provides strength and rigidity to the pavement section. Over time, the stone base course can become contaminated with fine-grained soil particles from the supporting soils beneath the base course. The most positive repair to such an area is to remove the contaminated base course and replace it with new base stone to the design depth. It is appropriate to perform these types of repairs immediately prior to asphalt restoration projects. Generally, this type of repair should not be required for approximately five years after an asphalt restoration project.

7.5 Asphalt Crack Filling: Cracks that develop throughout the life of the asphalt should be thoroughly cleaned of plant growth and debris (lanced) and then filled with a rubberized asphalt crack sealant. If the crack surfaces are not properly prepared, the sealant will not adhere. Crack filling should be accomplished every three to six years to prevent infiltration of water through the asphalt into the sub-grade, causing damage to the road base. It is appropriate to perform these types of repairs immediately prior to edgemill and overlay. Generally, this type of repair should not be required for approximately five years after an edgemill and overlay project.

7.6 Asphalt Footpaths: Transverse and longitudinal cracks should be cleaned of debris and plant growth (lanced) and filled with a rubberized asphaltic compound to prevent water infiltration. Cracks and deflection of the asphalt pavement can develop in the areas where tree roots cross the path. Tree roots should be removed and damaged areas repaired. An additional maintenance issue with footpaths is vegetation control. In areas where vegetation encroaches on the paths, both underfoot and overhead, visibility is reduced, and personal injury can occur from low-growing branches. Vegetation control should be accomplished on a regular basis under the maintenance budget for safety considerations and to extend the useful service life of the pavement.

7.7 Concrete Sidewalks: When sidewalks are cracked or scaled or sections have settled, the resulting differential or 'tripping hazard' can present a liability problem for the Association if personal injury should occur as a result. Tripping hazards should be repaired expeditiously to promote safety and prevent liability problems for the community. Generally, where practical and appropriate, concrete element repairs and replacements are scheduled in the same years to promote cost efficiencies. Replacements are usually scheduled in cycles because the necessity of full replacement at one time is unlikely. Typically, damaged or differentially settled sections can be removed by saw cutting or jack hammer and re-cast. Concrete milling of the differential surfaces is sometimes an appropriate, cost-effective alternative to re-casting. Skim coating is not an effective repair for scaled or settled concrete surfaces and, over time, will usually worsen the problem. The use of ice melting chemicals may accelerate deterioration of concrete components.

7.8 Concrete Curbs and Gutters: Vehicle impacts, differential settlement, construction damage, and cracking and spalling of the concrete will eventually result in the need for replacement of some curb sections. A typical damaged or settled section, usually 10 feet in length, will be removed by saw cutting or jack hammer and re-cast.

7.9 Metal Handrailings: Metal handrailings should be periodically straightened, loose connections repaired, cleaned of rust, primed, and painted to maintain appearance and extend the useful service life. Bases should be periodically cleaned and sealed to prevent moisture infiltration, which will cause damage to the concrete in freeze/thaw cycles. Welding new bases to replace deteriorated bases is a viable alternative to replacing handrailings.

7.10 Light Poles and Fixtures: Outdoor lighting has a limited-service life because of the accelerated aging process due to weather extremes. Remediation of the poles and fixtures is a viable alternative to full replacement and would include painting the poles along with lamp housing replacement, including ballasts and capacitors. Any poles observed to be out of plumb should be straightened. Periodic cleaning of peeling paint and rust, priming, and re-painting of poles and fixtures will help extend the useful service life and improve appearance.

7.11 Brick Components: Brick components should be inspected periodically for step cracks in the mortar and shear cracks through the brick and mortar, indicating settlement problems. Signs of efflorescence on the brick face and mortar or spalling brick faces indicate water infiltration and should be investigated. Efflorescence, a residue of fine white crystals resulting from salts leaching from the mortar, serves as a warning that water is infiltrating the structure. Water infiltration problems are usually initiated at the top of an improperly sealed coping. Eliminating the infiltration of water into the wall from the coping can be accomplished by various methods, depending on the brick detail. Installation of a metal coping is sometimes a cost-effective method of solving these problems and extending the life of the wall. Cleaning of discolored brick surfaces with an appropriate masonry cleaner will restore appearance. Sealing of brick surfaces with breathable coatings will also extend the useful service life of the brick. All vegetation, such as vines or tree limbs should be kept clear of the wall to prevent damage.

7.12 Brick Component Tuckpointing & Repair: Brick components should be inspected periodically for step cracks in the mortar and shear cracks through the brick and mortar, indicating settlement problems. Signs of efflorescence on the brick face and mortar or spalling brick faces indicate water infiltration and should be investigated. Efflorescence, a residue of fine white crystals resulting from salts leaching from the mortar, serves as a warning that water is infiltrating the structure. Water infiltration problems are usually initiated at the top of an improperly sealed coping. Eliminating the infiltration of water into the structure from the coping can be accomplished by various methods, depending on the brick detail. Installation of a metal coping is sometimes a cost-effective method of solving these problems and extending the life of the component. Application of a penetrating sealer or a breathable coating may also extend the useful service life of the brick. All vegetation, such as vines or tree limbs should be kept clear of the brick to prevent damage. As brick components age, depending upon the initial quality of the mortar and the long-term environment of the wall, mortar joints may deteriorate. This condition can be corrected by tuckpointing. Applying soft sealants to the deteriorated joints or to cover up mortar joint cracks is not recommended. Deteriorated or cracked mortar joints should be repaired by cutting damaged material $\frac{3}{4}$ -inch deep with a diamond blade masonry saw. The void should then be filled with new mortar and the joints struck to match the original work.

7.13 Brick Entrance Monument: Brick monuments should be inspected periodically for step cracks in the mortar and shear cracks through the brick and mortar, indicating settlement problems. Signs of efflorescence on the brick face and mortar or spalling brick faces should be investigated. Efflorescence, a residue of fine white crystals resulting from salts leaching from the mortar, serves as a warning that water is infiltrating the structure. Water infiltration problems are usually initiated at the top of an improperly sealed coping. Eliminating the infiltration of water into the monument from the coping can be accomplished by various methods, depending on the brick detail. Installation of a metal coping is sometimes a cost-effective method of solving these problems and extending the life of the brick structure. Sealing of brick surfaces with breathable coatings will also extend the useful service life of the brick. All vegetation, such as vines or tree limbs should be kept clear of the monument to prevent damage. As brick components age, depending upon the initial quality of the mortar and the long-term environment of the monument, mortar joints may deteriorate. This condition can be corrected by tuckpointing. Applying soft sealants to the deteriorated joints or to cover up

mortar joint cracks is not recommended. Deteriorated or cracked mortar joints should be repaired by cutting damaged material $\frac{3}{4}$ -inch deep with a diamond blade masonry saw. The void should then be filled with new mortar and the joints struck to match the original work.

7.14 Tot Lot Equipment and Outdoor Furniture: Little maintenance is necessary on the newer style, pre-finished or painted metal play modules other than periodic safety inspections and repair, re-finishing, or replacement of any worn or damaged components. Bare wood components, both non-treated and pressure-treated, generally will achieve a greater useful service life and improved appearance if preventative maintenance is performed. Periodic pressure washing and sealing with wood preservative is recommended on all wood components. Rough edges and splinters should be sanded prior to sealing. Damaged or deteriorated wood components should be replaced, as necessary. Generally, securing or repairing wood components with screws will provide a better fastening method than nails. Tot lot equipment should be inspected frequently for loose components, rough edges, splinters, and safety hazards. Tot lot borders should be leveled periodically, and protruding border anchors should be made flush with the timber surface.

7.15 Street Signage: Metal perforated-post and pressure-treated wood post street signs generally require very little maintenance over their useful service life. Signage tends to fade due to environmental exposure. Cleaning of peeled paint, periodic cleaning of rust (metal posts) and repainting of wood and metal posts will maintain appearance. There is little that can be done with the signs except to replace them periodically. The wood components of entrance signs should be periodically cleaned of loose paint and repainted to maintain appearance. Out-of-plumb posts should be straightened and secured.

7.16 Vinyl Siding: There is little maintenance to be done to vinyl siding. Periodic pressure washing will maintain appearance. Damaged sections should be replaced. It may be advisable for the Association to stockpile some replacement sections for future repairs and replacements in the event that matching components may become unavailable.

7.17 Metal Chimney Copings: These components frequently rust or become stained with creosote. Allowing the copings to deteriorate can discolor chimney materials and eventually lead to perforated metal and leaks. Copings should periodically be cleaned of rust and residue, primed, and re-painted.

7.18 Painted Metal Components: Painted metal components should be periodically cleaned of rust and peeling paint, primed, and re-painted.

7.19 Composite Shingle Roofs: Roofs and attic spaces should be inspected annually for damage and leaks. During the attic inspection, check to make sure that mechanical ventilation systems, such as bathroom exhaust fans and dryer ducts, are routed through the roof and not discharging into the attic space. Loose or missing shingles should be replaced on a regular basis. Signs of deflected roof sheathing or discoloration of the sheathing are indicative of moisture problems and should be investigated. It is important to ensure that proper ventilation is occurring at the soffit vents and that insulation is not obstructing the airflow. If attic ventilation appears to be inadequate, the installation of ridge vents and/or through-the-roof mechanical vents is usually a cost-effective way of extending the useful service life of the sheathing. Roof penetrations, such as plumbing vents, are a major source of leaks. During the inspection, these areas should be checked carefully for signs of leakage or rotten sheathing.

Gutters and downspouts should be inspected annually. Loose, damaged, or leaking sections should be secured, repaired, or replaced. All gutters should be kept clean of leaf material and debris. Clogged downspouts should be cleared. In areas where gutters collect fallen leaves, gutters should have screens installed. Downspouts should be directed away from buildings. Erosion can be minimized by the use of properly located splash blocks or plastic flexible tubing. In all cases, water should be directed away from building foundations. Splash blocks must be properly placed, and flexible plastic extensions require diligent maintenance.

7.20 Painted Wood Components: The service life of painted wood components depends greatly on the type of wood used, the initial installation method, level of exposure to the elements, and preventative maintenance practices during its service life. Kiln dried trim pieces should be primed on all surfaces prior to installation. Re-painting projects should be performed every four years or as needed. Loose and flaking paint should be thoroughly removed and deteriorated trim pieces replaced with primed trim pieces prior to repainting projects.

8. ASPHALT PAVEMENT REPORT

All quantities approximate.

Street Name	Total SY Asphalt Pavement	SY Full-Depth Repairs	Linear Footage Cracks	Parking Spaces	Parking Bays
Phase 1 (Restored 2012)					
Calamary Circle	4,728	709	960	138	8
Marigold Circle	2,810	843	1,100	63	6
Sub-total	7,538	1552	2,060	201	14
Phase 2 (Restored 2017)					
Atwood Square	848	0	160	28	4
Comstock Circle	2,043	306	750	24	4
Feilding Terrace	1,109	0	110	38	4
Canopy Terrace	1,271	3	150	44	4
Sub-total	5,271	309	1170	134	16
Phase 3 (Restored 2020)					
Aster Terrace	879	0	35	30	3
Hazelnut Square	830	0	0	28	4
Summit Terrace	1,070	0	12	36	4
Macaw Square	746	0	10	24	4
Sub-total	3,525	0	57	118	15
TOTALS	16,334	1,861	3,287	453	45

COMPONENT DATA AND ASSET REPLACEMENT SCHEDULE TABLE 1 EXPLANATION

This table lists the common assets included in the reserve fund plan and provides details of the replacement schedules. A narrative discussion is provided adjacent to each component. Photo references and maintenance protocol reference numbers are also provided. An explanation of each column in the table follows:

- Column **1** **Component No.** is consistent throughout all tables.
- Column **2** **Component** is a brief description of the component.
- Column **3** **Quantity** of the component studied, which may be an exact number, a rough estimate, or simply a (1) if the expenditure forecast is a lump sum allowance for replacement of an unquantified component.
- Column **4** **Unit of Measurement** used to quantify the component: SY = Square Yards
 SF = Square Feet
 LF = Linear Feet
 EA = Each
 LS = Lump Sum
 PR = Pair
 CY = Cubic Yards
- Column **5** **Unit Cost** used to calculate the required expenditure. This unit cost includes removal of existing components and installation of new components, including materials, labor, and overhead and profit for the contractor.
- Column **6** **Total Asset Base** is the total value of common assets included in the study in current dollars. In addition to capital assets, this figure includes one cycle of maintenance liability.
- Column **7** **Typical Service Life (Yrs) or Cycle** is the typical life expectancy of similar components in average conditions or the length of years between replacement cycles, and does not necessarily reflect the conditions observed during the field evaluation. This number is furnished for reference and is not necessarily computed in the system.
- Column **8** **1st Cycle Year** is the scheduled year of the first projected replacement or repair.
- Column **9** **Percentage of Replacement** is the percentage of component value to be replaced in the first replacement cycle.
- Column **10** **Cost for 1st Cycle** is the future cost (with inflation) of the replacement. It is the product of Column 6 times Column 9 in future dollars.
- Column **11** **2nd Cycle Year** is the scheduled year of the second projected replacement or repair. If a second cycle is not listed, it is because the first cycle is beyond the end of the study.
- Column **12** **Percentage of Replacement** is the percentage of component value to be replaced in the second replacement cycle. This can vary from the percentage of the first cycle for various reasons, such as the increased age of a component may require a larger amount of repair.
- Columns **13** **Cycles, Percentage, and Cost** repeat as itemized above. Although not shown on the tables, Through **16** the cycles continue throughout the study period and beyond.
- Column **18** **Discussion** is the description and observed condition of the component and the methodology employed in the decision-making process. Includes the photo reference, **(Photo #1, #2, etc.)** and Maintenance Protocol reference numbers **(7.1, 7.2 etc.)** if applicable.

Reserve Fund Plan for
ROLLING RIDGE CONDO ASSOCIATION
Sterling, Virginia

COMPONENT DATA AND
ASSET REPLACEMENT SCHEDULE
TABLE 1
2023 Through 2042



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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18
Component No.	Component	Quantity	Unit of Measurement	Unit Cost	Total Asset Base	Typical Service or Cycle Life in Yrs	1st Cycle Year	Percentage of Replacement	Cost For 1st Cycle	2nd Cycle Year	Percentage of Replacement	Cost For 2nd Cycle	3rd Cycle Year	Percentage of Replacement	Cost For 3rd Cycle	DISCUSSION
1 ASPHALT COMPONENTS																
1.1	Asphalt Restoration Project - Phase 1	7,538	SY	\$19.00	\$143,222	18	2030	100%	\$188,470	2048	100%	\$381,806				Phase 1 includes Calamary Circle and Marigold Circle asphalt driveways and parking bays. Neither the depth nor the sub-base of the pavement could be visually determined. We understand that the pavement was restored circa 2012. Moderate areas of deflected cracking (indicative of sub-base damage or insufficient asphalt depth) were observed on the driveways or parking bays. Restoration includes full-width profile milling and new compacted asphalt. Core sampling should be used to determine the depth and condition of the sub-base and pavement prior to restoration. Costs do not include replacement of any inadequate sub-base.
1.2	Asphalt Restoration Project - Phase 2	5,271	SY	\$19.00	\$100,149	18	2035	100%	\$160,342	2053	100%	\$324,823				Phase 2 includes Atwood Square, Comstock Circle, Fielding Terrace, and Canopy Terrace asphalt driveways and parking bays. Neither the depth nor the sub-base of the pavement could be visually determined. We understand that these streets and parking bays were restored circa 2017. Minor areas of deflected cracking (indicative of sub-base damage or insufficient asphalt depth) were observed on the driveways or parking bays. Restoration includes full-width profile milling and new compacted asphalt. Core sampling should be used to determine the depth and condition of the sub-base and pavement prior to restoration. Costs do not include replacement of any inadequate sub-base.
1.3	Asphalt Restoration Project - Phase 3	3,525	SY	\$19.00	\$66,975	18	2038	100%	\$120,618	2056	100%	\$244,350				Phase 3 includes Aster Terrace, Hazelnut Square, Summit Terrace, and Macaw Square asphalt driveways and parking bays. Neither the depth nor the sub-base of the pavement could be visually determined. We understand that the pavements were restored in 2020. No deflected asphalt was observed on the driveways or parking bays. Restoration includes full-width profile milling and new compacted asphalt. Core sampling should be used to determine the depth and condition of the sub-base and pavement prior to restoration. Costs do not include replacement of any inadequate sub-base.
1.4	Asphalt Rejuvenator	16,334	SY	\$2.00	\$32,668	6	2025	100%	\$35,334	2031	54%	\$24,143	2037	46%	\$26,022	The pavement appears to have been seal coated in past pavement maintenance practices. We understand that Rejuvenator was used, which is slightly higher in cost, but appears to be a better product. Seal coating may help prevent water infiltration into the sub-base through micro-cracks, but is largely a cosmetic issue. To help improve curb appeal after repairs, we have scheduled seal coating projects every six years, except in the year of the pavement restoration project when it is not necessary. Crack filling and full-depth repairs should be completed prior to application to achieve maximum benefit from the seal coating. Seal coating projects include re-striping. It should be understood that coal-tar based seal coating products have been banned from use in many localities throughout the country due to heavy contamination of ground water.
1.5	Asphalt Repair Allowance	1	LS	\$40,000.00	\$40,000	6	2025	75%	\$32,448	2031	35%	\$19,160	2037	50%	\$34,634	Approximately 1,861 square yards of deflected pavement (indicative of sub-base damage), and about 3,287 linear feet of longitudinal or transverse cracking were observed. Repairs are essential in order to achieve the projected remaining service life of the pavement. Full-depth repairs and crack filling are scheduled every six years throughout the study period, including the year of the asphalt restoration project.
1.6	Asphalt Footpaths	502	SY	\$38.00	\$19,076	15	2027	100%	\$22,316	2042	100%	\$40,190	2057	100%	\$72,380	Five asphalt footpaths generally 4' in width are constructed at various locations throughout the community. The footpaths are in generally good condition. We observed some transverse cracking and two areas with root heaving, which are potential tripping hazards, requiring near-term repairs under operations. Any trip hazards or hazardous surface deficiencies should be addressed expeditiously to prevent personal injury.
2 CONCRETE COMPONENTS																
2.1	Concrete Sidewalks	22,408	SF	\$12.50	\$280,100	5	2025	4%	\$12,118	2030	3%	\$11,058	2035	3%	\$13,453	Concrete sidewalks, generally 4' wide, are present throughout the community. Their thickness could not be visually determined. They are in generally fair to good condition. About 880 square feet (3.9% of the total area) is either cracked, settled or heaved between sections. We have not scheduled replacement of all sections with lesser surface defects. Severely scaled sections will tend to deteriorate more quickly over time and should be replaced in each replacement cycle. Cyclic repairs are scheduled, as full replacement at one time is not appropriate or anticipated. Concrete repairs are scheduled to coincide with work on other concrete components to take advantage of economies of scale in packaging concrete restoration work. Any trip hazards or hazardous surface deficiencies should be addressed expeditiously to prevent personal injury. Management requested the first cycle repair date.
2.2	Concrete Curbs & Gutters	8,276	LF	\$38.00	\$314,488	5	2025	5%	\$17,008	2030	4%	\$16,554	2035	3%	\$15,105	The driveways and parking bays are lined with standard-profile, cast-in-place, concrete curbs and gutters. They are in fair condition with moderate quantities of transverse cracks or settlement. We observed approximately 380 linear feet of damaged sections. Minor chips usually do not justify replacement. Cyclic repairs are scheduled, as full replacement at one time is not appropriate or anticipated. Curb repairs are scheduled to coincide with work on other concrete components to maximize economies of scale. Any trip hazards or hazardous surface deficiencies should be addressed expeditiously to prevent personal injury. Management requested the first cycle repair date.
3 SITE FEATURES																
3.1	Brick & Mortar Entrance Monument Allowance	1	EA	\$6,500.00	\$6,500	30	2035	100%	\$10,407	2065	100%	\$33,753				A brick and mortar entrance monument is installed on Thomas Jefferson Drive and Hillcrest Drive. The monument is approximately 9' x 5' with two 2 x 2 x 4.5 columns on each side. A round planter is installed on one side. The monument includes two metal carriage lights and the community name is spelled out in metal letters. The monument is in good condition.

Reserve Fund Plan for
ROLLING RIDGE CONDO ASSOCIATION
Sterling, Virginia

COMPONENT DATA AND
ASSET REPLACEMENT SCHEDULE
TABLE 1
2023 Through 2042



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Component No.	Component	Quantity	Unit of Measurement	Unit Cost	Total Asset Base	Typical Service or Cycle Life in Yrs	1st Cycle Year	Percentage of Replacement	Cost For 1st Cycle	2nd Cycle Year	Percentage of Replacement	Cost For 2nd Cycle	3rd Cycle Year	Percentage of Replacement	Cost For 3rd Cycle	DISCUSSION
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18
3.2	Street and Informational Signage	58	EA	\$175.00	\$10,150	20	2028	50%	\$6,175	2038	50%	\$9,140	2048	50%	\$13,529	Standard metal traffic, parking and access control signs, typically 12" by 18" and mounted on perforated metal posts, are located throughout the community. Other signs, such as stop signs, are mounted on 4" by 4" timber posts. A total of approximately 55 signs are installed. This category includes the three dog clean-up stations installed in various locations. Most posts and signs appear to be in good to fair condition, with a few damaged and out-of-plumb signs observed.
3.3	Mailbox Modules	15	EA	\$2,600.00	\$39,000	25	2027	73%	\$33,306	2047	27%	\$26,992				Approximately 15 metal mailbox modules are installed throughout the community. Four of the modules were recently replaced and are in excellent condition. The remaining modules range from poor to fair condition. We observed significant amounts of rust on most of the older units.
3.4	Timber Retaining Walls	170	SF	\$45.00	\$7,650	25	2028	100%	\$9,307	2053	100%	\$24,812				Timber 6 x 6 retaining walls are constructed at two common property locations. The walls are in fair condition. Management reported that the timber retaining walls constructed adjacent to the homes on Summit Terrace will be replaced under operations. These observations should be viewed in the context of capital reserve budget projections, and not as a structural analysis. Any questions regarding the safety or structural integrity of the walls should be referred to a professional engineer.
3.5	Light Poles & Fixtures	43	EA	\$2,500.00	\$107,500	35	2033	100%	\$159,126	2068	100%	\$627,926				Management advised that the community is responsible for maintenance and replacement of the street lights. Approximately 43 fiberglass reinforced plastic (FRP) light poles, about 12' high, with traditional lantern fixtures and some with L.E.D. fixtures provide street and area illumination. They appear to be in generally good condition. The lighting was not observed after dark. No problems were reported with lighting.
3.6	Pedestrian Bridge Allowance	1	EA	\$15,000.00	\$15,000	25	2023	20%	\$3,000	2029	100%	\$18,980	2054	100%	\$50,597	A wood pedestrian bridge is installed off the footpath leading from Comstock Circle. The bridge is about six feet in width and is about 44 feet in length. The bridge framing is constructed with six pressure treated wood 6 x 6 posts and 2 x 10 beams installed over 2 x 2 decking, with metal handrailings. The bridge is in fair condition. We suggest to replace the top decking boards across the span of the bridge and at both sets of steps near-term, and full reconstruction of the bridge mid-term. Painting the bridge would improve appearance. Management requested the first cycle repair date.
3.7	Tot Lot & Outdoor Furniture Allowance	1	LS	\$38,000.00	\$38,000	15	2023	80%	\$30,400	2032	20%	\$10,817	2038	80%	\$54,749	One major tot lot is located within the community located between Atwood Square and Fielding Terrace. Additionally, jungle bars are installed off Comstock Circle. Equipment consists of 160 linear feet of new wood borders, two benches with a trash receptacle, and a metal post play module with climbing equipment and three plastic slides. The play module ranges from poor to fair condition. We observed significant rusting of the platforms, requiring near-term full replacement. The additional jungle gym bars with 85 linear feet of wood border (new) and a bench are in good condition. Frequent, periodic safety checks of all components should be conducted to prevent personal injury. Replacement costs are based on replacement with U.S. Consumer Product Safety Commission (CPSC)-compliant play modules. Management requested the first cycle repair date.
3.8	Storm Water Drainage System Allowance	1	LS	\$8,500.00	\$8,500	7	2030	100%	\$11,185	2037	100%	\$14,719	2044	100%	\$19,370	Storm water drainage is provided by concrete yard drains, curb drop inlets, and underground structures, leading storm water offsite. We understand that responsibility for some or parts of the system may rest with local government. Though storm water drainage systems are a long life component and catastrophic failure is not anticipated, it is prudent for the community to plan for localized repairs and repairs to ancillary damage, even if a public entity has primary responsibility. This category may also be used to address localized erosion issues. This line item addresses potential storm water collection, drainage, and erosion issues throughout the study period and does not represent a single expense or action already identified as necessary.
4 BUILDING EXTERIORS																
4.1	Re-Roofing Project Allowance	153,456	SF	\$6.60	1,012,810	20	2024	16.60%	\$174,851	2025	16.60%	\$181,846	2026	16.60%	\$189,119	The 27 buildings have 6/12 pitched gable roofs with builder grade asphalt shingles. Most roofing was replaced between 2002 and 2007. We understand that Prime Exteriors, LLC, replaced eight units in 2022 and 2023. Management requested that we phase the remaining roofing projects over the next six years beginning near-term. Approximately 28 to 29 units should be re-roofed each year until all are complete. Pre-finished aluminum gutters and downspouts appear to be installed at all proper roof terminations directing water away from building foundations. Roofing ranges from poor to good condition. Re-roofing projects include replacement of shingles, deteriorated sheathing, and gutters and downspouts.
4.2	Vinyl Siding Restoration Allowance	171,863	SF	\$4.75	\$816,349	35	2044	100%	1,860,271							Vinyl siding provides the building envelope for approximately 3/4 of all of the buildings. Manufacturers represent that this material should provide a 35-year service life, but our observations indicate that may be optimistic, and the condition should be monitored over time and, possibly, the service life adjusted. Our experience is that the material may become brittle and fastener tabs may break, releasing the siding in high winds. Little maintenance, other than occasional cleaning, should be necessary throughout the service life.
4.3	Aluminum/PVC Building Trim	1	LS	\$75,000.00	\$75,000	4	2027	5%	\$4,387	2031	5%	\$5,132	2035	5%	\$6,004	Painted wood or polyurethane, or aluminum trim is provided at portions of the exterior façade. Trim appears to be in good condition. The trim will continue to require maintenance in order to provide a long service life. We have budgeted an allowance be made for the on-going replacement of rotted trim during painting cycles.
4.4	Brick Tuckpointing & Repair Allowance	1	LS	\$15,000.00	\$15,000	10	2033	50%	\$11,102	2043	75%	\$24,650	2053	100%	\$48,651	Approximately 1/4 of the building envelopes are brick veneer. Most brick and mortar appears to be in good condition. No major step cracks, sheer cracks, or deteriorated mortar was observed. The veneer is a long-life component that should not require replacement. However, we have scheduled tuckpointing in the future to address deterioration as the building ages. Cost is based on 10% of the total surface area.
4.5	Chimney Cap Replacement Allowance	180	EA	\$160.00	\$28,800	30	2024	16.60%	\$4,972	2025	16.60%	\$5,171	2026	16.60%	\$5,378	Each of the units include an aluminum chimney cap. The caps could not be evaluated from ground level, but appear to be in good condition. The chimney caps should be replaced during re-roofing projects.

CALENDAR OF EXPENDITURES TABLE 2 EXPLANATION

This table is a yearly plan of action of replacements and costs. A description of the columns in the table follows:

- Column 1 **Year** is the year of the projected replacement and expenditure.
- Column 2 **Component No.** itemizes the components and is consistent throughout the tables.
- Column 3 **Component** is a brief description of the component.
- Column 4 **Present Cost** is the cost for the cycle in today's dollars.
- Column 5 **Future Cost (Inflated)** is the cost for the cycle in future dollars.
- Column 6 **Total Annual Expenditures** gives the total expenditures by year.
- Column 7 **Action** is an area provided for the Board to make notations as to action taken on each component.

Reserve Fund Plan for
ROLLING RIDGE CONDO ASSOCIATION
 Sterling, Virginia

CALENDAR OF EXPENDITURES

TABLE 2
 2023 Through 2042



YEAR	COMPONENT NO.	COMPONENT	PRESENT COST 2023	FUTURE COST (INFLATED)	TOTAL ANNUAL EXPENDITURES	ACTION
1	2	3	4	5	6	7
2023						2023
	3.6	Pedestrian Bridge Allowance	\$3,000	\$3,000	TOTAL EXPENDITURES	
	3.7	Tot Lot & Outdoor Furniture Allowance	\$30,400	\$30,400		
					\$33,400	
2024						2024
	4.1	Re-Roofing Project Allowance	\$168,126	\$174,851	TOTAL EXPENDITURES	
	4.5	Chimney Cap Replacement Allowance	\$4,781	\$4,972		
					\$179,823	
2025						2025
	1.4	Asphalt Rejuvenator	\$32,668	\$35,334	TOTAL EXPENDITURES	
	1.5	Asphalt Repair Allowance	\$30,000	\$32,448		
	2.1	Concrete Sidewalks	\$11,204	\$12,118		
	2.2	Concrete Curbs & Gutters	\$15,724	\$17,008		
	4.1	Re-Roofing Project Allowance	\$168,126	\$181,846		
	4.5	Chimney Cap Replacement Allowance	\$4,781	\$5,171		
					\$283,924	
2026						2026
	4.1	Re-Roofing Project Allowance	\$168,126	\$189,119	TOTAL EXPENDITURES	
	4.5	Chimney Cap Replacement Allowance	\$4,781	\$5,378		
					\$194,497	
2027						2027
	1.6	Asphalt Footpaths	\$19,076	\$22,316	TOTAL EXPENDITURES	
	3.3	Mailbox Modules	\$28,470	\$33,306		
	4.1	Re-Roofing Project Allowance	\$168,126	\$196,684		
	4.3	Aluminum/PVC Building Trim	\$3,750	\$4,387		
	4.5	Chimney Cap Replacement Allowance	\$4,781	\$5,593		
					\$262,286	
2028						2028
	3.2	Street and Informational Signage	\$5,075	\$6,175	TOTAL EXPENDITURES	
	3.4	Timber Retaining Walls	\$7,650	\$9,307		
	4.1	Re-Roofing Project Allowance	\$168,126	\$204,551		
	4.5	Chimney Cap Replacement Allowance	\$4,781	\$5,817		
					\$225,850	
2029						2029
	3.6	Pedestrian Bridge Allowance	\$15,000	\$18,980	TOTAL EXPENDITURES	
	4.1	Re-Roofing Project Allowance	\$168,126	\$212,734		
					\$231,713	
2030						2030
	1.1	Asphalt Restoration Project - Phase 1	\$143,222	\$188,470	TOTAL EXPENDITURES	
	2.1	Concrete Sidewalks	\$8,403	\$11,058		
	2.2	Concrete Curbs & Gutters	\$12,580	\$16,554		
	3.8	Storm Water Drainage System Allowance	\$8,500	\$11,185		
					\$227,267	
2031						2031
	1.4	Asphalt Rejuvenator	\$17,641	\$24,143	TOTAL EXPENDITURES	
	1.5	Asphalt Repair Allowance	\$14,000	\$19,160		
	4.3	Aluminum/PVC Building Trim	\$3,750	\$5,132		
					\$48,435	

Reserve Fund Plan for
ROLLING RIDGE CONDO ASSOCIATION
 Sterling, Virginia

CALENDAR OF EXPENDITURES

TABLE 2
 2023 Through 2042



YEAR	COMPONENT NO.	COMPONENT	PRESENT COST 2023	FUTURE COST (INFLATED)	TOTAL ANNUAL EXPENDITURES	ACTION
1	2	3	4	5	6	7
2032					2032	
	3.7	Tot Lot & Outdoor Furniture Allowance	\$7,600	\$10,817	TOTAL EXPENDITURES	
					\$10,817	
2033					2033	
	3.5	Light Poles & Fixtures	\$107,500	\$159,126	TOTAL EXPENDITURES	
	4.4	Brick Tuckpointing & Repair Allowance	\$7,500	\$11,102		
					\$170,228	
2034					2034	
					NO EXPENDITURES	
2035					2035	
	1.2	Asphalt Restoration Project - Phase 2	\$100,149	\$160,342	TOTAL EXPENDITURES	
	2.1	Concrete Sidewalks	\$8,403	\$13,453		
	2.2	Concrete Curbs & Gutters	\$9,435	\$15,105		
	3.1	Brick & Mortar Entrance Monument Allowance	\$6,500	\$10,407		
	4.3	Aluminum/PVC Building Trim	\$3,750	\$6,004		
					\$205,311	
2036					2036	
					NO EXPENDITURES	
2037					2037	
	1.4	Asphalt Rejuvenator	\$15,027	\$26,022	TOTAL EXPENDITURES	
	1.5	Asphalt Repair Allowance	\$20,000	\$34,634		
	3.8	Storm Water Drainage System Allowance	\$8,500	\$14,719		
					\$75,375	
2038					2038	
	1.3	Asphalt Restoration Project - Phase 3	\$66,975	\$120,618	TOTAL EXPENDITURES	
	3.2	Street and Informational Signage	\$5,075	\$9,140		
	3.7	Tot Lot & Outdoor Furniture Allowance	\$30,400	\$54,749		
					\$184,507	
2039					2039	
	4.3	Aluminum/PVC Building Trim	\$3,750	\$7,024	TOTAL EXPENDITURES	
					\$7,024	
2040					2040	
	2.1	Concrete Sidewalks	\$8,403	\$16,368	TOTAL EXPENDITURES	
	2.2	Concrete Curbs & Gutters	\$6,290	\$12,252		
					\$28,620	
2041					2041	
					NO EXPENDITURES	
2042					2042	
	1.6	Asphalt Footpaths	\$19,076	\$40,190	TOTAL EXPENDITURES	
	4.1	Re-Roofing Project Allowance	\$168,126	\$354,217		
					\$394,407	

CURRENT FUNDING ANALYSIS CASH FLOW METHOD
TABLE 3.0 EXPLANATION
and, if applicable,
ALTERNATIVE FUNDING ANALYSIS CASH FLOW METHOD
TABLE 3.1, 3.2, 3.3 (etc.) EXPLANATION

Table 3.0 shows the financial picture over the twenty-year study period, using the current annual contribution and the reserve fund balance reported at the beginning of the study year. If the results of the study indicate a need to increase the annual contribution to maintain adequate balances throughout the study period, Table 3.1, and possibly, 3.2 will be provided for consideration. Alternatives might also be provided if a community is over-funded and desires to adjust the annual contribution downward.

Alternative funding may be achieved by increasing the annual contribution to a fixed yearly amount or by applying an annual escalation factor to increase contributions over time, or a combination of both methods. An inflation factor and interest income factor may be included in the calculations on this page.

A description of the columns in the table follows:

- Column 1 **Year**
- Column 2 **Total Asset Base** of all common capital assets included in the reserve fund with costs adjusted for inflation.
- Column 3 **Beginning Reserve Fund Balance** is the reserve fund balance after all activity in the prior year is completed.
- Column 4 **Annual Contribution**, on Table 3, is the amount contributed annually to the reserve fund as reported by the Board of Directors. On the Alternative Funding Analysis tables (3.1, 3.2, etc.), the annual contribution is projected to maintain positive balances throughout the study period.
- Column 5 **Interest Income**, which is indicated in the heading of the table, is applied to the reserve fund balance and is accrued monthly throughout each year after the yearly expenditures are deducted. The interest income percentage may be varied to reflect actual experience of the community investments.
- Column 6 **Capital Expenditures** are annual totals of expenditures for each year of the study period adjusted by the inflation percentage listed in the heading of the table.
- Column 7 **Ending Reserve Fund Balance** is the result of the beginning reserve fund balance plus the annual contribution, plus interest income, less capital expenditures for the year.
- Column 8 **Balance to Asset Base Ratio**, expressed as a percentage, is the ratio between the ending reserve fund balance and the total asset base for that year. The ratio is useful to the analysts in understanding general financial condition, but there is no standard ratio as each community's condition and complexity varies.

Reserve Fund Plan for
ROLLING RIDGE CONDO ASSOCIATION
 Sterling, Virginia

CURRENT FUNDING ANALYSIS
CASH FLOW METHOD
TABLE 3



Beginning Reserve Fund Balance: **451,053** Annual Contribution To Reserves: **88,435** Contribution Percentage Increase: **4.00%** Annual Inflation Factor: **4.00%** Annual Interest Income Factor: **2.00%**

In Dollars

YEAR	TOTAL ASSET BASE	BEGINNING RESERVE FUND BALANCE	ANNUAL CONTRIBUTION	INTEREST INCOME	CAPITAL EXPENDITURES	ENDING RESERVE FUND BALANCE
1	2	3	4	5	6	7
2023	3,176,937	451,053	88,435	9,705	33,400	515,793
2024	3,304,014	515,793	91,972	9,459	179,823	437,402
2025	3,436,175	437,402	95,651	6,786	283,925	255,914
2026	3,573,622	255,914	99,477	4,136	194,497	165,031
2027	3,716,567	165,031	103,456	1,609	262,286	7,810
2028	3,865,229	7,810	107,595	0	225,850	(110,445)
2029	4,019,839	(110,445)	111,898	0	231,714	(230,261)
2030	4,180,632	(230,261)	116,374	0	227,267	(341,153)
2031	4,347,857	(341,153)	121,029	0	48,435	(268,559)
2032	4,521,772	(268,559)	125,871	0	10,817	(153,505)
2033	4,702,643	(153,505)	130,905	0	170,228	(192,828)
2034	4,890,748	(192,828)	136,142	0	0	(56,686)
2035	5,086,378	(56,686)	141,587	0	205,311	(120,410)
2036	5,289,833	(120,410)	147,251	1,605	0	28,446
2037	5,501,427	28,446	153,141	1,424	75,375	107,636
2038	5,721,484	107,636	159,266	1,904	184,507	84,299
2039	5,950,343	84,299	165,637	3,431	7,024	246,343
2040	6,188,357	246,343	172,263	6,539	28,620	396,524
2041	6,435,891	396,524	179,153	9,956	0	585,633
2042	6,693,327	585,633	186,319	9,566	394,407	387,111

STUDY PERIOD TOTALS

2,633,424 66,120 2,763,486

Reserve Fund Plan for
ROLLING RIDGE CONDO ASSOCIATION
 Sterling, Virginia

ALTERNATIVE FUNDING ANALYSIS
CASH FLOW METHOD
HYBRID APPROACH
TABLE 3.1



Beginning Reserve Fund Balance: **451,053** Annual Contribution To Reserves: **88,435** Contribution Percentage Increase: **4.00%** Annual Inflation Factor: **4.00%** Annual Interest Income Factor: **2.00%**

In Dollars

YEAR	TOTAL ASSET BASE	BEGINNING RESERVE FUND BALANCE	ANNUAL CONTRIBUTION	INTEREST INCOME	CAPITAL EXPENDITURES	ENDING RESERVE FUND BALANCE
1	2	3	4	5	6	7
2023	3,176,937	451,053	88,435	9,705	33,400	515,793
2024	3,304,014	515,793	123,435	9,802	179,823	469,208
2025	3,436,175	469,208	158,435	8,112	283,925	351,830
2026	3,573,622	351,830	193,435	7,096	194,497	357,864
2027	3,716,567	357,864	201,172	6,566	262,286	303,317
2028	3,865,229	303,317	209,219	5,949	225,850	292,634
2029	4,019,839	292,634	217,588	5,760	231,714	284,269
2030	4,180,632	284,269	226,292	5,735	227,267	289,028
2031	4,347,857	289,028	235,343	7,873	48,435	483,809
2032	4,521,772	483,809	244,757	12,316	10,817	730,065
2033	4,702,643	730,065	254,547	15,661	170,228	830,045
2034	4,890,748	830,045	264,729	19,639	0	1,114,413
2035	5,086,378	1,114,413	275,318	23,264	205,311	1,207,684
2036	5,289,833	1,207,684	286,331	27,497	0	1,521,513
2037	5,501,427	1,521,513	297,784	33,137	75,375	1,777,059
2038	5,721,484	1,777,059	309,696	37,239	184,507	1,939,487
2039	5,950,343	1,939,487	322,083	42,582	7,024	2,297,129
2040	6,188,357	2,297,129	334,967	49,706	28,620	2,653,182
2041	6,435,891	2,653,182	348,366	57,350	0	3,058,897
2042	6,693,327	3,058,897	362,300	61,405	394,407	3,088,195

STUDY PERIOD TOTALS

4,954,233 **446,395** **2,763,486**

FULLY FUNDED BALANCE GOAL



FUNDING ANALYSIS COMPONENT METHOD TABLE 4 EXPLANATION

Table 4 is a yearly list of annual contributions toward each component, which must be made to achieve 100% funding. The reserve fund balance is the balance at the beginning of the study year. The beginning reserve fund balance is applied, proportionately, to each component prior to calculating the yearly contribution for each component. Future costs (inflation) are factored into the replacement cycles. The annual contribution for each year is calculated in the bottom row of the study labeled **Annual Component Contribution Totals**. Interest and inflation are calculated at the same annual rates as the Cash Flow Method (Table 3).

Column 1 **Component Number** is consistent throughout the tables.

Column 2 **Component** is a brief description of the component.

Columns 3 - 22 **Years** lists the annual contribution amount toward each component throughout the twenty-year study period, which is totaled at the bottom of the component table.

COMPONENT METHOD SUMMARY

The component method summary computes the beginning reserve fund balance, the annual component contribution, the annual expenditures, and interest income. It then provides the ending reserve fund balance for each year of the study.

Reserve Fund Plan for
ROLLING RIDGE CONDO ASSOCIATION
 Sterling, Virginia

FUNDING ANALYSIS
COMPONENT METHOD
 TABLE 4



Beginning Reserve Fund Balance:

In Dollars **451,053**

Component Number	COMPONENT	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
1 ASPHALT COMPONENTS																					
1.1	Asphalt Restoration Project - Phase 1	18,617	18,617	18,617	18,617	18,617	18,617	18,617	17,610	17,610	17,610	17,610	17,610	17,610	17,610	17,610	17,610	17,610	17,610	17,610	17,610
1.2	Asphalt Restoration Project - Phase 2	9,982	9,982	9,982	9,982	9,982	9,982	9,982	9,982	9,982	9,982	9,982	9,982	14,982	14,982	14,982	14,982	14,982	14,982	14,982	14,982
1.3	Asphalt Restoration Project - Phase 3	6,323	6,323	6,323	6,323	6,323	6,323	6,323	6,323	6,323	6,323	6,323	6,323	6,323	6,323	6,323	11,270	11,270	11,270	11,270	11,270
1.4	Asphalt Rejuvenator	12,325	12,325	3,784	3,784	3,784	3,784	3,784	3,784	4,079	4,079	4,079	4,079	4,079	4,079	11,220	11,220	11,220	11,220	11,220	11,220
1.5	Asphalt Repair Allowance	11,319	11,319	3,003	3,003	3,003	3,003	3,003	3,003	5,429	5,429	5,429	5,429	5,429	5,429	10,303	10,303	10,303	10,303	10,303	10,303
1.6	Asphalt Footpaths	3,748	3,748	3,748	3,748	2,296	2,296	2,296	2,296	2,296	2,296	2,296	2,296	2,296	2,296	2,296	2,296	2,296	2,296	2,296	4,135
2 CONCRETE COMPONENTS																					
2.1	Concrete Sidewalks	4,382	4,382	2,101	2,101	2,101	2,101	2,101	2,556	2,556	2,556	2,556	2,556	3,110	3,110	3,110	3,110	3,110	3,784	3,784	3,784
2.2	Concrete Curbs & Gutters	6,150	6,150	3,145	3,145	3,145	3,145	3,145	2,870	2,870	2,870	2,870	2,870	2,328	2,328	2,328	2,328	2,328	2,832	2,832	2,832
3 SITE FEATURES																					
3.1	Brick & Mortar Entrance Monument Allowan	579	579	579	579	579	579	579	579	579	579	579	579	821	821	821	821	821	821	821	821
3.2	Street and Informational Signage	915	915	915	915	915	825	825	825	825	825	825	825	825	825	825	1,221	1,221	1,221	1,221	1,221
3.3	Mailbox Modules	5,523	5,523	5,523	5,523	1,097	1,097	1,097	1,097	1,097	1,097	1,097	1,097	1,097	1,097	1,097	1,097	1,097	1,097	1,097	1,097
3.4	Timber Retaining Walls	1,238	1,238	1,238	1,238	1,238	764	764	764	764	764	764	764	764	764	764	764	764	764	764	764
3.5	Light Poles & Fixtures	10,552	10,552	10,552	10,552	10,552	10,552	10,552	10,552	10,552	10,552	12,382	12,382	12,382	12,382	12,382	12,382	12,382	12,382	12,382	12,382
3.6	Pedestrian Bridge Allowance	4,935	2,975	2,975	2,975	2,975	2,975	1,559	1,559	1,559	1,559	1,559	1,559	1,559	1,559	1,559	1,559	1,559	1,559	1,559	1,559
3.7	Tot Lot & Outdoor Furniture Allowance	19,810	1,096	1,096	1,096	1,096	1,096	1,096	1,096	1,096	8,582	8,582	8,582	8,582	8,582	8,582	1,974	1,974	1,974	1,974	1,974
3.8	Storm Water Drainage System Allowance	1,488	1,488	1,488	1,488	1,488	1,488	1,488	1,957	1,957	1,957	1,957	1,957	1,957	1,957	2,576	2,576	2,576	2,576	2,576	2,576
4 BUILDING EXTERIORS																					
4.1	Re-Roofing Project Allowance	112,911	179,885	187,080	194,563	202,346	210,440	23,841	23,841	23,841	23,841	23,841	23,841	23,841	23,841	23,841	23,841	23,841	23,841	23,841	364,414
4.2	Vinyl Siding Restoration Allowance	58,046	58,046	58,046	58,046	58,046	58,046	58,046	58,046	58,046	58,046	58,046	58,046	58,046	58,046	58,046	58,046	58,046	58,046	58,046	58,046
4.3	Aluminum/PVC Building Trim	1,053	1,053	1,053	1,053	1,231	1,231	1,231	1,231	1,441	1,441	1,441	1,441	1,685	1,685	1,685	1,685	1,972	1,972	1,972	1,972
4.4	Brick Tuckpointing & Repair Allowance	1,002	1,002	1,002	1,002	1,002	1,002	1,002	1,002	1,002	1,002	2,225	2,225	2,225	2,225	2,225	2,225	2,225	2,225	2,225	2,225
4.5	Chimney Cap Replacement Allowance	3,359	5,115	5,320	5,533	5,754	530	530	530	530	530	530	530	530	530	530	530	530	530	530	530
ANNUAL COMPONENT CONTRIBUTION TOTALS		294,257	342,313	327,570	335,266	337,570	339,876	151,861	151,503	154,434	161,920	164,973	164,973	170,471	170,471	183,105	181,840	182,127	183,305	183,305	525,717

COMPONENT METHOD SUMMARY	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
BEGINNING RESERVE FUND BALANCE	451,053	724,222	905,061	970,544	1,134,557	1,236,421	1,379,108	1,328,747	1,281,454	1,415,002	1,596,430	1,625,196	1,824,771	1,828,621	2,037,860	2,188,718	2,232,211	2,454,355	2,660,578	2,899,583
PLUS ANNUAL COMPONENT CONTRIBUTION	294,257	342,313	327,570	335,266	337,570	339,876	151,861	151,503	154,434	161,920	164,973	164,973	170,471	170,471	183,105	181,840	182,127	183,305	183,305	525,717
CAPITAL EXPENDITURES	33,400	179,823	283,925	194,497	262,286	225,850	231,714	227,267	48,435	10,817	170,228	0	205,311	0	75,375	184,507	7,024	28,620	0	394,407
SUBTOTAL	711,910	886,712	948,706	1,111,313	1,209,841	1,350,447	1,299,255	1,252,983	1,387,453	1,566,105	1,591,175	1,790,169	1,789,931	1,999,092	2,145,590	2,186,051	2,407,314	2,609,040	2,843,883	3,030,893
PLUS INTEREST INCOME @ 2.00%	12,312	18,349	21,839	23,244	26,580	28,661	29,492	28,471	27,549	30,326	34,021	34,602	38,690	38,768	43,129	46,160	47,041	51,538	55,700	64,256
FULLY FUNDED RESERVE FUND BALANCE	724,222	905,061	970,544	1,134,557	1,236,421	1,379,108	1,328,747	1,281,454	1,415,002	1,596,430	1,625,196	1,824,771	1,828,621	2,037,860	2,188,718	2,232,211	2,454,355	2,660,578	2,899,583	3,095,149

PERCENT FUNDED FOR CURRENT CYCLE 44%

TOTAL EXPENDITURES 2,763,486

TOTAL CONTRIBUTIONS 4,706,857

STUDY PERIOD TOTAL INTEREST 700,725

AVERAGE ANNUAL CONTRIBUTION 235,343

FULLY FUNDED BALANCE GOAL

**PHOTOGRAPHS
WITH
DESCRIPTIVE
NARRATIVES**



MASON & MASON
CAPITAL RESERVE ANALYSTS, INC.



PHOTO #1
The Phase 1 asphalt (restored in 2012) driveways and parking bays are in generally fair condition. We observed a moderate quantity of deflected asphalt (indicative of sub-base damage) throughout both Calamary Circle and Marigold Circle.



PHOTO #2
Deflected asphalt such as this requires full-depth repair during pavement maintenance projects every six years. Asphalt rejuvenator has been used to seal the pavements and appears to be holding up well.



PHOTO #3
The Phase 2 asphalt, (restored around 2017) is holding up well. Very minor amounts of deflected asphalt and filled cracking were observed.



PHOTO #4
The Phase 3 pavements are in good condition with zero deflected asphalt. Most cracking has been filled.



PHOTO #5
The asphalt footpaths are in fair condition. Root heaves such as this are potential tripping hazards which should be repaired expeditiously.



PHOTO #6
The concrete sidewalks range from fair to good condition. We observed a moderate quantity of settled, heaved, or cracked concrete panels, requiring expeditious repair to prevent personal injury.



PHOTO #7
The concrete curbs and gutters also range from fair to good condition. We observed moderate cracking and settlement, requiring eventual repair/replacement.



PHOTO #8
The brick-and-mortar entrance monument and monument lighting appear to be in generally good condition.



PHOTO #9
11 of the 15 mailbox modules range from poor to fair condition. We observed moderate rusting of most modules. Four of the modules were recently replaced near Canopy Terrace and are in excellent condition.



PHOTO #10

The light poles and fixtures appear to be in fair to good condition. We understand that some of the fixtures have been updated to L.E.D. Lighting was not observed after dark.



PHOTO #11

The pedestrian bridge is in fair condition. Structurally it appears to be in good condition. However, the top treads require replacement near-term. The bridge should be painted to improve appearance.



PHOTO #12

The play module wood borders and the mulch have been replaced recently and are in good condition.



PHOTO #13
The main play module metal flooring is rusted, and it is deteriorated. The module will require replacement near-term.



PHOTO #14
Building roofing ranges from fair to good condition. We understand that eight units have had recent roofing replacements in 2022 and 2023. The remaining roofing is scheduled for full replacement between now and mid-term, in phases to help reduce major contribution increases.



PHOTO #15
We understand that the vinyl siding and trim were restored between 2005 and 2009. The building siding, trim, and brick veneer range from fair to good condition.