MASON & MASON
CAPITAL RESERVE ANALYSTS, INC.

MEMBER OF community ASSOCIATIONS INSTITUTE

Condition Assessment
&
Reserve Fund Plan Update
2020
Spring Oak

Burke, Virginia

Prepared for:
The Board of Trustees
Burke Centre Conservancy

MASON & MASON
CAPITAL RESERVE ANALYSTS, INC.

MEMBER OF community ASSOCIATIONS INSTITUTE

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March 25, 2020

Mr. Bob Bray, Finance Administrator
Burke Centre Conservancy
6060 Burke Centre Parkway
Burke, Virginia 22015-3702

RE: CONDITION ASSESSMENT AND RESERVE FUND PLAN UPDATE 2020
Spring Oak Cluster
Burke, Virginia
Project No. 8903#14

Dear Mr. Bray:

Mason & Mason Capital Reserve Analysts, Inc. has completed the report for Spring Oak.

As outlined in our proposal, the report is being submitted to you and the Board of Directors for review and comment. A review of the Summary of Key Issues iii, and Sections 1 and 2 will provide you with our findings and financial analyses. We will be happy to meet with the Board to help them fully understand the issues. If no changes are necessary, please consider this version the final report. If changes are requested, Mason & Mason will make the revisions and re-issue the report. We encourage the Board to complete this process expeditiously and will support the effort.

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

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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RESERVE FUND PLAN

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 3 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 Spring Oak's Reserve Fund Plan Update. 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's understandable to a first-time reader.

Analyzing the capital reserves reveals that:

- The reserve fund is **fully funded** through 2019. Our goal is to maintain fully funded status through the end of the 20-year period (2039).

In order to maintain fully funded status, the Board should:

- Reduce the annual contribution in 2021 from $19,585 to $16,591, and plan on annual adjustments of 1.00% thereafter.
- This represents a reduction from $15.70 to $13.29 (a net reduction of $2.41) per residence, per month (based on 104 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 don't 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 doesn't include an evaluation of moisture penetration, mold, indoor air quality, or other environmental issues. While we may identify safety, hazards observed during the course of the field survey, this report shouldn't 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 are 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.

1. INTRODUCTION

1.1 Background: Spring Oak Cluster is comprised of 104 dwelling units within 26 quadraplex buildings located on Nordeen Oak Court, Myrtle Oak Court, and Spring Oak Court off Oak Leather Drive (Route 6416) north of Burke Centre Parkway in Burke, Virginia. The Cluster was constructed circa 1979. The street layout includes concrete sidewalks, concrete curbs and gutters, and 17 parking bays providing 212 spaces. Site features include concrete leadwalks, concrete steps, stone retaining walls, a single wood timber retaining wall, retaining wall fencing, split rail fencing, storm water drainage system, and mailbox modules.

We are providing the Condition Assessment and Reserve Fund Plan Update based on Proposal Acceptance Agreement No. 8903#14 dated October 9, 2019. 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 Cluster. Ultimately, the establishment, management, and expenditure of reserves are within the discretion of the Cluster and its Board of Directors pursuant to their organizational documents and subject to the laws of the applicable jurisdiction. We are not financially associated with Burke Centre Conservancy Management or the Cluster, and 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.

Mason & Mason provided a Level I Condition Assessment and Reserve Fund Plan for Spring Oak Cluster in 2006, and Level II Updates in 2010 and 2015. This report is an additional Level II Update and includes a new condition assessment. All common components were visually observed. Measurements and quantities were generally accepted from the previous report except where changes have occurred. The update report is a stand-alone document and reference to the previous report should not be necessary.

James G. Mason III, R. S. conducted the field evaluation for this report on March 16, 2020. The sky was clear, and the temperature was approximately 50 degrees F. Precipitation had not occurred for several days prior to the site visit. The pavements and grounds were generally dry and clean of debris.

1.2 Principal Findings: The common assets appear to be in overall continuing good condition. The community has now reached a 40-year benchmark in terms of replacement of major systems. The three asphalt drivelanes and adjacent parking bays were restored about 2013 and are in continuing good condition. These streets are holding up well, with only about 23 square yards of deflection observed. Pavement maintenance, which should include full-depth repairs, crack filling, and seal coating was accomplished in the last year or so. In order to achieve the projected remaining service life, continued pavement maintenance should be accomplished every six years. The future restoration project should include profile milling to a depth of two inches with new compacted asphalt.

A few cracked or settled sections of concrete curb and gutter were observed. The liability and costs associated with personal injury lawsuits resulting primarily from sidewalk and curb tripping hazards are too great to defer repair. It is our opinion that deficiencies, which pose a hazard to pedestrians should be corrected as soon as practicable.

The split rail fencing along Oak Leather Drive is in continuing good condition. The "common" sections of the stone retaining walls are in fair condition, with some missing stones observed. Replacement is scheduled in about seven years. The "private" adjoining sections of stone retaining walls are in heavily deteriorated condition, which may affect the future of the "common" walls. We suggest that the private wall sections are replaced during the common replacement project. The fencing constructed above the common walls ranges from poor to fair condition, with replacement scheduled to coincide with the stone retaining wall replacement. The timber retaining wall and the mailbox modules range from fair to continuing good condition.

The pricing provided by Management indicates that moderate price reductions have occurred since 2015 resulting in a slightly lower than projected level of contribution. Currently the reserve fund appears to be fully funded for the current cycle and the contributions should be slightly lowered to address generational equity issues, while maintaining fully funded status long-term. The Association has adequate reserve funding and should be proactive in making the necessary common component repairs and replacements.

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 7, for specific information.

2. FINANCIAL ANALYSIS

We track the annual inflation rate among our clients based on their reported costs for typical services. The average rate of inflation since the 2008 recession has been 1.46% according to the U.S. Labor Department and is similar in our experience with clients. Substantially higher inflation rates have not materialized since then. So, we are using a 2% annual rate of inflation in our calculations. Interest income has also remained low since 2008, and many smaller Associations and Condominiums are earning less than 2% on savings accounts. So, we are using a 1.5% interest income rate of return in our calculations. However, unlike reserves, interest income is taxable, which may reduce the net gain even further. We anticipate increasingly volatile economic conditions near to mid-term. 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.

2.1 Calculation Basics: The Cluster is on a calendar fiscal year. Management reported that the audited reserve fund balance, including cash and securities, as of December 31, 2019, was $178,021. We have used 2.00% annual inflation and 1.50% 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 $400,134.

2.2 Current Funding Analysis, Cash Flow Method (Table 3): The 2020 annual contribution to reserves has been set at $19,585 with a presumed 2.0% annual increase. At this level, the total for all annual contributions for the twenty-year period would be $475,864, and the total interest income is projected to be $67,474. This funding results in unnecessarily high balances throughout the twenty-year period and over funds the reserves.

2.3 Alternative Funding Analysis, Cash Flow Method, Hybrid Approach (Table 3.1): This plan provides the annual contributions necessary to maintain balances more consistent with the fully funded status by reducing the annual contribution to $16,591 in 2021 and providing a 1.00% annual adjustment thereafter. This plan allows for a gradual increase over time after the initial reduction and addresses generational equity issues. The total for all annual contributions for the twenty-year period would be $364,868, and the total interest income is projected to be $52,868. The fully funded balance in 2039 is $195,623.

2.4 Funding Analysis, Component Method (Table 4): This method of funding would require variable annual contributions, averaging $18,207 over the twenty-year period. The total for all annual contributions would be $364,142, and the total interest income is projected to be $53,594. The fully funded balance in 2039 is $195,623. The Component Method model considers the current reserve fund balance in computing individual component contributions for current cycles.

3. 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.

3.1 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."

3.2 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 doesn't 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 doesn't 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 don't address the reality of fully funding, and typically are just a way of passing the obligation on to the next generation.

3.3 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.

4. 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.

4.1 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.

4.2 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 doesn't include inflation is a 1-year plan, and any data beyond that first year won't reflect reality.

4.3 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.

4.4 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.

4.5 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.

4.6 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.

4.7 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 shouldn't 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 doesn't provide any relative value or utility.

4.8 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.

4.9 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.

4.10 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.

5. 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.

6. 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.

6.1 Asphalt Pavement: 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 twenty years.

6.2 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. 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.

6.3 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.

6.4 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.

6.5 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.

6.6 Concrete Steps: Concrete steps should be replaced when cracking, deterioration, or settlement occurs. Cracks, which occur at the intersection of treads and risers, should be filled with an appropriate sealant to prevent water infiltration.

6.7 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. Replacements are scheduled in cycles because the necessity of full replacement at one time is unlikely.

6.8 Bare Wood 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, warped, 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.

6.9 Wood Fence: 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.

6.10 Stone Retaining Wall Repair: Stone retaining walls should be inspected periodically for cracks indicating settlement problems. All vegetation, such as vines, tree limbs, and tree roots should be kept clear of the stone wall to prevent damage. As stone retaining walls 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. Deteriorated or cracked mortar should be removed, and the void should then be filled with new mortar. Major settlement cracks or deflection may require the rebuilding of that section of the wall.

7. ASPHALT PAVEMENT REPORT

Street Name	Total SY Asphalt Pavement	SY Full-Depth Repairs	Linear Footage Cracks	Parking Spaces	Parking Bays
Nordeen Oak Court	2,111	0	90	67	6
Myrtle Oak Court	2,255	0	92	72	4
Spring Oak Court	2,248	23	135	73	7
TOTALS	6,614	23	317	212	17

All quantities approximate

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 Through 16 **Cycles, Percentage, and Cost** repeat as itemized above. Although not shown on the tables, 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
14. SPRING OAK
Burke, Virginia

COMPONENT DATA AND ASSET REPLACEMENT SCHEDULE
TABLE 1
2020 Through 2039

MASON & MASON
CAPITAL RESERVE ANALYSTS, INC.
www.masonreserves.com 800-776-6980 Fax 800-776-6408

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
1 ASPHALT COMPONENTS																
1.1	Asphalt Restoration Project	6,614	SY	$10.00	$66,140	18	2031	100%	$82,237	2049	100%	$117,454				This component includes three asphalt drivelanes and the parking bays of the Cluster. Neither the depth nor the sub-base of the pavement could be visually determined. We understand that the pavement was restored circa 2013, and it is in continuing good condition. Minimal deflected cracking (indicative of sub-base damage or insufficient asphalt depth) was observed. Future restoration includes profile milling to a depth of 2" with new compacted asphalt. Core sampling should be used to determine the depth and condition of the sub-base and pavement prior to restoration. Costs include striping, but not replacement of any inadequate sub-base.
1.2	Asphalt Seal Coat	6,614	SY	$1.05	$6,945	6	2025	100%	$7,668	2037	100%	$9,724	2043	100%	$10,951	The asphalt has been seal coated in past pavement repair projects, including recently. 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.
1.3	Asphalt Repair Allowance	1	LS	$13,000.00	$13,000	6	2025	50%	$7,177	2031	100%	$16,164	2037	25%	$4,551	Approximately 23 square yards of deflected pavement (indicative of sub-base damage), and about 317 linear feet of longitudinal or transverse cracking was 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. See the Asphalt Pavement Report, Section 7, for additional details.
2 CONCRETE COMPONENTS																
2.1	Concrete Sidewalks & Steps	17,002	SF	$10.00	$170,020	5	2020	3%	$5,101	2025	3%	$5,631	2030	3%	$6,218	Concrete sidewalks throughout the Cluster are generally 4' or 5' wide with 3' leadwalks serving the multiple unit entrances. We counted 39 steps at grade differentials. Their thickness could not be visually determined. They range from fair to continuing good condition. About 384 square feet (2.2% 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 as soon as practicable to prevent personal injury.
2.2	Concrete Curbs & Gutters	2,972	LF	$26.50	$78,758	5	2020	2%	$1,575	2025	2%	$1,739	2030	2%	$1,920	The drivelanes and parking bays are lined with standard-profile, cast-in-place, concrete curbs and gutters. They are in continuing good condition with about 30 linear feet of transverse cracks or settlement observed. 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 as soon as practicable to prevent personal injury.
3 SITE FEATURES																
3.1	Split Rail Fencing	645	LF	$17.28	$11,146	20	2033	100%	$14,418	2053	100%	$21,424				Split rail fencing is constructed adjacent to the Cluster name sign and adjacent to Oak Leather Drive. Fencing along Oak Leather Drive has been replaced in recent years and is in continuing good condition. Fencing at the Cluster sign is in fair condition. Any future localized deflected or warped timbers or posts should be replaced under operations.
3.2	Shadowbox Wood Fencing	183	LF	$22.00	$4,026	20	2027	100%	$4,625	2057	100%	$8,377				Pressure-treated wood shadowbox fencing approximately 4' high is constructed at the top of three common stone retaining walls. This category includes only the "common" portion of the walls and not the walls that continue onto "private" property. All fencing appears to range from poor to fair condition with some deterioration observed. Any deteriorated or damaged components should be periodically replaced and out of plumb posts straightened and secured to achieve the full service life of the fencing. Periodic pressure-washing and sealing with an appropriate wood preservative will maintain appearance.
3.3	Stone Retaining Walls	985	SF	$125.00	$123,125	50	2027	100%	$141,432	2077	100%	$380,676				Three stone retaining walls are constructed within the Cluster. Only the "common" portion of each retaining wall is included in this category. It appears that the "common" walls have all had tuckpointing and repair in the past, but require further tuckpointing. However, they connect with portions of walls that have not been tuckpointed and are in poor condition, which may eventually affect the service life of the properly tuckpointed walls. Tuckpointing should be performed under the operations budget as this line item is for the total replacement at the end of the projected service life.
3.4	Wood Retaining Wall	171	SF	$35.00	$5,985	20	2027	100%	$6,875	2047	100%	$10,216				One pressure-treated wood retaining wall approximately 38' long and averaging 4.5' high is constructed at one grade differential within the Cluster. The wall was replaced in recent years and ranges from fair to continuing good condition.
3.5	Storm Water Drainage System Allowance	1	LS	$10,200.00	$10,200	5	2023	100%	$10,824	2028	100%	$11,951	2033	100%	$13,195	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.

Reserve Fund Plan for
14. SPRING OAK
Burke, Virginia

COMPONENT DATA AND ASSET REPLACEMENT SCHEDULE
TABLE 1
2020 Through 2039

MASON & MASON
CAPITAL RESERVE ANALYSTS, INC.
www.masonreserves.com 800-776-6980 Fax 800-776-6408

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
3.6	**Mailbox Modules**	**8**	**EA**	**$1,675.00**	**$13,400**	**20**	**2026**	**100%**	**$15,091**	**2046**	**100%**	**$22,424**				**Approximately eight A. F. Florence fiberglass mailbox modules have been installed at various locations. The units are pedestal mounted to concrete pads and have 12 letter sized boxes and one parcel box for each unit. A manufacturing date stamp of August 2006 was observed at the rear of one unit. Although they are heavily algae stained, they are in continuing good condition. Pressure-washing and painting the modules will help to extend the service life and improve appearance.**
4 ENGINEERING																
4.1	**Cyclic Updates**	**1**	**LS**	**$1,813.00**	**$1,813**	**5**	**2020**	**100%**	**$1,813**	**2025**	**100%**	**$2,002**	**2030**	**100%**	**$2,210**	**At the direction of Management, we have included an allowance to cover the cost of future updates, which are performed on a five-year basis.**

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.

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Reserve Fund Plan for
14. SPRING OAK
Burke, Virginia

CALENDAR OF EXPENDITURES
TABLE 2
2020 Through 2039

MASON & MASON
CAPITAL RESERVE ANALYSTS, INC.
www.masonreserves.com 800-776-6980 Fax 800-776-6408

YEAR	COMPONENT NO.	COMPONENT	PRESENT COST 2020	FUTURE COST (INFLATED)	TOTAL ANNUAL EXPENDITURES	ACTION
1	2	3	4	5	6	7
2020					2020	
	2.1	Concrete Sidewalks & Steps	$5,101	$5,101	TOTAL EXPENDITURES	
	2.2	Concrete Curbs & Gutters	$1,575	$1,575		
	4.1	Cyclic Updates	$1,813	$1,813		
					$8,489	
2021					2021	
					NO EXPENDITURES	
2022					2022	
					NO EXPENDITURES	
2023					2023	
	3.5	Storm Water Drainage System Allowance	$10,200	$10,824	TOTAL EXPENDITURES	
					$10,824	
2024					2024	
					NO EXPENDITURES	
2025					2025	
	1.2	Asphalt Seal Coat	$6,945	$7,668	TOTAL EXPENDITURES	
	1.3	Asphalt Repair Allowance	$6,500	$7,177		
	2.1	Concrete Sidewalks & Steps	$5,101	$5,631		
	2.2	Concrete Curbs & Gutters	$1,575	$1,739		
	4.1	Cyclic Updates	$1,813	$2,002		
					$24,216	
2026					2026	
	3.6	Mailbox Modules	$13,400	$15,091	TOTAL EXPENDITURES	
					$15,091	
2027					2027	
	3.2	Shadowbox Wood Fencing	$4,026	$4,625	TOTAL EXPENDITURES	
	3.3	Stone Retaining Walls	$123,125	$141,432		
	3.4	Wood Retaining Wall	$5,985	$6,875		
					$152,931	
2028					2028	
	3.5	Storm Water Drainage System Allowance	$10,200	$11,951	TOTAL EXPENDITURES	
					$11,951	
2029					2029	
					NO EXPENDITURES	
2030					2030	
	2.1	Concrete Sidewalks & Steps	$5,101	$6,218	TOTAL EXPENDITURES	
	2.2	Concrete Curbs & Gutters	$1,575	$1,920		
	4.1	Cyclic Updates	$1,813	$2,210		
					$10,348	
2031					2031	
	1.1	Asphalt Restoration Project	$66,140	$82,237	TOTAL EXPENDITURES	
	1.3	Asphalt Repair Allowance	$13,000	$16,164		
					$98,401	
2032					2032	
					NO EXPENDITURES	
2033					2033	
	3.1	Split Rail Fencing	$11,146	$14,418	TOTAL EXPENDITURES	
	3.5	Storm Water Drainage System Allowance	$10,200	$13,195		
					$27,613	

Reserve Fund Plan for
14. SPRING OAK
Burke, Virginia

CALENDAR OF EXPENDITURES
TABLE 2
2020 Through 2039

MASON & MASON
CAPITAL RESERVE ANALYSTS, INC.
www.masonreserves.com 800-776-6980 Fax 800-776-6408

YEAR	COMPONENT NO.	COMPONENT	PRESENT COST 2020	FUTURE COST (INFLATED)	TOTAL ANNUAL EXPENDITURES	ACTION
1	2	3	4	5	6	7
2034					2034	
					NO EXPENDITURES	
2035					2035	
	2.1	Concrete Sidewalks & Steps	$5,101	$6,865	TOTAL EXPENDITURES	
	2.2	Concrete Curbs & Gutters	$1,575	$2,120		
	4.1	Cyclic Updates	$1,813	$2,440		
					$11,425	
2036					2036	
					NO EXPENDITURES	
2037					2037	
	1.2	Asphalt Seal Coat	$6,945	$9,724	TOTAL EXPENDITURES	
	1.3	Asphalt Repair Allowance	$3,250	$4,551		
					$14,275	
2038					2038	
	3.5	Storm Water Drainage System Allowance	$10,200	$14,568	TOTAL EXPENDITURES	
					$14,568	
2039					2039	
					NO EXPENDITURES	

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
14. SPRING OAK
Burke, Virginia

CURRENT FUNDING ANALYSIS
CASH FLOW METHOD
TABLE 3

MASON & MASON
CAPITAL RESERVE ANALYSTS, INC.
www.masonreserves.com 800-776-6980 Fax 800-776-6408

In Dollars

Beginning Reserve Fund Balance:	Annual Contribution To Reserves:	Contribution Percentage Increase:	Annual Inflation Factor:	Annual Interest Income Factor:
178,021	19,585	2.00%	2.00%	1.50%

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
2020	504,557	178,021	19,585	2,779	8,489	191,896
2021	514,648	191,896	19,977	3,061	0	214,935
2022	524,941	214,935	20,376	3,413	0	238,723
2023	535,440	238,723	20,784	3,687	10,824	252,370
2024	546,149	252,370	21,199	3,985	0	277,554
2025	557,072	277,554	21,623	4,171	24,217	279,132
2026	568,213	279,132	22,056	4,273	15,091	290,370
2027	579,578	290,370	22,497	3,324	152,932	163,259
2028	591,169	163,259	22,947	2,556	11,951	176,811
2029	602,993	176,811	23,406	2,862	0	203,078
2030	615,053	203,078	23,874	3,178	10,348	219,782
2031	627,354	219,782	24,351	2,717	98,401	148,449
2032	639,901	148,449	24,839	2,445	0	175,733
2033	652,699	175,733	25,335	2,636	27,613	176,091
2034	665,753	176,091	25,842	2,871	0	204,803
2035	679,068	204,803	26,359	3,215	11,425	222,953
2036	692,649	222,953	26,886	3,587	0	253,426
2037	706,502	253,426	27,424	3,935	14,275	270,509
2038	720,632	270,509	27,972	4,195	14,568	288,109
2039	735,045	288,109	28,532	4,584	0	321,225
STUDY PERIOD TOTALS			475,864	67,474	400,134	

Reserve Fund Plan for
14. SPRING OAK
Burke, Virginia

ALTERNATIVE FUNDING ANALYSIS
CASH FLOW METHOD
HYBRID APPROACH
TABLE 3.1

MASON & MASON
CAPITAL RESERVE ANALYSTS, INC.
www.masonreserves.com 800-776-6980 Fax 800-776-6408

In Dollars

Beginning Reserve Fund Balance:	Annual Contribution To Reserves:	Contribution Percentage Increase:	Annual Inflation Factor:	Annual Interest Income Factor:
178,021	19,585	1.00%	2.00%	1.50%

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
2020	504,557	178,021	19,585	2,779	8,489	191,896
2021	514,648	191,896	16,591	3,034	0	211,522
2022	524,941	211,522	16,757	3,332	0	231,611
2023	535,440	231,611	16,925	3,548	10,824	241,260
2024	546,149	241,260	17,094	3,783	0	262,137
2025	557,072	262,137	17,265	3,903	24,217	259,088
2026	568,213	259,088	17,438	3,933	15,091	265,368
2027	579,578	265,368	17,612	2,906	152,932	132,954
2028	591,169	132,954	17,788	2,056	11,951	140,848
2029	602,993	140,848	17,966	2,274	0	161,088
2030	615,053	161,088	18,146	2,497	10,348	171,382
2031	627,354	171,382	18,327	1,937	98,401	93,245
2032	639,901	93,245	18,511	1,559	0	113,315
2033	652,699	113,315	18,696	1,639	27,613	106,037
2034	665,753	106,037	18,883	1,756	0	126,676
2035	679,068	126,676	19,071	1,976	11,425	136,298
2036	692,649	136,298	19,262	2,216	0	157,776
2037	706,502	157,776	19,455	2,426	14,275	165,381
2038	720,632	165,381	19,649	2,540	14,568	173,002
2039	735,045	173,002	19,846	2,775	0	195,623
STUDY PERIOD TOTALS			364,868	52,868	400,134	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
14. SPRING OAK
Burke, Virginia

FUNDING ANALYSIS
COMPONENT METHOD
TABLE 4

MASON & MASON
CAPITAL RESERVE ANALYSTS, INC.
www.masonreserves.com 800-776-6980 Fax 800-776-6408

Beginning Reserve Fund Balance:

In Dollars **178,021**

Component Number	COMPONENT	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
1 ASPHALT COMPONENTS																					
1.1	Asphalt Restoration Project	2,268	2,268	2,268	2,268	2,268	2,268	2,268	2,268	2,268	2,268	2,268	5,681	5,681	5,681	5,681	5,681	5,681	5,681	5,681	5,681
1.2	Asphalt Seal Coat	487	487	487	487	487	739	739	739	739	739	739	739	739	739	739	739	739	1,743	1,743	1,743
1.3	Asphalt Repair Allowance	456	456	456	456	456	2,573	2,573	2,573	2,573	2,573	2,573	724	724	724	724	724	724	1,632	1,632	1,632
2 CONCRETE COMPONENTS																					
2.1	Concrete Sidewalks & Steps	2,753	1,084	1,084	1,084	1,084	1,197	1,197	1,197	1,197	1,197	1,321	1,321	1,321	1,321	1,321	1,459	1,459	1,459	1,459	1,459
2.2	Concrete Curbs & Gutters	850	335	335	335	335	370	370	370	370	370	408	408	408	408	408	451	451	451	451	451
3 SITE FEATURES																					
3.1	Split Rail Fencing	331	331	331	331	331	331	331	331	331	331	331	331	331	918	918	918	918	918	918	918
3.2	Shadowbox Wood Fencing	207	207	207	207	207	207	207	221	221	221	221	221	221	221	221	221	221	221	221	221
3.3	Stone Retaining Walls	6,320	6,320	6,320	6,320	6,320	6,320	6,320	5,110	5,110	5,110	5,110	5,110	5,110	5,110	5,110	5,110	5,110	5,110	5,110	5,110
3.4	Wood Retaining Wall	307	307	307	307	307	307	307	438	438	438	438	438	438	438	438	438	438	438	438	438
3.5	Storm Water Drainage System Allowance	1,163	1,163	1,163	2,300	2,300	2,300	2,300	2,300	2,540	2,540	2,540	2,540	2,540	2,804	2,804	2,804	2,804	2,804	3,096	3,096
3.6	Mailbox Modules	793	793	793	793	793	793	961	961	961	961	961	961	961	961	961	961	961	961	961	961
4 ENGINEERING																					
4.1	Cyclic Updates	979	385	385	385	385	425	425	425	425	425	470	470	470	470	470	519	519	519	519	519
	ANNUAL COMPONENT CONTRIBUTION TOTALS	16,914	14,136	14,136	15,273	15,273	17,830	17,998	16,933	17,173	17,173	17,380	18,944	18,944	19,795	19,795	20,025	20,025	21,937	22,229	22,229

COMPONENT METHOD SUMMARY	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
BEGINNING RESERVE FUND BALANCE	178,021	189,273	206,383	223,751	231,704	250,602	248,145	254,947	122,937	130,156	149,435	158,866	81,963	102,299	96,188	117,597	128,137	150,261	160,371	170,636
PLUS ANNUAL COMPONENT CONTRIBUTION	16,914	14,136	14,136	15,273	15,273	17,830	17,998	16,933	17,173	17,173	17,380	18,944	18,944	19,795	19,795	20,025	20,025	21,937	22,229	22,229
CAPITAL EXPENDITURES	8,489	0	0	10,824	0	24,217	15,091	152,932	11,951	0	10,348	98,401	0	27,613	0	11,425	0	14,275	14,568	0
SUBTOTAL	186,446	203,409	220,519	228,200	246,977	244,215	251,052	118,948	128,159	147,329	156,467	79,409	100,907	94,481	115,983	126,197	148,162	157,923	168,032	192,865
PLUS INTEREST INCOME @ 1.50%	2,827	2,974	3,232	3,504	3,624	3,931	3,895	3,989	1,997	2,106	2,399	2,554	1,393	1,707	1,614	1,940	2,099	2,449	2,604	2,759
FULLY FUNDED RESERVE FUND BALANCE	189,273	206,383	223,751	231,704	250,602	248,145	254,947	122,937	130,156	149,435	158,866	81,963	102,299	96,188	117,597	128,137	150,261	160,371	170,636	195,623

FULLY FUNDED BALANCE GOAL

PERCENT FUNDED FOR CURRENT CYCLE	124%	TOTAL EXPENDITURES	400,134	TOTAL CONTRIBUTIONS	364,142	STUDY PERIOD TOTAL INTEREST	53,594	AVERAGE ANNUAL CONTRIBUTION	18,207