



MASON & MASON
CAPITAL RESERVE ANALYSTS, INC.



Condition Assessment
and
Reserve Fund Plan Update
2012

for

Sample Place

Location, Virginia



Prepared for:
The Board of Directors
&
Sample Community Management, Inc.



MASON & MASON

CAPITAL RESERVE ANALYSTS, INC.



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January 20, 2012

Ms. First Second, CMCA, AMS, General Manager
Sample Community Management, Inc.
33 Management Company Street
Town, Virginia 22131

RE: **CONDITION ASSESSMENT AND RESERVE FUND PLAN UPDATE 2012**
Sample Place
Sample Location, Virginia
Project No. 9110

Dear Ms. Last Name:

Mason & Mason Capital Reserve Analysts, Inc. has completed the report for Sample Place.

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 again work with you and the Association.

Sincerely,

Mason & Mason Capital Reserve Analysts, Inc.

James G. Mason, R. S.
Principal

N. K. Mason, R. S.
Principal



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RESERVE FUND PLAN FOR CAPITAL RESERVES

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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 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 Sample Place'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 Capital Reserve fund is approximately fully funded for the current cycle. **This is a significant improvement from past years. Our goal is to remain fully funded by the end of the 20-year period (2031).**
- The Neighborhood Reserve fund is approximately fully funded for the current cycle. **This is also a significant improvement from past years. Our goal is to remain fully funded by the end of the 20-year period (2031).**
-

In order to achieve this goal, the Capital Reserves should:

- Set the annual contribution in **2012** at **\$78,665**, and plan on annual adjustments of **3.0%** to reflect inflation thereafter.
- This represents **\$7.01** per residential unit, per month (based on **935** combined SFHs and Townhomes).

In order to achieve this goal, the Neighborhood Reserves should:

- Set the annual contribution in **2012** at **\$96,001**, and plan on annual adjustments of **3.0%** to reflect inflation thereafter.
- This represents **\$11.41** per residential unit, per month (based on **701** Townhomes).

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: Sample Place Community Association is comprised of 345 single-family homes (SFH) and 987 townhomes (TH) located on Sample Street in Sample Location, Virginia. The community was constructed between 1986 and 1988. The Association is organized into two elements; Capital Reserves for the Community Center, pool facility, and general site assets, and Neighborhood Reserves for the townhome assets (four sections identified as Section 1, 2, 3, and 4). The roadways serving the SFH sections are VDOT and not the responsibility of the Association. The roadways serving the TH sections are private and therefore are funded by the Neighborhoods. The neighborhood roadway layout includes concrete sidewalks, curbs and gutters, driveway aprons, and 305 parking bays providing 1051 spaces.

We are providing the Condition Assessment and Reserve Fund Plan Update based on Proposal Acceptance Agreement No. 9110 dated September 15, 2011. 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 Community Association. Ultimately, the establishment, management, and expenditure of reserves are within the discretion of the 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 Sample Place and we therefore do not have any conflicts of interest that would bias this report. Information provided by Management and the Board 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 Sample Place in 1998, 2002, and 2007. This report is a Level II update of the previous reports 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, R. S., and N. K. Mason, R. S. conducted an interview with Ms. First Last, General Manager on January 10, 2012. The field evaluation for this Level II report was conducted on January 10, 11, 12, and 14, 2012. The weather during the period was generally overcast with light snow and rain, and the temperature ranged from approximately 35 to 45 degrees F. The pavements, walkways, and grounds were generally wet.

1.2 Principal Findings: The common assets appear to be in overall improving good condition. Sample Place is now reaching its twenty to twenty-five year benchmark in terms of replacement of major systems. The Boards and Management have been proactive in caring for their assets. In 2007 several major components such as the Community Center retaining wall, tennis court, and parking lot had developed problems. An evaluation by a professional engineer was recommended and conducted to identify the issues with the wall and tennis court. Those deficiencies have now been corrected, although it appears, they will continue to be a maintenance issue, and require limited repairs on about a ten-year cycle.

In 1998 Mason & Mason surveyed (evaluated) and quantified all pavements, footpaths, sidewalks, curbs and gutters, and driveway aprons. The 2007 survey resulted in a significant number of streets in Sections 1, 2, and 4 receiving localized repairs or overlay repairs. The Community Center parking lot and all of Section 3 were overlay restored that year as well. In 2011 six streets in Sections 2 and 4 were overlay restored. We have identified four more streets in Sections 1, 2, and 4 that should be overlay restored this year. Repairs and community-wide seal coating have also been scheduled for this year. Management has indicated that annual inspections and needed overlay restoration will continue until all streets have been completed. We have scheduled the next block of remaining streets for 2015, but this could change based on weather and other factors. We have updated the Asphalt Pavement Report including street names and sections with overlay and repair information, which can be used by Management for future pavement planning.

Other Capital Reserve components scheduled for repair this year include some sections of asphalt footpaths totaling approximately 13%, which is significantly lower since so much has been repaired in the interim. An evaluation of the retention pond by an environmental engineer to identify specific issues and liabilities associated with the pond and its long-term best maintenance practices was originally scheduled for 2008, but it has now been deferred to 2012.

Concrete repair/replacement cycles have been reduced to two-year intervals to mitigate liability issues with tripping hazards beginning in 2012. Our survey indicates a deficiency rate of only 1% currently.

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. However, currently we are seeing somewhat higher rates and are anticipating that general price inflation will continue at elevated levels near to mid-term. As such, we are using a 3% rate of inflation in our calculations. Interest income has increased similarly since 2008, and many smaller Associations and Condominiums are earning up to 1.85% on savings accounts and as much as 3.37% on 5-year certificates of deposit. Accordingly, we are assuming 2.5% interest income in our calculations. However, unlike reserves, interest income is taxable, which may reduce the net gain. 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.

CAPITAL RESERVES

2.1 Calculation Basics: Capital Reserves are on a calendar fiscal year. Management reported that the reserve fund balance, including cash and securities, as of December 31, 2011, was **\$837,829**. We have used a **2.00% annual interest income factor** and a **3.00% inflation factor** in our model. The total expenditures for the twenty-year study period for both the **Cash Flow Method and Component Method** are projected to be **\$2,054,785**.

2.2 Funding Analysis, Cash Flow Method, Hybrid Approach (Table 3): This plan provides the annual contributions necessary to maintain balances consistent with the **fully funded goal by setting the annual contribution at \$78,665 in 2012 and providing an annual escalation factor of 3.00%, matching inflation thereafter. This plan allows for a gradual increase over time and addresses generational equity issues.** The total for all annual contributions for the twenty-year period would be **\$2,113,757**, and the total interest income is projected to be **\$439,490**. **The fully funded balance in 2031 is \$1,336,291.**

2.3 Funding Analysis, Component Method (Table 4): This method of funding would require variable annual contributions, averaging **\$105,046** over the twenty-year period. The total for all annual contributions would be **\$2,100,917**, and the total interest income is projected to be **\$452,330**. **The fully funded balance in 2031 is \$1,336,291.** The Component Method model considers the current reserve fund balance in computing individual component contributions for current cycles. The Component Method model distributes the current reserve fund balance proportionally to all components prior to calculating the individual component contributions for each component cycle.

NEIGHBORHOOD RESERVES

2.4 Calculation Basics: Neighborhood Reserves are on a calendar fiscal year. Management reported that the reserve fund balance, including cash and securities, as of December 31, 2011, was **\$411,692**. We have used a **2.00% annual interest income factor** and a **3.00% inflation factor** in our model. The total expenditures for the twenty-year study period for both the **Cash Flow Method and Component Method** are projected to be **\$2,752,899**.

2.5 Funding Analysis, Cash Flow Method, Hybrid Approach (Table 3): This plan provides the annual contributions necessary to maintain balances consistent with the **fully funded goal by setting the annual contribution at \$96,001 in 2012 and providing an annual escalation factor of 3.00%, matching inflation thereafter. This plan allows for a gradual increase over time and addresses generational equity issues.** The total for all annual contributions for the twenty-year period would be **\$2,579,591**, and the total interest income is projected to be **\$474,336**. **The fully funded balance in 2031 is \$712,720.**

2.6 Funding Analysis, Component Method (Table 4): This method of funding would require variable annual contributions, averaging **\$123,460** over the twenty-year period. The total for all annual contributions would be **\$2,469,190**, and the total interest income is projected to be **\$584,737**. **The fully funded balance in 2031 is \$712,720.** The Component Method model considers the current reserve fund balance in computing individual component contributions for current cycles. The Component Method model distributes the current reserve fund balance proportionally to all components prior to calculating the individual component contributions for each component cycle.

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 adjustments 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 upward-adjusting 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) has 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 PDF attachments.

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. ASPHALT PAVEMENT REPORT

| Section & Street (Yr of Overlay "O" or Repairs "R") | Total SY Asphalt Pavement | SY Full-Depth Repair | Linear Footage Cracks | Parking Spaces | Parking Bays |
|--|---------------------------|----------------------|-----------------------|----------------|--------------|
| Community Center (2007 O) | 2,500 | 16 | 100 | 80 | 10 |
| Section 1 | | | | | |
| Key Court (2007 R) | 4,700 | 0 | 500 | 41 | 5 |
| Ball Drive (2007 R) | 4,300 | 4 | 1,000 | 34 | 3 |
| Flank Street (2007 R) | 2,800 | N/A | N/A | 80 | 7 |
| Random Court (2007 R) | 1,900 | 50 | 800 | 51 | 4 |
| Subtotal | 13,700 | 50 | 800 | 206 | 19 |
| Section 2 | | | | | |
| Redux Circle (2011 O) | 2,900 | 0 | 0 | 19 | 3 |
| Killman Drive (2007 R) | 5,700 | N/A | N/A | 54 | 7 |
| Field Lane (2007 R) | 2,600 | 44 | 2,000 | 16 | 3 |
| Boiling Lane (2007 R) | 1,500 | 12 | 500 | 23 | 2 |
| Master Court (2007 R) | 2,400 | 0 | 1,000 | 23 | 3 |
| Stone Way (2007 R) | 3,200 | 0 | 1,000 | 71 | 7 |
| Aspen Court (2011 O) | 4,300 | 0 | 0 | 103 | 9 |
| Folly Court (2011 O) | 1,500 | 0 | 0 | 35 | 4 |
| Subtotal | 24,100 | 56 | 4,500 | 344 | 38 |
| Section 3 | | | | | |
| Dream Sickle Court (2007 O) | 1,360 | 0 | 0 | 5 | 1 |
| Houton Drive (2007 O) | 5,000 | 0 | 0 | 44 | 6 |
| Smith Road (2007 O) | 1,900 | 0 | 0 | 33 | 2 |
| Grinding Court (2007 O) | 1,500 | 0 | 60 | 33 | 4 |
| Sport Court (2007 O) | 1,400 | 0 | 0 | 4 | 1 |
| Making Lane (2007 O) | 1,700 | 0 | 20 | 26 | 3 |
| Landing Court (2007 O) | 1,800 | 0 | 20 | 41 | 5 |
| Green Court (2007 O) | 2,100 | 0 | 0 | 37 | 4 |
| Sage Lane (2007 O) | 1,400 | 0 | 0 | 18 | 2 |
| Subtotal | 18,160 | 0 | 100 | 241 | 28 |
| Section 4 | | | | | |
| Reeger Drive (2007 R) | 2,500 | 16 | 500 | 9 | 1 |
| Kathy Court (2007 R) | 1,300 | N/A | N/A | 7 | 2 |
| Amy Court (2007 R) | 1,300 | N/A | N/A | 11 | 2 |
| Hunter Drive (2011 O) | 6,800 | 0 | 0 | 72 | 9 |
| Maximus Court (2011 O) | 1,800 | 0 | 0 | 56 | 5 |
| Key Landing (2011 O) | 800 | 0 | 0 | 5 | 1 |
| Subtotal | 14,500 | 16 | 500 | 160 | 20 |
| TOTALS | 72,960 | 206 | 7,500 | 1,031 | 115 |
| N/A Damage Significant, Mill & Replace Restore in 2012 Restore in 2015 | | | | | |

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
SAMPLE PLACE CAPITAL RESERVES
Sample Location, Virginia

COMPONENT DATA AND
ASSET REPLACEMENT SCHEDULE

TABLE 1
2012 Through 2031



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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 ASPHALT COMPONENTS | | | | | | | | | | | | | | | | |
| 1.1 | Asphalt Restoration Project, Community Center | 2,500 | SY | \$12.50 | \$31,250 | 18 | 2025 | 100% | \$45,892 | 2043 | 100% | \$78,128 | | | | The Community Center parking lot was restored in 2007 and, except for one area of damage, appears to be in like-new condition. The thickness of the pavement could not be visually determined. Restoration includes curb to curb full 2" milling and overlay replacement with 2" new compacted asphalt. Costs are based on a recent conversation with the Association's paving company regarding 2012 projected pricing. Core sampling should be used to determine the depth and condition of the sub base and pavement prior to restoration. Costs include re-striping, but not replacement of any inadequate sub-base. A full service life is dependent on preventative maintenance being performed as suggested in the Preventive Maintenance section of the report and scheduled in Items 1.2 and 1.3 below. See the Asphalt Pavement Report, Section 7, for additional details. |
| 1.2 | Asphalt Seal Coat, Community Center | 2,500 | SY | \$0.86 | \$2,150 | 6 | 2012 | 100% | \$2,150 | 2018 | 100% | \$2,567 | 2031 | 100% | \$3,770 | The pavement has, appropriately, not been seal coated since restoration. Seal coating will improve curb appeal after repairs are performed. We have scheduled seal coating projects every six years, except in the year of the pavement restoration project. Seal coating projects include striping and curb painting. This will be part of the community-wide seal coating project for uniformity and project management. |
| 1.3 | Asphalt Full-Depth Repair & Crack Filling Allowance | 1 | LS | \$10,000.00 | \$10,000 | 6 | 2012 | 10% | \$1,000 | 2018 | 50% | \$5,970 | 2025 | 100% | \$14,685 | Some deflected pavement, indicative of sub-base damage, is present at the accessible parking places. Minimal random longitudinal and transverse cracking is also present. Repairs (3" depth mill and replace) are essential in order to achieve the projected service life of the new overlay. Mill repairs and crack filling are scheduled progressively 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. |
| 1.4 | Asphalt Footpaths | 3,441 | SY | \$20.00 | \$68,820 | 6 | 2012 | 13% | \$8,947 | 2018 | 27% | \$22,187 | 2024 | 30% | \$29,436 | Asphalt footpaths generally 4' or 6' in width provide access between sections of the Community. One section of 8' in width is constructed adjacent to Gunston Boulevard. The footpaths range from new to poor. We observed tree root damage (including to newer pavement) and some uneven surfaces and minor subsidence of edges at many locations. Of concern are the very wide transverse shrinkage cracks that have occurred at many locations. Because of their width, a crack filling program should be undertaken to mitigate the trip hazard caused by these cracks. Much of the previously scheduled work was accomplished since the last site evaluation and the percentage of poor condition asphalt is much lower. We have scheduled sectional replacements and localized repairs near-term at 13% of the total square yardage. Of concern are areas where standing water may create a hazard in icy conditions, namely adjacent to the Section 4 tennis court and near a storm water drain near the adjacent condominiums, which should be corrected. |
| 2 CONCRETE COMPONENTS | | | | | | | | | | | | | | | | |
| 2.1 | Concrete Sidewalks & Steps | 3,354 | SF | \$6.60 | \$22,136 | 2 | 2014 | 1% | \$235 | 2016 | 1% | \$249 | 2018 | 1% | \$264 | Concrete sidewalks throughout the Community are generally 4' wide with wider sections constructed at accessible ramps. The thickness of the concrete could not be visually determined. Their condition is generally continuing good with a few settled sections causing tripping hazards observed, which are scheduled for near-term replacement. Bi-annual repairs are scheduled to address tripping hazards in a timely manner. Full replacement at one time is not appropriate or anticipated. Concrete repairs are scheduled to coincide with other concrete components to promote cost efficiencies. |
| 2.2 | Concrete Curbs & Gutters | 1,400 | LF | \$31.00 | \$43,400 | 2 | 2014 | 1% | \$460 | 2016 | 1% | \$488 | 2018 | 1% | \$518 | The driveways and parking bays are lined with standard-profile, cast-in-place, concrete curbs. The curbs are generally in continuing good condition with only a couple of damaged curbs observed. As curbs age, cracks, vehicle impact damage, and settlement should be anticipated. Bi-annual repairs are scheduled as full replacement at one time is not appropriate or anticipated. Concrete are scheduled to coincide with other concrete components to promote cost efficiencies. |
| 2.3 | Concrete Pool Deck | 10,139 | SF | \$11.50 | \$116,599 | 10 | 2016 | 10% | \$13,123 | 2026 | 20% | \$35,273 | 2036 | 10% | \$23,702 | The pool deck is cast-in-place concrete on grade and is generally in continuing good condition. A very few minor cracks in the deck were observed, but no major settlement. It is a cut and fill site, so some settlement in the future should be anticipated. Any additional cracks should be routed and sealed to prevent water infiltration into the deck and monitored for movement. Cyclic repairs are scheduled as full replacement of the entire deck at one time is not appropriate or anticipated. Concrete repairs are scheduled to coincide with other concrete components to promote cost efficiencies. |
| 3 SITE FEATURES | | | | | | | | | | | | | | | | |
| 3.1 | Community Entrance Sign | 1 | EA | \$13,500.00 | \$13,500 | 20 | 2030 | 100% | \$22,983 | 2050 | 100% | \$41,510 | | | | A new brick monument wall with square bollards and composite caps was constructed in 2010 at the corner of the Community entrance below the pool area. Carriage-style light fixtures are installed at the top of each of the two bollards and an LED message board is mounted on the wall. a brick planter wall is constructed at the front. It appears to be in like-new condition and reportedly functions well. |
| 3.2 | Flag Pole | 1 | EA | \$4,000.00 | \$4,000 | 30 | 2024 | 100% | \$5,703 | 2054 | 100% | \$13,843 | | | | An approximately 25' high aluminum flagpole is installed at the front of the Community Center. It appears to be in continuing good condition. |
| 3.3 | Wood Timber Retaining Walls | 1,082 | SF | \$36.00 | \$38,952 | 20 | 2014 | 100% | \$41,324 | 2034 | 100% | \$74,636 | | | | Pressure-treated wood retaining walls are constructed throughout the Community at grade differentials in three locations and at the Community Center tennis court. They range in condition from continuing good to fair. We observed beginning deflection of the tennis court wall. This should not be problematic for many years, but should be monitored for movement. |
| 3.4 | Modular Block Retaining Wall | 296 | SF | \$40.00 | \$11,840 | 40 | 2037 | 100% | \$24,790 | | | | | | | One modular block retaining wall is constructed adjacent to the footpath behind the Boiling Lane townhomes. It is in continuing good condition with no deflection or deterioration observed. Modular block retaining walls may have a very long service life if vegetation is properly controlled to prevent root damage. The walls may be rebuilt when necessary, new geotextile fabric installed, and the undamaged blocks re-used. |

Reserve Fund Plan for
SAMPLE PLACE CAPITAL RESERVES
Sample Location, Virginia

COMPONENT DATA AND
ASSET REPLACEMENT SCHEDULE

TABLE 1
2012 Through 2031



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| 3.5 | Tot Lot & Outdoor Furniture Allowance | 1 | LS | \$99,000.00 | \$99,000 | 15 | 2022 | 100% | \$133,048 | 2037 | 100% | \$207,284 | | | | The tot lot at the Community Center has been removed and the play module relocated to one of the other tot lots. Three other tot lots are constructed within the Community. Tot lot equipment includes composite post play modules and swing sets, cable climbing structures, wood borders, split rail fencing, composite and metal or wood and metal benches and trash receptacles, and signs. All equipment appears to be in good condition. Periodic pressure-washing of equipment will maintain appearance. 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. |
| 3.6 | Community Center Tennis Court Restoration | 1 | EA | \$25,000.00 | \$25,000 | 20 | 2018 | 100% | \$29,851 | 2038 | 100% | \$53,915 | | | | The single tennis court is built on a cut and fill site and appears to be in improved condition with repairs to the major settlement cracking. Some additional cracking has occurred at this location, and the net post footings are deflected. Repairs are scheduled in 3.7 below including addressing these deficiencies. Since net tension is a common cause of court damage, homeowners should be advised that tension on the nets should be released when not in use, and nets should not be over-tensioned when in use. The full service life of the tennis courts is dependent on preventative maintenance being performed as outlined in the Preventive Maintenance section of the report. |
| 3.7 | Community Center Tennis Court Color Coat | 1 | EA | \$6,500.00 | \$6,500 | 5 | 2013 | 100% | \$6,695 | 2023 | 100% | \$8,998 | 2029 | 100% | \$10,744 | Though the tennis court color coat appears to be in otherwise currently good condition, we have scheduled a near-term project to address the deficiencies mentioned above. Tennis court color coat seals the surface of the tennis courts and helps prevent water infiltration into the court structure. Color coat generally has a five-year service life. |
| 3.8 | Community Center Tennis Court Fencing | 360 | LF | \$28.75 | \$10,350 | 35 | 2028 | 100% | \$16,609 | 2063 | 100% | \$46,735 | | | | Ten-foot-high, vinyl-coated chain link fencing is installed around the perimeter of the tennis courts. Though it appears to be in generally continuing good, serviceable condition, the coating on the vertical and some horizontal posts is peeling and unsightly. This does not impact the serviceability, but is somewhat unsightly. Remediation techniques should be investigated to improve appearance. |
| 3.9 | Section 8B Tennis Court Restoration | 2 | EA | \$25,000.00 | \$50,000 | 20 | 2019 | 100% | \$61,494 | 2039 | 100% | \$111,064 | | | | This tennis court appears to be in continuing good condition and is constructed on undisturbed soils, which should not foster settlement. No deflection or settlement cracking was observed. No cracks were observed at the base of the net post footings. Since net tension is the most common cause of court damage, homeowners should be advised that tension on the nets should be released when not in use, and nets should not be over-tensioned when in use. The full service life of the tennis courts is dependent on preventative maintenance being performed as outlined in the Preventive Maintenance section of the report. |
| 3.10 | Section 8B Tennis Court Color Coat | 2 | EA | \$5,500.00 | \$11,000 | 5 | 2014 | 100% | \$11,670 | 2024 | 100% | \$15,683 | 2029 | 100% | \$18,181 | The tennis court color coat appears to be in somewhat faded condition, no surface deterioration was observed. Striping appears to be new. Tennis court color coat seals the surface of the tennis courts and helps prevent water infiltration into the court structure. Color coat generally has a five-year service life. |
| 3.11 | Section 8B Tennis Court Fencing | 480 | LF | \$28.75 | \$13,800 | 30 | 2019 | 100% | \$16,972 | 2049 | 100% | \$41,196 | | | | Ten-foot-high, vinyl-coated chain link fencing is installed around the perimeter of the tennis court. It appears to be in continuing good condition but some deflection of the posts was observed, most likely from wind pressure. Many of the fence post footings are displaced and elevated above the surface elevation. This should be addressed during the upcoming color coat project. |
| 3.12 | Multi-Purpose Court Restoration | 1 | LS | \$7,000.00 | \$7,000 | 20 | 2031 | 100% | \$12,275 | 2051 | 100% | \$22,169 | | | | The multi-purpose court is constructed on undisturbed soil at Gunston Boulevard. It appears to be in generally like-new condition since its 2011 restoration. No settlement cracking, areas of ponding water, or deterioration was observed. It appears that drainage of the area has been improved around the perimeter of the court by the installation of swales, which prevent water from ponding on the surface as was previously observed. |
| 3.13 | Multi-Purpose Court Color Coat | 1 | LS | \$3,500.00 | \$3,500 | 7 | 2018 | 100% | \$4,179 | 2025 | 100% | \$5,140 | 2036 | 100% | \$7,115 | The multi-purpose color coat is in like-new condition having been replaced in the recent court restoration. |
| 3.14 | Basketball Goals | 2 | EA | \$2,500.00 | \$5,000 | 30 | 2031 | 100% | \$8,768 | 2061 | 100% | \$21,281 | | | | Two basketball goals mounted on metal standards are installed the multi-purpose court. They appear to be in continuing good condition. |
| 3.15 | Storm Water Drainage System Allowance | 1 | LS | \$17,500.00 | \$17,500 | 7 | 2015 | 100% | \$19,123 | 2022 | 100% | \$23,519 | 2029 | 100% | \$28,925 | Storm water drainage is provided by concrete yard drains, curb drop inlets, underground structures, riprap flumes, a storm water retention (wet) pond, and a storm water detention pond (dry). The ponds are created by earthen impoundment structures with a concrete overflow risers. All observable components appear to be in continuing good condition. Though storm water drainage systems are a long life component and catastrophic failure is not anticipated, it is prudent to plan for localized repairs and repairs to ancillary damage as the system ages. This category may also be used to address localized erosion issues such as those mentioned in Component 1.4 above. |
| 3.16 | Pond, Structures, & Evaluations Allowance | 1 | LS | \$40,000.00 | \$40,000 | 20 | 2012 | 100% | \$40,000 | 2032 | 100% | \$72,244 | | | | There are a number of pond maintenance issues such as shoreline stabilization, chemical applications for weed control, bacterial improvement to control algae, surface aerators, diffusers, dredging, beaver control, and mosquito control, all of which may be required at some time over the life of a pond. Significant maintenance and liability costs may be associated ponds. We understand that the retention pond overflow riser has had repairs in the past. The wet pond is reportedly live-stream-fed, which may mean that sediment may become an issue in the future. Sedimentation diminishes capacity over time and may necessitate dredging, which can be an expensive undertaking. We recommend that a bathometric study be performed to establish baseline sedimentation levels and costing for a long-term master plan incorporating best maintenance practices. The Board should consider the construction of a safety fence around the perimeter of the pond to help prevent entry into the water by children and to help stop debris from entering the area. This was originally scheduled for 2008, but has now been deferred to 2012. |

Reserve Fund Plan for
POTOMAC PLACE CAPITAL RESERVES
Sample Location, Virginia

COMPONENT DATA AND
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| 3.17 | Tree & Major Landscaping Allowance | 1 | LS | \$34,000.00 | \$34,000 | 5 | 2012 | 100% | \$34,000 | 2017 | 50% | \$19,708 | 2022 | 100% | \$45,693 | Management requested that this budget be included for periodic management of large scale landscaping. It has been significantly increased to address anticipated higher costs as the trees become older and more problematic. |
| 3.18 | Cemetery Assets | 1 | LS | \$2,900.00 | \$2,900 | 15 | 2020 | 100% | \$3,674 | 2035 | 100% | \$5,723 | | | | The June Johnson Private Cemetery, located at Amy Court in Section 4, is surrounded by split rail fencing, which appears to be in continuing good condition. An engraved metal plaque is attached to the right post and is mounted on a plywood backing. |
| 3.19 | Solar Lighting System | 1 | LS | \$27,600.00 | \$27,600 | 15 | 2022 | 100% | \$37,092 | 2037 | 100% | \$57,788 | | | | The Making Lane tot lot is illuminated by a solar-powered system of several poles with fluorescent tube fixtures. This system was installed in approximately 2007. It appears to be in good condition and is reportedly functioning well. The cost is based on the actual installation plus inflation. |
| 4 Community CENTER ARCHITECTURAL FEATURES | | | | | | | | | | | | | | | | |
| 4.1 | Re-Roofing Project | 4,500 | SF | \$4.30 | \$19,350 | 20 | 2016 | 100% | \$21,779 | 2036 | 100% | \$39,335 | | | | The approximate 9/12 pitched gable roofs have asphalt shingle roof coverings. Ventilation is achieved through soffit vents, ridge vents, and gable vents. We observed no deteriorated shingles or deflection of the roof sheathing. Some areas have received repairs with new shingles. Pre-finished aluminum gutters and downspouts are installed at all proper roof terminations. Downspouts appear to be properly directed away from building foundations. All components appear to be in continuing good condition and, subsequently, we have increased the service life. Re-roofing projects include replacement of shingles, deteriorated sheathing, and gutters and downspouts. |
| 4.2 | Vinyl Siding | 6,000 | SF | \$6.50 | \$39,000 | 30 | 2024 | 100% | \$55,605 | 2054 | 100% | \$134,967 | | | | Vinyl siding provides the primary building envelope, which appears to be in continuing good condition. Manufacturers represent that this material should provide a 35 year service life, but our observations indicate that this is optimistic. 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. Most trim is metal clad and is included in the restoration. |
| 4.3 | Windows | 600 | SF | \$40.00 | \$24,000 | 30 | 2024 | 100% | \$34,218 | 2054 | 100% | \$83,057 | | | | The windows of the Community Center are double-hung, aluminum-frame, and appear to be in continuing good condition. No window flashing leaks were reported or observed. |
| 4.4 | Wood Deck | 168 | SF | \$35.00 | \$5,880 | 30 | 2024 | 100% | \$8,383 | 2039 | 50% | \$6,531 | | | | The deck at the rear of the Community Center is constructed of pressure-treated wood structure and composite wood decking installed in 2009. The supporting post and joists appear to be in continuing good condition. The next replacement cycle includes the structure and decking at 100%. |
| 4.5 | Exterior Doors | 10 | EA | \$650.00 | \$6,500 | 30 | 2024 | 100% | \$9,267 | 2054 | 100% | \$22,495 | | | | This category includes all exterior doors of the Community Center. Most doors appear to be in generally continuing good condition. Though we have scheduled replacement all at once, doors are generally replaced as individual units become damaged or deteriorated. Doors in a wet or chlorine environment generally have a shorter than average service life. |
| 4.6 | Basement Waterproofing Allowance | 1 | LS | \$10,000.00 | \$10,000 | 20 | 2017 | 100% | \$11,593 | 2037 | 100% | \$20,938 | | | | We understand that there have been instances of water intrusion through below-grade walls of the lower levels, such as in the racquetball court area. Remediation involves excavation at the exterior wall, cleaning, and re-application of a waterproof membrane. |
| 5 Community CENTER INTERIORS | | | | | | | | | | | | | | | | |
| 5.1 | Interior Doors | 16 | EA | \$525.00 | \$8,400 | 40 | 2034 | 100% | \$16,095 | | | | | | | This category includes the interior doors of the Community Center. All doors appear to be in generally continuing good condition. Doors are generally replaced as individual units become damaged or deteriorated. Doors in a wet or chlorine environment generally have a shorter than average service life. |
| 5.2 | Carpeting | 192 | SY | \$45.00 | \$8,640 | 10 | 2018 | 100% | \$10,317 | 2028 | 100% | \$13,865 | 2038 | 100% | \$18,633 | The carpet throughout the Community Center appears to be in generally good, fresh-looking condition having been replaced in 2008. Replacement costs and timing are generally discretionary. The costs used in the study are for a high-quality, commercial carpet and are based on the recent installation cost. |
| 5.3 | Vinyl Flooring | 430 | SF | \$7.20 | \$3,096 | 25 | 2019 | 100% | \$3,808 | 2044 | 100% | \$7,972 | | | | Resilient vinyl flooring tiles are installed at the upstairs restrooms, the kitchen, and the central area of the shower rooms. All flooring appears to be serviceable condition with no major deterioration observed. |
| 5.4 | Ceramic Tile | 420 | SF | \$14.00 | \$5,880 | 25 | 2019 | 100% | \$7,232 | 2044 | 100% | \$15,141 | | | | The floors and shower walls of the shower rooms are grouted ceramic tile. All tile that could be observed appears to be in continuing good condition. |
| 5.5 | Dry Deck Flooring | 284 | SF | \$6.60 | \$1,874 | 7 | 2013 | 100% | \$1,931 | 2020 | 100% | \$2,374 | 2027 | 100% | \$2,920 | The non-slip surface of the shower rooms is provided by molded vinyl tiles. They appear to be in continuing good condition. |
| 5.6 | Fitness Equipment | 1 | LS | \$32,000.00 | \$32,000 | 10 | 2012 | 3% | \$960 | 2017 | 50% | \$18,548 | 2022 | 50% | \$21,503 | Exercise equipment includes a treadmill, two stationery bicycles, an elliptical trainer, a stair climber, and a new three-place gym. All equipment appears to be in continuing good condition. Replacements are scheduled at 50% of the value every five years. |
| 5.7 | Office Furnishings & Equipment Allowance | 1 | LS | \$35,000.00 | \$35,000 | 10 | 2015 | 50% | \$19,123 | 2020 | 25% | \$11,084 | 2025 | 50% | \$25,699 | This category includes computers, printers, copier/printer, file cabinets, desks, chairs, work station, bookshelves, and ID camera and cart. We have budgeted an allowance for partial replacements throughout the study period, including computer replacements every five years. |

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| 5.8 | Furnishings Allowance | 1 | LS | \$17,500.00 | \$17,500 | 10 | 2017 | 50% | \$10,144 | 2022 | 50% | \$11,759 | 2027 | 50% | \$13,632 | This category includes valance and horizontal blind window treatments, sofas, chairs, a dining table and chairs, coffee, parsons, and end tables, a big screen television, a boom box, floor and table lamps, folding tables and chairs, and planters. All furnishings appear to be in continuing good condition. We have budgeted an allowance for partial replacements throughout the study period. |
| 5.9 | Racquetball Room Floor Re-Finishing | 800 | SF | \$8.60 | \$6,880 | 15 | 2025 | 100% | \$10,104 | 2040 | 100% | \$15,741 | | | | The 20' by 40' racquetball court has what appears to be hardwood floating flooring installed. It appears to be in generally continuing good condition and is scheduled for eventual refinishing. |
| 5.10 | Kitchen Modernization | 1 | LS | \$17,500.00 | \$17,500 | 25 | 2019 | 100% | \$21,523 | 2044 | 100% | \$45,064 | | | | Kitchen components include wall-mounted and base-mounted millwork and countertops, a microwave oven, a refrigerator with icemaker, a dishwasher, and a double stainless steel sink. All components appear to be in good, serviceable condition. We understand that a new refrigerator was recently purchased. |
| 6 Community CENTER MEP | | | | | | | | | | | | | | | | |
| 6.1 | HVAC Split-System #1 | 1 | EA | \$13,800.00 | \$13,800 | 15 | 2020 | 100% | \$17,481 | 2035 | 100% | \$27,235 | | | | This unit is a replacement Carrier Gemini, electric, Model #38ARQ008, Serial No. 1405G20134, 7-1/2 ton, split system, heat pump and is reportedly operating properly. |
| 6.2 | HVAC Split-System #2 | 1 | EA | \$5,200.00 | \$5,200 | 15 | 2014 | 100% | \$5,517 | 2034 | 100% | \$9,964 | | | | This unit is an original Carrier, 2-1/2 ton, electric, Model #0699#Z4821, split system, heat pump, which has exceeded its service life. We have re-scheduled it for near-term replacement. |
| 6.3 | HVAC Split-System #3 | 1 | EA | \$13,800.00 | \$13,800 | 20 | 2026 | 100% | \$20,874 | 2041 | 100% | \$32,521 | | | | This is a 2011 replacement unit. It is a Trane, 7-1/2 ton, electric, Model #TWA090D30RAA, split system, heat pump and is reportedly operating properly. |
| 6.4 | Water Heater | 1 | EA | \$1,725.00 | \$1,725 | 20 | 2014 | 100% | \$1,830 | 2034 | 100% | \$3,305 | | | | Domestic hot water is provided to the shower rooms by a Rheem, residential, Serial #0293802180, 80-gallon, electric, water heater. The unit may have been in service for many years but appears to be in continuing good condition. |
| 6.5 | Electrical Modernization Allowance | 1 | LS | \$36,000.00 | \$36,000 | 35 | 2029 | 100% | \$59,503 | 2064 | 100% | \$167,432 | | | | This category includes double-headed, hard-wired with battery backup emergency lights, exit signs, recessed and ceiling-mounted interior and exterior light fixtures, wall-mounted light bars at all sinks, fluorescent fixtures, racquetball court fixtures, ceiling fans, building-mounted small and large carriage exterior fixtures, flood lights and one security fixture, exhaust fans, and electrical distribution panels including Cutler-Hammer 200 amp load centers (2), Cutler Hammer 200 amp disconnect, a 120 amp load center, and a GE 300 amp motor control. All lighting and equipment appears to be in continuing good condition. Replacement timing and cost is generally discretionary. |
| 6.6 | Plumbing Modernization Allowance | 1 | LS | \$25,000.00 | \$25,000 | 35 | 2029 | 100% | \$41,321 | 2064 | 100% | \$116,272 | | | | This category consists of sinks, commodes, urinals, showers, and partitions of the shower rooms and the restrooms, as well as the drinking fountains. All components appear to be in good, serviceable condition. The plumbing modernization cost includes limited piping replacement. |
| 7 POOL FACILITY | | | | | | | | | | | | | | | | |
| 7.1 | Pool Restoration Project | 3,633 | SF | \$52.00 | \$188,916 | 30 | 2026 | 100% | \$285,752 | 2056 | 100% | \$693,596 | | | | The swimming pools are in-ground, cast-in-place concrete structures built on a cut and fill site. Most outdoor pools of this type, in this area, require a major renovation between twenty-five and forty years of age. The restoration might include beam re-construction, plumbing replacement/remediation, removal and replacement of the white coat, waterline tiles, coping, and sealants. It is prudent to plan for structural renovation now because of the large expense involved if required. This project should also include ADA upgrades and modified, dual-drain systems for safety. No current problems were reported with the main and wading pools. |
| 7.2 | Pool White Coat | 3,655 | SF | \$7.30 | \$26,682 | 7 | 2014 | 100% | \$28,306 | 2021 | 100% | \$34,813 | 2033 | 100% | \$49,635 | The white coat was not observed as the pool was covered for the season. It was previously replaced in 2007 and should achieve a few more years of service life. White coating seals the pool surface and helps prevent water infiltration into the structure of the pool. White coat generally has a service life of five to seven years. |
| 7.3 | Pool Coping | 310 | LF | \$32.00 | \$9,920 | 3 | 2013 | 5% | \$511 | 2016 | 5% | \$558 | 2019 | 5% | \$610 | Standard cast stone bullnose coping tiles are installed around the perimeter of the pools but were not observed as the pools were covered for the season. We have scheduled an allowance throughout the study period to address replacements of cracked, loose, or "hollow" tiles. The soft sealant between the coping and the pool deck appears to be in generally continuing good condition. Diligent maintenance of the soft joint sealant will prevent water infiltration behind the pool shell, which, if not controlled, will cause freeze/thaw damage. |
| 7.4 | Pool Fencing | 1 | LS | \$12,000.00 | \$12,000 | 25 | 2016 | 100% | \$13,506 | 2041 | 100% | \$28,279 | | | | 471 linear feet of vinyl coated, six or seven-foot-high, chain link fencing is constructed at the perimeter of the swimming pool deck and around the tot lot area. 50 linear feet of 8' high fencing is constructed near the tennis court end of the pool deck, and 35 linear feet of 3.5-foot-high fencing separates the wading pool from the main pool. Though it appears to be in generally continuing good, serviceable condition, the coating on the vertical and some horizontal posts is peeling and unsightly. This does not impact the serviceability, but is somewhat unsightly. Remediation techniques should be investigated to improve appearance. Replacement is scheduled to coincide with the pool restoration project. |

Reserve Fund Plan for
POTOMAC PLACE CAPITAL RESERVES
 Sample Location, Virginia

**COMPONENT DATA AND
 ASSET REPLACEMENT SCHEDULE**

TABLE 1
 2012 Through 2031



MASON & MASON
 CAPITAL RESERVE ANALYSTS, INC.

www.masonreserves.com

800-776-6980

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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 |
| 7.5 | Metal Handrailing | 133 | LF | \$80.00 | \$10,640 | 50 | 2045 | 100% | \$28,221 | | | | | | | Painted, heavy-gauge metal handrailings are constructed at the spa, at the wood deck, at the top of some retaining walls, and at the front entrance of the Community Center. The handrailings are generally in good condition with a minor amount of peeling paint and rust observed. With proper, diligent maintenance, including cleaning of peeling paint, priming, and painting, sealing bases, and repairing deteriorated areas by welding replacement parts, metal railings should provide a long service life. |
| 7.6 | Pool Furniture Allowance | 1 | LS | \$29,000.00 | \$29,000 | 10 | 2017 | 50% | \$16,809 | 2022 | 50% | \$19,487 | 2027 | 50% | \$22,591 | This category includes aluminum-frame and vinyl webbing lounges, large and small chairs, and trash receptacles, fiberglass and metal or acrylic and metal tables, umbrellas, and fiberglass and metal picnic tables. All furniture was stored for the season and appears to be in generally continuing good condition. A small allowance is budgeted near-term for minor replacements with a larger allowance budgeted throughout the study period to replace a percentage of the furniture as necessary. Re-webbing of damaged pieces periodically may extend the service life of the entire set of furniture. We understand that some table tops have been repainted. |
| 7.7 | Pool Perimeter Equipment | 1 | LS | \$8,000.00 | \$8,000 | 30 | 2026 | 100% | \$12,101 | 2056 | 100% | \$29,372 | | | | Pool perimeter equipment consists of one fixed lifeguard stand, a new, moveable lifeguard stand, three stainless steel ladders, and one stainless steel handrail. Most components appear to be in continuing good condition and are scheduled for replacement coinciding with the pool restoration project. The remaining lifeguard stand has expanded rust at the base, which will require remediation in order to achieve the full service life and improve appearance. |
| 7.8 | Fifteen-Year Pool Pump & Filtration Equipment | 1 | LS | \$15,000.00 | \$15,000 | 15 | 2015 | 50% | \$8,195 | 2030 | 100% | \$25,536 | 2045 | 100% | \$39,785 | The main pool is served by a 7-1/2hp 2010 replacement metal pump and strainer assembly and is filtered by three original Triton TR-140, permanent media filters. The equipment is in serviceable condition and should provide several more years of service. |
| 7.9 | Ten-Year Pool Pump, Filtration, & Chlorination Equipment | 1 | LS | \$2,500.00 | \$2,500 | 10 | 2015 | 100% | \$2,732 | 2025 | 100% | \$3,671 | 2035 | 100% | \$4,934 | The wading pool is served by a 3/4hp plastic pump and strainer assembly and is filtered by one Triton TR-60, permanent media filter. Chlorination is accomplished by a Rolochem Model RC 100 SC and a FlexFlo Model A-100-N chemical feeder. The equipment is in serviceable condition and should provide a few more years of service. |
| 7.10 | Pool Area Brick Retaining Walls & Features | 1 | LS | \$25,000.00 | \$25,000 | 10 | 2018 | 100% | \$29,851 | 2028 | 100% | \$40,118 | 2038 | 100% | \$53,915 | Brick and mortar retaining walls and planters are constructed at grade differentials at the swimming pool. Engineered repairs have greatly improved the condition of the walls with the installation of control joints and tuckpointing damaged areas. Some additional minor cracking was observed, which should be addressed with on-going repairs. With periodic repairs and tuckpointing performed at 10-year intervals the walls should provide a long service life. |
| 7.11 | Pool Area Brick Pavers | 2,064 | SF | \$35.00 | \$72,240 | 40 | 2034 | 100% | \$138,419 | | | | | | | Mortared brick pavers provide the pedestrian surface adjacent to the pool area at the picnic area. The system appears to be in generally continuing good condition with a minimal amount of localized deterioration observed. |
| 7.12 | Pool Covers | 3,800 | SF | \$3.75 | \$14,250 | 10 | 2013 | 100% | \$14,678 | 2023 | 100% | \$19,725 | 2033 | 100% | \$26,509 | The pools were covered for the season with nylon mesh covers, which appear to be in generally poor condition with extensive fading, deterioration, holes, and tears. Replacement is scheduled near-term. |

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
POTOMAC PLACE CAPITAL RESERVES
 Sample Location, Virginia

CALENDAR OF EXPENDITURES
TABLE 2
 2012 Through 2031

| YEAR | COMPONENT NO. | COMPONENT | PRESENT COST 2012 | FUTURE COST (INFLATED) | TOTAL ANNUAL EXPENDITURES | ACTION |
|-------------|---------------|---|----------------------|---------------------------|------------------------------|--------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2012 | | | | | 2012 | |
| | 1.2 | Asphalt Seal Coat, Community Center | \$2,150 | \$2,150 | TOTAL EXPENDITURES | |
| | 1.3 | Asphalt Full-Depth Repair & Crack Filling Allowan | \$1,000 | \$1,000 | | |
| | 1.4 | Asphalt Footpaths | \$8,947 | \$8,947 | | |
| | 3.16 | Pond, Structures, & Evaluations Allowance | \$40,000 | \$40,000 | | |
| | 3.17 | Tree & Major Landscaping Allowance | \$34,000 | \$34,000 | | |
| | 5.6 | Fitness Equipment | \$960 | \$960 | | |
| | | | | | \$87,057 | |
| 2013 | | | | | 2013 | |
| | 3.7 | Community Center Tennis Court Color Coat | \$6,500 | \$6,695 | TOTAL EXPENDITURES | |
| | 5.5 | Dry Deck Flooring | \$1,874 | \$1,931 | | |
| | 7.3 | Pool Coping | \$496 | \$511 | | |
| | 7.12 | Pool Covers | \$14,250 | \$14,678 | | |
| | | | | | \$23,814 | |
| 2014 | | | | | 2014 | |
| | 2.1 | Concrete Sidewalks & Steps | \$221 | \$235 | TOTAL EXPENDITURES | |
| | 2.2 | Concrete Curbs & Gutters | \$434 | \$460 | | |
| | 3.3 | Wood Timber Retaining Walls | \$38,952 | \$41,324 | | |
| | 3.10 | Section4 Tennis Court Color Coat | \$11,000 | \$11,670 | | |
| | 6.2 | HVAC Split-System #2 | \$5,200 | \$5,517 | | |
| | 6.4 | Water Heater | \$1,725 | \$1,830 | | |
| | 7.2 | Pool White Coat | \$26,682 | \$28,306 | | |
| | | | | | \$89,342 | |
| 2015 | | | | | 2015 | |
| | 3.15 | Storm Water Drainage System Allowance | \$17,500 | \$19,123 | TOTAL EXPENDITURES | |
| | 5.7 | Office Furnishings & Equipment Allowance | \$17,500 | \$19,123 | | |
| | 7.8 | Fifteen-Year Pool Pump & Filtration Equipment | \$7,500 | \$8,195 | | |
| | 7.9 | Ten-Year Pool Pump, Filtration, & Chlorination Eq | \$2,500 | \$2,732 | | |
| | | | | | \$49,173 | |
| 2016 | | | | | 2016 | |
| | 2.1 | Concrete Sidewalks & Steps | \$221 | \$249 | TOTAL EXPENDITURES | |
| | 2.2 | Concrete Curbs & Gutters | \$434 | \$488 | | |
| | 2.3 | Concrete Pool Deck | \$11,660 | \$13,123 | | |
| | 4.1 | Re-Roofing Project | \$19,350 | \$21,779 | | |
| | 7.3 | Pool Coping | \$496 | \$558 | | |
| | 7.4 | Pool Fencing | \$12,000 | \$13,506 | | |
| | | | | | \$49,704 | |
| 2017 | | | | | 2017 | |
| | 3.17 | Tree & Major Landscaping Allowance | \$17,000 | \$19,708 | TOTAL EXPENDITURES | |
| | 4.6 | Basement Waterproofing Allowance | \$10,000 | \$11,593 | | |
| | 5.6 | Fitness Equipment | \$16,000 | \$18,548 | | |
| | 5.8 | Furnishings Allowance | \$8,750 | \$10,144 | | |
| | 7.6 | Pool Furniture Allowance | \$14,500 | \$16,809 | | |
| | | | | | \$76,802 | |

Reserve Fund Plan for
POTOMAC PLACE CAPITAL RESERVES
 Sample Location, Virginia

CALENDAR OF EXPENDITURES
TABLE 2
 2012 Through 2031

| YEAR | COMPONENT NO. | COMPONENT | PRESENT COST 2012 | FUTURE COST (INFLATED) | TOTAL ANNUAL EXPENDITURES | ACTION |
|-------------|---------------|---|----------------------|---------------------------|------------------------------|-----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2018 | | | | | 2018 | |
| | 1.2 | Asphalt Seal Coat, Community Center | \$2,150 | \$2,567 | TOTAL EXPENDITURES | |
| | 1.3 | Asphalt Full-Depth Repair & Crack Filling Allowan | \$5,000 | \$5,970 | | |
| | 1.4 | Asphalt Footpaths | \$18,581 | \$22,187 | | |
| | 2.1 | Concrete Sidewalks & Steps | \$221 | \$264 | | |
| | 2.2 | Concrete Curbs & Gutters | \$434 | \$518 | | |
| | 3.6 | Community Center Tennis Court Restoration | \$25,000 | \$29,851 | | |
| | 3.13 | Multi-Purpose Court Color Coat | \$3,500 | \$4,179 | | |
| | 5.2 | Carpeting | \$8,640 | \$10,317 | | |
| | 7.10 | Pool Area Brick Retaining Walls & Features | \$25,000 | \$29,851 | | |
| | | | | | | \$105,706 |
| 2019 | | | | | 2019 | |
| | 3.9 | Section 4 Tennis Court Restoration | \$50,000 | \$61,494 | TOTAL EXPENDITURES | |
| | 3.11 | Section 4 Tennis Court Fencing | \$13,800 | \$16,972 | | |
| | 5.3 | Vinyl Flooring | \$3,096 | \$3,808 | | |
| | 5.4 | Ceramic Tile | \$5,880 | \$7,232 | | |
| | 5.10 | Kitchen Modernization | \$17,500 | \$21,523 | | |
| | 7.3 | Pool Coping | \$496 | \$610 | | |
| | | | | | \$111,638 | |
| 2020 | | | | | 2020 | |
| | 2.1 | Concrete Sidewalks & Steps | \$221 | \$280 | TOTAL EXPENDITURES | |
| | 2.2 | Concrete Curbs & Gutters | \$434 | \$550 | | |
| | 3.18 | Cemetery Assets | \$2,900 | \$3,674 | | |
| | 5.5 | Dry Deck Flooring | \$1,874 | \$2,374 | | |
| | 5.7 | Office Furnishings & Equipment Allowance | \$8,750 | \$11,084 | | |
| | 6.1 | HVAC Split-System #1 | \$13,800 | \$17,481 | | |
| | | | | | \$35,444 | |
| 2021 | | | | | 2021 | |
| | 7.2 | Pool White Coat | \$26,682 | \$34,813 | TOTAL EXPENDITURES | |
| | | | | | \$34,813 | |
| 2022 | | | | | 2022 | |
| | 2.1 | Concrete Sidewalks & Steps | \$221 | \$297 | TOTAL EXPENDITURES | |
| | 2.2 | Concrete Curbs & Gutters | \$434 | \$583 | | |
| | 3.5 | Tot Lot & Outdoor Furniture Allowance | \$99,000 | \$133,048 | | |
| | 3.15 | Storm Water Drainage System Allowance | \$17,500 | \$23,519 | | |
| | 3.17 | Tree & Major Landscaping Allowance | \$34,000 | \$45,693 | | |
| | 3.19 | Solar Lighting System | \$27,600 | \$37,092 | | |
| | 5.6 | Fitness Equipment | \$16,000 | \$21,503 | | |
| | 5.8 | Furnishings Allowance | \$8,750 | \$11,759 | | |
| | 7.3 | Pool Coping | \$496 | \$667 | | |
| | 7.6 | Pool Furniture Allowance | \$14,500 | \$19,487 | | |
| | | | | | \$293,648 | |
| 2023 | | | | | 2023 | |
| | 3.7 | Community Center Tennis Court Color Coat | \$6,500 | \$8,998 | TOTAL EXPENDITURES | |
| | 7.12 | Pool Covers | \$14,250 | \$19,725 | | |
| | | | | | \$28,723 | |
| 2024 | | | | | 2024 | |
| | 1.4 | Asphalt Footpaths | \$20,646 | \$29,436 | TOTAL EXPENDITURES | |
| | 2.1 | Concrete Sidewalks & Steps | \$221 | \$316 | | |
| | 2.2 | Concrete Curbs & Gutters | \$434 | \$619 | | |
| | 3.2 | Flag Pole | \$4,000 | \$5,703 | | |
| | 3.10 | Section 8B Tennis Court Color Coat | \$11,000 | \$15,683 | | |
| | 4.2 | Vinyl Siding | \$39,000 | \$55,605 | | |
| | 4.3 | Windows | \$24,000 | \$34,218 | | |
| | 4.4 | Wood Deck | \$5,880 | \$8,383 | | |
| | 4.5 | Exterior Doors | \$6,500 | \$9,267 | | |
| | | | | | | \$159,231 |

Reserve Fund Plan for
POTOMAC PLACE CAPITAL RESERVES
 Sample Location, Virginia

CALENDAR OF EXPENDITURES
TABLE 2
 2012 Through 2031

| YEAR | COMPONENT NO. | COMPONENT | PRESENT COST 2012 | FUTURE COST (INFLATED) | TOTAL ANNUAL EXPENDITURES | ACTION |
|-------------|---------------|---|----------------------|---------------------------|------------------------------|-------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2025 | | | | | | 2025 |
| | 1.1 | Asphalt Restoration Project, Community Center | \$31,250 | \$45,892 | TOTAL EXPENDITURES | |
| | 1.3 | Asphalt Full-Depth Repair & Crack Filling Allowan | \$10,000 | \$14,685 | | |
| | 3.13 | Multi-Purpose Court Color Coat | \$3,500 | \$5,140 | | |
| | 5.7 | Office Furnishings & Equipment Allowance | \$17,500 | \$25,699 | | |
| | 5.9 | Racquetball Room Floor Re-Finishing | \$6,880 | \$10,104 | | |
| | 7.3 | Pool Coping | \$496 | \$728 | | |
| | 7.9 | Ten-Year Pool Pump, Filtration, & Chlorination Eq | \$2,500 | \$3,671 | | |
| | | | | | \$105,919 | |
| 2026 | | | | | | 2026 |
| | 2.1 | Concrete Sidewalks & Steps | \$221 | \$335 | TOTAL EXPENDITURES | |
| | 2.2 | Concrete Curbs & Gutters | \$434 | \$656 | | |
| | 2.3 | Concrete Pool Deck | \$23,320 | \$35,273 | | |
| | 6.3 | HVAC Split-System #3 | \$13,800 | \$20,874 | | |
| | 7.1 | Pool Restoration Project | \$188,916 | \$285,752 | | |
| | 7.7 | Pool Perimeter Equipment | \$8,000 | \$12,101 | | |
| | | | | | \$354,991 | |
| 2027 | | | | | | 2027 |
| | 3.17 | Tree & Major Landscaping Allowance | \$17,000 | \$26,485 | TOTAL EXPENDITURES | |
| | 5.5 | Dry Deck Flooring | \$1,874 | \$2,920 | | |
| | 5.6 | Fitness Equipment | \$16,000 | \$24,927 | | |
| | 5.8 | Furnishings Allowance | \$8,750 | \$13,632 | | |
| | 7.6 | Pool Furniture Allowance | \$14,500 | \$22,591 | | |
| | | | | | \$90,556 | |
| 2028 | | | | | | 2028 |
| | 2.1 | Concrete Sidewalks & Steps | \$221 | \$355 | TOTAL EXPENDITURES | |
| | 2.2 | Concrete Curbs & Gutters | \$434 | \$696 | | |
| | 3.8 | Community Center Tennis Court Fencing | \$10,350 | \$16,609 | | |
| | 5.2 | Carpeting | \$8,640 | \$13,865 | | |
| | 7.3 | Pool Coping | \$496 | \$796 | | |
| | 7.10 | Pool Area Brick Retaining Walls & Features | \$25,000 | \$40,118 | | |
| | | | | | \$72,439 | |
| 2029 | | | | | | 2029 |
| | 3.7 | Community Center Tennis Court Color Coat | \$6,500 | \$10,744 | TOTAL EXPENDITURES | |
| | 3.10 | Section 8B Tennis Court Color Coat | \$11,000 | \$18,181 | | |
| | 3.15 | Storm Water Drainage System Allowance | \$17,500 | \$28,925 | | |
| | 6.5 | Electrical Modernization Allowance | \$36,000 | \$59,503 | | |
| | 6.6 | Plumbing Modernization Allowance | \$25,000 | \$41,321 | | |
| | | | | | \$158,673 | |
| 2030 | | | | | | 2030 |
| | 1.4 | Asphalt Footpaths | \$20,646 | \$35,148 | TOTAL EXPENDITURES | |
| | 2.1 | Concrete Sidewalks & Steps | \$221 | \$377 | | |
| | 2.2 | Concrete Curbs & Gutters | \$434 | \$739 | | |
| | 3.1 | Community Entrance Sign | \$13,500 | \$22,983 | | |
| | 5.7 | Office Furnishings & Equipment Allowance | \$8,750 | \$14,896 | | |
| | 7.8 | Fifteen-Year Pool Pump & Filtration Equipment | \$15,000 | \$25,536 | | |
| | | | | | \$99,680 | |
| 2031 | | | | | | 2031 |
| | 1.2 | Asphalt Seal Coat, Community Center | \$2,150 | \$3,770 | TOTAL EXPENDITURES | |
| | 1.3 | Asphalt Full-Depth Repair & Crack Filling Allowan | \$1,000 | \$1,754 | | |
| | 3.12 | Multi-Purpose Court Restoration | \$7,000 | \$12,275 | | |
| | 3.14 | Basketball Goals | \$5,000 | \$8,768 | | |
| | 7.3 | Pool Coping | \$496 | \$870 | | |
| | | | | | \$27,435 | |

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
SAMPLE PLACE CAPITAL RESERVES
 Sample Location, Virginia

FUNDING ANALYSIS
HYBRID APPROACH
 CASH FLOW METHOD
 TABLE 3



Beginning Reserve Fund Balance: **837,829** Annual Contribution To Reserves: **78,665** Contribution Percentage Increase: **3.00%** Annual Inflation Factor: **3.00%** 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 |
| 2012 | 1,466,970 | 837,829 | 78,665 | 17,680 | 87,057 | 847,117 |
| 2013 | 1,510,979 | 847,117 | 81,025 | 17,723 | 23,814 | 922,051 |
| 2014 | 1,556,308 | 922,051 | 83,456 | 18,550 | 89,342 | 934,714 |
| 2015 | 1,602,998 | 934,714 | 85,959 | 19,269 | 49,173 | 990,770 |
| 2016 | 1,651,087 | 990,770 | 88,538 | 20,423 | 49,703 | 1,050,028 |
| 2017 | 1,700,620 | 1,050,028 | 91,194 | 21,354 | 76,802 | 1,085,774 |
| 2018 | 1,751,639 | 1,085,774 | 93,930 | 21,791 | 105,704 | 1,095,791 |
| 2019 | 1,804,188 | 1,095,791 | 96,748 | 21,959 | 111,639 | 1,102,859 |
| 2020 | 1,858,313 | 1,102,859 | 99,650 | 22,962 | 35,443 | 1,190,028 |
| 2021 | 1,914,063 | 1,190,028 | 102,640 | 24,760 | 34,813 | 1,282,615 |
| 2022 | 1,971,485 | 1,282,615 | 105,719 | 23,850 | 293,648 | 1,118,536 |
| 2023 | 2,030,629 | 1,118,536 | 108,891 | 23,452 | 28,723 | 1,222,156 |
| 2024 | 2,091,548 | 1,222,156 | 112,157 | 24,161 | 159,230 | 1,199,244 |
| 2025 | 2,154,295 | 1,199,244 | 115,522 | 24,314 | 105,919 | 1,233,161 |
| 2026 | 2,218,923 | 1,233,161 | 118,988 | 22,330 | 354,991 | 1,019,488 |
| 2027 | 2,285,491 | 1,019,488 | 122,557 | 20,930 | 90,555 | 1,072,420 |
| 2028 | 2,354,056 | 1,072,420 | 126,234 | 22,235 | 72,439 | 1,148,450 |
| 2029 | 2,424,678 | 1,148,450 | 130,021 | 22,874 | 158,674 | 1,142,671 |
| 2030 | 2,497,418 | 1,142,671 | 133,922 | 23,441 | 99,679 | 1,200,355 |
| 2031 | 2,572,340 | 1,200,355 | 137,940 | 25,434 | 27,437 | 1,336,291 |

STUDY PERIOD TOTALS

2,113,757 **439,490** **2,054,785**

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.

FUNDING ANALYSIS
COMPONENT METHOD - TABLE 4

Beginning Reserve Fund Balance:

In Dollars

837,829

| Component Number | COMPONENT | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | |
|---|--|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-------|
| 5.4 | Ceramic Tile | 321 | 321 | 321 | 321 | 321 | 321 | 321 | 467 | 467 | 467 | 467 | 467 | 467 | 467 | 467 | 467 | 467 | 467 | 467 | 467 | |
| 5.5 | Dry Deck Flooring | 638 | 316 | 316 | 316 | 316 | 316 | 316 | 316 | 388 | 388 | 388 | 388 | 388 | 388 | 388 | 478 | 478 | 478 | 478 | 478 | |
| 5.6 | Fitness Equipment | 3,842 | 3,524 | 3,524 | 3,524 | 3,524 | 4,086 | 4,086 | 4,086 | 4,086 | 4,086 | 4,737 | 4,737 | 4,737 | 4,737 | 4,737 | 5,491 | 5,491 | 5,491 | 5,491 | 5,491 | |
| 5.7 | Office Furnishings & Equipment Allowance | 2,066 | 2,066 | 2,066 | 2,106 | 2,106 | 2,106 | 2,106 | 2,106 | 4,883 | 4,883 | 4,883 | 4,883 | 4,883 | 2,831 | 2,831 | 2,831 | 2,831 | 2,831 | 2,831 | 6,563 | 6,563 |
| 5.8 | Furnishings Allowance | 644 | 644 | 644 | 644 | 644 | 2,234 | 2,234 | 2,234 | 2,234 | 2,234 | 2,590 | 2,590 | 2,590 | 2,590 | 2,590 | 3,003 | 3,003 | 3,003 | 3,003 | 3,003 | |
| 5.9 | Racquetball Room Floor Re-Finishing | 227 | 227 | 227 | 227 | 227 | 227 | 227 | 227 | 227 | 227 | 227 | 227 | 227 | 899 | 899 | 899 | 899 | 899 | 899 | 899 | |
| 5.10 | Kitchen Modernization | 957 | 957 | 957 | 957 | 957 | 957 | 957 | 1,388 | 1,388 | 1,388 | 1,388 | 1,388 | 1,388 | 1,388 | 1,388 | 1,388 | 1,388 | 1,388 | 1,388 | 1,388 | |
| 6 COMMUNITY CENTER MEP | | | | | | | | | | | | | | | | | | | | | | |
| 6.1 | HVAC Split-System #1 | 673 | 673 | 673 | 673 | 673 | 673 | 673 | 673 | 1,556 | 1,556 | 1,556 | 1,556 | 1,556 | 1,556 | 1,556 | 1,556 | 1,556 | 1,556 | 1,556 | 1,556 | |
| 6.2 | HVAC Split-System #2 | 903 | 903 | 405 | 405 | 405 | 405 | 405 | 405 | 405 | 405 | 405 | 405 | 405 | 405 | 405 | 405 | 405 | 405 | 405 | 405 | |
| 6.3 | HVAC Split-System #3 | 432 | 432 | 432 | 432 | 432 | 432 | 432 | 432 | 432 | 432 | 432 | 432 | 432 | 432 | 1,858 | 1,858 | 1,858 | 1,858 | 1,858 | 1,858 | |
| 6.4 | Water Heater | 300 | 300 | 134 | 134 | 134 | 134 | 134 | 134 | 134 | 134 | 134 | 134 | 134 | 134 | 134 | 134 | 134 | 134 | 134 | 134 | |
| 6.5 | Electrical Modernization Allowance | 982 | 982 | 982 | 982 | 982 | 982 | 982 | 982 | 982 | 982 | 982 | 982 | 982 | 982 | 982 | 982 | 982 | 3,302 | 3,302 | 3,302 | |
| 6.6 | Plumbing Modernization Allowance | 682 | 682 | 682 | 682 | 682 | 682 | 682 | 682 | 682 | 682 | 682 | 682 | 682 | 682 | 682 | 682 | 682 | 2,293 | 2,293 | 2,293 | |
| 7 POOL FACILITY | | | | | | | | | | | | | | | | | | | | | | |
| 7.1 | Pool Restoration Project | 5,907 | 5,907 | 5,907 | 5,907 | 5,907 | 5,907 | 5,907 | 5,907 | 5,907 | 5,907 | 5,907 | 5,907 | 5,907 | 5,907 | 16,864 | 16,864 | 16,864 | 16,864 | 16,864 | 16,864 | |
| 7.2 | Pool White Coat | 4,633 | 4,633 | 4,630 | 4,630 | 4,630 | 4,630 | 4,630 | 4,630 | 4,630 | 3,657 | 3,657 | 3,657 | 3,657 | 3,657 | 3,657 | 3,657 | 3,657 | 3,657 | 3,657 | 3,657 | |
| 7.3 | Pool Coping | 169 | 180 | 180 | 180 | 197 | 197 | 197 | 215 | 215 | 215 | 235 | 235 | 235 | 257 | 257 | 257 | 281 | 281 | 281 | 307 | |
| 7.4 | Pool Fencing | 1,083 | 1,083 | 1,083 | 1,083 | 871 | 871 | 871 | 871 | 871 | 871 | 871 | 871 | 871 | 871 | 871 | 871 | 871 | 871 | 871 | 871 | |
| 7.5 | Metal Handrailing | 202 | 202 | 202 | 202 | 202 | 202 | 202 | 202 | 202 | 202 | 202 | 202 | 202 | 202 | 202 | 202 | 202 | 202 | 202 | 202 | |
| 7.6 | Pool Furniture Allowance | 1,068 | 1,068 | 1,068 | 1,068 | 1,068 | 3,703 | 3,703 | 3,703 | 3,703 | 3,703 | 4,293 | 4,293 | 4,293 | 4,293 | 4,293 | 4,976 | 4,976 | 4,976 | 4,976 | 4,976 | |
| 7.7 | Pool Perimeter Equipment | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 714 | 714 | 714 | 714 | 714 | 714 | |
| 7.8 | Fifteen-Year Pool Pump & Filtration Equipment | 885 | 885 | 885 | 1,459 | 1,459 | 1,459 | 1,459 | 1,459 | 1,459 | 1,459 | 1,459 | 1,459 | 1,459 | 1,459 | 1,459 | 1,459 | 1,459 | 1,459 | 1,459 | 2,273 | 2,273 |
| 7.9 | Ten-Year Pool Pump, Filtration, & Chlorination Equipme | 295 | 295 | 295 | 331 | 331 | 331 | 331 | 331 | 331 | 331 | 331 | 331 | 331 | 445 | 445 | 445 | 445 | 445 | 445 | 445 | |
| 7.10 | Pool Area Brick Retaining Walls & Features | 1,564 | 1,564 | 1,564 | 1,564 | 1,564 | 1,564 | 3,621 | 3,621 | 3,621 | 3,621 | 3,621 | 3,621 | 3,621 | 3,621 | 3,621 | 3,621 | 3,621 | 4,867 | 4,867 | 4,867 | |
| 7.11 | Pool Area Brick Pavers | 1,673 | 1,673 | 1,673 | 1,673 | 1,673 | 1,673 | 1,673 | 1,673 | 1,673 | 1,673 | 1,673 | 1,673 | 1,673 | 1,673 | 1,673 | 1,673 | 1,673 | 1,673 | 1,673 | 1,673 | |
| 7.12 | Pool Covers | 4,853 | 1,781 | 1,781 | 1,781 | 1,781 | 1,781 | 1,781 | 1,781 | 1,781 | 1,781 | 1,781 | 2,393 | 2,393 | 2,393 | 2,393 | 2,393 | 2,393 | 2,393 | 2,393 | 2,393 | |
| ANNUAL COMPONENT CONTRIBUTION TOTALS | | 108,287 | 74,717 | 70,074 | 71,786 | 73,596 | 83,435 | 89,324 | 92,024 | 95,968 | 94,995 | 103,717 | 105,201 | 111,934 | 111,477 | 123,309 | 131,884 | 134,244 | 138,493 | 141,747 | 144,705 | |

| COMPONENT METHOD SUMMARY | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 |
|------------------------------------|---------|---------|---------|---------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| BEGINNING RESERVE FUND BALANCE | 837,829 | 877,150 | 946,572 | 947,174 | 989,688 | 1,034,359 | 1,062,779 | 1,068,825 | 1,071,786 | 1,154,991 | 1,239,521 | 1,075,739 | 1,175,077 | 1,152,719 | 1,182,759 | 976,294 | 1,038,767 | 1,123,002 | 1,126,997 | 1,193,358 |
| PLUS ANNUAL COMPONENT CONTRIBUTION | 108,287 | 74,717 | 70,074 | 71,786 | 73,596 | 83,435 | 89,324 | 92,024 | 95,968 | 94,995 | 103,717 | 105,201 | 111,934 | 111,477 | 123,309 | 131,884 | 134,244 | 138,493 | 141,747 | 144,705 |
| CAPITAL EXPENDITURES | 87,057 | 23,814 | 89,342 | 49,173 | 49,703 | 76,802 | 105,704 | 111,639 | 35,443 | 34,813 | 293,648 | 28,723 | 159,230 | 105,919 | 354,991 | 90,555 | 72,439 | 158,674 | 99,679 | 27,437 |
| SUBTOTAL | 859,059 | 928,053 | 927,304 | 969,787 | 1,013,581 | 1,040,992 | 1,046,399 | 1,049,210 | 1,132,311 | 1,215,173 | 1,049,590 | 1,152,217 | 1,127,781 | 1,158,277 | 951,077 | 1,017,623 | 1,100,572 | 1,102,821 | 1,169,065 | 1,310,626 |
| PLUS INTEREST INCOME @ 2.00% | 18,091 | 18,519 | 19,870 | 19,901 | 20,778 | 21,787 | 22,425 | 22,577 | 22,679 | 24,348 | 26,149 | 22,860 | 24,938 | 24,482 | 25,217 | 21,143 | 22,430 | 24,177 | 24,293 | 25,664 |
| FULLY FUNDED RESERVE FUND BALANCE | 877,150 | 946,572 | 947,174 | 989,688 | 1,034,359 | 1,062,779 | 1,068,825 | 1,071,786 | 1,154,991 | 1,239,521 | 1,075,739 | 1,175,077 | 1,152,719 | 1,182,759 | 976,294 | 1,038,767 | 1,123,002 | 1,126,997 | 1,193,358 | 1,336,291 |

TOTAL EXPENDITURES 2,054,785

TOTAL CONTRIBUTIONS 2,100,917

STUDY PERIOD TOTAL INTEREST 452,330

AVERAGE ANNUAL CONTRIBUTION 105,046

FULLY FUNDED BALANCE GOAL

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
POTOMAC PLACE NEIGHBORHOOD
RESERVES
 Sample Location, Virginia

COMPONENT DATA AND
ASSET REPLACEMENT SCHEDULE

TABLE 1
 2012 Through 2031



| 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, Section 1 | 13,700 | SY | \$12.50 | \$171,250 | 18 | 2012 | 20% | \$34,250 | 2015 | 80% | \$145,385 | 2030 | 100% | \$244,587 | The asphalt pavement throughout Section 1 appears to be in generally fair to continuing good condition. The thickness of the pavement could not be visually determined. Restoration includes curb to curb full 2 " milling and overlay replacement with 2" new compacted asphalt. Costs are based on a recent conversation with the Association's paving company regarding 2012 projected pricing. Core sampling should be used to determine the depth and condition of the sub-base and pavement prior to restoration. Costs include re-stripping, but not replacement of any inadequate sub-base. A full service life is dependent on preventative maintenance being performed as suggested in the Preventive Maintenance section of the report and scheduled in Items 1.5 and 1.6 below. See the Asphalt Pavement Report, Section 7, for additional details. One street, Flank Street is scheduled for 2012. The remaining streets in Section 1 are scheduled for 2015. |
| 1.2 | Asphalt Restoration Project, Section 2 | 24,100 | SY | \$12.50 | \$301,250 | 18 | 2012 | 24% | \$72,300 | 2015 | 40% | \$127,876 | 2030 | 100% | \$430,259 | The asphalt pavement throughout Section 2 appears to be in generally fair to continuing good condition. The thickness of the pavement could not be visually determined. Restoration includes curb to curb full 2 " milling and overlay replacement with 2" new compacted asphalt. Costs are based on a recent conversation with the Association's paving company regarding 2012 projected pricing. Core sampling should be used to determine the depth and condition of the sub-base and pavement prior to restoration. Costs include re-stripping, but not replacement of any inadequate sub-base. A full service life is dependent on preventative maintenance being performed as suggested in the Preventive Maintenance section of the report and scheduled in Items 1.5 and 1.6 below. See the Asphalt Pavement Report, Section 7, for additional details. One street, Killman Drive, is scheduled for 2012. The remaining streets in Section 2 were either restored in 2011 or scheduled for restoration in 2015. |
| 1.3 | Asphalt Restoration Project, Section 3 | 18,160 | SY | \$12.50 | \$227,000 | 18 | 2025 | 100% | \$293,649 | 2043 | 100% | \$419,403 | | | | The asphalt pavement throughout Section 3 was fully restored in 2007 and appears to be in like new condition. The thickness of the pavement could not be visually determined. Restoration includes curb to curb full 2 " milling and overlay replacement with 2" new compacted asphalt. Costs are based on a recent conversation with Dominion Paving & Sealing regarding 2012 projected pricing. Core sampling should be used to determine the depth and condition of the sub-base and pavement prior to restoration. Costs include re-stripping, but not replacement of any inadequate sub-base. A full service life is dependent on preventative maintenance being performed as suggested in the Preventive Maintenance section of the report and scheduled in Items 1.5 and 1.6 below. See the Asphalt Pavement Report, Section 7, for additional details. |
| 1.4 | Asphalt Restoration Project, Section 4 | 14,500 | SY | \$12.50 | \$181,250 | 18 | 2012 | 18% | \$32,625 | 2015 | 17% | \$32,698 | 2029 | 100% | \$253,794 | The asphalt pavement throughout Section 4 appears to be in generally fair to continuing good condition. The thickness of the pavement could not be visually determined. Restoration includes curb to curb full 2 " milling and overlay replacement with 2" new compacted asphalt. Costs are based on a recent conversation with the Association's paving company regarding 2012 projected pricing. Core sampling should be used to determine the depth and condition of the sub-base and pavement prior to restoration. Costs include re-stripping, but not replacement of any inadequate sub-base. A full service life is dependent on preventative maintenance being performed as suggested in the Preventive Maintenance section of the report and scheduled in Items 1.5 and 1.6 below. See the Asphalt Pavement Report, Section 7, for additional details. Two streets, Kathy Court and Amy Court, are scheduled for 2012. The remaining streets in Section 4 were either restored in 2011 or scheduled for restoration in 2015. |
| 1.5 | Asphalt Seal Coat | 70,460 | SY | \$0.86 | \$60,596 | 6 | 2012 | 100% | \$60,596 | 2018 | 100% | \$68,240 | 2024 | 100% | \$76,850 | The pavements have been seal coated in the past, but most have had extensive repairs or restorations. In order to help extend the service life of the new pavements and improve curb appeal after repairs are performed, we have scheduled seal coating projects every six years, including the years of the pavement restoration projects. Seal coating projects include striping and curb painting. A community-wide application of seal coat has been scheduled near-term for uniformity of appearance and scheduling management. |
| 1.6 | Asphalt Full-Depth Repair & Crack Filling Allowance | 1 | LS | \$200,000.00 | \$200,000 | 6 | 2012 | 10% | \$20,000 | 2018 | 25% | \$56,308 | 2024 | 50% | \$126,824 | Only very small quantities of deflected pavement, indicative of sub-base damage, were observed in all sections. Random longitudinal and transverse cracking were also present on most street including the 2007 restorations. Repairs are essential in order to achieve the projected service life of the pavements. Mill repairs and crack filling are scheduled progressively every six years throughout the study period, including the year of the asphalt restoration projects. The budget has been significantly reduced reflecting the overall improved condition of the pavements, and anticipated better management of the asset in the future. See the Asphalt Pavement Report, Section 7, for additional details. |
| 2 CONCRETE COMPONENTS | | | | | | | | | | | | | | | | |
| 2.1 | Concrete Sidewalks | 79,950 | SF | \$6.60 | \$527,670 | 2 | 2012 | 1% | \$5,277 | 2014 | 1% | \$5,490 | 2016 | 1% | \$5,712 | Concrete sidewalks throughout the community are generally 4' wide with wider sections at assessable ramps. The thickness of the concrete could not be visually determined. Their condition ranges from continuing good to fair with replacement sections observed throughout the neighborhoods. We observed approximately 928 square feet of deficient concrete including settlement tripping hazards, large cracks, and severe scaling. Many additional sections display minor deficiencies that do not require replacement immediately, but that may be addressed in future replacement cycles, which are scheduled at three-year intervals. We have not scheduled replacement all of the sidewalk sections with scaled surfaces as they do not appear to pose a hazard at the present. However, replacement of some of the more severely scaled sections should be addressed with each replacement cycle as they will tend to deteriorate more quickly over time. We have scheduled bi-annual repairs to address hazards in a timely manner. Concrete repairs are scheduled to coincide with other concrete components to promote cost efficiencies. |
| 2.2 | Concrete Curbs & Gutters | 53,300 | LF | \$31.00 | 1,652,300 | 2 | 2014 | 1% | \$17,191 | 2016 | 1% | \$17,885 | 2018 | 1% | \$18,608 | The driveways and parking bays are lined with standard-profile, cast-in-place, concrete curbs. The curbs are generally in continuing good condition with a very minor number of deficient sections observed. As curbs continue to age, cracks, vehicle impact damage, and settlement should be anticipated. Bi-annual repairs are scheduled to address replacements. Concrete are scheduled to coincide with other concrete components to promote cost efficiencies. |

Reserve Fund Plan for
**POTOMAC PLACE NEIGHBORHOOD
RESERVES**
Sample Location, Virginia

**COMPONENT DATA AND
ASSET REPLACEMENT SCHEDULE**

TABLE 1
2012 Through 2031



MASON & MASON
CAPITAL RESERVE ANALYSTS, INC.

www.masonreserves.com

800-776-6980

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| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | DISCUSSION |
|------------------------|--------------------------|----------|---------------------|------------|------------------|--------------------------------------|----------------|---------------------------|--------------------|----------------|---------------------------|--------------------|----------------|---------------------------|--------------------|--|
| 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 | |
| 2.3 | Concrete Driveway Aprons | 27,900 | SF | \$9.75 | \$272,025 | 2 | 2012 | 1% | \$2,720 | 2014 | 1% | \$2,830 | 2016 | 1% | \$2,944 | Single and double concrete driveway aprons provide access to driveways and garages and provide the pedestrian surface at sidewalks. Most aprons appear to be in continuing good condition. Cracks and some settled sections were observed totaling approximately 306 square feet. Again, we observed many additional areas of minor deficiencies, which may not justify replacement near-term, but should be included in future replacement cycles. These occur generally where patches to minor damage were made in the past. Patching is not generally a long-term repair to concrete. Cyclic repairs are scheduled as full replacement at one time is not appropriate or anticipated. Concrete repairs are scheduled to coincide with other concrete components to promote cost efficiencies. |
| 3 SITE FEATURES | | | | | | | | | | | | | | | | |
| 3.1 | Light Poles & Fixtures | 85 | EA | \$2,200.00 | \$187,000 | 30 | 2037 | 100% | \$306,793 | | | | | | | Pre-finished Fiberglass reinforced plastic (FRP) light poles, generally 15' high, with carriage lantern fixtures provide illumination for the streets and common areas. They appear to be in generally good condition. These have been added as a new component since the previous report. The fixtures were not observed illuminated. No problems were reported with lighting. |
| 3.2 | Wood Fencing | 440 | LF | \$18.00 | \$7,920 | 20 | 2013 | 100% | \$8,078 | 2033 | 100% | \$12,004 | | | | Standard wood fencing is installed in the woods at the Harps Court area property line. It is in poor condition. Management requested that we schedule near-term replacement. |

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
POTOMAC PLACE NEIGHBORHOOD RESERVES
 Sample Location, Virginia

CALENDAR OF EXPENDITURES

TABLE 2
 2012 Through 2031



MASON & MASON
 CAPITAL RESERVE ANALYSTS, INC.

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| YEAR | COMPONENT NO. | COMPONENT | PRESENT COST 2012 | FUTURE COST (INFLATED) | TOTAL ANNUAL EXPENDITURES | ACTION |
|------|---------------|---|----------------------|---------------------------|------------------------------|--------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2012 | | | | | 2012 | |
| | | | | | TOTAL EXPENDITURES | |
| | 1.1 | Asphalt Restoration Project, Section 1 | \$34,250 | \$34,250 | | |
| | 1.2 | Asphalt Restoration Project, Section 2 | \$72,300 | \$72,300 | | |
| | 1.4 | Asphalt Restoration Project, Section 4 | \$32,625 | \$32,625 | | |
| | 1.5 | Asphalt Seal Coat | \$60,596 | \$60,596 | | |
| | 1.6 | Asphalt Full-Depth Repair & Crack Filling Allowan | \$20,000 | \$20,000 | | |
| | 2.1 | Concrete Sidewalks | \$5,277 | \$5,277 | | |
| | 2.3 | Concrete Driveway Aprons | \$2,720 | \$2,720 | | |
| | | | | | \$227,768 | |
| 2013 | | | | | 2013 | |
| | 3.2 | Wood Fencing | \$7,920 | \$8,078 | TOTAL EXPENDITURES | |
| | | | | | \$8,078 | |
| 2014 | | | | | 2014 | |
| | 2.1 | Concrete Sidewalks | \$5,277 | \$5,490 | TOTAL EXPENDITURES | |
| | 2.2 | Concrete Curbs & Gutters | \$16,523 | \$17,191 | | |
| | 2.3 | Concrete Driveway Aprons | \$2,720 | \$2,830 | | |
| | | | | | \$25,511 | |
| 2015 | | | | | 2015 | |
| | 1.1 | Asphalt Restoration Project, Section 1 | \$137,000 | \$145,385 | TOTAL EXPENDITURES | |
| | 1.2 | Asphalt Restoration Project, Section 2 | \$120,500 | \$127,876 | | |
| | 1.4 | Asphalt Restoration Project, Section 4 | \$30,813 | \$32,698 | | |
| | | | | | \$305,960 | |
| 2016 | | | | | 2016 | |
| | 2.1 | Concrete Sidewalks | \$5,277 | \$5,712 | TOTAL EXPENDITURES | |
| | 2.2 | Concrete Curbs & Gutters | \$16,523 | \$17,885 | | |
| | 2.3 | Concrete Driveway Aprons | \$2,720 | \$2,944 | | |
| | | | | | \$26,541 | |
| 2017 | | | | | 2017 | |
| | | | | | NO EXPENDITURES | |
| 2018 | | | | | 2018 | |
| | 1.5 | Asphalt Seal Coat | \$60,596 | \$68,240 | TOTAL EXPENDITURES | |
| | 1.6 | Asphalt Full-Depth Repair & Crack Filling Allowan | \$50,000 | \$56,308 | | |
| | 2.1 | Concrete Sidewalks | \$5,277 | \$5,942 | | |
| | 2.2 | Concrete Curbs & Gutters | \$16,523 | \$18,608 | | |
| | 2.3 | Concrete Driveway Aprons | \$2,720 | \$3,063 | | |
| | | | | | \$152,162 | |
| 2019 | | | | | 2019 | |
| | | | | | NO EXPENDITURES | |
| 2020 | | | | | 2020 | |
| | 2.1 | Concrete Sidewalks | \$5,277 | \$6,182 | TOTAL EXPENDITURES | |
| | 2.2 | Concrete Curbs & Gutters | \$16,523 | \$19,359 | | |
| | 2.3 | Concrete Driveway Aprons | \$2,720 | \$3,187 | | |
| | | | | | \$28,729 | |
| 2021 | | | | | 2021 | |
| | | | | | NO EXPENDITURES | |
| 2022 | | | | | 2022 | |
| | 2.1 | Concrete Sidewalks | \$5,277 | \$6,432 | TOTAL EXPENDITURES | |
| | 2.2 | Concrete Curbs & Gutters | \$16,523 | \$20,141 | | |
| | 2.3 | Concrete Driveway Aprons | \$5,441 | \$6,632 | | |
| | | | | | \$33,206 | |

Reserve Fund Plan for
POTOMAC PLACE NEIGHBORHOOD RESERVES
 Sample Location, Virginia

CALENDAR OF EXPENDITURES

TABLE 2

2012 Through 2031



MASON & MASON
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| YEAR | COMPONENT NO. | COMPONENT | PRESENT COST 2012 | FUTURE COST (INFLATED) | TOTAL ANNUAL EXPENDITURES | ACTION |
|------|---------------|---|----------------------|---------------------------|------------------------------|--------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2023 | | | | | 2023 | |
| | | | | | NO EXPENDITURES | |
| 2024 | | | | | 2024 | |
| | 1.5 | Asphalt Seal Coat | \$60,596 | \$76,850 | TOTAL EXPENDITURES | |
| | 1.6 | Asphalt Full-Depth Repair & Crack Filling Allowan | \$100,000 | \$126,824 | | |
| | 2.1 | Concrete Sidewalks | \$5,277 | \$6,692 | | |
| | 2.2 | Concrete Curbs & Gutters | \$16,523 | \$20,955 | | |
| | 2.3 | Concrete Driveway Aprons | \$5,441 | \$6,900 | | |
| | | | | | \$238,221 | |
| 2025 | | | | | 2025 | |
| | 1.3 | Asphalt Restoration Project, Section 8 | \$227,000 | \$293,649 | TOTAL EXPENDITURES | |
| | | | | | \$293,649 | |
| 2026 | | | | | 2026 | |
| | 2.1 | Concrete Sidewalks | \$5,277 | \$6,962 | TOTAL EXPENDITURES | |
| | 2.2 | Concrete Curbs & Gutters | \$16,523 | \$21,802 | | |
| | 2.3 | Concrete Driveway Aprons | \$5,441 | \$7,179 | | |
| | | | | | \$35,943 | |
| 2027 | | | | | 2027 | |
| | | | | | NO EXPENDITURES | |
| 2028 | | | | | 2028 | |
| | 2.1 | Concrete Sidewalks | \$5,277 | \$7,244 | TOTAL EXPENDITURES | |
| | 2.2 | Concrete Curbs & Gutters | \$16,523 | \$22,683 | | |
| | 2.3 | Concrete Driveway Aprons | \$5,441 | \$7,469 | | |
| | | | | | \$37,395 | |
| 2029 | | | | | 2029 | |
| | 1.4 | Asphalt Restoration Project, Section 4 | \$181,250 | \$253,794 | TOTAL EXPENDITURES | |
| | | | | | \$253,794 | |
| 2030 | | | | | 2030 | |
| | 1.1 | Asphalt Restoration Project, Section 1 | \$171,250 | \$244,587 | TOTAL EXPENDITURES | |
| | 1.2 | Asphalt Restoration Project, Section 2 | \$301,250 | \$430,259 | | |
| | 1.5 | Asphalt Seal Coat | \$60,596 | \$86,545 | | |
| | 1.6 | Asphalt Full-Depth Repair & Crack Filling Allowan | \$200,000 | \$285,649 | | |
| | 2.1 | Concrete Sidewalks | \$5,277 | \$7,536 | | |
| | 2.2 | Concrete Curbs & Gutters | \$16,523 | \$23,599 | | |
| | 2.3 | Concrete Driveway Aprons | \$5,441 | \$7,770 | | |
| | | | | | 1,085,947 | |
| 2031 | | | | | 2031 | |
| | | | | | 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
**SAMPLE PLACE NEIGHBORHOOD
 RESERVES**
 Sample Location, Virginia

**FUNDING ANALYSIS
 HYBRID APPROACH**
 CASH FLOW METHOD
 TABLE 3



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800-776-6980

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Beginning Reserve Fund Balance: **411,692** Annual Contribution To Reserves: **96,001** Contribution Percentage Increase: **3.00%** Annual Inflation Factor: **2.00%** Annual Interest Income Factor: **3.00%**

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 |
| 2012 | 3,788,261 | 411,692 | 96,001 | 11,953 | 227,768 | 291,878 |
| 2013 | 3,864,026 | 291,878 | 98,881 | 10,368 | 8,078 | 393,049 |
| 2014 | 3,941,306 | 393,049 | 101,848 | 13,209 | 25,511 | 482,594 |
| 2015 | 4,020,132 | 482,594 | 104,903 | 11,404 | 305,959 | 292,943 |
| 2016 | 4,100,535 | 292,943 | 108,050 | 10,249 | 26,541 | 384,701 |
| 2017 | 4,182,546 | 384,701 | 111,292 | 13,526 | 0 | 509,519 |
| 2018 | 4,266,197 | 509,519 | 114,631 | 14,894 | 152,161 | 486,882 |
| 2019 | 4,351,521 | 486,882 | 118,069 | 16,745 | 0 | 621,697 |
| 2020 | 4,438,551 | 621,697 | 121,612 | 20,435 | 28,728 | 735,016 |
| 2021 | 4,527,322 | 735,016 | 125,260 | 24,410 | 0 | 884,686 |
| 2022 | 4,617,869 | 884,686 | 129,018 | 28,482 | 33,205 | 1,008,981 |
| 2023 | 4,710,226 | 1,008,981 | 132,888 | 32,868 | 0 | 1,174,738 |
| 2024 | 4,804,430 | 1,174,738 | 136,875 | 34,087 | 238,221 | 1,107,478 |
| 2025 | 4,900,519 | 1,107,478 | 140,981 | 31,203 | 293,649 | 986,014 |
| 2026 | 4,998,529 | 986,014 | 145,211 | 31,785 | 35,943 | 1,127,067 |
| 2027 | 5,098,500 | 1,127,067 | 149,567 | 36,734 | 0 | 1,313,368 |
| 2028 | 5,200,470 | 1,313,368 | 154,054 | 41,863 | 37,396 | 1,471,889 |
| 2029 | 5,304,479 | 1,471,889 | 158,676 | 43,228 | 253,794 | 1,419,998 |
| 2030 | 5,410,569 | 1,419,998 | 163,436 | 28,144 | 1,085,945 | 525,633 |
| 2031 | 5,518,780 | 525,633 | 168,339 | 18,748 | 0 | 712,720 |

STUDY PERIOD TOTALS

2,579,591 474,336 2,752,899

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.

FUNDING ANALYSIS
COMPONENT METHOD - TABLE 4



Beginning Reserve Fund Balance:

In Dollars

411,692

| Component Number | COMPONENT | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 |
|---|---|----------------|----------------|----------------|---------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 1 ASPHALT COMPONENTS | | | | | | | | | | | | | | | | | | | | | |
| 1.1 | Asphalt Restoration Project, Section 1 | 56,670 | 46,259 | 46,259 | 12,899 | 12,899 | 12,899 | 12,899 | 12,899 | 12,899 | 12,899 | 12,899 | 12,899 | 12,899 | 12,899 | 12,899 | 12,899 | 12,899 | 12,899 | 14,624 | 14,624 |
| 1.2 | Asphalt Restoration Project, Section 2 | 62,665 | 40,687 | 40,687 | 22,691 | 22,691 | 22,691 | 22,691 | 22,691 | 22,691 | 22,691 | 22,691 | 22,691 | 22,691 | 22,691 | 22,691 | 22,691 | 22,691 | 22,691 | 25,725 | 25,725 |
| 1.3 | Asphalt Restoration Project, Section 3 | 5,701 | 5,701 | 5,701 | 5,701 | 5,701 | 5,701 | 5,701 | 5,701 | 5,701 | 5,701 | 5,701 | 5,701 | 5,701 | 17,557 | 17,557 | 17,557 | 17,557 | 17,557 | 17,557 | 17,557 |
| 1.4 | Asphalt Restoration Project, Section 4 | 20,321 | 10,404 | 10,404 | 14,573 | 14,573 | 14,573 | 14,573 | 14,573 | 14,573 | 14,573 | 14,573 | 14,573 | 14,573 | 14,573 | 14,573 | 14,573 | 14,573 | 14,573 | 15,174 | 15,174 |
| 1.5 | Asphalt Seal Coat | 28,789 | 10,369 | 10,369 | 10,369 | 10,369 | 10,369 | 11,677 | 11,677 | 11,677 | 11,677 | 11,677 | 11,677 | 11,677 | 13,150 | 13,150 | 13,150 | 13,150 | 13,150 | 13,150 | 14,809 |
| 1.6 | Asphalt Full-Depth Repair & Crack Filling Allowance | 14,635 | 8,556 | 8,556 | 8,556 | 8,556 | 8,556 | 19,270 | 19,270 | 19,270 | 19,270 | 19,270 | 19,270 | 43,403 | 43,403 | 43,403 | 43,403 | 43,403 | 43,403 | 43,403 | 4,888 |
| 2 CONCRETE COMPONENTS | | | | | | | | | | | | | | | | | | | | | |
| 2.1 | Concrete Sidewalks | 4,264 | 2,660 | 2,768 | 2,768 | 2,879 | 2,879 | 2,996 | 2,996 | 3,117 | 3,117 | 3,243 | 3,243 | 3,374 | 3,374 | 3,510 | 3,510 | 3,652 | 3,652 | 3,799 | 3,799 |
| 2.2 | Concrete Curbs & Gutters | 2,574 | 2,574 | 8,666 | 8,666 | 9,017 | 9,017 | 9,381 | 9,381 | 9,760 | 9,760 | 10,154 | 10,154 | 10,564 | 10,564 | 10,991 | 10,991 | 11,435 | 11,435 | 11,897 | 11,897 |
| 2.3 | Concrete Driveway Aprons | 2,198 | 1,371 | 1,427 | 1,427 | 1,484 | 1,484 | 1,544 | 1,544 | 3,214 | 3,214 | 3,343 | 3,343 | 3,478 | 3,478 | 3,619 | 3,619 | 3,765 | 3,765 | 3,917 | 3,917 |
| 3 SITE FEATURES | | | | | | | | | | | | | | | | | | | | | |
| 3.1 | Light Poles & Fixtures | 2,544 | 2,544 | 2,544 | 2,544 | 2,544 | 2,544 | 2,544 | 2,544 | 2,544 | 2,544 | 2,544 | 2,544 | 2,544 | 2,544 | 2,544 | 2,544 | 2,544 | 2,544 | 2,544 | 2,544 |
| 3.2 | Wood Fencing | 2,456 | 438 | 438 | 438 | 438 | 438 | 438 | 438 | 438 | 438 | 438 | 438 | 438 | 438 | 438 | 438 | 438 | 438 | 438 | 438 |
| ANNUAL COMPONENT CONTRIBUTION TOTALS | | 202,817 | 131,563 | 137,819 | 90,632 | 91,151 | 91,151 | 103,714 | 103,714 | 105,884 | 105,884 | 106,533 | 106,533 | 132,815 | 144,671 | 145,375 | 145,375 | 146,107 | 146,708 | 115,372 | 115,372 |

| COMPONENT METHOD SUMMARY | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 |
|------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------|
| BEGINNING RESERVE FUND BALANCE | 411,692 | 402,589 | 540,477 | 671,484 | 478,067 | 558,713 | 668,353 | 641,935 | 766,875 | 869,093 | 1,003,148 | 1,108,735 | 1,250,738 | 1,185,553 | 1,075,007 | 1,219,520 | 1,404,372 | 1,558,195 | 1,500,909 | 577,880 |
| PLUS ANNUAL COMPONENT CONTRIBUTION | 202,817 | 131,563 | 137,819 | 90,632 | 91,151 | 91,151 | 103,714 | 103,714 | 105,884 | 105,884 | 106,533 | 106,533 | 132,815 | 144,671 | 145,375 | 145,375 | 146,107 | 146,708 | 115,372 | 115,372 |
| CAPITAL EXPENDITURES | 227,768 | 8,078 | 25,511 | 305,959 | 26,541 | 0 | 152,161 | 0 | 28,728 | 0 | 33,205 | 0 | 238,221 | 293,649 | 35,943 | 0 | 37,396 | 253,794 | 1,085,945 | 0 |
| SUBTOTAL | 386,741 | 526,074 | 652,785 | 456,157 | 542,677 | 649,864 | 619,906 | 745,649 | 844,031 | 974,977 | 1,076,476 | 1,215,268 | 1,145,332 | 1,036,575 | 1,184,439 | 1,364,895 | 1,513,083 | 1,451,109 | 530,336 | 693,252 |
| PLUS INTEREST INCOME @ 3.00% | 15,848 | 14,403 | 18,699 | 21,910 | 16,036 | 18,489 | 22,029 | 21,226 | 25,062 | 28,171 | 32,259 | 35,470 | 40,221 | 38,432 | 35,081 | 39,477 | 45,111 | 49,800 | 47,544 | 19,469 |
| FULLY FUNDED RESERVE FUND BALANCE | 402,589 | 540,477 | 671,484 | 478,067 | 558,713 | 668,353 | 641,935 | 766,875 | 869,093 | 1,003,148 | 1,108,735 | 1,250,738 | 1,185,553 | 1,075,007 | 1,219,520 | 1,404,372 | 1,558,195 | 1,500,909 | 577,880 | 712,720 |

TOTAL EXPENDITURES 2,752,899

TOTAL CONTRIBUTIONS 2,469,190

STUDY PERIOD TOTAL INTEREST 584,737

AVERAGE ANNUAL CONTRIBUTION 123,460

FULLY FUNDED BALANCE GOAL

**PHOTOGRAPHS
WITH
DESCRIPTIVE
NARRATIVES**



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PHOTO #1
Although the Community Center parking lot was restored in 2007, this area is now in beginning failure, and requires full-depth repairs. The new pavement elsewhere is in continuing good condition.



PHOTO #2
Folly Court, one of six streets that were fully restored in 2011, now appearing to be in like-new condition.



PHOTO #3
New crack appearing on older streets that were repaired and cracked filled in 2007. This will continue until the streets are restored.



PHOTO #4

While this area was crack filled in 2007, it is obvious that additional deflection is now present. Areas like this should be milled to the appropriate depth and replaced in the next pavement restoration.



PHOTO #5

Some older crack filling is still visible here, but note the extensive new cracking as this pavement reaches the end of its service life.



PHOTO #6

Here a 2007 extensive full-depth repair is present and holding up well. Note that there is little continuing radiating cracking on the perimeter of the patch. Also note the crack fill on the perimeter of the patch, which is the proper procedure and is often overlooked by pavers.



PHOTO #7
The Section 4 asphalt footpath is under water here. This could be considered a hazard, especially in freezing temperatures, when it will become ice.



PHOTO #8
Areas like this now require localized full-depth repair. The material should be removed, new gravel base installed and the path repaved. Only about 13% of the system requires repairs at this time.



PHOTO #9
This is an example of typical tree root damage to footpaths. Eventually the heaves become tripping hazards and the roots must be removed before new pavement is installed.



PHOTO #10

This is the worst of only a few heaved sidewalk panels. This is an obvious tripping hazard requiring replacement near-term.



PHOTO #11

This crack is still quite tight and probably not at the point to justify the expense of replacement.



PHOTO #12

Concrete surface scaling is the result of many factors including ice melt chemicals. While unsightly, it is not usually problematic until the surface is deteriorated enough to become a potential tripping hazard.



PHOTO #13

This potential tripping hazard is located in a remote part of the pool deck. Pool deck repairs are scheduled in 2016 and this will be one of the deficiencies addressed at that time.



PHOTO #14

The monuments have always been considered permanent structures requiring periodic maintenance under operations. We observed a few highly fissile stones that are deteriorating and should be replaced along with minor mortar replacement on the top surface.



PHOTO #15

The pressure-treated timber retaining wall adjacent to the Community Center tennis court is continuing to deflect as evidenced by the reveal at the deadmen anchors. Due to location, this will be a difficult replacement. The structure should be capable of a few additional years of service, but should be monitored for movement.



PHOTO #16

The cracking at the Community Center tennis court has reappeared or continues in spite of the 2007 engineered repairs to the supporting masonry retaining wall. The cracks should be patched as part of the next color coat temporarily until the court is fully restored in 2018.



PHOTO #17

The Section 4 tennis court is in continuing good condition with no significant deficiencies currently. Though the color coat is older and somewhat faded, it is still serviceable with newly applied striping.



PHOTO #18

The multi-purpose court was converted to a basketball court as part of a full restoration in 2011 including drainage improvements.



PHOTO #19
The asphalt shingle roofing appears to be in continuing good condition with no significant deficiencies observed.



PHOTO #20
The Community Center wood decking was replaced with composite decking in 2009. Eventually, the pressure-treated wood joists supporting it will require replacement, but the decking may be re-useable at that time.



PHOTO #21
The condenser and air handler of HVAC Unit #3 was replaced in 2011. Its sister Unit #1 is still operating.



PHOTO #22
The 2007 recommended engineered repairs to the masonry retaining wall appear to have been successful.



PHOTO #23
Additional tuckpointing and masonry repairs/waterproofing of planters will be necessary on an on-going basis, and we have programmed the component accordingly.

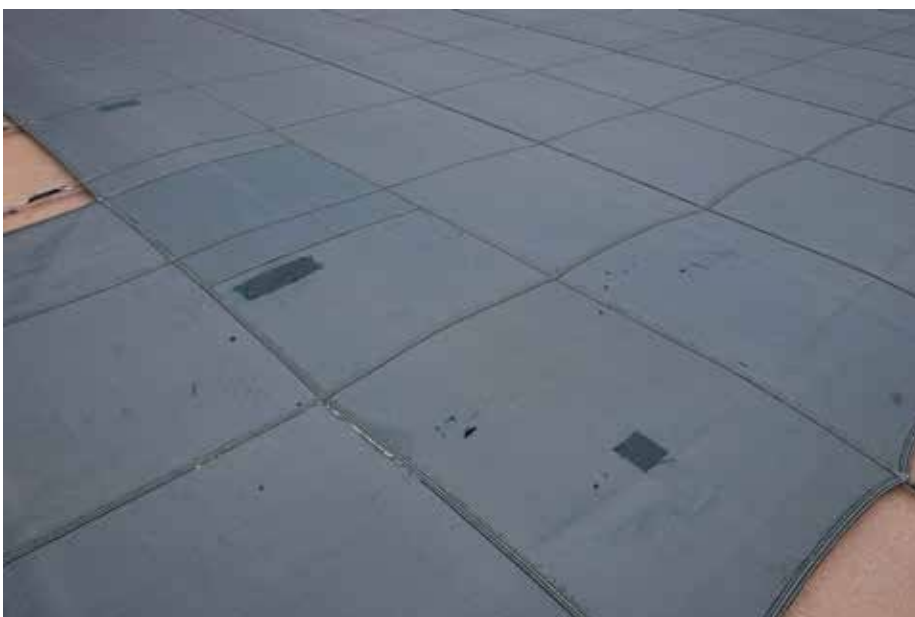


PHOTO #24
The pool cover is aging and tired. We have scheduled replacement in 2013.