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CAPITAL RESERVE STUDY

FOR THE

Tanyard Springs HOA Glen Burnie, Maryland



Study Prepared For: Mr. Randy Summers
Community Management Corporation- An Assicia Company



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Introduction

The purpose of a Capital Reserve Study is to estimate the amount of money that must be funded to replace those common element components that will require replacement before the end of the effective life of the project.

Mortgage lenders recognize the conditions of inadequate reserves. Reserves are important in preserving the qualities of a particular complex or building and therefore can affect property values. Consequently, capital reserves are directly related to the security and risk of a lender's investment and the marketability of the property.

The Capital Reserve Study develops a recommended basic annual contribution based upon current replacement costs. Inflation may increase future costs, and the accumulation of interest on the reserve fund deposits increases available funds. Accurate projection of these factors is not possible. However, the effects of inflation and interest are shown via cash flow projections using assumed inflation and interest rates. Accurate reserve funding requires regular updates. The Community Associations Institute recommends yearly reviews and a formal study every three years.

Project Narrative

The Tanyard Springs is a Community Association located in Glen Burnie, Maryland. This Home Owners Association remains under development, and is planned to contain 1,114 single family and townhome units. The community has been provided with a centrally located amenities facility, including a clubhouse, fitness and meeting rooms, outdoor pool, tennis courts, tot lots, and various other site amenities.

Capital Reserve Methodology

In preparing this study, when provided, we reviewed the master deed and offering statement to identify the common element components. The interpretation of inconsistencies and contradictions which may exist within the designations and definition of the Common Elements of the property, as presented in the Governing Documents, are not the purview of the Engineering firm. In circumstances where uncertainties exist, the Becht study will incorporate the common element designations which are provided to us by the client.

These building and site components are owned by the Association. Only components with estimated remaining lives of 30 years or less have been included in the capital reserve fund. Components with estimated remaining lives that are greater than 30 years, such as building



structures, piping and electrical wiring are usually replaced during a major renovation and financed at that time. Including these components in the reserve fund would result in an unrealistically high-recommended annual contribution to the capital reserve. The general accepted practice is to not include these items in reserve studies.

Quantities of the components to be included in the reserve fund were then determined by either field measurements or from available building and site plans.

Estimates of the costs to replace each component were derived from published industry standards, including the R.S. Means Company cost-estimating guides. In addition, the costs were reviewed for accuracy based on our experience of similar replacement projects.

Finally, estimated remaining lives were determined for each of the included components based on the present age, available industry data related to typical useful lives and the condition of the component, as determined by our physical inspection.

The capital reserve fund is not intended to cover annual maintenance. If maintenance items are included in the Capital Reserve Study, the tax status of the reserve fund can be jeopardized. However, expected lives are based on the assumption that proper annual maintenance is being performed. Therefore, this annual maintenance should be included in the Association's maintenance fee. Without proper maintenance, accelerated deterioration can be expected, with shortened lives. Please note, it is only possible to reserve for future expenditures and that a current need must be financed separately by borrowing or assessments.

This Capital Reserve Study is developed as an aid in the proper financial planning of the Association. As such, the common element components included are evaluated for their physical condition and only for the purpose of estimating their remaining lives. Identification of possible deficient conditions is beyond the intent and scope of the Capital Reserve Study.



Executive Summary

Level of Service	Full Service with Site Visits
Fiscal Year of Study	2014
Total First Year Contribution Per Funding Method	
Component Funding Contribution	\$197,730*
5% Threshold Funding Contribution	\$77,048*
10% Threshold Funding Contribution	\$83,936*
Present Reserve Fund	\$372,900
Required Reserve Fund (Based on Component Method)	\$668,760
Percent Funded (Based on Component Method)	56%
Month Contributions Commence	May 2014

- * Please note that this is the contribution for the period of January 2014 through December 2014.



Reserve Study Disclosures

General - Becht Engineering is not aware of any involvement with this Association that would lead to an actual or perceived conflict of interest.

Physical Analysis - The inspections performed to determine the current physical condition of the common elements were visual in nature; no destructive testing or invasive inspections were performed. Quantities were taken from a combination of field counts/measurements and plan take-offs.

Personnel Credentials - Preparation of this Reserve Study was performed by a CAI designated Reserve Specialist and licensed Building Inspector.

Completeness - This Reserve Study assumes that proper preventative and corrective maintenance has been and will continue to be performed on the common elements. Failure to properly maintain the common elements may lead to premature failure. It should be noted that higher rates of inflation, lower earned interest rates or prematurely failing components can result in a negative closing cash balance. In addition, it is important to note that the capital fund contributions each year are assumed to rise at the assumed rate of inflation. Failure to raise the annual contributions with inflation will reduce the closing balance and may lead to a future shortfall.

Reliance on Client Data – This Reserve Study was prepared based on certain information provided by the Association. This information typically includes the current asset balance of the Reserve Fund, the ages of the common elements and dates of most recent replacements, and the interest and inflation rates which must be provided to us.

Scope – This Reserve Study is a reflection of the information provided to us and assembled for the Association's use for budgeting purposes, not for the purpose of performing an audit, quality/forensic analysis or background checks of historical records.

Reserve Balance – The actual and projected Reserve Fund Balance is based upon information provided by the Association and was not audited.

Component Quantities – Where this Reserve Study is an update of a previously prepared Study, the Association is considered to have deemed previously developed component listings and quantities as accurate and reliable.

Reserve Projects – While the information provided in this Study is to be considered reliable, on-site inspections are not to be considered a project audit or quality inspection.



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The Capital Reserve Study develops a recommended basic annual contribution based upon current replacement costs. Inflation may increase future costs, and the accumulation of interest on the reserve fund deposits increases available funds. Accurate projection of these factors is not possible. However, the effects of inflation and interest are shown via cash flow projections using assumed inflation and interest rates. Accurate reserve funding requires regular updates. The Community Associations Institute recommends yearly reviews and a formal study every three years.

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In preparing this study, we reviewed the master deed and offering statement to identify the common element components. These building and site components are owned by the Association. Only components with estimated remaining lives of 30 years or less have been included in the capital reserve fund. Components with estimated remaining lives that are greater than 30 years, such as building structures, piping and electrical wiring are usually replaced during a major renovation and financed at that time. Including these components in the reserve fund would result in an unrealistically high-recommended annual contribution to the capital reserve. The general accepted practice is to not include these items in reserve studies.

Quantities of the components to be included in the reserve fund were then determined by field measurements, as well as a review of available building and site plans.



Estimates of the costs to replace each component were derived from published industry standards, including the R.S. Means Company cost-estimating guides. In addition, the costs were reviewed for accuracy based on our experience of similar replacement projects.

Finally, estimated remaining lives were determined for each of the included components based on the present age, available industry data related to typical useful lives and the condition of the component, as determined by our physical inspection.

The capital reserve fund is not intended to cover annual maintenance. If maintenance items are included in the Capital Reserve Study, the tax status of the reserve fund can be jeopardized. However, expected lives are based on the assumption that proper annual maintenance is being performed. Therefore, this annual maintenance should be included in the Association's maintenance fee. Without proper maintenance, accelerated deterioration can be expected, with shortened lives. Please note, it is only possible to reserve for future expenditures and that a current need must be financed separately by borrowing or assessments.

This Capital Reserve Study is developed as an aid in the proper financial planning of the Association. As such, the common element components included are evaluated for their physical condition and only for the purpose of estimating their remaining lives. Identification of possible deficient conditions is beyond the intent and scope of the Capital Reserve Study.

Capital Reserve Calculation

We have provided two Capital Reserve calculation methods. The first method provided in this reserve study is what is known as the Component Method. This is the most conservative approach to calculating the reserve requirement. The Component Method analyzes each component individually and assumes that the money collected for each item will only be used to replace that item. Our program uses assumed rates of interest and inflation in the calculation of the annual contribution and fully funded balance. The assumed inflation rate is 3.00% and the assumed interest rate is 0.00%.

The second calculation method is known as the Threshold Funding Method. This method pools all the components and assumes that the money contributed to the fund is available for replacement of any item. The annual contribution is determined by lowering the contribution until the closing balance for any given year drops below a pre-determined threshold. This minimizes the annual contribution while maintaining a minimum closing balance. Determining the optimum minimum closing balance is a subjective task. Certainly, the lower the minimum acceptable balance is the greater the risk that the fund will experience a deficit.



The **Reserve Summary (A-1)** outlines the categories included in the study. This sheet lists the estimated **Replacement Costs** for all components in each category at the time of the study. The **Present Fund** column is the amount presently on deposit for the replacement of the components in these categories. The **Required Fund**, which is the amount we have determined should be on deposit at this time, is calculated as the **Present Age** of the components multiplied by the **Basic Annual Contribution**. The **Basic Annual Contribution** is the amount that should be reserved each year, in current dollars, to replace the components included in these categories.

The **Component Schedule (A-2 through A-3)** shows the amount necessary to replace individual components, which are grouped in the categories shown on the **Reserve Summary**. **Present Age** is the age of the component at the time of the study. The **Estimated Remaining Life** is the anticipated number of years before replacement of this component can be expected to be necessary. This is based on the normal life, the current age, and an engineering assessment that considers site specific conditions if a site visit is included in our scope of work. The **Typical Life** column represents the anticipated number of years that a component may be expected to provide adequate service. These figures are based on industry standards; a component may outlive, or require replacement prior to, its typical life. The **Percentage of Total** is the percent of total **Required Fund**. This shows the significance of specific components relative to the total fund. The **Present Fund** refers to the amount currently set aside for replacement. If present funds are not reserved for specific components but are an unallocated pool, the total present fund is allocated between the components according to a calculation that takes into account the **Percentage of Total** column. The **Required Fund** is the amount necessary for each component to be considered fully funded. The **Surplus (Deficit)** column is a calculation of the **Present Fund** minus the **Required Fund**. A positive number means a surplus of cash reserves have been set aside to date. A negative number indicates that there is a deficit in the Present Fund. **Years to Make-Up** is simply the Estimated Remaining Life or the amount of time left to fully fund a particular component before the money is anticipated to be required to replace the component. Finally, the **Contribution Adjustment** signifies, if a deficit exists, the increase in annual contributions above the recommended **Basic Annual Contribution** required to eliminate the deficit. If a surplus exists, this is the decrease in annual contributions that would offset the over-funded condition. The Annual Make-Up is based on the assumption the reserve for the item must be fully funded before the item must be replaced.

The **Disbursement Schedule (A-9 through A-11)** lists the years in which each component will require replacement. In addition, this schedule shows the replacement cost in current dollars and the adjusted cost based on the assumed inflation factor.

The Reserve Fund **Scenario(s) (A-12 through A-14)** are schedules that approximate actual cash flows. Since this is a plan of accumulating deposits to fund the cost of replacing these capital components in future years, it is necessary to consider the interest earned on the



deposited money and the effect of inflation on the costs of the replacement work. A-12 shows a 30-year scenario of the component method calculation, using the assumed rates of interest and inflation. Deposits into the fund and expenditures out of the fund are shown on an annual basis. It is very important to note that these scenarios assume that the annual contributions to the capital reserve fund will be increased at the rate of inflation. A-13 through A-14 show a 30-year scenario using the same rates of interest and inflation with a minimized Annual Contribution resulting in a closing balance, which never goes below the established threshold.

The **Component Detail Pages (A-4 through A-8)** show further details of the individual components, including the quantities.

Capital Reserve Recommendations

The Tanyard Springs HOA has a total of 41 components in the reserve fund with a current Replacement Cost of \$3,179,591. The Association presently has a total of \$372,900 in the reserve fund. Using the Component Method, we have determined that the Basic Annual Contribution to the reserve fund should be \$175,853. The fully funded balance required is \$668,760. This leaves a deficit of \$295,860 in the reserve fund. The deficit will be offset on an annual basis, for each reserve component, based on the estimated remaining lives. The total of the next budget year contribution to the Contribution Adjustment is \$21,878. This results in a Total Contribution to the reserve fund for the next budget year of \$197,731.

For the Threshold Funding calculations, as directed by the Association, we have used minimum closing balances of 5% and 10% of the Total Replacement Cost of all reserve components. This means that, using the given assumptions; the closing balance will never go below these minimum balances. The Threshold Funding Method results in first year Basic Annual Contributions of \$77,048 and \$83,936.

Based on your evaluation of the preferred calculation method, we suggest that you plan your annual contributions over the next few years according to the appropriate cash flow schedule. Each year, for the next three years, you may choose to review these assumptions. At no later than three years, we suggest that you contact us for an update based on a proper engineering review of the facility and replacement costs.

It should be noted that higher rates of inflation, lower earned interest rates or prematurely failing components can result in a negative closing cash balance. In addition, it is important to note that the capital fund contributions each year are assumed to rise at the assumed rate of inflation. Failure to raise the annual contributions with inflation will reduce the closing balance.

We recommend that the Association review this Capital Reserve Study with their Certified Public Accountant to be utilized in the preparation of their annual budget.



Component Narrative

Architectural

CARPETING, CLUBHOUSE-This component is 4 years old and we estimate a remaining useful life of 6 years.

DOORS, EXTERIOR-This component is 4 years old and we estimate a remaining useful life of 21 years.

GUTTERS AND LEADERS, CLUBHOUSE-This component is 4 years old and we estimate a remaining useful life of 21 years. The estimated replacement cost for this item is based on replacements of similar style and quality.

ROOF SHINGLES, CLUBHOUSE- The roofs are reported to be approximately four years old. They are in good shape and we estimate a useful life of approximately 20 years. The estimated cost of this component includes the full removal and replacement with new shingles and materials of similar grade and quality. It is recommended that continual maintenance be performed so these roofs can fully reach their useful life.

Electrical

FIRE ALARM CONTROL SYSTEM PANEL-This component is 4 years old and we estimate a remaining useful life of 26 years.

INTERIOR LIGHTING ALLOWANCE-This component is 4 years old and we estimate a remaining useful life of 21 years. This lighting budget is grouped in an allowance due to the number and types of lighting throughout the building as an alternative to funding for a one time full replacement. This number requires updating in future reserves to properly manage funding in the long term.

SECURITY/ENTRY SYSTEM-This component is 4 years old and we estimate a remaining useful life of 16 years.

Mechanical

DOMESTIC WATER HEATER, 100GAL-This component is 4 years old and we estimate a remaining useful life of 11 years.



ENERGY RECOVERY UNIT-This component is 4 years old and we estimate a remaining useful life of 11 years. This unit is located in ceiling area of the bathroom exit vestibule.

HVAC SPLIT SYSTEMS, CLUBHOUSE 5X-This component is 4 years old and we estimate a remaining useful life of 11 years. This is for replacement of the compressors and gas furnaces.

There are five natural gas, split systems servicing the clubhouse. A four tone, twinned system servicing the clubroom and office areas, a three ton twinned system servicing the fitness area, and a 1 ½ tone system servicing the locker rooms. This system is located in attic area by the rear entry to the locker rooms.

Site

ASPHALT PATH- This component listing includes funding for the removal of the existing path, funding for base repairs as required and the installation of a minimum of 2 inches thick asphalt pavement.

The paths are located throughout the community with the total amount being 3995 LF with areas of 3 to 5 feet widths equaling 1817 SY at a present price of \$25 per SY.

Note- The estimated replacement cost of the asphalt pavement listed below includes a full milling of the entire top wearing surface of approximately 2 inches in depth and the re-application of Hot Mix Asphalt (HMA) of the required mix design.

ASPHALT PAVING, CLUBHOUSE PARKING-This component is 4 years old and we estimate a remaining useful life of 16 years.

ASPHALT PAVING, ROADS OFF ELLSWORTH TER.-This component is 4 years old and we estimate a remaining useful life of 16 years.

ASPHALT PAVING, ROADS OFF HERITAGE CROSSING-This component is 3 years old and we estimate a remaining useful life of 17 years.

ASPHALT PAVING, ROADS OFF TANYARD SPRINGS-This component is 4 years old and we estimate a remaining useful life of 16 years.

ASPHALT SEAL COATING, CLUBHOUSE-This component is 4 years old and we estimate a remaining useful life of 6 years. This component listing includes funding to seal and patch as necessary the asphalt surfaces at the clubhouse.

CONCRETE CURB AND GUTTER, CLUBHOUSE-This component is 4 years old and we estimate a remaining useful life of 36 years.



CONCRETE CURB AND GUTTER, NEIGHBORHOODS-This component is 4 years old and we estimate a remaining useful life of 46 years.

CONCRETE POOL APRON-This component is 4 years old and we estimate a remaining useful life of 26 years.

CONCRETE WALKS, CLUBHOUSE AREA-This component is 4 years old and we estimate a remaining useful life of 31 years.

CONCRETE WALKS, NEIGHBORHOODS-This component is 4 years old and we estimate a remaining useful life of 36 years.

COURTS REHABILITATION-This component is 4 years old and we estimate a remaining useful life of 6 years. The estimated replacement cost is for the rehabilitation of the two tennis courts and the all-purpose court which are located at the clubhouse. This cost includes repairing any cracks, installing a new surface, and line painting.

FENCING SPLIT RAIL, CONSERVATION AREA-This component is 4 years old and we estimate a remaining useful life of 16 years.

FENCING, ALUMINUM, GAVEYARD-This component is 4 years old and we estimate a remaining useful life of 21 years.

FENCING, ALUMINUM, POOL AREA-This component is 4 years old and we estimate a remaining useful life of 21 years.

FENCING, PVC AT MOMUMENTS-This component is 4 years old and we estimate a remaining useful life of 16 years.

FENCING, TENNIS & ALL PURPOSE COURT-This component is 4 years old and we estimate a remaining useful life of 21 years.

PLAYGROUND EQUIPMENT, 2 LOCATIONS-This component is 4 years old and we estimate a remaining useful life of 21 years.

POOL CHEMICAL FEED-This component is 4 years old and we estimate a remaining useful life of 6 years.

POOL FILTRATION SYSTEM, MAIN & WADE-This component is 4 years old and we estimate a remaining useful life of 8 years.



POOL PUMPS, 10HP & 3/4HP-This component is 4 years old and we estimate a remaining useful life of 11 years.

POOL TILE COPING, MAIN & WADE-This component is 4 years old and we estimate a remaining useful life of 16 years.

POOL WHITE COATING-This component is 4 years old and we estimate a remaining useful life of 6 years.

RAILING, ALUMINUM AT RETAINING WALL-This component is 4 years old and we estimate a remaining useful life of 21 years.

RETAINING WALL, WOOD. ARCHIBALD DR.-This component is 4 years old and we estimate a remaining useful life of 16 years.

WALKING BRIDGE DECKING, 2X-This component is 4 years old and we estimate a remaining useful life of 21 years. These walking bridges are steel structures that will last beyond the life of this study, however, the decking is wood and will require replacement.

Miscellaneous

CLUBHOUSE FURNITURE ALLOWANCE-This component is 4 years old and we estimate a remaining useful life of 16 years. The replacement cost was provided by management from the original receipts.

EXERCISE EQUIPMENT-This component is 4 years old and we estimate a remaining useful life of 16 years.

IRRIGATION SYSTEM CLUBHOUSE- This component includes funding to replace the controller, the backflow preventer at the point of connection and funding to make regular head replacements and repairs.

MEDIA SYSTEMS CLUBHOUSE-This component is 4 years old and we estimate a remaining useful life of 6 years.

SIGNAGE ALLOWANCE COMMUNITY-This component is 4 years old and we estimate a remaining useful life of 16 years. This replacement cost includes funds to replace or make periodic repairs to the signage at the dog park, the clubhouse and the community entry.



James H. Stegemerten

James H. Stegemerten, RS
Senior Project Manager
CAI Reserve Specialist #145

June 27, 2014



Capital Reserve Calculations



Reserve Summary

Project Name:	Tanyard Springs HOA	Interest Rate:	0.00%
Project Location:	Glen Burnie, Maryland	Inflation Rate:	3.00%
Project Number:	13-1131		
Date of Study:	May 2014		
Month Contributions Commence:	May 2014		

Category	Replacement Cost	RESERVES			CONTRIBUTION		
		Present Fund	Required Fund	Surplus (Deficit)	Basic Annual	Adjustment*	Total
Architectural	\$43,882	\$6,961	\$12,483	(\$5,523)	\$3,287	\$549	\$3,836
Electrical	\$36,500	\$4,801	\$8,610	(\$3,809)	\$2,242	\$270	\$2,513
Mechanical	\$25,300	\$4,806	\$8,619	(\$3,813)	\$2,291	\$443	\$2,734
Site	\$2,746,909	\$304,907	\$546,821	(\$241,914)	\$143,772	\$16,850	\$160,622
Miscellaneous	\$327,000	\$51,425	\$92,226	(\$40,801)	\$24,260	\$3,766	\$28,026
TOTALS	\$3,179,591	\$372,900	\$668,760	(\$295,860)	\$175,853	\$21,878	\$197,730

* FIRST YEAR CONTRIBUTION ADJUSTMENT CAN DIFFER EACH YEAR



Component Schedule

Project Name: Tanyard Springs HOA
Project Location: Glen Burnie, Maryland
Project Number: 13-1131
Date of Study: May 2014

Interest Rate: 0.00%
Inflation Rate: 3.00%

Description	Replacement Cost	Present Age	Est.		Basic Annual Contrib.	Percent Total	Present Fund	Required Fund	Surplus (Deficit)	Contrib. Adjustment
			Rem. Life	Typical Life						
Architectural										
Carpeting, Clubhouse	\$3,990	4	6	10	\$501	0.28%	\$1,035	\$1,855	(\$821)	\$159
Doors, Exterior	\$4,800	4	21	25	\$292	0.17%	\$626	\$1,123	(\$497)	\$35
Gutters and Leaders, Clubhouse	\$3,825	4	21	25	\$233	0.13%	\$499	\$895	(\$396)	\$28
Roof Shingles, Clubhouse	\$31,267	4	16	20	\$2,261	1.29%	\$4,801	\$8,610	(\$3,809)	\$328
Electrical										
Fire Alarm Control System Panel	\$4,000	4	26	30	\$212	0.12%	\$457	\$819	(\$362)	\$21
Interior Lighting Allowance	\$28,000	4	21	25	\$1,705	0.98%	\$3,653	\$6,552	(\$2,899)	\$202
Security/Entry System	\$4,500	4	16	20	\$325	0.19%	\$691	\$1,239	(\$548)	\$47
Mechanical										
Domestic Water Heater, 100gal	\$2,800	4	11	15	\$254	0.14%	\$532	\$954	(\$422)	\$49
Energy Recovery Unit	\$6,500	4	11	15	\$589	0.33%	\$1,235	\$2,214	(\$980)	\$114
HVAC Split Systems, Clubhouse 5X	\$16,000	4	11	15	\$1,449	0.82%	\$3,039	\$5,451	(\$2,412)	\$280
Site										
Asphalt Path	\$45,425	4	16	20	\$3,285	1.87%	\$6,975	\$12,509	(\$5,534)	\$476
Asphalt Paving, Clubhouse Parking	\$45,780	4	16	20	\$3,311	1.89%	\$7,029	\$12,606	(\$5,577)	\$480
Asphalt Paving, Roads off Ellsworth Ter	\$150,624	4	16	20	\$10,893	6.20%	\$23,127	\$41,477	(\$18,349)	\$1,579
Asphalt Paving, Roads off Heritage Cro	\$116,280	3	17	20	\$8,409	3.64%	\$13,567	\$24,331	(\$10,764)	\$883
Asphalt Paving, Roads off Tanyard Spri	\$304,380	4	16	20	\$22,012	12.53%	\$46,736	\$83,816	(\$37,080)	\$3,191
Asphalt Seal Coating, Clubhouse	\$7,439	4	6	10	\$934	0.52%	\$1,929	\$3,459	(\$1,530)	\$297
Concrete Curb and Gutter, Clubhouse	\$43,372	4	36	40	\$1,836	1.07%	\$4,002	\$7,178	(\$3,176)	\$146
Concrete Curb and Gutter, Neighborhoc	\$753,228	4	46	50	\$26,693	15.71%	\$58,574	\$105,046	(\$46,472)	\$1,761
Concrete Pool Apron	\$95,880	4	26	30	\$5,075	2.94%	\$10,951	\$19,640	(\$8,689)	\$513
Concrete Walks, Clubhouse Area	\$52,710	4	31	35	\$2,477	1.44%	\$5,374	\$9,638	(\$4,264)	\$220
Concrete Walks, Neighborhoods	\$802,365	4	36	40	\$33,969	19.86%	\$74,043	\$132,789	(\$58,746)	\$2,701
Courts Rehabilitation	\$16,584	4	6	10	\$2,083	1.15%	\$4,300	\$7,712	(\$3,412)	\$661
Fencing Split Rail, Conservation Area	\$26,280	4	16	20	\$1,900	1.08%	\$4,035	\$7,237	(\$3,201)	\$275



Component Schedule

Project Name: Tanyard Springs HOA
Project Location: Glen Burnie, Maryland
Project Number: 13-1131
Date of Study: May 2014

Interest Rate: 0.00%
Inflation Rate: 3.00%

Description	Replacement Cost	Present Age	Est.		Basic Annual Contrib.	Percent Total	Present Fund	Required Fund	Surplus (Deficit)	Contrib. Adjustment
			Rem. Life	Typical Life						
Fencing, Aluminum, Gaveyard	\$29,782	4	21	25	\$1,814	1.04%	\$3,886	\$6,969	(\$3,083)	\$215
Fencing, Aluminum, Pool Area	\$16,482	4	21	25	\$1,004	0.58%	\$2,150	\$3,857	(\$1,706)	\$119
Fencing, PVC at Monuments	\$2,600	4	16	20	\$188	0.11%	\$399	\$716	(\$317)	\$27
Fencing, Tennis & All Purpose Court	\$14,310	4	21	25	\$871	0.50%	\$1,867	\$3,348	(\$1,481)	\$103
Playground Equipment, 2 locations	\$68,000	4	21	25	\$4,141	2.38%	\$8,872	\$15,911	(\$7,039)	\$490
Pool Chemical Feed	\$550	4	6	10	\$69	0.04%	\$143	\$256	(\$113)	\$22
Pool Filtration System, Main & Wade	\$6,500	4	8	12	\$703	0.39%	\$1,463	\$2,823	(\$1,160)	\$176
Pool Pumps, 10hp & 3/4Hp	\$11,000	4	11	15	\$996	0.56%	\$2,090	\$3,748	(\$1,658)	\$193
Pool Tile Coping, Main & Wade	\$13,000	4	16	20	\$940	0.54%	\$1,996	\$3,580	(\$1,584)	\$136
Pool White Coating	\$38,616	4	6	10	\$4,850	2.69%	\$10,013	\$17,957	(\$7,944)	\$1,539
Railing, Aluminum at Retaining Wall	\$38,592	4	21	25	\$2,350	1.35%	\$5,035	\$9,030	(\$3,995)	\$278
Retaining Wall, Wood. Archibald Dr.	\$8,730	4	16	20	\$631	0.36%	\$1,340	\$2,404	(\$1,064)	\$92
Walking Bridge Decking, 2X	\$38,400	4	21	25	\$2,338	1.34%	\$5,010	\$8,985	(\$3,975)	\$277
Miscellaneous										
Clubhouse Furniture Allowance	\$245,000	4	16	20	\$17,717	10.09%	\$37,618	\$67,465	(\$29,847)	\$2,568
Exercise Equipment	\$65,000	4	16	20	\$4,701	2.68%	\$9,980	\$17,899	(\$7,918)	\$681
Irrigation System Clubhouse	\$3,500	4	6	10	\$440	0.24%	\$908	\$1,628	(\$720)	\$140
Media Systems Clubhouse	\$8,000	4	6	10	\$1,005	0.56%	\$2,074	\$3,720	(\$1,646)	\$319
Signage Allowance Community	\$5,500	4	16	20	\$398	0.23%	\$844	\$1,515	(\$670)	\$58
TOTALS	\$3,179,591				\$175,853	100.00%	\$372,900	\$668,760	(\$295,860)	\$21,878

General Notes:
 None



Component Detail

Project Name:	Tanyard Springs HOA		
Project Location:	Glen Burnie, Maryland		
Project Number:	13-1131	Interest Rate:	0.00%
Date of Study:	May 2014	Inflation Rate:	3.00%

Architectural

	Quantity	Replacement Cost	RESERVES			CONTRIBUTION	
			Present Fund	Required Fund	Surplus (Deficit)	Basic Annual	Total
Carpeting, Clubhouse	105 SY	\$3,990	\$1,035	\$1,855	(\$821)	\$501	\$660
Doors, Exterior	4 EA	\$4,800	\$626	\$1,123	(\$497)	\$292	\$327
Gutters and Leaders, Clubhouse	510 LF	\$3,825	\$499	\$895	(\$396)	\$233	\$261
Roof Shingles, Clubhouse	10,086 SF	\$31,267	\$4,801	\$8,610	(\$3,809)	\$2,261	\$2,589
TOTALS		\$43,882	\$6,961	\$12,483	(\$5,523)	\$3,287	\$3,836



Component Detail

Project Name: Tanyard Springs HOA
Project Location: Glen Burnie, Maryland
Project Number: 13-1131
Date of Study: May 2014

Interest Rate: 0.00%
Inflation Rate: 3.00%

Electrical

	Quantity	Replacement Cost	RESERVES			CONTRIBUTION	
			Present Fund	Required Fund	Surplus (Deficit)	Basic Annual	Total
Fire Alarm Control System Panel	1 EA	\$4,000	\$457	\$819	(\$362)	\$212	\$233
Interior Lighting Allowance	1 LS	\$28,000	\$3,653	\$6,552	(\$2,899)	\$1,705	\$1,907
Security/Entry System	1 LS	\$4,500	\$691	\$1,239	(\$548)	\$325	\$373
TOTALS		\$36,500	\$4,801	\$8,610	(\$3,809)	\$2,242	\$2,513



Component Detail

Project Name: Tanyard Springs HOA
Project Location: Glen Burnie, Maryland
Project Number: 13-1131
Date of Study: May 2014

Interest Rate: 0.00%
Inflation Rate: 3.00%

Mechanical

	Quantity	Replacement Cost	RESERVES			CONTRIBUTION	
			Present Fund	Required Fund	Surplus (Deficit)	Basic Annual	Total
Domestic Water Heater, 100gal	1 EA	\$2,800	\$532	\$954	(\$422)	\$254	\$303
Energy Recovery Unit	1 EA	\$6,500	\$1,235	\$2,214	(\$980)	\$589	\$702
HVAC Split Systems, Clubhouse 5X	1 LS	\$16,000	\$3,039	\$5,451	(\$2,412)	\$1,449	\$1,729
TOTALS		\$25,300	\$4,806	\$8,619	(\$3,813)	\$2,291	\$2,734



Component Detail

Project Name: Tanyard Springs HOA
Project Location: Glen Burnie, Maryland
Project Number: 13-1131
Date of Study: May 2014

Interest Rate: 0.00%
Inflation Rate: 3.00%

Site	Quantity	Replacement Cost	RESERVES			CONTRIBUTION	
			Present Fund	Required Fund	Surplus (Deficit)	Basic Annual	Total
Asphalt Path	1,817 SY	\$45,425	\$6,975	\$12,509	(\$5,534)	\$3,285	\$3,761
Asphalt Paving, Clubhouse Parking	2,289 SY	\$45,780	\$7,029	\$12,606	(\$5,577)	\$3,311	\$3,791
Asphalt Paving, Roads off Ellsworth Ter.	8,368 SY	\$150,624	\$23,127	\$41,477	(\$18,349)	\$10,893	\$12,472
Asphalt Paving, Roads off Heritage Crossing	6,460 SY	\$116,280	\$13,567	\$24,331	(\$10,764)	\$8,409	\$9,292
Asphalt Paving, Roads off Tanyard Springs	16,910 SY	\$304,380	\$46,736	\$83,816	(\$37,080)	\$22,012	\$25,202
Asphalt Seal Coating, Clubhouse	2,289 SY	\$7,439	\$1,929	\$3,459	(\$1,530)	\$934	\$1,231
Concrete Curb and Gutter, Clubhouse	1,549 LF	\$43,372	\$4,002	\$7,178	(\$3,176)	\$1,836	\$1,982
Concrete Curb and Gutter, Neighborhoods	26,901 LF	\$753,228	\$58,574	\$105,046	(\$46,472)	\$26,693	\$28,454
Concrete Pool Apron	11,985 SF	\$95,880	\$10,951	\$19,640	(\$8,689)	\$5,075	\$5,589
Concrete Walks, Clubhouse Area	7,028 SF	\$52,710	\$5,374	\$9,638	(\$4,264)	\$2,477	\$2,697
Concrete Walks, Neighborhoods	106,982 SF	\$802,365	\$74,043	\$132,789	(\$58,746)	\$33,969	\$36,670
Courts Rehabilitation	16,584 SF	\$16,584	\$4,300	\$7,712	(\$3,412)	\$2,083	\$2,744
Fencing Split Rail, Conservation Area	1,460 LF	\$26,280	\$4,035	\$7,237	(\$3,201)	\$1,900	\$2,176
Fencing, Aluminum, Gaveyard	889 LF	\$29,782	\$3,886	\$6,969	(\$3,083)	\$1,814	\$2,028
Fencing, Aluminum, Pool Area	492 LF	\$16,482	\$2,150	\$3,857	(\$1,706)	\$1,004	\$1,123
Fencing, PVC at Monuments	130 LF	\$2,600	\$399	\$716	(\$317)	\$188	\$215
Fencing, Tennis & All Purpose Court	530 LF	\$14,310	\$1,867	\$3,348	(\$1,481)	\$871	\$975
Playground Equipment, 2 locations	1 LS	\$68,000	\$8,872	\$15,911	(\$7,039)	\$4,141	\$4,631
Pool Chemical Feed	1 EA	\$550	\$143	\$256	(\$113)	\$69	\$91
Pool Filtration System, Main & Wade	1 LS	\$6,500	\$1,463	\$2,623	(\$1,160)	\$703	\$879
Pool Pumps, 10hp & 3/4Hp	1 LS	\$11,000	\$2,090	\$3,748	(\$1,658)	\$996	\$1,189
Pool Tile Coping, Main & Wade	520 LF	\$13,000	\$1,996	\$3,580	(\$1,584)	\$940	\$1,076
Pool White Coating	6,436 SF	\$38,616	\$10,013	\$17,957	(\$7,944)	\$4,850	\$6,389
Railing, Aluminum at Retaining Wall	576 LF	\$38,592	\$5,035	\$9,030	(\$3,995)	\$2,350	\$2,628
Retaining Wall, Wood. Archibald Dr.	291 SF	\$8,730	\$1,340	\$2,404	(\$1,064)	\$631	\$723
Walking Bridge Decking, 2X	3,200 SF	\$38,400	\$5,010	\$8,985	(\$3,975)	\$2,338	\$2,615
TOTALS		\$2,746,909	\$304,907	\$546,821	(\$241,914)	\$143,772	\$160,622



Component Detail

Project Name: Tanyard Springs HOA
Project Location: Glen Burnie, Maryland
Project Number: 13-1131
Date of Study: May 2014

Interest Rate: 0.00%
Inflation Rate: 3.00%

Miscellaneous

	Quantity	Replacement Cost	RESERVES			CONTRIBUTION	
			Present Fund	Required Fund	Surplus (Deficit)	Basic Annual	Total
Clubhouse Furniture Allowance	1 LS	\$245,000	\$37,618	\$67,465	(\$29,847)	\$17,717	\$20,286
Exercise Equipment	1 LS	\$65,000	\$9,980	\$17,899	(\$7,918)	\$4,701	\$5,382
Irrigation System Clubhouse	1 LS	\$3,500	\$908	\$1,628	(\$720)	\$440	\$579
Media Systems Clubhouse	1 LS	\$8,000	\$2,074	\$3,720	(\$1,646)	\$1,005	\$1,324
Signage Allowance Community	1 LS	\$5,500	\$844	\$1,515	(\$670)	\$398	\$455
TOTALS		\$327,000	\$51,425	\$92,226	(\$40,801)	\$24,260	\$28,026



Disbursement Schedule

Project Name:	Tanyard Springs HOA	Interest Rate:	0.00%
Project Location:	Glen Burnie, Maryland	Inflation Rate:	3.00%
Project Number:	13-1131		
Date of Study:	May 2014		

Year	Description	Base Cost	Future Replacement Cost
2020			
	Asphalt Seal Coating, Clubhouse	\$7,439	\$8,883
	Carpeting, Clubhouse	\$3,990	\$4,764
	Courts Rehabilitation	\$16,584	\$19,802
	Irrigation System Clubhouse	\$3,500	\$4,179
	Media Systems Clubhouse	\$8,000	\$9,552
	Pool Chemical Feed	\$550	\$657
	Pool White Coating	\$38,616	\$46,110
		\$78,679	\$93,947
2022			
	Pool Filtration System, Main & Wade	\$6,500	\$8,234
		\$6,500	\$8,234
2025			
	Domestic Water Heater, 100gal	\$2,800	\$3,876
	Energy Recovery Unit	\$6,500	\$8,998
	HVAC Split Systems, Clubhouse 5X	\$16,000	\$22,148
	Pool Pumps, 10hp & 3/4Hp	\$11,000	\$15,227
		\$36,300	\$50,248
2030			
	Asphalt Path	\$45,425	\$72,894
	Asphalt Paving, Clubhouse Parking	\$45,780	\$73,463
	Asphalt Paving, Roads off Ellsworth Ter.	\$150,624	\$241,707
	Asphalt Paving, Roads off Tanyard Springs	\$304,380	\$488,441
	Asphalt Seal Coating, Clubhouse	\$7,439	\$11,937
	Carpeting, Clubhouse	\$3,990	\$6,403
	Clubhouse Furniture Allowance	\$245,000	\$393,153
	Courts Rehabilitation	\$16,584	\$26,612
	Exercise Equipment	\$65,000	\$104,306
	Fencing Split Rail, Conservation Area	\$26,280	\$42,172
	Fencing, PVC at Momuments	\$2,600	\$4,172
	Irrigation System Clubhouse	\$3,500	\$5,616
	Media Systems Clubhouse	\$8,000	\$12,838



Disbursement Schedule

Project Name:	Tanyard Springs HOA	Interest Rate:	0.00%
Project Location:	Glen Burnie, Maryland	Inflation Rate:	3.00%
Project Number:	13-1131		
Date of Study:	May 2014		

Year	Description	Base Cost	Future Replacement Cost
	Pool Chemical Feed	\$550	\$883
	Pool Tile Coping, Main & Wade	\$13,000	\$20,861
	Pool White Coating	\$38,616	\$61,967
	Retaining Wall, Wood. Archibald Dr.	\$8,730	\$14,009
	Roof Shingles, Clubhouse	\$31,267	\$50,174
	Security/Entry System	\$4,500	\$7,221
	Signage Allowance Community	\$5,500	\$8,826
		\$1,026,765	\$1,647,656
2031			
	Asphalt Paving, Roads off Heritage Crossing	\$116,280	\$192,193
		\$116,280	\$192,193
2034			
	Pool Filtration System, Main & Wade	\$6,500	\$11,740
		\$6,500	\$11,740
2035			
	Doors, Exterior	\$4,800	\$8,929
	Fencing, Aluminum, Gaveyard	\$29,782	\$55,403
	Fencing, Aluminum, Pool Area	\$16,482	\$30,661
	Fencing, Tennis & All Purpose Court	\$14,310	\$26,621
	Gutters and Leaders, Clubhouse	\$3,825	\$7,116
	Interior Lighting Allowance	\$28,000	\$52,088
	Playground Equipment, 2 locations	\$68,000	\$126,500
	Railing, Aluminum at Retaining Wall	\$38,592	\$71,792
	Walking Bridge Decking, 2X	\$38,400	\$71,435
		\$242,191	\$450,547
2040			
	Asphalt Seal Coating, Clubhouse	\$7,439	\$16,043
	Carpeting, Clubhouse	\$3,990	\$8,605
	Concrete Pool Apron	\$95,880	\$206,774
	Courts Rehabilitation	\$16,584	\$35,765
	Domestic Water Heater, 100gal	\$2,800	\$6,038



Disbursement Schedule

Project Name:	Tanyard Springs HOA	Interest Rate:	0.00%
Project Location:	Glen Burnie, Maryland	Inflation Rate:	3.00%
Project Number:	13-1131		
Date of Study:	May 2014		

Year	Description	Base Cost	Future Replacement Cost
	Energy Recovery Unit	\$6,500	\$14,018
	Fire Alarm Control System Panel	\$4,000	\$8,626
	HVAC Split Systems, Clubhouse 5X	\$16,000	\$34,505
	Irrigation System Clubhouse	\$3,500	\$7,548
	Media Systems Clubhouse	\$8,000	\$17,253
	Pool Chemical Feed	\$550	\$1,186
	Pool Pumps, 10hp & 3/4Hp	\$11,000	\$23,723
	Pool White Coating	\$38,616	\$83,279
		\$214,859	\$463,363
2045	Concrete Walks, Clubhouse Area	\$52,710	\$131,779
		\$52,710	\$131,779
2050	Concrete Curb and Gutter, Clubhouse	\$43,372	\$125,704
	Concrete Walks, Neighborhoods	\$802,365	\$2,325,477
		\$845,737	\$2,451,181
2060	Concrete Curb and Gutter, Neighborhoods	\$753,228	\$2,933,856
		\$753,228	\$2,933,856



Reserve Fund Scenario

Project Name:	Tanyard Springs HOA	Calculation Method:	Component
Project Location:	Glen Burnie, Maryland	Interest Rate:	0.00%
Project Number:	13-1131	Inflation Rate:	3.00%
Date of Study:	May 2014		
Month Contributions Commence:	May 2014		

Year	Opening Balance	Annual Contribution	Contribution Adjustment	Disbursements	Earned Interest	Closing Balance
2014	\$372,900	\$117,235	\$21,878	\$0	\$0	\$512,013
2015	\$512,013	\$181,128	\$22,534	\$0	\$0	\$715,675
2016	\$715,675	\$186,562	\$23,210	\$0	\$0	\$925,447
2017	\$925,447	\$192,159	\$23,907	\$0	\$0	\$1,141,512
2018	\$1,141,512	\$197,924	\$24,624	\$0	\$0	\$1,364,059
2019	\$1,364,059	\$203,861	\$25,362	\$0	\$0	\$1,593,283
2020	\$1,593,283	\$209,977	\$22,379	\$93,947	\$0	\$1,731,692
2021	\$1,731,692	\$216,276	\$23,050	\$0	\$0	\$1,971,019
2022	\$1,971,019	\$222,765	\$23,519	\$8,234	\$0	\$2,209,069
2023	\$2,209,069	\$229,448	\$24,225	\$0	\$0	\$2,462,742
2024	\$2,462,742	\$236,331	\$24,952	\$0	\$0	\$2,724,025
2025	\$2,724,025	\$243,421	\$24,820	\$50,248	\$0	\$2,942,019
2026	\$2,942,019	\$250,724	\$25,565	\$0	\$0	\$3,218,308
2027	\$3,218,308	\$258,245	\$26,332	\$0	\$0	\$3,502,885
2028	\$3,502,885	\$265,993	\$27,122	\$0	\$0	\$3,796,000
2029	\$3,796,000	\$273,973	\$27,936	\$0	\$0	\$4,097,908
2030	\$4,097,908	\$282,192	\$12,825	\$1,647,656	\$0	\$2,745,269
2031	\$2,745,269	\$290,658	\$11,750	\$192,193	\$0	\$2,855,483
2032	\$2,855,483	\$299,377	\$12,102	\$0	\$0	\$3,166,962
2033	\$3,166,962	\$308,359	\$12,465	\$0	\$0	\$3,487,786
2034	\$3,487,786	\$317,609	\$12,839	\$11,740	\$0	\$3,806,494
2035	\$3,806,494	\$327,138	\$9,976	\$450,547	\$0	\$3,693,061
2036	\$3,693,061	\$336,952	\$10,276	\$0	\$0	\$4,040,288
2037	\$4,040,288	\$347,060	\$10,584	\$0	\$0	\$4,397,932
2038	\$4,397,932	\$357,472	\$10,901	\$0	\$0	\$4,766,305
2039	\$4,766,305	\$368,196	\$11,228	\$0	\$0	\$5,145,730
2040	\$5,145,730	\$379,242	\$10,412	\$463,363	\$0	\$5,072,021
2041	\$5,072,021	\$390,619	\$10,724	\$0	\$0	\$5,473,365
2042	\$5,473,365	\$402,338	\$11,046	\$0	\$0	\$5,886,749
2043	\$5,886,749	\$414,408	\$11,377	\$0	\$0	\$6,312,534
2044	\$6,312,534	\$426,840	\$11,719	\$0	\$0	\$6,751,093



Reserve Fund Scenario

Project Name:	Tanyard Springs HOA	Calculation Method:	5% of Repl. Cost
Project Location:	Glen Burnie, Maryland	Minimum Balance	\$158,980
Project Number:	13-1131	Interest Rate:	0.00%
Date of Study:	May 2014	Inflation Rate:	3.00%
Month Contributions Commence:	May 2014		

Year	Opening Balance	Annual Contribution	Contribution Adjustment	Disbursements	Earned Interest	Closing Balance
2014	\$372,900	\$51,365	\$0	\$0	\$0	\$424,265
2015	\$424,265	\$79,360	\$0	\$0	\$0	\$503,625
2016	\$503,625	\$81,740	\$0	\$0	\$0	\$585,366
2017	\$585,366	\$84,193	\$0	\$0	\$0	\$669,558
2018	\$669,558	\$86,718	\$0	\$0	\$0	\$756,277
2019	\$756,277	\$89,320	\$0	\$0	\$0	\$845,597
2020	\$845,597	\$92,000	\$0	\$93,947	\$0	\$843,649
2021	\$843,649	\$94,760	\$0	\$0	\$0	\$938,409
2022	\$938,409	\$97,602	\$0	\$8,234	\$0	\$1,027,777
2023	\$1,027,777	\$100,530	\$0	\$0	\$0	\$1,128,308
2024	\$1,128,308	\$103,546	\$0	\$0	\$0	\$1,231,854
2025	\$1,231,854	\$106,653	\$0	\$50,248	\$0	\$1,288,259
2026	\$1,288,259	\$109,852	\$0	\$0	\$0	\$1,398,112
2027	\$1,398,112	\$113,148	\$0	\$0	\$0	\$1,511,260
2028	\$1,511,260	\$116,542	\$0	\$0	\$0	\$1,627,802
2029	\$1,627,802	\$120,039	\$0	\$0	\$0	\$1,747,841
2030	\$1,747,841	\$123,640	\$0	\$1,647,656	\$0	\$223,824
2031	\$223,824	\$127,349	\$0	\$192,193	\$0	\$158,980
2032	\$158,980	\$131,169	\$0	\$0	\$0	\$290,149
2033	\$290,149	\$135,105	\$0	\$0	\$0	\$425,254
2034	\$425,254	\$139,158	\$0	\$11,740	\$0	\$552,672
2035	\$552,672	\$143,332	\$0	\$450,547	\$0	\$245,457
2036	\$245,457	\$147,632	\$0	\$0	\$0	\$393,090
2037	\$393,090	\$152,061	\$0	\$0	\$0	\$545,151
2038	\$545,151	\$156,623	\$0	\$0	\$0	\$701,774
2039	\$701,774	\$161,322	\$0	\$0	\$0	\$863,096
2040	\$863,096	\$166,162	\$0	\$463,363	\$0	\$565,895
2041	\$565,895	\$171,146	\$0	\$0	\$0	\$737,041
2042	\$737,041	\$176,281	\$0	\$0	\$0	\$913,322
2043	\$913,322	\$181,569	\$0	\$0	\$0	\$1,094,891
2044	\$1,094,891	\$187,016	\$0	\$0	\$0	\$1,281,907



Reserve Fund Scenario

Project Name:	Tanyard Springs HOA	Calculation Method:	10% of Repl. Cost
Project Location:	Glen Burnie, Maryland	Minimum Balance	\$317,959
Project Number:	13-1131	Interest Rate:	0.00%
Date of Study:	May 2014	Inflation Rate:	3.00%
Month Contributions Commence:	May 2014		

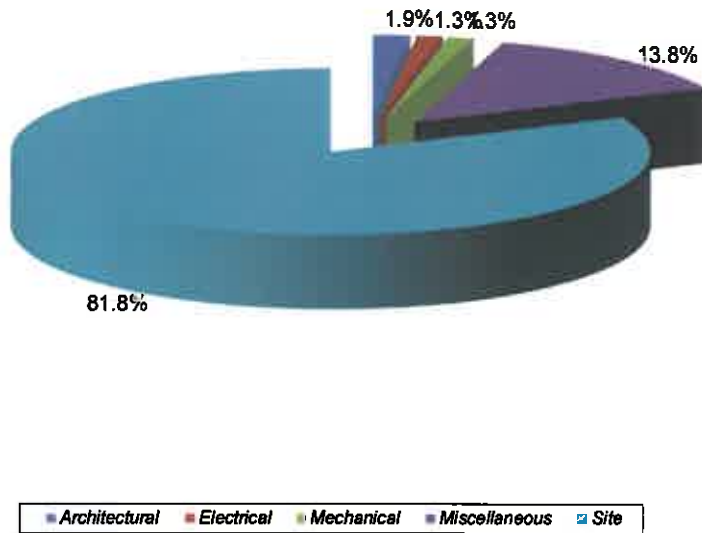
Year	Opening Balance	Annual Contribution	Contribution Adjustment	Disbursements	Earned Interest	Closing Balance
2014	\$372,900	\$55,957	\$0	\$0	\$0	\$428,857
2015	\$428,857	\$86,454	\$0	\$0	\$0	\$515,312
2016	\$515,312	\$89,048	\$0	\$0	\$0	\$604,359
2017	\$604,359	\$91,719	\$0	\$0	\$0	\$696,079
2018	\$696,079	\$94,471	\$0	\$0	\$0	\$790,549
2019	\$790,549	\$97,305	\$0	\$0	\$0	\$887,854
2020	\$887,854	\$100,224	\$0	\$93,947	\$0	\$894,131
2021	\$894,131	\$103,231	\$0	\$0	\$0	\$997,362
2022	\$997,362	\$106,328	\$0	\$8,234	\$0	\$1,095,456
2023	\$1,095,456	\$109,518	\$0	\$0	\$0	\$1,204,973
2024	\$1,204,973	\$112,803	\$0	\$0	\$0	\$1,317,777
2025	\$1,317,777	\$116,187	\$0	\$50,248	\$0	\$1,383,716
2026	\$1,383,716	\$119,673	\$0	\$0	\$0	\$1,503,389
2027	\$1,503,389	\$123,263	\$0	\$0	\$0	\$1,626,652
2028	\$1,626,652	\$126,961	\$0	\$0	\$0	\$1,753,613
2029	\$1,753,613	\$130,770	\$0	\$0	\$0	\$1,884,382
2030	\$1,884,382	\$134,693	\$0	\$1,647,656	\$0	\$371,418
2031	\$371,418	\$138,734	\$0	\$192,193	\$0	\$317,959
2032	\$317,959	\$142,896	\$0	\$0	\$0	\$460,854
2033	\$460,854	\$147,182	\$0	\$0	\$0	\$608,037
2034	\$608,037	\$151,598	\$0	\$11,740	\$0	\$747,895
2035	\$747,895	\$156,146	\$0	\$450,547	\$0	\$453,494
2036	\$453,494	\$160,830	\$0	\$0	\$0	\$614,324
2037	\$614,324	\$165,655	\$0	\$0	\$0	\$779,979
2038	\$779,979	\$170,625	\$0	\$0	\$0	\$950,604
2039	\$950,604	\$175,743	\$0	\$0	\$0	\$1,126,348
2040	\$1,126,348	\$181,016	\$0	\$463,363	\$0	\$844,000
2041	\$844,000	\$186,446	\$0	\$0	\$0	\$1,030,447
2042	\$1,030,447	\$192,040	\$0	\$0	\$0	\$1,222,486
2043	\$1,222,486	\$197,801	\$0	\$0	\$0	\$1,420,287
2044	\$1,420,287	\$203,735	\$0	\$0	\$0	\$1,624,022



Present Fund By Category

Project Name: Tanyard Springs HOA
Project Location: Glen Burnie, Maryland
Project Number: 13-1131
Date of Study: May 2014

Interest Rate: 0.00%
Inflation Rate: 3.00%





Current Replacement Cost by Category

Project Name: Tanyard Springs HOA

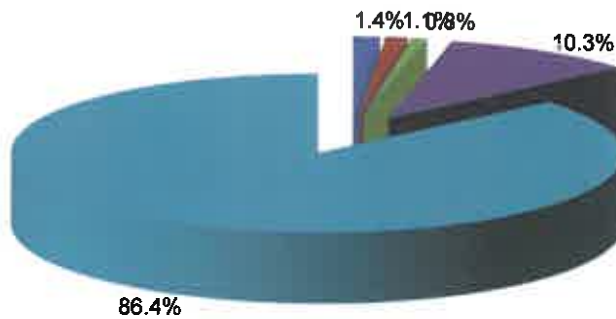
Project Location: Glen Burnie, Maryland

Project Number: 13-1131

Date of Study: May 2014

Interest Rate: 0.00%

Inflation Rate: 3.00%



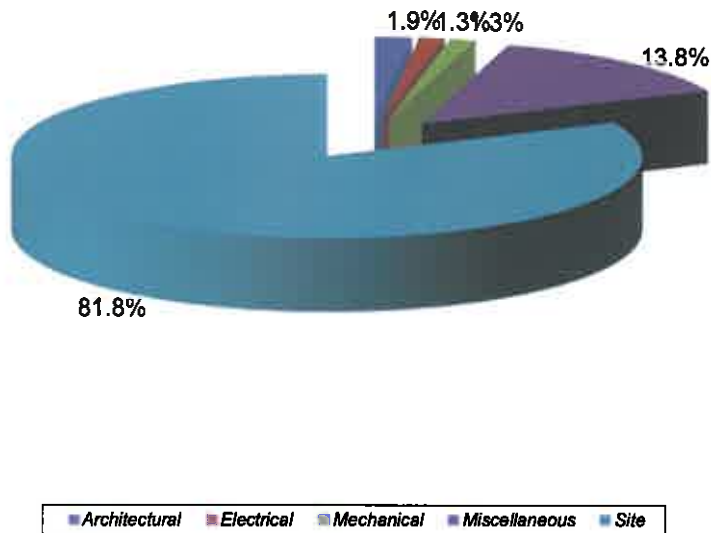
■ Architectural ■ Electrical ■ Mechanical ■ Miscellaneous ■ Site



Annual Contribution by Category

Project Name: Tanyard Springs HOA
Project Location: Glen Burnie, Maryland
Project Number: 13-1131
Date of Study: May 2014

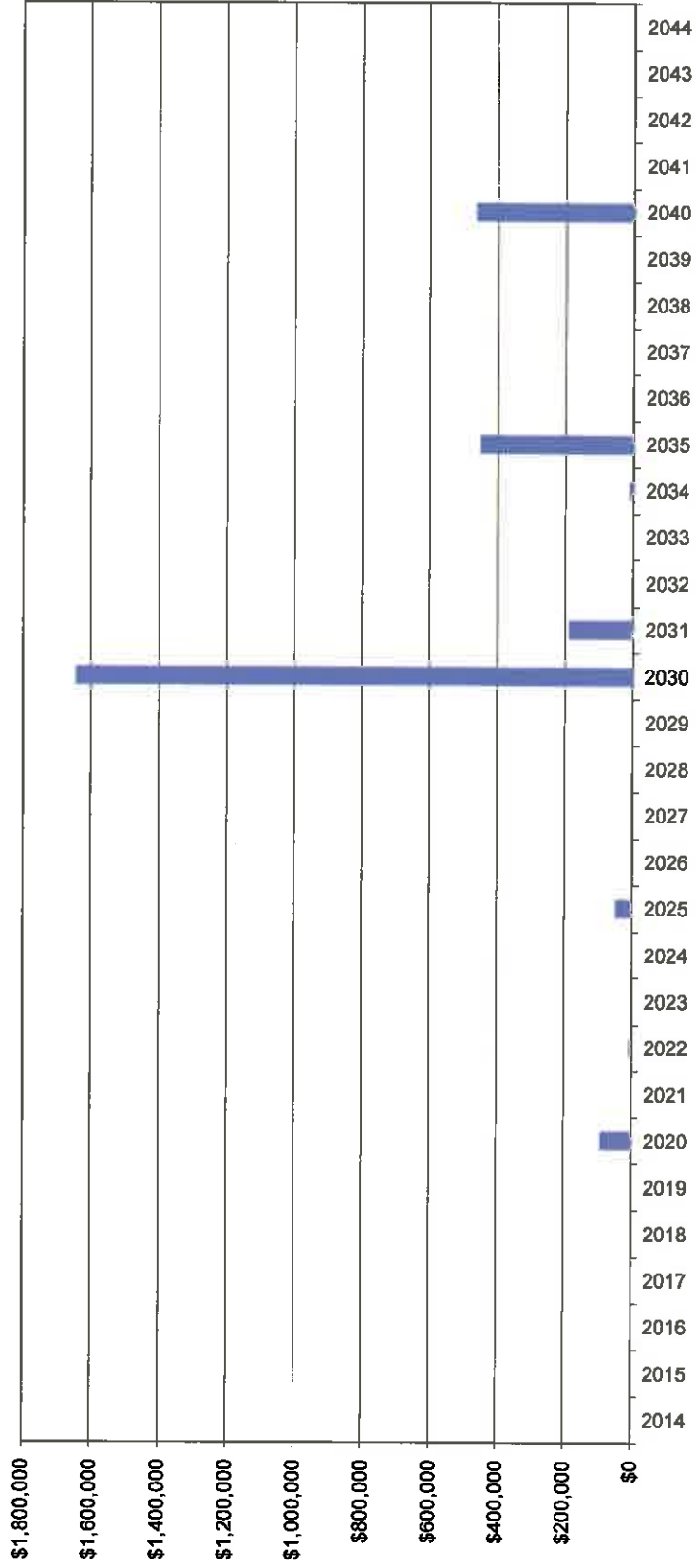
Interest Rate: 0.00%
Inflation Rate: 3.00%





Disbursements by Year

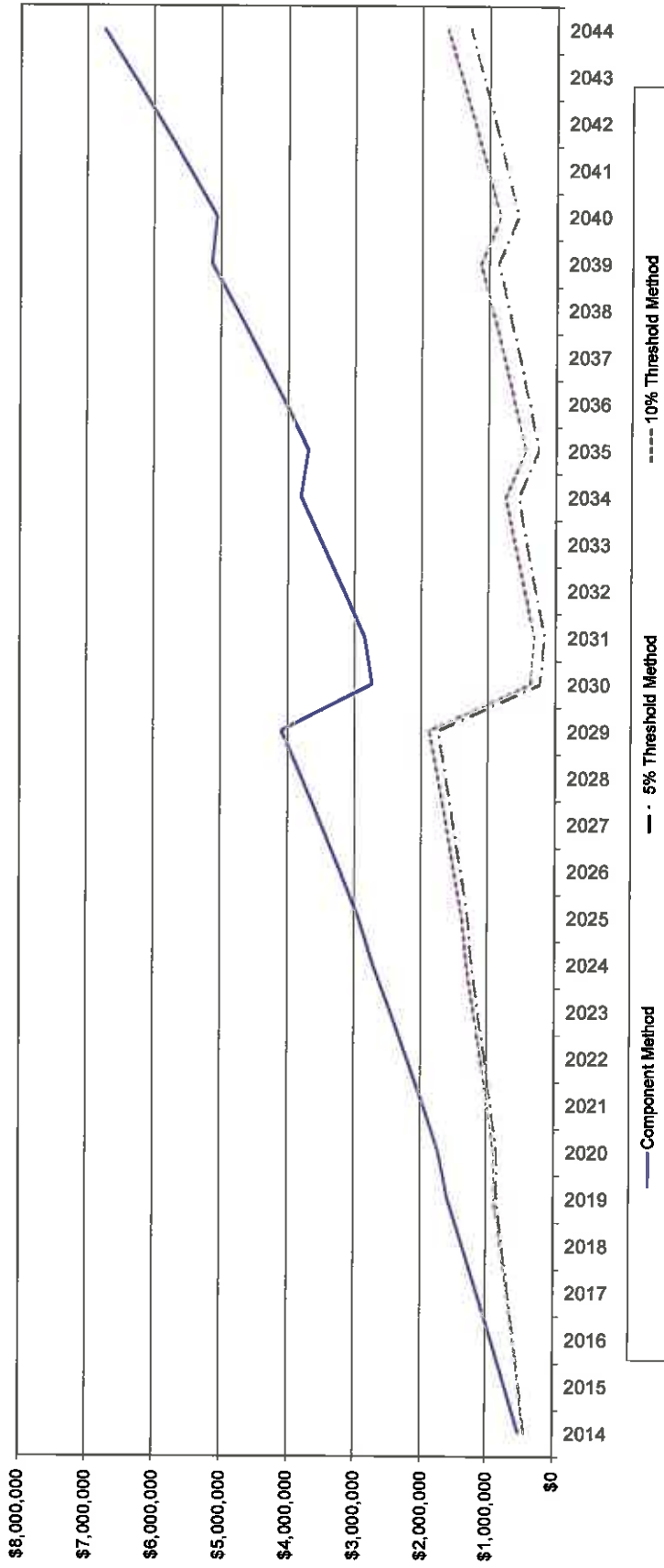
Project Name: Tanyard Springs HOA
Project Location: Glen Burnie, Maryland
Project Number: 13-1131
Date of Study: May 2014
Interest Rate: 0.00%
Inflation Rate: 3.00%





Reserve Fund Closing Balance Component vs. Cash Flow

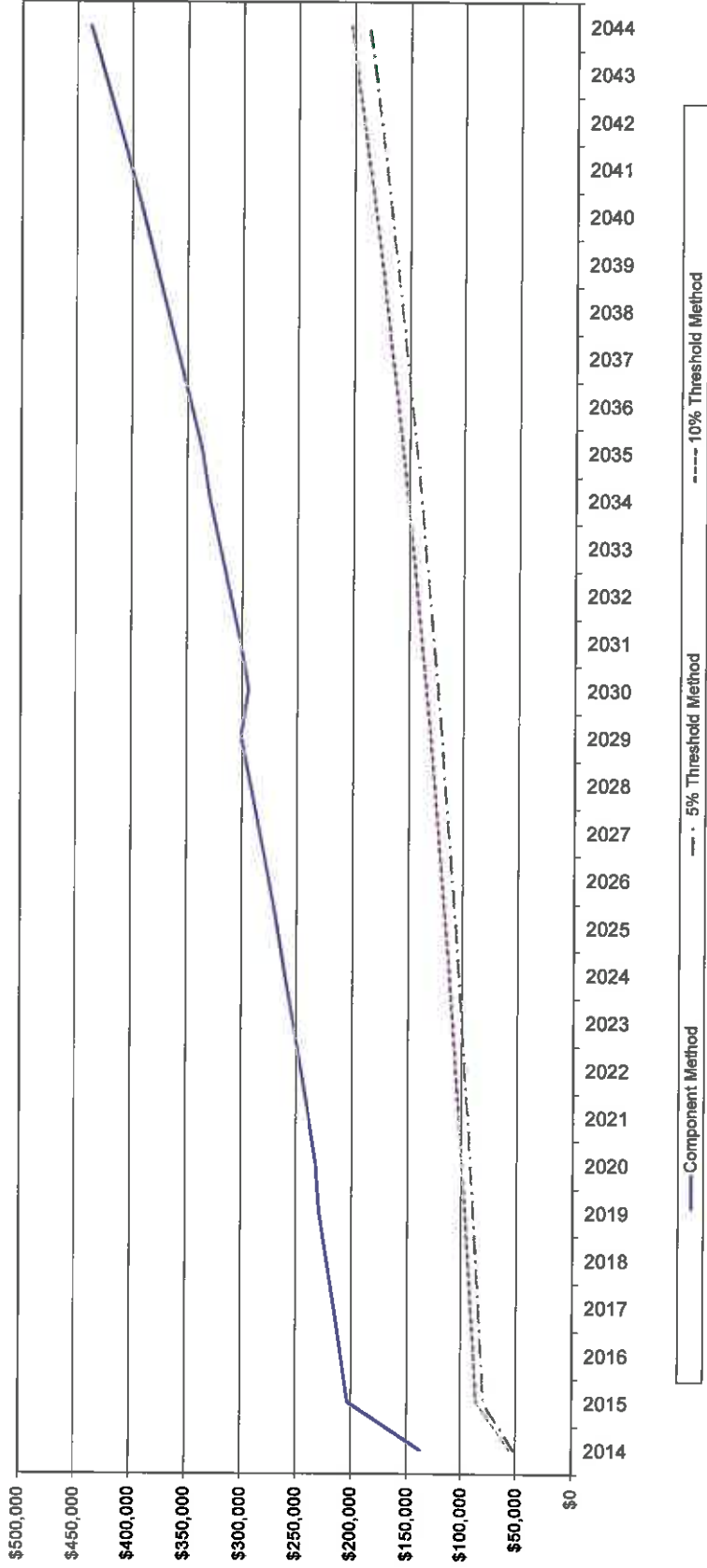
Project Name: Tanyard Springs HOA
Project Location: Glen Burnie, Maryland
Project Number: 13-1131
Date of Study: May 2014
Interest Rate: 0.00%
Inflation Rate: 3.00%





Reserve Fund Contributions Component vs. Cash Flow

Project Name: Tanyard Springs HOA
Project Location: Glen Burnie, Maryland
Project Number: 13-1131
Date of Study: May 2014
Interest Rate: 0.00%
Inflation Rate: 3.00%





Appendix



Definitions

Base Cost - See definition "Current Replacement Cost Allowance". This calculation, based on current costs, is increased according to the assumed rates of inflation in the "Disbursement Schedule".

Basic Annual Contribution - This is the amount that should have been contributed each year, while considering assumed rates of interest and inflation, to accumulate a reserve equal to the Current Replacement Cost Allowance at the anticipated replacement time (end-of-life).

Contribution Adjustment - If the capital reserve fund for a component is not fully funded, this is the increase in annual contributions that would be required to fully fund the reserve before the estimated end-of-life. If the capital reserve fund for a component is over-funded, this is the decrease in annual contributions that would offset the over-funded condition.

Contribution, Total - This is the recommended Basic Annual Contribution plus the "Annual Make-Up" (see definition) required to make up for past underfunding before replacement of the component is estimated to be required. The amount can decrease in future years because the required Annual Make-Up decreases each year in which a reserve fund for a capital component is fully funded.

Current Replacement Cost - The cost to replace the component at the time of this Study.

Estimated Remaining Life - The anticipated number of years before replacement of this component can be expected to be necessary. This is based on the normal life, the current age, and an engineering assessment that considers site-specific conditions.

Deficit - This shows the amount that the Present Fund is undercapitalized. It is the present fund minus the Required Fund. A positive number (surplus) means excess cash reserves have been set aside to date. A negative number indicates a deficit in the Present Fund; this underfunding can be made up in one of two ways: 1) an increase in the annual fees to catch up or, 2) a special assessment between now and when the component requires replacement. This Study assumes the second method is used and recommends annual makeup on that basis.

Interest - Interest accumulated on the capital reserve fund deposit based on the assumed interest rate listed at the top of the "Projected Cash Flow" pages.

Inflation – The increased cost of future replacement expenditures are based on an assumed rate of inflation.

Opening Balance - On the "Projected Cash Flow" pages, this is the reported total reserve fund on deposit for the condominium Association.



Percentage Of Total - Percent of total recommended Basic Annual Contribution. This shows the significance of specific components relative to required contributions to the capital reserve fund.

Present Age - Age of the component at the time of this Study.

Present Fund - Present funds set aside for capital component replacement at this time. If present fund are not reserved for specific components but are an unallocated pool, the total present fund is allocated between the components according to the Percentage Of Total column.

Required Fund - this amount should have been set aside for each component in the fund to be considered fully funded.

Surplus - This shows the amount that the Present Fund is overcapitalized. It is the present fund minus the Required Fund. A positive number (surplus) means excess cash reserves have been set aside to date.

Typical Life - The anticipated number of years that a component may be expected to provide adequate service. Please note that this is based on industry standards. A component may outlive, or require replacement prior to, its typical life.

Abbreviations:

EA - Each

LF - Linear Foot

LS - Lump Sum

SF - Square Foot

SY - Square Yard