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April 9, 2021

Jillian Swann, Community Manager (email only) Tall Trees Homeowner's Association 950 Town Center Drive, Suite B-25 Langhorne, PA 19047

RE: Reserve Fund Study Update Report

Dear Jillian,

Attached is the draft of the Reserve Fund Study Update for the above-mentioned community. Please distribute to the appropriate board members for their records.

We ask that the Board review the report and forward any questions or comments to our office for answering. Once all comments have been addressed, a final version of the report will be released to the Board.

A change from the last study to this current study includes the removal of the line item for the irrigation system. This edit was discussed with the Board while on site. Since the irrigation system receives general maintenance, it seems redundant to also have the line item in the reserve study. Additionally, irrigation systems are generally not included in the reserve fund study as a capital item.

The financial analysis included in the subsequent Reserve Study shows the Association's current funding to be adequate. The Association is currently contributing \$10,000 annually to the reserve fund.

If we have not received any questions or comments within 60 days of submittal of the Reserve Fund Study, the report will automatically be placed into the final version.

We thank the Association for calling on us once again to be of service and remain available to assist the Association with all their Community Engineering needs.

Sincerely,

Gregory S. Bustamante, PE, BIE, RS Bustamante Engineers, Inc.



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# **RESERVE FUND ANALYSIS**

# TALL TREES

PREPARED FOR:
TALL TREES HOMEOWNERS' ASSOCIATION

PHYSICAL ADDRESS: OAK HILL DRIVE, ABINGTON TOWNSHIP, PA 19006 MAILING ADDRESS: 950 TOWN CENTER DRIVE, SUITE B-25, LANGHORNE, PA 19047

> COMMUNITY MANAGER: JILLIAN SWANN OF ASSOCIA MID-ATLANTIC

> > Prepared By: Bustamante Engineers, Inc.

> > > DATE:

APRIL 09, 2021

DRAFT



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# INTRODUCTION

Tall Trees Homeowners' Association authorized Bustamante Engineers, Inc. to conduct a Reserve Fund Study for the townhome community located on Oak Hill Drive in Abington Township, Montgomery County, Pennsylvania.

This Reserve Fund Study is in accordance with the scope of services as depicted in our proposal for engineering services dated December 22, 2020.

This study is an update to a Reserve Fund Study prepared by another firm in October 2019. Where needed, the costs of the capital reserve items were <u>increased</u> to meet the cost of inflation over the last 2 years.

The main objective of this report is to provide financial information to assist the Community Association in the capital needs planning and in understanding the components expected and remaining useful lives. The common area components are derived from Homeowner Association documents that were presented to us. We did not, nor was it in our scope of services, interpret the Homeowners' Association documents or the common area components within those documents.

The Association documents can change from time to time. In this regard, we ask the Association Board of Directors to confirm if what is noted in this study is true and in effect.

This financial analysis and report are to meet the Community Association Institute standards or definitions as depicted in the "Reserve Funding & Reserve Investment Strategies". As part of the standards, this report will guide the Association with the following:

- 1. The physical status of the common area components derived from our observation(s).
- 2. Financial analysis of the current reserve funding and a projection of future reserve funding.

For the financial analysis section of the report, we project 20-years into the future, based on the current financial situation, and projections with future reserve contributions and capital improvements. This report presents "forward thinking" as we take into consideration both reasonable "Rate of Inflation" and "Rate of Return on Investments". Todays present dollar value is forecasted as a practical approach to a sound reserve fund study.

The goal of this reserve fund study is to allow for full funding of the reserve fund levels by utilizing "base line funding" through a pre-determined threshold to meet the Community's needs. The objective is to avoid special assessments by maintaining a minimum balance (threshold) at any given time during the projected years of the reserve study.

## **RESERVE FUND ANALYSIS**

Please note that the estimates noted herein are based on 2021 dollars developed from the following resources:

- 1. Noted published construction cost guides, such as RS Means Building Construction Cost Data per the year of this report.
- 2. Local estimating based on actual costs associated with construction projects in this region that we have been involved with.
- 3. Cost estimates from proposals or historical costs provided to us by the Association.

In the Analysis, we provide the following:

- 1. An Input Worksheet featuring current reserve fund balance, monthly or annual reserve contribution, all adjusted with an estimated rate of inflation and rate of return on investments, without assuming tax burden.
- 2. A listing of Common Area Components including quantities, units, and projected costs, estimated remaining life expectancies, frequency, in years, of when items require replacement and/or repair, and monthly and annual funding requirements.
- 3. Tables and graphs representing the present year balances and the projected reserve balances based on a given set of annual liabilities. Tables and graphs for up to three funding options are also provided.
- 4. All amounts or costs take into consideration "rate of inflation" and "rate of return on investments" compounded monthly over a given 12-month period, minus the month that the study period commences. (i.e. if the study starts March 31, only 9 months will be compounded that given year).

The following definitions may apply only if a physical condition assessment was part of the study:

Excellent: Current "as new" condition for the component, requiring no rehabilitation.

Good: The current condition for the component is performing to its intended use and is showing signs of normal wear and tear. Some repair or maintenance may be needed.

Fair: The current condition of the component is showing more than normal wear and tear, or previous repairs are not in compliance with commonly accepted practice, or workmanship not in compliance with commonly accepted standards (obsolescence) or approaching end of expected use. Repair or replacement is needed to prolong expected life or to cure a deficiency.

*Poor:* The current condition of the component has either failed or cannot be relied upon for continued performance. The component could be in a state of physical failure or by design failure. The component has exceeded its expected performance. Repair or replacement is required.

The following definitions shall apply:

<u>Estimated Useful Life (EUL):</u> A component's <u>useful life</u> is the estimated period of time (or total amount of activity) before which the component can be expected to be replaced. During this lifespan, the capital component should be expected to function and be in service within the community.

<u>Remaining Useful Life (RUL)</u>: A subjective estimate of the number of remaining years a component may have, less than the <u>expected useful life</u>, before replacement. The component may fail or not function in accordance with its intended purpose before warranting replacement.

<u>Long-lived Property Components</u>: Items that require infrequent repair or replacement, without predicted remaining useful lives. Examples of long-lived property components include water and sewer mains, electrical panels and circuitry, foundations, and framing. These should be funded through the operating budget or re-visited within the cycle of a reserve fund study as the item approaches the end of its lifespan.

<u>Baseline with Threshold Funding</u>: A funding strategy where the goal is to keep the reserve *cash value* above zero while maintaining a pre-determine threshold. A *threshold* is defined as a minimum balance and is usually between 10 and 15% of the Total Estimated Cost of Replacements over the given 20 or 30-year basis period. Special accommodations can be made to reduce or increase the calculated minimum balance.

<u>Full Funding Balance</u>: The full funding balance for year one is provided on the "Capital Item Replacement Worksheet" under "Reserve Funding Required". This balance is derived by taking into consideration the depreciation of the specific cost of each component, summed for all components. Funding per item example: current cost of component ÷ frequency.

<u>Quantity:</u> The amount of each reserve component element. Commonly measured using the following abbreviations:

- SF Square Feet
- SY Square Yard
- LF Linear Feet
- LS Lump Sum Cost
- EA Each
- SQ Squares=100 Square Feet

## **SOURCES OF INFORMATION & DOCUMENTATION**

The following documents were made available for review:

- 1. Reserve Fund Study as prepared by another firm dated October 29, 2019.
- 2. Completed Bustamante Engineers, Inc. Association Information Request Form, complete with reserve balance and monthly unit contributions.

# **COMMENTS**

#### General

Tall Trees is a townhome community consisting of 49 units within sixteen buildings and a manor house. The community was constructed approximately 35 years ago. Homeowners are responsible for the exteriors of the buildings, while the Association is responsible for site components. Amenities at the community include tennis courts and a manager's office.

A site visit of the community was made on March 22, 2021 by Jennifer Keggan, EIT. Two members of the Board were present during the walk thru. Based on a review of the common area components, we provide the following comments:

# Site Components

# Roadways & Parking

There are two roadways within the community, Oak Hill Drive and Hidden Pond Lane, both of which have been dedicated to the township. Maintenance and repair of these is the responsibility of the Township of Abington. The Association is responsible for the parking area near the tennis courts and the overflow parking areas on Oak Hill Drive.

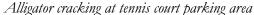
We noted much alligator cracking and long spider cracks in the asphalt of the tennis court parking area. The asphalt has reached the end of its useful life. The overflow parking areas along Oak Hill Drive appear newer and we did not note anything that would indicate premature failure.

The estimated life expectancy of parking lots is 20 to 25 years. With this in mind, we estimate repaving the overflow parking areas within the next eighteen years, while replacement of the tennis court parking area within the next year.

Costs for repaving the roads include milling of the asphalt surface in the amount of 2" and applying at minimum 2" of asphalt wearing surface course. Some full depth replacement may be needed on areas with rutting.

Future maintenance of the asphalt consists of sealing open cracks and patching potholes.







Overflow parking along Oak Hill Drive

# Community Identification Sign & Entrance Wall

At the entrance to the community is an identification sign and wall features. The community identification sign consists of a composite sign mounted on two wooden posts. The sign is in good condition and reportedly was replaced in the last few years. We have scheduled for the eventual replacement in year fourteen (2035).

In addition to the sign, there are two stone veneer walls with pillars containing lanterns. We noted some cracking and deterioration of the mortar joints on the masonry wall. In the Reserve Fund Analysis, we include replacement costs for the lanterns but not the masonry wall. Pointing, if needed should be paid for under the operation and maintenance accounts.



Community identification sign at entrance



Lantern and wall at entrance

# Retaining Walls

There are three smaller sized retaining walls scattered around the community. These include a stone wall on the southwestern corner of the tennis courts, a wooden tie retaining wall under the tree on the southern side of the tennis courts, and a wooden tie retaining wall under the tree on the right side of the entrance roadway.

Replacement for the stone retaining wall was not included in the Reserve Fund Analysis since this is considered a long-lived service item. If constructed properly, it should have a 40 to 50-year service life. Eventually, the stone wall may require spot pointing and should be completed on a maintenance related basis.

We did, however, include replacement of the wooden tie walls as they are both leaning severely. Eventually, replacement will be needed for both. We have included the cost to replace with a landscape block style wall, which has a longer useful life.

Typical wall maintenance includes spot pointing between the stones and correcting soil washout above the walls.

All retaining walls should be routinely inspected to ward off serious structural conditions that could cause wall failure. Typical signs of distress are as follows:

- 1. Vertical wall displacement
- 2. Loose soil and settlement behind the wall
- 3. Deteriorated wood surfaces

This study should not be considered an inspection of the retaining walls or certification of their condition.



Wood tie wall at entrance to community



Wood tie wall near tennis court

# **MANAGER'S OFFICE**

On the island, at the entrance to the community, is a manager's office space. The building is a one-story structure which houses a storage closet, office space and bathroom. We included replacement costs for the roofing, including gutters and downspouts, front door, wall mounted exterior lighting, carpeting, security system upgrades, and an interior refurbish fund.

The Association recently renovated portions of the building including upgrading the bathroom fixtures, repairing water damage at the foundation on the southern elevation, installation of drainage on the exterior of the building, repainting, and replacement of carpeting.





# Landscaping

We continue to include a landscaping allowance in the reserve fund study. The allowance is \$5,000 to be spent every three years. Recently, the Association used these moneys on the islands located along the roadways. Also included for replacement in the study is the uplighting for the trees on the landscaped islands. We estimate the useful life of the lights to be 15 years.





# Community Features

# Tennis Court

A double tennis court area is located on the northern portion of the property, near the entrance. The two courts were recently renovated including resurfacing of the courts, installation of a new fence and installation of a new court rules sign.

In the Reserve Fund Analysis, we continue to include costs for the resurfacing and eventual replacement of the surface. Typically, resurfacing of the courts occurs on an eight-year cycle but this can vary depending on usage and weather conditions. Complete replacement should not be needed for 25 to 30 years. Items such as nets and posts are not included in the reserve fund account and should be paid for from the operating budget.

We have assigned a useful life of 25 years for the chain link fencing surrounding the court structure with anticipated replacement occurring in year twenty-five, as this was recently replaced. To help extend the life of the fence, we suggest the trees overlapping the fence be trimmed back and no vegetation allowed to grow into the fence.



View of tennis court surface



View of chainlink fence at tennis courts

# Shed at Tennis Court

Adjacent to the tennis courts is a small shed that houses a garbage can, wooden bench, and portapotty. We have included a line item for a refurbish fund to pay for replacement of the roof, replacement of the wooden bench, and replacement/repair of the wooden siding.

We noted that some of the shingles are starting to break and the one side of the roof has moss growing on it. We suggest that the tree overhanging the shed be cut back to prevent further wear and tear on the shingles. We have scheduled the upgrades to the shed in year five (2026).

Reportedly, the shed is painted at the same time as the homes. We suggest the Community continue with this practice.



View of shed at tennis court



Shed roof with moss & brittle shingles

# **RESULTS**

Please refer to the attached spreadsheets for the projections. The following financial data was utilized in our Analysis:

Reserve Fund Balance as of January 31, 2021	\$81,479.88	Rate of Inflation per Year	2.5%
Reserve Fund Contribution	\$834 per month	Reserve Basis Period	20 years
Rate of Return on Investments per year	0.5%	Minimum threshold balance over the 20-year Basis Period (+/- 10% of Capital Item Replacement Total)	<i>\$21,767</i>

# The current funding is \$10,000 annually or ~\$834 per month.

Based on our review of the common area components, financial information from the Association and reserve planning over the next <u>20-years</u>, the current reserve funding is <u>adequate</u>. The current funding level is <u>sufficient</u> to meet the capital replacement plan over the next 20 years. The Community should continue with their current funding level until their next Reserve Study Update, within the next 4 years.

# RESERVE STUDY INPUT WORKSHEET

#### **Community Information**

Organization: TALL TREES HOMEOWNERS ASSOCIATION

Board Contact:Jerry RosenauAddress:Oak Hill DriveCity:Huntingdon ValleyState:PennsylvaniaAssociation Management:Associa Mid-AtlanticManagement Contact:Jillian Swann

 Current Date:
 04/09/2021

 Inspection Date:
 03/22/2021

Number of Units: 49
Starting Occupancy %: 100%
Occupancy Change / Year: 0%
Building(s) Age (years): ~33 to 35

 Study Start Date:
 01/01/2021

 Study Duration (years):
 20

 Study End Date:
 12/31/2040

Select Special Contribution Type:

#### **Current Financial Information**

Reserve Funds at Start of Study Date: \$81,470.88

Assumed Annual Nominal Rate of Return on Funds (%):

Assumed Annual Rate of Inflation (%):

2.50%

Current Funding Contribution Entry Selection:

Funding Contribution Amount:

Funding Contribution Amount Increase Per Fiscal Year:

Total Monthly Contribution:

\$ 833.33

Total Annual Contribution:

\$ 10,000.00

No Contributions





# **CURRENT FUNDING & FUNDING OPTIONS WORKSHEET**

# For: TALL TREES HOMEOWNERS ASSOCIATION

Total Annual \$ 10,000.00 0.00%  \$ 81,470.88 \$ 113,737.09 \$ 8,222.19
0.00% 8 81,470.88 113,737.09
81,470.88 113,737.09
113,737.09
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8,222.19
•
\$ 138,970.42
2036
81,470.88
Current
No Contributions
Total Annual

Funding Option #1 - Maintain Current	Funding	
Selected Funding Contribution:	T	otal Annual
Funding Contribution Amount:	\$	10,000.00
Funding Contribution Amount Increase Per Fiscal Year:		0.00%
Starting Balance:	\$	81,470.88
Ending Balance:	\$	113,737.09
Immediate Liabilities after end of study:	\$	8,222.19
Maximum Balance:	\$	138,970.42
Year of Maximum Balance:		2036
Minimum Balance:	\$	81,470.88
Year of Minimum Balance:		Current
Select Special Contribution Type:	No	Contributions
Special Funding Consideration	S	
Year Change	Т	otal Annual



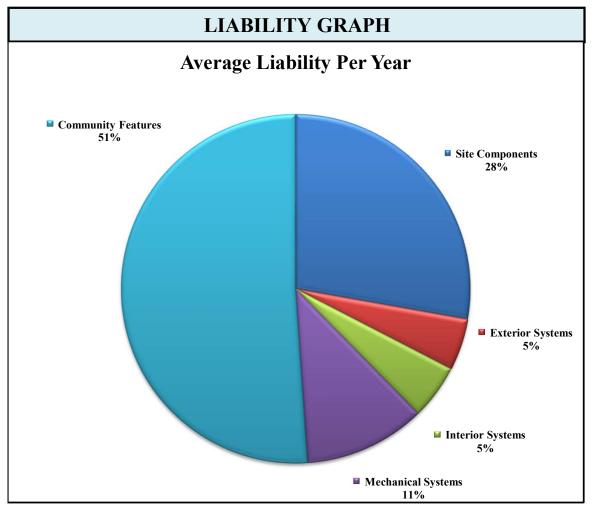
# CAPITAL ITEM REPLACEMENT WORKSHEET

# For: TALL TREES HOMEOWNERS ASSOCIATION

Costs are typically 10%±

Capital Item	Quantity	Unit cost		Current	Frequency		Entire Study Cost	Remaining Life	Reserve Fun	ling F	Required
Сарітаї пет	Quantity	Unit cost		Total Price (*)	Years		(with inflation)	Years	Monthly		Annual
<u>Total</u>			\$	145,334.55		\$	178,175.22	\$	790.82	\$	9,489.88
C'. C											
Site Components	450 637	0.50	•	0.200.00	2.5	Ф	0.606.40	1 0	21.20	Ф	277.56
Milling & Paving - Parking Area at Tennis Courts	458 SY			9,389.00	25		9,606.42	1 \$	31.30		375.56
Milling & Paving - Overflow Parking along Oak Hill	137 SY			2,808.50	25		4,393.39	18 \$	9.36		112.34
Community Identification Sign	1 EA	,		1,200.00	18		1,830.88	17 \$	5.56		66.67
Wooden Tie Retaining Wall - Replacement	118 SF			6,490.00	30		7,156.90	4 \$	18.03	\$	216.33
Tennis Court Shed - Refurbish Fund	1 LS	\$ 5,000.00	\$	5,000.00	25		5,653.23	5 \$	16.67	\$	200.00
Landscaping - Allowance	1 LS	\$ 5,000.00	\$	5,000.00	3	\$	38,265.21	2 \$	138.89	\$	1,666.67
Exterior Systems											
Managers Office - Shingle Roof & Gutters	1 LS	\$ 3,200.00	\$	3,200.00	20	\$	4,309.22	12 \$	13.33	\$	160.00
Managers Office - Cement Siding	1 LS	\$ 7,200.00	\$	7,200.00	40	\$	7,744.03	3 \$	15.00	\$	180.00
Managers Office - Double Door	1 EA	\$ 2,850.00	\$	2,850.00	25	\$	2,989.74	2 \$	9.50	\$	114.00
Interior Systems											
Managers Office - Carpeting	45 SY	\$ 25.00	\$	1,125.00	20	\$	1,716.45	17 \$	4.69	\$	56.25
Managers Office - Refurbish Fund		\$ 8,500.00		8,500.00	20		12,968.75	17 \$	35.42		425.00
Mechanical Systems		, .,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		-,			,				
Entrance Wall Lighting	4 EA	\$ 450.00	\$	1,800.00	20	\$	2,364.15	11 \$	7.50	\$	90.00
Uplighting on Landscape Islands	41 EA			6,765.00	15		9,576.55	14 \$	37.58		451.00
Wall Mounted Lights at Managers Office	2 EA			550.00	20		687.18	9 \$	2.29	\$	27.50
Security System Upgrades		\$ 5,000.00		5,000.00	10		13,236.71	6 \$	41.67		500.00
Community Features	1 L3	5,000.00	φ	3,000.00	10	Ψ	13,230.71	0 \$	41.07	Ψ	300.00
	1.455 SY	\$ 28.50	¢.	41,467.50	25			24 \$	138.23	\$	1.658.70
Tennis Court - Replacement	1,455 SY 1.455 SY					ø	54 151 10	•			,
Tennis Court - Resurfacing	,	*		20,006.25	8	Þ	54,151.19	8 \$	208.40		2,500.78
Tennis Court - Chainlink Fencing		\$ 34.65		16,008.30	25			25 \$	53.36		640.33
Tennis Court - Benches	3 EA	\$ 325.00	\$	975.00	20	\$	1,525.21	18 \$	4.06	\$	48.75





For: TALL TREES HOMEOWNERS ASSOCIATION

Liability Categories	Per Year Liability	
Site Components	\$	2,637.57
Exterior Systems	\$	454.00
Interior Systems	\$	481.25
Mechanical Systems	\$	1,068.50
Community Features	\$	4,848.56



# LIABILITIES BY YEAR

# For: TALL TREES HOMEOWNERS ASSOCIATION

All Values are Adjusted for Inflation

Year Number		1		2		3		4		5		6		7		8
Start of Period:	]	1/1/2021		1/1/2022		1/1/2023		1/1/2024		1/1/2025		1/1/2026		1/1/2027	1	/1/2028
End of Period:	12/	31/2021	12	2/31/2022	12	2/31/2023	12	2/31/2024	12	2/31/2025	1	2/31/2026	12	2/31/2027	12/	31/2028
Site Components																
Milling & Paving - Parking Area at Tennis Courts	\$	-	\$	9,606.42	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Milling & Paving - Overflow Parking along Oak Hill	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Community Identification Sign	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Wooden Tie Retaining Wall - Replacement	\$	-	\$	-	\$	-	\$	-	\$	7,156.90	\$	-	\$	-	\$	-
Tennis Court Shed - Refurbish Fund	\$	-	\$	-	\$	-	\$	-	\$	-	\$	5,653.23	\$	-	\$	-
Landscaping - Allowance	\$	-	\$	-	\$	5,245.15	\$	-	\$	-	\$	5,653.23	\$	-	\$	-
Exterior Systems																
Managers Office - Shingle Roof & Gutters	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Managers Office - Cement Siding	\$	-	\$	-	\$	-	\$	7,744.03	\$	-	\$	-	\$	-	\$	-
Managers Office - Double Door	\$	-	\$	-	\$	2,989.74	\$	-	\$	-	\$	-	\$	-	\$	-
Interior Systems																
Managers Office - Carpeting	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Managers Office - Refurbish Fund	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Mechanical Systems																
Entrance Wall Lighting	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Uplighting on Landscape Islands	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Wall Mounted Lights at Managers Office	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Security System Upgrades	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	5,796.19	\$	-
Community Features																
Tennis Court - Replacement	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Tennis Court - Resurfacing	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Tennis Court - Chainlink Fencing	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Tennis Court - Benches	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
TOTA	L <b>\$</b>	_	\$	9,606.42	\$	8,234.89	\$	7,744.03	\$	7,156.90	\$	11,306.46	\$	5,796.19	\$	



# LIABILITIES BY YEAR

# For: TALL TREES HOMEOWNERS ASSOCIATION

All Values are Adjusted for Inflation

Year Number		9		10		11		12		13		14		15		16
Start of Period:		1/1/2029		1/1/2030		1/1/2031		1/1/2032		1/1/2033		1/1/2034		1/1/2035	1,	/1/2036
End of Period:	1	2/31/2029	12	/31/2030	12	2/31/2031	12	2/31/2032	12	2/31/2033	12	2/31/2034	1	2/31/2035	12/3	31/2036
Site Components																
Milling & Paving - Parking Area at Tennis Courts	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Milling & Paving - Overflow Parking along Oak Hill	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Community Identification Sign	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Wooden Tie Retaining Wall - Replacement	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Tennis Court Shed - Refurbish Fund	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Landscaping - Allowance	\$	6,093.05	\$	-	\$	-	\$	6,567.09	\$	-	\$	-	\$	7,078.01	\$	-
Exterior Systems																
Managers Office - Shingle Roof & Gutters	\$	-	\$	-	\$	-	\$	-	\$	4,309.22	\$	-	\$	-	\$	-
Managers Office - Cement Siding	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Managers Office - Double Door	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Interior Systems																
Managers Office - Carpeting	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Managers Office - Refurbish Fund	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Mechanical Systems																
Entrance Wall Lighting	\$	-	\$	-	\$	-	\$	2,364.15	\$	-	\$	-	\$	-	\$	-
Uplighting on Landscape Islands	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	9,576.55	\$	-
Wall Mounted Lights at Managers Office	\$	-	\$	687.18	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Security System Upgrades	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Community Features																
Tennis Court - Replacement	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Tennis Court - Resurfacing	\$	24,379.81	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Tennis Court - Chainlink Fencing	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Tennis Court - Benches	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
TOTA	L -\$	30,472.86	\$	687.18	\$	_	\$	8,931.24	\$	4,309.22	\$		\$	16,654.56	\$	_



# LIABILITIES BY YEAR

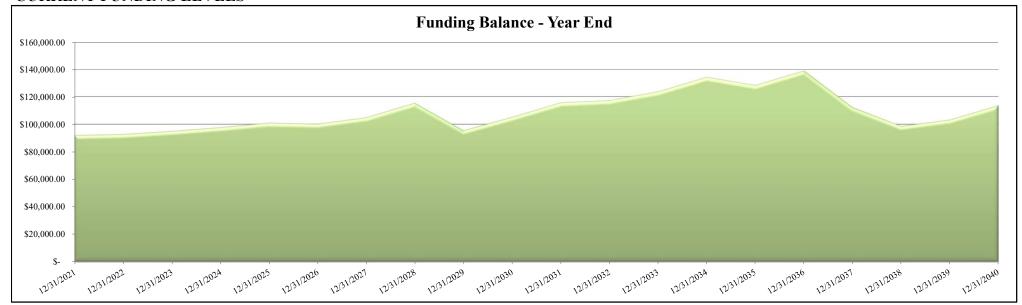
For: TALL TREES HOMEOWNERS ASSOCIATION

All Values are Adjusted for Inflation

Year Number		17		18		19		20
Start of Period:		1/1/2037		1/1/2038		1/1/2039		1/1/2040
End of Period:		12/31/2037	1	12/31/2038	12	2/31/2039	12	/31/2040
Site Components	•							
Milling & Paving - Parking Area at Tennis Courts	\$	-	\$	-	\$	-	\$	-
Milling & Paving - Overflow Parking along Oak Hill	\$	-	\$	-	\$	4,393.39	\$	-
Community Identification Sign	\$	-	\$	1,830.88	\$	-	\$	-
Wooden Tie Retaining Wall - Replacement	\$	-	\$	-	\$	-	\$	-
Tennis Court Shed - Refurbish Fund	\$	-	\$	-	\$	-	\$	-
Landscaping - Allowance	\$	-	\$	7,628.68	\$	-	\$	-
Exterior Systems								
Managers Office - Shingle Roof & Gutters	\$	-	\$	-	\$	-	\$	-
Managers Office - Cement Siding	\$	-	\$	-	\$	-	\$	-
Managers Office - Double Door	\$	-	\$	-	\$	-	\$	-
Interior Systems								
Managers Office - Carpeting	\$	-	\$	1,716.45	\$	-	\$	-
Managers Office - Refurbish Fund	\$	-	\$	12,968.75	\$	-	\$	-
Mechanical Systems								
Entrance Wall Lighting	\$	-	\$	-	\$	-	\$	-
Uplighting on Landscape Islands	\$	-	\$	-	\$	-	\$	-
Wall Mounted Lights at Managers Office	\$	-	\$	-	\$	-	\$	-
Security System Upgrades	\$	7,440.52	\$	-	\$	-	\$	-
<b>Community Features</b>								
Tennis Court - Replacement	\$	-	\$	-	\$	-	\$	-
Tennis Court - Resurfacing	\$	29,771.38	\$	-	\$	-	\$	-
Tennis Court - Chainlink Fencing	\$	-	\$	-	\$	-	\$	-
Tennis Court - Benches	\$	-	\$	-	\$	1,525.21	\$	-
TOTAL	\$	37,211.90	\$	24,144.77	\$	5,918.60	\$	



# **CURRENT FUNDING LEVELS**



Funding Balance at Start of S	tudy:		\$ 81,470.88	Specia	ıl Fı	ınding Consider	atio	ns:		Special Cor	ıtril	butions:	Minimun	n Ba	alance		Date
				Year	Cha	ange	Tot	al Annual		Year	Amount		\$		81,470.88		Current
Select Current Funding Contr	ibutio	on:	Total Annual		Noı	ne				None			Maximur	num Balance			Date
Funding Contribution Amoun	t:		\$ 10,000.00										\$		138,970.42		2036
Funding Contribution Amoun	t Incr	ease Per Year:	0.0%														
Year:		1/1/2021	1/1/2022	1/1/2023		1/1/2024		1/1/2025		1/1/2026		1/1/2027	1/1/2028		1/1/2029		1/1/2030
Beginning Fund Balance:	\$	81,470.88	\$ 91,906.29	\$ 92,739.44	\$	94,955.17	\$	97,675.32	\$	100,999.17	\$	100,169.33	\$ 104,873.22	\$	115,425.91	\$	95,405.91
Revenue:	\$	10,000.00	\$ 10,000.00	\$ 10,000.00	\$	10,000.00	\$	10,000.00	\$	10,000.00	\$	10,000.00	\$ 10,000.00	\$	10,000.00	\$	10,000.00
Special Assessments:	\$	-	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$ -	\$	-	\$	-
Investment Earnings:	\$	435.41	\$ 439.57	\$ 450.62	\$	464.18	\$	480.76	\$	476.62	\$	500.07	\$ 552.69	\$	452.86	\$	501.81
Capital Expenditures:	\$		\$ 9,606.42	\$ 8,234.89	\$	7,744.03	\$	7,156.90	\$	11,306.46	\$	5,796.19	\$ 	\$	30,472.86	\$	687.18
<b>Ending Fund Balance:</b>	\$	91,906.29	\$ 92,739.44	\$ 94,955.17	\$	97,675.32	\$	100,999.17	\$	100,169.33	\$	104,873.22	\$ 115,425.91	\$	95,405.91	\$	105,220.53
Year:		1/1/2031	1/1/2032	1/1/2033		1/1/2034		1/1/2035		1/1/2036		1/1/2037	1/1/2038		1/1/2039		1/1/2040
<b>Beginning Fund Balance:</b>	\$	105,220.53	\$ 115,774.97	\$ 117,406.30	\$	123,690.98	\$	134,337.98	\$	128,300.32	\$	138,970.42	\$ 112,295.60	\$	98,619.73	\$	103,192.82
Revenue:	\$	10,000.00	\$ 10,000.00	\$ 10,000.00	\$	10,000.00	\$	10,000.00	\$	10,000.00	\$	10,000.00	\$ 10,000.00	\$	10,000.00	\$	10,000.00
Special Assessments:	\$	-	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$ -	\$	-	\$	-
<b>Investment Earnings:</b>	\$	554.43	\$ 562.57	\$ 593.91	\$	647.00	\$	616.89	\$	670.10	\$	537.08	\$ 468.89	\$	491.69	\$	544.27
Capital Expenditures:	\$		\$ 8,931.24	\$ 4,309.22	\$		\$	16,654.56	\$		\$	37,211.90	\$ 24,144.77	\$	5,918.60	\$	-
<b>Ending Fund Balance:</b>	\$	115,774.97	\$ 117,406.30	\$ 123,690.98	\$	134,337.98	\$	128,300.32	\$	138,970.42	\$	112,295.60	\$ 98,619.73	\$	103,192.82	\$	113,737.09

# BUSTAMANTE

# APPENDIX B: WORK SHEET DEFINITIONS

# A: Capital Item to be Replaced

<u>Definition</u>: Common components to be included in the reserve study that are categories based on location.

# B: Quantity & Units

Definition: Quantity refers to the number of units included.

## C: Unit Cost

<u>Definition</u>: Unit cost is the cost based on current dollars for the calculated unit of measure.

# **D:** Current Cost

<u>Definition</u>: Reserve requirement is the amount of money, in present dollars, for the replacement item.

# E: Frequency

<u>Definition</u>: The Frequency the capital item is to be repaired or replaced.

# F: Remaining Life

<u>Definition</u>: The number of years before an item must be repaired or replaced the first time.

# **G**: Entire Study Cost

<u>Definition</u>: The amount of money that must be set aside each year in order to ensure that the total amount is available for that item at the first instance of its repair/replacement.

# I: Reserve Funding Required - Yearly/Monthly

<u>Definition</u>: The amount of money that must be set aside each year in order to ensure that the total amount is available for that item at the first instance of its repair/replacement.

# **I**: Return on Investments and Inflation Rate

<u>Definition</u>: The amounts or costs shown are "rate of inflation" is based on compounding yearly. The rate of return on investments is for end of year balance multiplied by that giving rate.



# **APPENDIX C: LIMITATIONS**

The observations as described in this report are strictly limited to the date of the investigation. No available construction drawings were provided and the conditions noted here are based on a **visual inspection** only. It was not within the scope of services nor was it implied that the reserve fund study would include removing surface materials, perform destructive or invasive testing, moving furniture or equipment, personal belongings or perform excavation or probing of soils. Bustamante Engineers, Inc. shall not be held accountable or responsible for items that could not be seen or are outside the scope of our services.

It is beyond the scope of services for Bustamante Engineers, Inc. to provide building code investigations nor is it our responsibility to perform design of items to be cured or requiring replacement.

This study shall <u>not</u> be considered a warranty of condition and no warranty is applied.

Furthermore, the study shall not be considered an exhaustive inspection or evaluation, or to be utilized as condition summary of future expectations of building or site components.

To formulate this report, Bustamante Engineers, Inc. relied on historical data from the Association. We are not responsible for it's validly or accuracy.

This study is strictly for the use of the Association and should not be shared with other individuals without express written consent from Bustamante Engineers, Inc. We cannot be held responsible for other individual parties who rely on the study and the individual parties shall indemnify and hold Bustamante Engineers, Inc. harmless for any damages, losses or expenses that might occur.

The financial information such as reserve balances and contributions are strictly from resources submitted to our company and we shall not be held responsible of its validation. The Association and their agents should always confirm the financial information in the reserve fund analysis.

As for the reserve fund components that are depicted in this study, these components are the result of information submitted to us from the Association or its agents and we assume no validation, and cannot be responsible for items that might be omitted.

<u>Estimates</u> – Cost estimates are provided and assumed that all work for the given component will be completed as a single project. If projects are done in stages or not inclusive of the total quantity shown in the reserve fund analysis, the Association should expect the higher costs.

The cost estimates noted here are based on nationally recognized construction cost indexes, such as R.S. Means Construction Cost Guide. At times, we will rely on historical costs obtained from the Association or costs gathered by Bustamante Engineers Inc. from construction projects. At times, there is no standard guide or estimate for items that need repair and therefore so developed costs are estimated based on general knowledge of construction.

We did not attempt nor was it in the scope of work to obtain competitive quotations or estimates from contractors.

<u>Safety Issues</u>-if this report cites safety issues, they should be given the highest priority. The Association must recognize from a liability standpoint, they have been made aware of the existence of the unsafe conditions and those conditions should immediately be addressed.

# GREGORY S. BUSTAMANTE, P.E., B.I.E., R.S.

#### **SUMMARY:**

A registered Professional Engineer with over 32 years' experience in civil and structural engineering in the Commonwealth of Pennsylvania, and the states of Delaware and New Jersey. This experience includes evaluating the structural integrity of residential and commercial buildings in the real estate, insurance and community association sectors, design of repairs and capital improvement projects with all phases of civil engineering, including municipal projects, full-scale land development, state department of transportation roads and bridges, and project planning and implementation.

#### PROFESSIONAL EXPERIENCE:

# 1993-Present President, Bustamante Engineers Inc., Doylestown, PA

- Evaluate residential properties; home inspections, structural evaluations, energy audits
- Provide consulting engineering services to community associations, including reserve fund analysis, transition studies, construction monitoring and stormwater mgmt. & insurance investigations
- Prepare property condition assessments (PCA)
- Monitor all phases of construction, such as site development, storm water management and designs; prepare plans and specifications; procure bids
- Senior engineer for residential/commercial inspections/investigations, litigation support, and structural/civil engineering projects

# 1988-1993 Municipal Engineer, Carroll Engineering, Corp., Warrington, PA,

- Land Development & subdivision projects
- Participated in public meetings, as subject expert
- Assessed capital improvement project compliance with building codes and ordinances
- Evaluated structural, utility, and storm water "Best Management Practices" design

# 1983-1988 NJ and NY State Departments of Transportation, Greenman-Pedersen, Inc. Babylon, NY

- Project design for highways, roads and bridges
- Computer modeling
- Devised site grading and storm water management plans
- Conducted traffic feasibility studies
- Bridge ratings, inspection and evaluation

875 N. Easton Road #3B, Doylestown, PA 18902 215-340-6990

Info@BustamanteEng.com









# **EDUCATION:**

Fairleigh-Dickinson University - 1983 Bachelor of Science/Civil Engineering Technology

# LICENSED ENGINEER:

- Pennsylvania PE#039772E
- New Jersey PE#37317
- Delaware PE#16258

# PROFESSIONAL CERTIFICATIONS:

- Building Inspection Engineer
- CAI Reserve Specialist Designation #268

# **PROFESSIONAL SOCIETIES:**

- National Society of Professional Engineers
- National Academy of Building Inspection Engineers
- Community Association Institute
- Greater Philadelphia Condominium Management Association

#### **CLIENTS:**

- Community Associations
- Building owners and sellers
- Insurance Companies
- Warranty Companies
- Land owners
- Municipalities

#### **CORE COMPETENCY:**

Engineering, Design, Evaluation and Problem-Solving for real estate clients, performing Transition and Reserve Studies, Physical Inspections of Storm Water Easements, Retention and Detention Basins and Drainage Systems, Retaining Walls and Chimneys, as well as structural and general condition assessments.





