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RESERVE FUND ANALYSIS

WATERFORD CROSSING COMMUNITY ASSOCIATION

PREPARED FOR:

WATERFORD CROSSING COMMUNITY ASSOCIATION
PHYSICAL ADDRESS: WESTHAMPTON WAY, TOWAMENCIN, PA
MAILING ADDRESS: 762 E. MAIN STREET, 2ND FLOOR, LANSDALE, PA 19446

PROPERTY MANAGER:
ROSEMARY COOPER
GROSS & QUADE MANAGEMENT CO.

PREPARED BY:

BUSTAMANTE ENGINEERS, INC.

DATE:

JULY 18, 2016
REVISED DECEMBER 20, 2016

FINAL



Your Community is Our Business

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INTRODUCTION

Waterford Crossing Community Association authorized Bustamante Engineers, Inc., to conduct a Reserve Fund Study for the Waterford Crossing Community located along Westhampton Way in Towamencin, 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 9, 2015.

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 Condominium 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 is 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 including findings from our inspections.
2. Financial analysis of the current reserve funding and 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 with respect to reserve funding. This report presents “forward thinking” as we take into consideration both reasonable “Rate of Inflation” and “Rate of Return on Investments”. Today's 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 utilizing “base line funding” with a pre-determined threshold to meet the Community's needs. The objective is to avoid special assessments by maintaining a minimum balance 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 2016 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. Historical costs submitted to us by the Association.
4. Cost estimates from proposals provided by the Association.

Our Reserve Fund Study adjusts for an estimated rate of return on investments and rate of inflation, agreed to by the Association.

In the Analysis we provide the following:

1. An input data sheet including current reserve fund balances and contribution, rate of inflation and rate of return on investments without assuming tax burden.
2. A listing of common area components including quantities, unit and projected costs, estimated remaining life expectancies, frequency, in years, of when items require replacement and/or repair, and a projection based on this frequency.
3. Tables and graphs representing the present year balances versus the projected reserve balances.
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., Study starts March 31, 2015 only 9 months will be compounded that given year).

The following definitions shall apply:

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 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.

Long-lived Property Components: Items that require infrequent repair or replacement without predicting remaining useful lives. Water and sewer mains, electrical panels and circuitry, foundations, framing, are examples of long-lived property components that should be funded through the operating budget or re-visited within the next cycle of a reserve fund study.

Baseline with Threshold Funding: Goal is to keep the reserve cash value above zero while maintaining a pre-determine threshold. A *threshold* is defined as “maintaining a minimum balance in the reserves over the given basis period, which is either 20 or 30 years”. The threshold is usually between 5 and 10% of the Total Estimate Cost of Replacements over the given 20 or 30 year basis period. Special accommodations can be made to reduce or increase the calculated amount. The reserve funding required for both yearly and monthly is based off the Full Funding Balance.

Quantity: The quantity or amount of each reserve component element and is commonly referenced using the following abbreviations:

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

SOURCES OF INFORMATION & DOCUMENTATION

The following documents were made available for review:

1. Completed Bustamante Engineers, Inc. Association Information Request Form, complete with reserve balance and monthly unit contributions.

FINDINGS

Inspection of the community was made on May 26, 2016 by Jennifer Keggan. Based on a review of the common area components, below are our findings and issues that should be addressed:

Site Components

Roadways

The Association is responsible for West Hampton Way. Overall the condition of the road and parking areas is good. It appears the roadway is the original from the initial construction. The estimated life expectancy of the road and parking areas is 20 years. With this in mind, we estimate repaving the roads within the next ten years.

The cost for repaving includes the following:

1. Both roadways and parking areas
2. Milling of the asphalt surface in the amount of 2"
3. Applying at minimum 2" of asphalt wearing surface

Future maintenance of the roads consists of the following:

1. Sealing open cracks and patching potholes.
2. Seal coat the asphalt services on a three to four year basis.

Please note that seal coating products that utilize "coal-tar" could be an **environmental risk**. (1). Studies suggest a common sealant using coal tar contains hazardous chemicals that elevate lifetime cancer risk. Some cities and states are banning its use". Local seal coating companies should know about this concern. (1) Per USA Today June 20, 2013.

In this regard, seal coat companies are utilizing "asphalt-based" emulsion sealers. We recommend before your seal coating applicator seal coats the driveways and roadways, the proper asphalt-based seal coat is selected.

Curbing

The curbing for this community consists of Belgian block set inside a concrete foundation. Belgian blocks are durable and do not require extensive maintenance other than occasionally repairing them, especially after the wintertime when snowplows tend to damage them. Since complete replacement is rarely needed, partial replacement is planned for in thirteen years. Interim repairs should be paid for out of the operation budget.

Concrete Flatwork

The concrete flatwork for the community includes sidewalks, walkways, and concrete driveway aprons. Typically concrete aprons across driveways are 6" of reinforced concrete while sidewalks are 4" non-reinforced concrete.

The sidewalks along Troxel Road and Allentown Road are in very good condition and look fairly new. The sidewalks and driveway aprons along West Hampton Way are in fair condition with much spalling and pitting present.

Replacement of the concrete flatwork should be performed on an as needed basis especially when the condition of them poses a safety concern to the residents. Such conditions are as follows:

1. Settlement when one edge is higher than the other. The general rule of thumb is when the elevation difference between the adjoining materials is $\frac{3}{4}$ to 1" or greater, it should be replaced for pedestrian safety reasons.
2. Excessive cracking
3. Open joints of walkways and steps
4. Spalling; surface erosion

During our inspection we noted the following concrete deficiencies:

CONCRETE DEFICIENCY TABLE				
Location / House	Spalled / Chipped (SF)	Cracked / Gapping / Crumbling (SF)	Heaved / Settled (SF)	Comments
#10 W Hampton Way		12		Walkway to unit
#20 W Hampton Way			45	Walkway to unit
#22 W Hampton Way		13		Walkway to unit
#38 W Hampton Way	147			Walkway to unit
#40 W Hampton Way	36			Walkway to unit
#42 W Hampton Way	33			Walkway to unit
#44 W Hampton Way	144			Walkway to unit
#17 W Hampton Way		16		Sidewalk
#17 W Hampton Way		15		Walkway to unit
#27 W Hampton Way		15		Walkway to unit
#37 W Hampton Way	30			Walkway to unit
#39 W Hampton Way	30			Walkway to unit
#41 W Hampton Way	30			Walkway to unit
#43 W Hampton Way	30			Walkway to unit
#45 W Hampton Way	380			Sidewalk, to the right of the building
TOTAL	860	71	45	

In the Reserve Analysis, we include concrete flatwork replacements based on 25% of the overall sidewalk quantity, 25% of the overall driveway apron quantity and 10% of the overall sidewalk quantity. The areas that are in the worst condition should be replaced first. The cost of the flatwork replacement does not include lawn restoration.

Asphalt Pathway

There is an approximately 7' wide asphalt pathway that meanders behind the community. Overall the pathway is in good condition with a few spider cracks and large gap crack behind Unit #2. There are a few other lateral cracks throughout. As with flatwork, the Association should be repairing the pathway on an as needed basis to avoid potential tripping concerns to the path users.

We include costs to overlay the pathway with 1-1/2" of asphalt, which should be applied to paving that is in good condition. As conditions apply, some full depth asphalt replacement should be expected prior to repaving. Cost for lawn restoration is not included. Overlay of the path should be performed in approximately fourteen years.

Emergency Accessway

There is a concrete driveway apron and asphalt pad leading to an emergency access drive on the northeast end of the development. The access drive connects West Hampton Way to Allentown Road, outside of the community. Repairs to the access drive should be made on an as needed basis to keep the lane drivable for emergency vehicles.

We include costs to overlay the asphalt pad with 1-1/2" of asphalt, which should be applied to paving that is in good condition, five PVC posts and chain. Cost for lawn restoration is not included. Replacement should not be needed for some time and is scheduled for in year eighteen.

Signs

The Association has traffic control signs located at the entrance of the community. The signs within the Community consist of 'Stop', 'No Outlet', & 'Private Property' signs. Overall, the condition of the traffic control signs is good. In the reserve fund study, these are scheduled to be replaced in seven years. Cost to replace is for a new sign and post.

Community Identification Sign/Wall

The community identification sign consists of metal letters mounted on a stucco covered masonry wall. The wall has a slate top. The masonry wall is in good condition with hardly any noticeable cracking. In the Reserve Fund Analysis, we include replacement costs for the lettering but not the masonry wall. Pointing, if needed should be paid for under the operational accounts.

Each of the walls is illuminated with flood lights. Replacement of these should be made on an as needed basis and paid for under the operation budget.

Streetlights

Based on a daytime inspection, the overall condition of the streetlights is good. It should be noted that during our inspection, some of the lights were on. The streetlights along West Hampton Way are estimated to have a 20 to 25 year expected life. Replacements have been planned for within ten years.

Mailbox Kiosks

In recent years, it is increasingly becoming the responsibility of associations to replace mailbox kiosks. It is our understanding that the USPS typically does not pay for this anymore. As such, this item was included in the reserve study. The cost includes new concrete pad, new shed roof & gutters and mail cluster boxes.

Stormwater Management

The stormsewer system consists of reinforced concrete piping and standard PennDOT style street inlets, manholes, and end structures. These items should have at minimum a 50-year service life. Since, they are considered long-lived service items; replacement costs are not included in the reserve study.

In the case of inlet hoods, prior to repaving of the roads the damaged inlet hoods should be replaced since they tend to deteriorate from snow plowing and deicing salts.

The detention basin is designed such that ground water infiltration is achieved for normal rainstorm events. It is important that the basins and stormwater outlet controls are kept clean and fully operational. The minimum maintenance procedures should include the following:

1. Cleaning of the inlet and outlet controls
2. Resetting stone rip rap energy dissipaters
3. Trimming or removal of unwanted vegetation (not wetlands)
4. Removing excess sediment
5. Yearly inspections of the basin berm and outlet control devices

The cost in the Reserve Fund Analysis is for regrading portions of each of the basins if maintenance programs falter. Regrading costs include removing sediment, regrading the basin channels and resetting rip-rap. As an exact cost is difficult to determine and will depend of the condition of the basin at the time of the work, the lump sum cost in the reserve study is an estimate based on past experiences with basins.

RESULTS

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

<i>Reserve Fund Balance as of April 4, 2016</i>	<i>\$101,800</i>	<i>Rate of Inflation per Year</i>	<i>3.0%</i>
<i>Reserve Fund Contribution</i>	<i>\$5,550 per year</i>	<i>Reserve Basis Period</i>	<i>20 years</i>
<i>Rate of Return on Investments per year</i>	<i>1.0%</i>	<i>Minimum threshold balance over the 20 year Reserve Study(+/- 10% of Total Capital Item Replacement Cost)</i>	<i>\$19,066.13</i>

Based on our inspection of the community financial information from the Association, and reserve planning over the next 20 years, the current reserve funding is **slightly underfunded**. In the later years the costs for repaving the roadway and replacing inlet hoods will cause the reserve fund to fall below zero.

Option #1 – Level Funding Increases –

- The current funding of \$5,500 per year is increased \$2,500 every other year, starting in 2019, as listed in the table below:

Funding Changes		
<u>Year</u>	<u>Change</u>	<u>Total Annual</u>
2019	Funding Increase	\$ 8,000.00
2021	Funding Increase	\$ 10,500.00
2023	Funding Increase	\$ 13,000.00
2025	Funding Increase	\$ 15,500.00

- The minimum balance (threshold) over the study period is \$19,804.12 in year 2031.

Option #2- Escalating Funding –

- The current funding of \$5,500 per year is increased in year 2017 to \$6,000 and every year thereafter; this amount is escalated 9.5% each year until 2032.
- In 2032, the escalation rate becomes 0%
- The minimum balance (threshold) over the study period is \$19,808.86 in year 2031.

Option #3- Escalating Funding with Special Assessment –

- The current funding of \$5,500 per year is escalated 2% each year for the next 20 years
- A special assessment is planned for in year 2028 in the amount of \$2,000 to pay for the replacement of the roadway
- The minimum balance (threshold) over the study period is \$24,275.91 in year 2031.

NOTE:

After review of the report, the Board opted to increase the reserve contribution payment by \$1,250 annually. This was done in an effort to eliminate a future negative reserve fund balance.



RESERVE STUDY INPUT WORKSHEET	
Community Information	
Organization:	WATERFORD CROSSING COMMUNITY ASSOCIATION
Board Contact:	David O'Neill
Address:	Westhampton Way
City:	Towamencin
State:	Pennsylvania
Association Management:	Gross and Quade Management Company
Management Contact:	Rosemary Cooper
Current Date:	06/22/2016
Inspection Date:	05/26/2016
Number of Units:	42
Starting Occupancy %:	100%
Occupancy Change / Year:	0%
Building(s) Age (years):	12
Study Start Date:	01/01/2017
Study Duration (years):	20
Study End Date:	12/31/2036

Current Financial Information		
Reserve Funds at Start of Study Date:	\$ 101,800.00	
Assumed Annual Nominal Rate of Return on Funds (%):	1.00%	
Assumed Annual Rate of Inflation (%):	3.00%	
Current Funding Contribution Entry Selection:	<table border="1"><tr><td>Total Annual</td></tr></table>	Total Annual
Total Annual		
Funding Contribution Amount:	\$ 5,500.00	
Funding Contribution Amount Increase Per Fiscal Year:	0.00%	
Total Monthly Contribution:	\$ 458.33	
Total Annual Contribution:	\$ 5,500.00	
Select Special Contribution Type:	No Contributions	

CURRENT FUNDING & FUNDING OPTIONS WORKSHEET

For: WATERFORD CROSSING COMMUNITY ASSOCIATION

Current Funding		
Current Funding Contribution:		Total Annual
Funding Contribution Amount:	\$	5,500.00
Funding Contribution Amount Increase Per Fiscal Year:		0.00%
Starting Balance:	\$	101,800.00
Ending Balance:	\$	(99,874.34)
Immediate Liabilities after end of study:	\$	3,632.43
Maximum Balance:	\$	121,700.72
Year of Maximum Balance:		2020
Minimum Balance:	\$	(99,874.34)
Year of Minimum Balance:		2036
Select Special Contribution Type:	No Contributions	
Special Contributions		
#	Year of Contribution	Amount
Special Funding Considerations		
Year	Change	Total Annual

Funding Option #2 - Escalating Funding		
Selected Funding Contribution:		Total Annual
Funding Contribution Amount:	\$	6,000.00
Funding Contribution Amount Increase Per Fiscal Year:		9.50%
Starting Balance:	\$	101,800.00
Ending Balance:	\$	92,462.38
Immediate Liabilities after end of study:	\$	3,632.43
Maximum Balance:	\$	136,933.43
Year of Maximum Balance:		2026
Minimum Balance:	\$	19,808.86
Year of Minimum Balance:		2031
Select Special Contribution Type:	No Contributions	
Special Contributions		
#	Year of Contribution	Amount
Special Funding Considerations		
Year	Change	Total Annual
2032	% Increase	0.00%

Funding Option #1 - Level Funding		
Selected Funding Contribution:		Total Annual
Funding Contribution Amount:	\$	5,500.00
Funding Contribution Amount Increase Per Fiscal Year:		0.00%
Starting Balance:	\$	101,800.00
Ending Balance:	\$	62,312.59
Immediate Liabilities after end of study:	\$	3,632.43
Maximum Balance:	\$	148,850.81
Year of Maximum Balance:		2026
Minimum Balance:	\$	19,804.12
Year of Minimum Balance:		2031
Select Special Contribution Type:	No Contributions	
Special Contributions		
#	Year of Contribution	Amount
Special Funding Considerations		
Year	Change	Total Annual
2019	Funding Reset	\$ 8,000.00
2021	Funding Reset	\$ 10,500.00
2023	Funding Reset	\$ 13,000.00
2025	Funding Reset	\$ 15,500.00

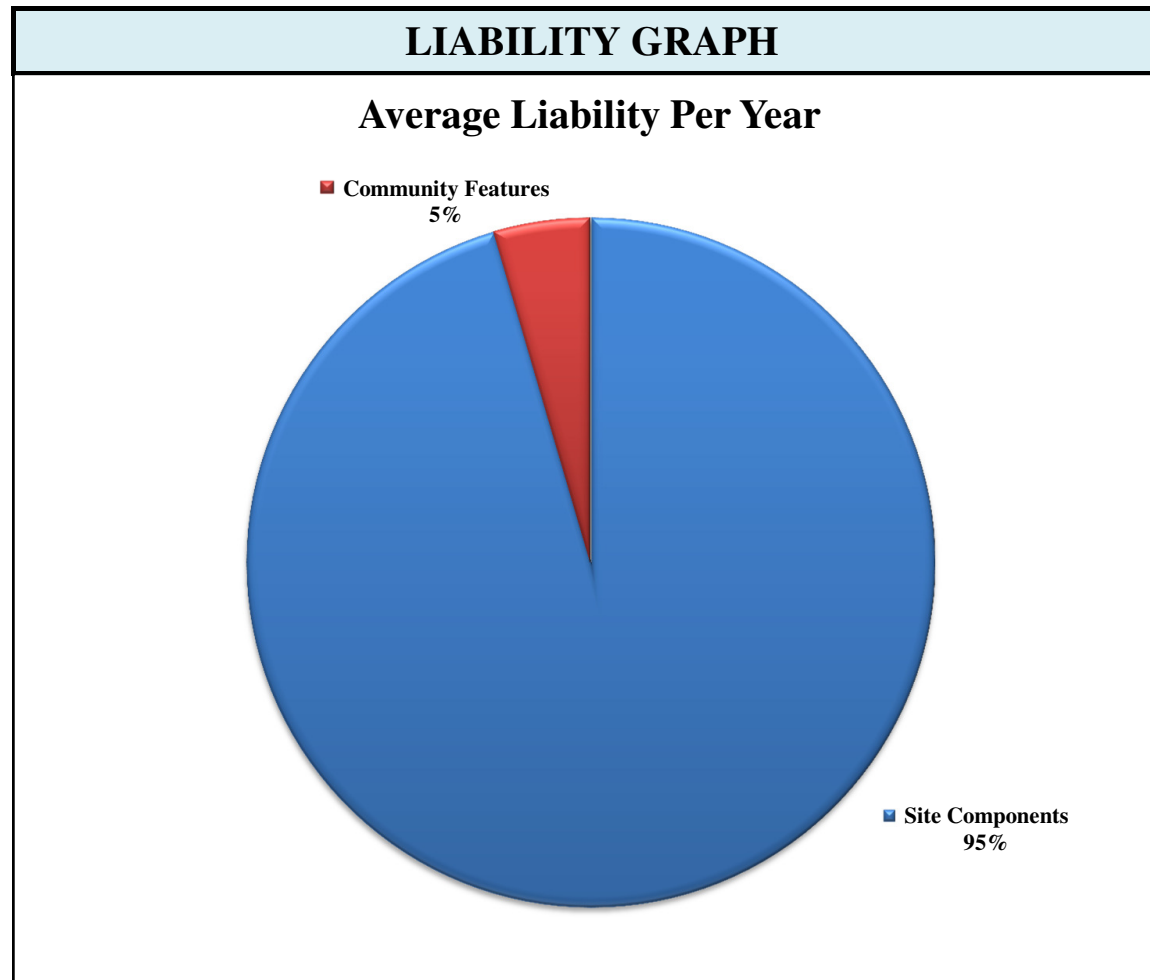
Funding Option #3 - Escalating Funding with Special Assessment		
Selected Funding Contribution:		Total Annual
Funding Contribution Amount:		\$ 6,000.00
Funding Contribution Amount Increase Per Fiscal Year:		2.00%
Starting Balance:		\$ 101,800.00
Ending Balance:		\$ 30,603.56
Immediate Liabilities after end of study:		\$ 3,632.43
Maximum Balance:		\$ 124,480.59
Year of Maximum Balance:		2020
Minimum Balance:		\$ 24,275.91
Year of Minimum Balance:		2031
Select Special Contribution Type:		Per Unit
Special Contributions		
#	Year of Contribution	Amount
1.)	01/01/2028	\$ 2,000.00
Special Funding Considerations		
Year	Change	Total Annual

CAPITAL ITEM REPLACEMENT WORKSHEET

For: WATERFORD CROSSING COMMUNITY ASSOCIATION

Costs are typically 10%±

Capital Item	Quantity	Unit cost	Current		Frequency		Entire Study Cost		Remaining Life		Reserve Funding Required					
			Total Price (*)		Years	Months	(with inflation)		Years	Months	Monthly	Annual				
Total			\$	190,661.25			\$	317,368.01			\$	919.94	\$	11,039.23		
Site Components																
Asphalt Milling & Paving	3,477	SY	\$	15.00	\$	52,155.00	20	0	\$	72,335.24	11	0	\$	217.31	\$	2,607.75
Sealcoating	3,477	SY	\$	1.75	\$	6,084.75	5	0	\$	33,722.76	3	0	\$	101.41	\$	1,216.95
Belgian Block Curbing - Partial Replacement (25%)	467	LF	\$	35.00	\$	16,345.00	25	0	\$	24,069.33	13	0	\$	54.48	\$	653.80
Concrete Sidewalks - Partial Replacement (10%)	657	SF	\$	12.50	\$	8,212.50	20	0	\$	9,515.99	5	0	\$	34.22	\$	410.63
Concrete Walkways - Partial Replacement (25%)	903	SF	\$	12.50	\$	11,287.50	20	0	\$	14,744.38	9	0	\$	47.03	\$	564.38
Concrete Driveway Aprons - Partial Replacement (25%)	732	SF	\$	22.00	\$	16,104.00	10	0	\$	42,544.95	4	0	\$	134.20	\$	1,610.40
Asphalt Walking Path	717	SY	\$	28.50	\$	20,434.50	25	0	\$	31,006.71	14	0	\$	68.12	\$	817.38
Emergency Access Drive	1	LS	\$	2,958.00	\$	2,958.00	25	0	\$	5,059.88	18	0	\$	9.86	\$	118.32
Signs - Traffic Control	3	EA	\$	650.00	\$	1,950.00	12	0	\$	5,836.12	7	0	\$	13.54	\$	162.50
Community Identification Sign	1	EA	\$	1,250.00	\$	1,250.00	18	0	\$	1,492.45	6	0	\$	5.79	\$	69.44
Streetlights	12	EA	\$	1,200.00	\$	14,400.00	22	0	\$	19,382.24	10	0	\$	54.55	\$	654.55
Mailbox Kiosk Area	1	LS	\$	4,780.00	\$	4,780.00	30	0	\$	8,425.24	19	0	\$	13.28	\$	159.33
Basin Regrading	1	LS	\$	12,500.00	\$	12,500.00	35	0			23	0	\$	29.76	\$	357.14
Inlet Hood Replacement	13	EA	\$	1,250.00	\$	16,250.00	30	0	\$	22,537.58	11	0	\$	45.14	\$	541.67
Bulletin Board	1	EA	\$	950.00	\$	950.00	10	0	\$	2,829.36	8	0	\$	7.92	\$	95.00
Irrigation System - General Repairs	1	LS	\$	3,000.00	\$	3,000.00	6	0	\$	13,000.95	6	0	\$	41.67	\$	500.00
Community Features																
Reserve Fund Study Update	1	LS	\$	2,000.00	\$	2,000.00	4	0	\$	10,864.82	4	0	\$	41.67	\$	500.00



For: WATERFORD CROSSING COMMUNITY ASSOCIATION

Liability Categories		Per Year Liability
Site Components	\$	10,539.23
Community Features	\$	500.00

LIABILITIES BY YEAR

For: WATERFORD CROSSING COMMUNITY ASSOCIATION

All Values are Adjusted for Inflation

Year Number	1	2	3	4	5	6	7	8	9
Start of Period:	1/1/2017	1/1/2018	1/1/2019	1/1/2020	1/1/2021	1/1/2022	1/1/2023	1/1/2024	1/1/2025
End of Period:	12/31/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022	12/31/2023	12/31/2024	12/31/2025
Site Components									
Asphalt Milling & Paving	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sealcoating	\$ -	\$ -	\$ -	\$ 6,640.43	\$ -	\$ -	\$ -	\$ -	\$ 7,713.63
Belgian Block Curbing - Partial Replacement (25%)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Concrete Sidewalks - Partial Replacement (10%)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,515.99	\$ -	\$ -	\$ -
Concrete Walkways - Partial Replacement (25%)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Concrete Driveway Aprons - Partial Replacement (25%)	\$ -	\$ -	\$ -	\$ -	\$ 18,109.22	\$ -	\$ -	\$ -	\$ -
Asphalt Walking Path	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Emergency Access Drive	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Signs - Traffic Control	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,399.04	\$ -
Community Identification Sign	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,492.45	\$ -	\$ -
Streetlights	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Mailbox Kiosk Area	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Basin Regrading	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Inlet Hood Replacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bulletin Board	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,204.31
Irrigation System - General Repairs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,581.89	\$ -	\$ -
Community Features									
Reserve Fund Study Update	\$ -	\$ -	\$ -	\$ -	\$ 2,249.03	\$ -	\$ -	\$ -	\$ 2,535.40
TOTAL	\$ -	\$ -	\$ -	\$ 6,640.43	\$ 20,358.25	\$ 9,515.99	\$ 5,074.35	\$ 2,399.04	\$ 11,453.35

LIABILITIES BY YEAR

For: WATERFORD CROSSING COMMUNITY ASSOCIATION

All Values are Adjusted for Inflation

Year Number	10	11	12	13	14	15	16	17
Start of Period:	1/1/2026	1/1/2027	1/1/2028	1/1/2029	1/1/2030	1/1/2031	1/1/2032	1/1/2033
End of Period:	12/31/2026	12/31/2027	12/31/2028	12/31/2029	12/31/2030	12/31/2031	12/31/2032	12/31/2033
Site Components								
Asphalt Milling & Paving	\$ -	\$ -	\$ 72,335.24	\$ -	\$ -	\$ -	\$ -	\$ -
Sealcoating	\$ -	\$ -	\$ -	\$ -	\$ 8,960.29	\$ -	\$ -	\$ -
Belgian Block Curbing - Partial Replacement (25%)	\$ -	\$ -	\$ -	\$ -	\$ 24,069.33	\$ -	\$ -	\$ -
Concrete Sidewalks - Partial Replacement (10%)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Concrete Walkways - Partial Replacement (25%)	\$ 14,744.38	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Concrete Driveway Aprons - Partial Replacement (25%)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 24,435.74	\$ -	\$ -
Asphalt Walking Path	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 31,006.71	\$ -	\$ -
Emergency Access Drive	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Signs - Traffic Control	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Community Identification Sign	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Streetlights	\$ -	\$ 19,382.24	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Mailbox Kiosk Area	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Basin Regrading	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Inlet Hood Replacement	\$ -	\$ -	\$ 22,537.58	\$ -	\$ -	\$ -	\$ -	\$ -
Bulletin Board	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Irrigation System - General Repairs	\$ -	\$ -	\$ -	\$ 4,287.34	\$ -	\$ -	\$ -	\$ -
Community Features								
Reserve Fund Study Update	\$ -	\$ -	\$ -	\$ 2,858.23	\$ -	\$ -	\$ -	\$ 3,222.16
TOTAL	\$ 14,744.38	\$ 19,382.24	\$ 94,872.82	\$ 7,145.56	\$ 33,029.62	\$ 55,442.45	\$ -	\$ 3,222.16

LIABILITIES BY YEAR

For: WATERFORD CROSSING COMMUNITY ASSOCIATION

All Values are Adjusted for Inflation

Year Number	18	19	20
Start of Period:	1/1/2034	1/1/2035	1/1/2036
End of Period:	12/31/2034	12/31/2035	12/31/2036

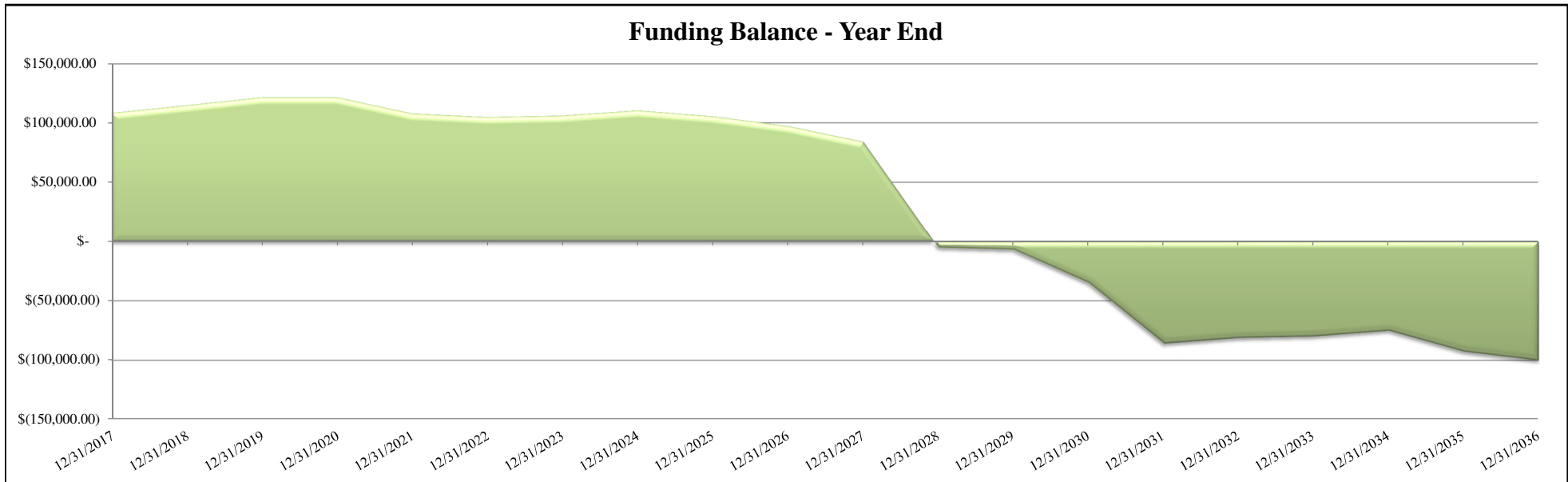
Site Components

Asphalt Milling & Paving	\$ -	\$ -	\$ -
Sealcoating	\$ -	\$ 10,408.42	\$ -
Belgian Block Curbing - Partial Replacement (25%)	\$ -	\$ -	\$ -
Concrete Sidewalks - Partial Replacement (10%)	\$ -	\$ -	\$ -
Concrete Walkways - Partial Replacement (25%)	\$ -	\$ -	\$ -
Concrete Driveway Aprons - Partial Replacement (25%)	\$ -	\$ -	\$ -
Asphalt Walking Path	\$ -	\$ -	\$ -
Emergency Access Drive	\$ -	\$ 5,059.88	\$ -
Signs - Traffic Control	\$ -	\$ -	\$ 3,437.08
Community Identification Sign	\$ -	\$ -	\$ -
Streetlights	\$ -	\$ -	\$ -
Mailbox Kiosk Area	\$ -	\$ -	\$ 8,425.24
Basin Regrading	\$ -	\$ -	\$ -
Inlet Hood Replacement	\$ -	\$ -	\$ -
Bulletin Board	\$ -	\$ 1,625.05	\$ -
Irrigation System - General Repairs	\$ -	\$ 5,131.72	\$ -

Community Features

Reserve Fund Study Update	\$ -	\$ -	\$ -
TOTAL	\$ -	\$ 22,225.07	\$ 11,862.32

CURRENT FUNDING LEVELS

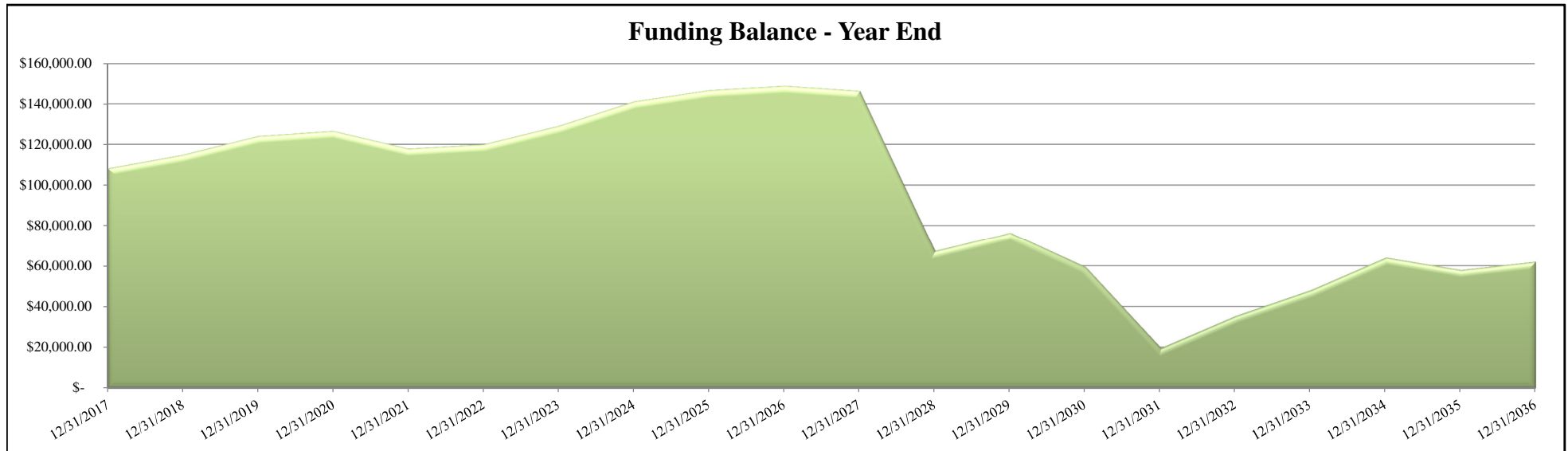


Funding Balance at Start of Study:	\$ 101,800.00	Special Funding Considerations:			Special Contributions:		Minimum Balance	Date
		Year	Change	Total Annual	Year	Amount	\$ (99,874.34)	2036
Select Current Funding Contribution:	Total Annual		None		None		Maximum Balance	Date
Funding Contribution Amount:	\$ 5,500.00						121,700.72	2020
Funding Contribution Amount Increase Per Year:	0.0%							

Year:	1/1/2017	1/1/2018	1/1/2019	1/1/2020	1/1/2021	1/1/2022	1/1/2023	1/1/2024	1/1/2025	1/1/2026
Beginning Fund Balance:	\$ 101,800.00	\$ 108,352.56	\$ 114,970.95	\$ 121,655.83	\$ 121,700.72	\$ 107,890.44	\$ 104,892.60	\$ 106,350.91	\$ 110,526.04	\$ 105,597.86
Revenue:	\$ 5,500.00	\$ 5,500.00	\$ 5,500.00	\$ 5,500.00	\$ 5,500.00	\$ 5,500.00	\$ 5,500.00	\$ 5,500.00	\$ 5,500.00	\$ 5,500.00
Special Assessments:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Investment Earnings:	\$ 1,052.56	\$ 1,118.39	\$ 1,184.88	\$ 1,185.32	\$ 1,047.97	\$ 1,018.15	\$ 1,032.65	\$ 1,074.18	\$ 1,025.16	\$ 942.59
Capital Expenditures:	\$ -	\$ -	\$ -	\$ 6,640.43	\$ 20,358.25	\$ 9,515.99	\$ 5,074.35	\$ 2,399.04	\$ 11,453.35	\$ 14,744.38
Ending Fund Balance:	\$ 108,352.56	\$ 114,970.95	\$ 121,655.83	\$ 121,700.72	\$ 107,890.44	\$ 104,892.60	\$ 106,350.91	\$ 110,526.04	\$ 105,597.86	\$ 97,296.07

Year:	1/1/2027	1/1/2028	1/1/2029	1/1/2030	1/1/2031	1/1/2032	1/1/2033	1/1/2034	1/1/2035	1/1/2036
Beginning Fund Balance:	\$ 97,296.07	\$ 84,226.44	\$ (5,223.45)	\$ (6,963.39)	\$ (34,864.89)	\$ (85,684.68)	\$ (81,015.58)	\$ (79,554.11)	\$ (74,823.42)	\$ (92,493.55)
Revenue:	\$ 5,500.00	\$ 5,500.00	\$ 5,500.00	\$ 5,500.00	\$ 5,500.00	\$ 5,500.00	\$ 5,500.00	\$ 5,500.00	\$ 5,500.00	\$ 5,500.00
Special Assessments:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Investment Earnings:	\$ 812.60	\$ (77.07)	\$ (94.38)	\$ (371.89)	\$ (877.34)	\$ (830.90)	\$ (816.37)	\$ (769.31)	\$ (945.06)	\$ (1,018.47)
Capital Expenditures:	\$ 19,382.24	\$ 94,872.82	\$ 7,145.56	\$ 33,029.62	\$ 55,442.45	\$ -	\$ 3,222.16	\$ -	\$ 22,225.07	\$ 11,862.32
Ending Fund Balance:	\$ 84,226.44	\$ (5,223.45)	\$ (6,963.39)	\$ (34,864.89)	\$ (85,684.68)	\$ (81,015.58)	\$ (79,554.11)	\$ (74,823.42)	\$ (92,493.55)	\$ (99,874.34)

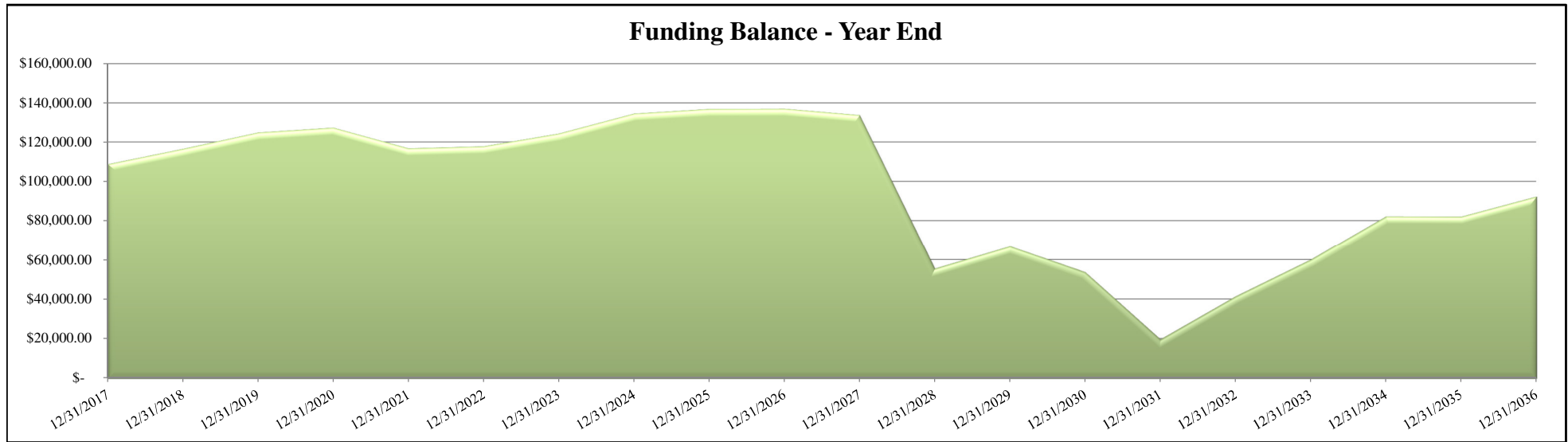
FUNDING OPTION #1



Funding Balance at Start of Study:	\$ 101,800.00	Step Funding:			Special Contributions:		Minimum Balance	Date
		Year	Change	Total Annual	Year	Amount	\$ 19,804.12	2031
Select Current Funding Contribution:	Total Annual	2019	Funding Reset	\$ 8,000.00	None		Maximum Balance	Date
Funding Contribution Amount:	\$ 5,500.00	2021	Funding Reset	\$ 10,500.00			\$ 148,850.81	2026
Funding Contribution Amount Increase Per Year:	0.0%	2025	Funding Reset	\$ 15,500.00				

Year:	1/1/2017	1/1/2018	1/1/2019	1/1/2020	1/1/2021	1/1/2022	1/1/2023	1/1/2024	1/1/2025	1/1/2026
Beginning Fund Balance:	\$ 101,800.00	\$ 108,352.56	\$ 114,970.95	\$ 124,169.41	\$ 126,753.14	\$ 118,020.78	\$ 120,151.87	\$ 129,304.22	\$ 141,250.70	\$ 146,685.51
Revenue:	\$ 5,500.00	\$ 5,500.00	\$ 8,000.00	\$ 8,000.00	\$ 10,500.00	\$ 10,500.00	\$ 13,000.00	\$ 13,000.00	\$ 15,500.00	\$ 15,500.00
Special Assessments:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Investment Earnings:	\$ 1,052.56	\$ 1,118.39	\$ 1,198.46	\$ 1,224.16	\$ 1,125.89	\$ 1,147.08	\$ 1,226.70	\$ 1,345.52	\$ 1,388.15	\$ 1,409.69
Capital Expenditures:	\$ -	\$ -	\$ -	\$ 6,640.43	\$ 20,358.25	\$ 9,515.99	\$ 5,074.35	\$ 2,399.04	\$ 11,453.35	\$ 14,744.38
Ending Fund Balance:	\$ 108,352.56	\$ 114,970.95	\$ 124,169.41	\$ 126,753.14	\$ 118,020.78	\$ 120,151.87	\$ 129,304.22	\$ 141,250.70	\$ 146,685.51	\$ 148,850.81

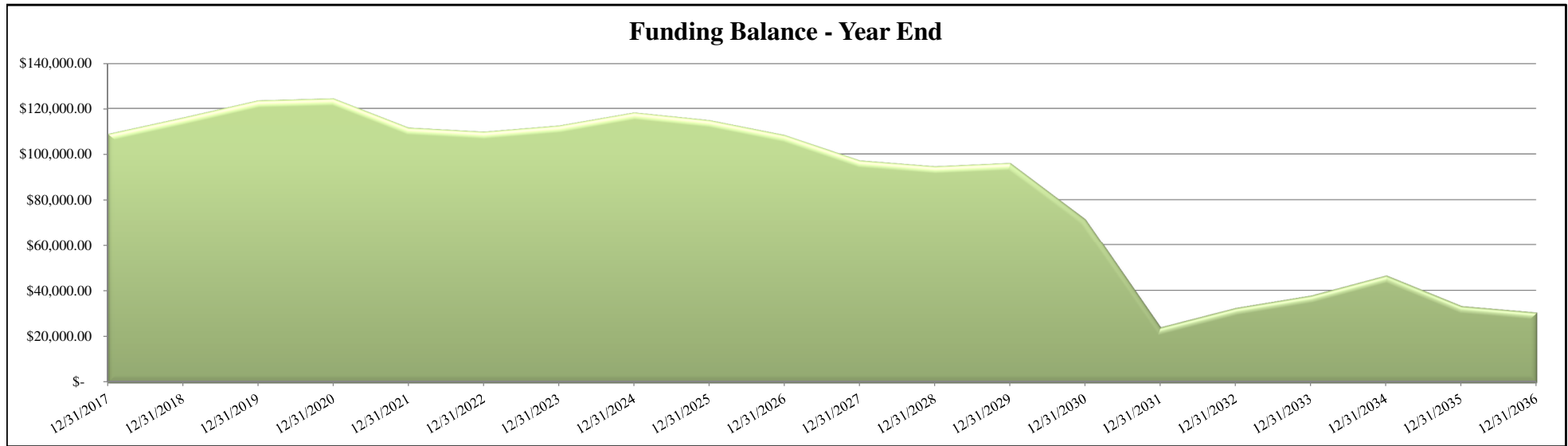
Year:	1/1/2027	1/1/2028	1/1/2029	1/1/2030	1/1/2031	1/1/2032	1/1/2033	1/1/2034	1/1/2035	1/1/2036
Beginning Fund Balance:	\$ 148,850.81	\$ 146,353.43	\$ 67,582.00	\$ 76,627.79	\$ 59,620.38	\$ 19,804.12	\$ 35,587.29	\$ 48,274.48	\$ 64,343.66	\$ 58,125.93
Revenue:	\$ 15,500.00	\$ 15,500.00	\$ 15,500.00	\$ 15,500.00	\$ 15,500.00	\$ 15,500.00	\$ 15,500.00	\$ 15,500.00	\$ 15,500.00	\$ 15,500.00
Special Assessments:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Investment Earnings:	\$ 1,384.85	\$ 601.39	\$ 691.36	\$ 522.20	\$ 126.19	\$ 283.17	\$ 409.35	\$ 569.18	\$ 507.34	\$ 548.98
Capital Expenditures:	\$ 19,382.24	\$ 94,872.82	\$ 7,145.56	\$ 33,029.62	\$ 55,442.45	\$ -	\$ 3,222.16	\$ -	\$ 22,225.07	\$ 11,862.32
Ending Fund Balance:	\$ 146,353.43	\$ 67,582.00	\$ 76,627.79	\$ 59,620.38	\$ 19,804.12	\$ 35,587.29	\$ 48,274.48	\$ 64,343.66	\$ 58,125.93	\$ 62,312.59

FUNDING OPTION #2

Funding Balance at Start of Study :	\$ 101,800.00	Step Funding:			Special Contributions:		Minimum Balance	Date
		Year	Change	Total Annual	Year	Amount	\$ 19,808.86	2031
Select Current Funding Contribution:	Total Annual	2032	% Increase	0.00%	None		Maximum Balance	Date
Funding Contribution Amount:	\$ 6,000.00						\$ 136,933.43	2026
Funding Contribution Amount Increase Per Year:	9.5%							

Year:	1/1/2017	1/1/2018	1/1/2019	1/1/2020	1/1/2021	1/1/2022	1/1/2023	1/1/2024	1/1/2025	1/1/2026
Beginning Fund Balance:	\$ 101,800.00	\$ 108,855.28	\$ 116,554.53	\$ 124,958.67	\$ 127,427.26	\$ 116,817.45	\$ 117,876.16	\$ 124,333.96	\$ 134,546.71	\$ 136,798.55
Revenue:	\$ 6,000.00	\$ 6,570.00	\$ 7,194.15	\$ 7,877.59	\$ 8,625.97	\$ 9,445.43	\$ 10,342.75	\$ 11,325.31	\$ 12,401.21	\$ 13,579.33
Special Assessments:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Investment Earnings:	\$ 1,055.28	\$ 1,129.25	\$ 1,209.99	\$ 1,231.42	\$ 1,122.48	\$ 1,129.27	\$ 1,189.40	\$ 1,286.49	\$ 1,303.97	\$ 1,299.93
Capital Expenditures:	\$ -	\$ -	\$ -	\$ 6,640.43	\$ 20,358.25	\$ 9,515.99	\$ 5,074.35	\$ 2,399.04	\$ 11,453.35	\$ 14,744.38
Ending Fund Balance:	\$ 108,855.28	\$ 116,554.53	\$ 124,958.67	\$ 127,427.26	\$ 116,817.45	\$ 117,876.16	\$ 124,333.96	\$ 134,546.71	\$ 136,798.55	\$ 136,933.43

Year:	1/1/2027	1/1/2028	1/1/2029	1/1/2030	1/1/2031	1/1/2032	1/1/2033	1/1/2034	1/1/2035	1/1/2036
Beginning Fund Balance:	\$ 136,933.43	\$ 133,682.27	\$ 55,569.75	\$ 66,836.26	\$ 53,774.80	\$ 19,808.86	\$ 41,501.11	\$ 60,156.76	\$ 82,254.34	\$ 82,125.58
Revenue:	\$ 14,869.37	\$ 16,281.96	\$ 17,828.74	\$ 19,522.47	\$ 21,377.11	\$ 21,377.11	\$ 21,377.11	\$ 21,377.11	\$ 21,377.11	\$ 21,377.11
Special Assessments:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Investment Earnings:	\$ 1,261.70	\$ 478.34	\$ 583.34	\$ 445.69	\$ 99.39	\$ 315.15	\$ 500.70	\$ 720.48	\$ 719.20	\$ 822.01
Capital Expenditures:	\$ 19,382.24	\$ 94,872.82	\$ 7,145.56	\$ 33,029.62	\$ 55,442.45	\$ -	\$ 3,222.16	\$ -	\$ 22,225.07	\$ 11,862.32
Ending Fund Balance:	\$ 133,682.27	\$ 55,569.75	\$ 66,836.26	\$ 53,774.80	\$ 19,808.86	\$ 41,501.11	\$ 60,156.76	\$ 82,254.34	\$ 82,125.58	\$ 92,462.38

FUNDING OPTION #3

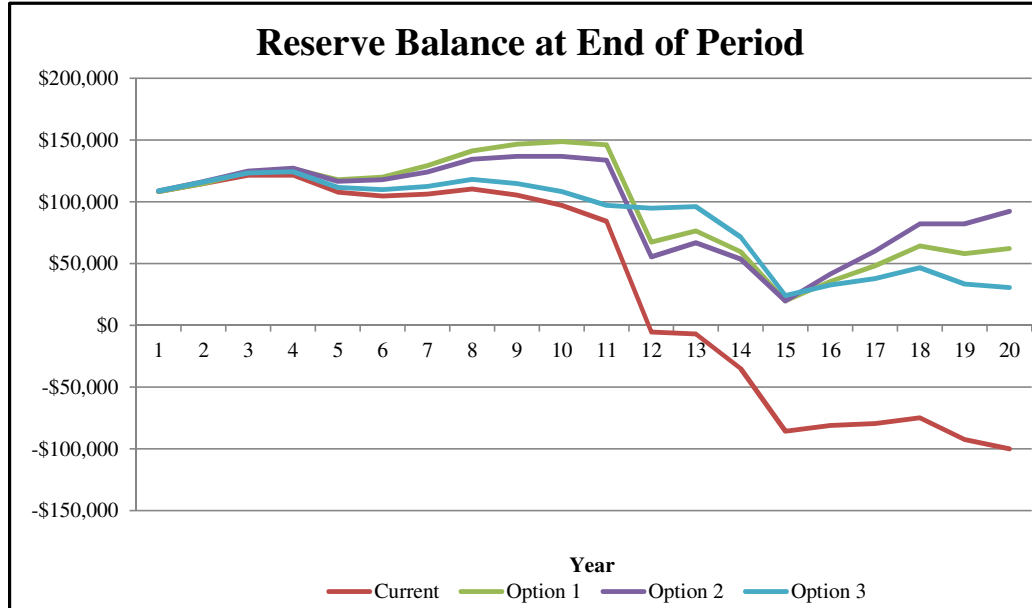
Funding Balance at Start of Study :	\$ 101,800.00	Step Funding:			Special Contributions:		Minimum Balance	Date
		Year	Change	Total Annual	Year	Amount	\$ 24,275.91	2031
Select Current Funding Contribution:	Total Annual		None		\$ 46,753.00	\$ 2,000.00	Maximum Balance	Date
Funding Contribution Amount:	\$ 6,000.00						\$ 124,480.59	2020
Funding Contribution Amount Increase Per Year:	2.0%							

Year:	1/1/2017	1/1/2018	1/1/2019	1/1/2020	1/1/2021	1/1/2022	1/1/2023	1/1/2024	1/1/2025	1/1/2026
Beginning Fund Balance:	\$ 101,800.00	\$ 108,855.28	\$ 116,102.09	\$ 123,544.76	\$ 124,480.59	\$ 111,698.23	\$ 109,869.24	\$ 112,641.34	\$ 118,279.35	\$ 114,967.33
Revenue:	\$ 6,000.00	\$ 6,120.00	\$ 6,242.40	\$ 6,367.25	\$ 6,494.59	\$ 6,624.48	\$ 6,756.97	\$ 6,892.11	\$ 7,029.96	\$ 7,170.56
Special Assessments:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Investment Earnings:	\$ 1,055.28	\$ 1,126.81	\$ 1,200.27	\$ 1,209.01	\$ 1,081.30	\$ 1,062.51	\$ 1,089.48	\$ 1,144.94	\$ 1,111.37	\$ 1,045.80
Capital Expenditures:	\$ -	\$ -	\$ -	\$ 6,640.43	\$ 20,358.25	\$ 9,515.99	\$ 5,074.35	\$ 2,399.04	\$ 11,453.35	\$ 14,744.38
Ending Fund Balance:	\$ 108,855.28	\$ 116,102.09	\$ 123,544.76	\$ 124,480.59	\$ 111,698.23	\$ 109,869.24	\$ 112,641.34	\$ 118,279.35	\$ 114,967.33	\$ 108,439.29

Year:	1/1/2027	1/1/2028	1/1/2029	1/1/2030	1/1/2031	1/1/2032	1/1/2033	1/1/2034	1/1/2035	1/1/2036
Beginning Fund Balance:	\$ 108,439.29	\$ 97,305.43	\$ 94,801.69	\$ 96,187.51	\$ 71,596.19	\$ 24,275.91	\$ 32,638.86	\$ 37,993.69	\$ 46,822.47	\$ 33,460.55
Revenue:	\$ 7,313.97	\$ 7,460.25	\$ 7,609.45	\$ 7,761.64	\$ 7,916.87	\$ 8,075.21	\$ 8,236.71	\$ 8,401.45	\$ 8,569.48	\$ 8,740.87
Special Assessments:	\$ -	\$ 84,000.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Investment Earnings:	\$ 934.40	\$ 908.83	\$ 921.93	\$ 676.65	\$ 205.29	\$ 287.75	\$ 340.27	\$ 427.33	\$ 293.66	\$ 264.47
Capital Expenditures:	\$ 19,382.24	\$ 94,872.82	\$ 7,145.56	\$ 33,029.62	\$ 55,442.45	\$ -	\$ 3,222.16	\$ -	\$ 22,225.07	\$ 11,862.32
Ending Fund Balance:	\$ 97,305.43	\$ 94,801.69	\$ 96,187.51	\$ 71,596.19	\$ 24,275.91	\$ 32,638.86	\$ 37,993.69	\$ 46,822.47	\$ 33,460.55	\$ 30,603.56

FUNDING COMPARISON

For: WATERFORD CROSSING COMMUNITY ASSOCIATION



Fiscal Year End	Year	Current	Option 1	Option 2	Option 3
12/31/2017	1	\$ 108,352.56	\$ 108,352.56	\$ 108,855.28	\$ 108,855.28
12/31/2018	2	\$ 114,970.95	\$ 114,970.95	\$ 116,554.53	\$ 116,102.09
12/31/2019	3	\$ 121,655.83	\$ 124,169.41	\$ 124,958.67	\$ 123,544.76
12/31/2020	4	\$ 121,700.72	\$ 126,753.14	\$ 127,427.26	\$ 124,480.59
12/31/2021	5	\$ 107,890.44	\$ 118,020.78	\$ 116,817.45	\$ 111,698.23
12/31/2022	6	\$ 104,892.60	\$ 120,151.87	\$ 117,876.16	\$ 109,869.24
12/31/2023	7	\$ 106,350.91	\$ 129,304.22	\$ 124,333.96	\$ 112,641.34
12/31/2024	8	\$ 110,526.04	\$ 141,250.70	\$ 134,546.71	\$ 118,279.35
12/31/2025	9	\$ 105,597.86	\$ 146,685.51	\$ 136,798.55	\$ 114,967.33
12/31/2026	10	\$ 97,296.07	\$ 148,850.81	\$ 136,933.43	\$ 108,439.29
12/31/2027	11	\$ 84,226.44	\$ 146,353.43	\$ 133,682.27	\$ 97,305.43
12/31/2028	12	\$ (5,223.45)	\$ 67,582.00	\$ 55,569.75	\$ 94,801.69
12/31/2029	13	\$ (6,963.39)	\$ 76,627.79	\$ 66,836.26	\$ 96,187.51
12/31/2030	14	\$ (34,864.89)	\$ 59,620.38	\$ 53,774.80	\$ 71,596.19
12/31/2031	15	\$ (85,684.68)	\$ 19,804.12	\$ 19,808.86	\$ 24,275.91
12/31/2032	16	\$ (81,015.58)	\$ 35,587.29	\$ 41,501.11	\$ 32,638.86
12/31/2033	17	\$ (79,554.11)	\$ 48,274.48	\$ 60,156.76	\$ 37,993.69
12/31/2034	18	\$ (74,823.42)	\$ 64,343.66	\$ 82,254.34	\$ 46,822.47
12/31/2035	19	\$ (92,493.55)	\$ 58,125.93	\$ 82,125.58	\$ 33,460.55
12/31/2036	20	\$ (99,874.34)	\$ 62,312.59	\$ 92,462.38	\$ 30,603.56

APPENDIX B
Photographs for Waterford Crossing
May 26, 2016



Photo One— Lateral cracks in pavement by visitor parking



Photo Two—Spider cracks in pavement along W Hampton Way



Photo Three— Chipped block in curbing along visitor parking area



Photo Four— Crack in walkway to Unit #22

Photographs for Waterford Crossing
May 26, 2016



Photo Five— Spalling on walkway to Unit #37



Photo Six—Spalling on driveway apron (typical condition)



Photo Seven—Entrance to asphalt walking path



Photo Eight—Wide crack along asphalt walking path

Photographs for Waterford Crossing
May 26, 2016



*Photo Nine— Emergency Access Drive
apron off Allentown Road*



*Photo Ten– Community identification
sign and masonry wall*



Photo Eleven– Mailbox kiosk area



*Photo Twelve– Detention basin on
southwest end of Community*

APPENDIX C: WORK SHEET DEFINITIONS

A: Capital Item to be Replaced

Definition: 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

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

D: Current Cost

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

E: Frequency

Definition: The Frequency the capital item is to be repaired or replaced.

F: Remaining Life

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

G: Entire Study Cost

Definition: 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

Definition: 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.

J: Return on Investments and Inflation Rate

Definition: 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 D: 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 not 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 its validity 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.

Estimates – 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.

Safety Issues-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.

