FULL RESERVE STUDY Moss Creek Homeowners Association



Riverview, Florida August 20, 2018



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Long-term thinking. Everyday commitment.

Moss Creek Homeowners Association Riverview, Florida

Dear Board of Directors of Moss Creek Homeowners Association:

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Full Reserve Study* of Moss Creek Homeowners Association in Riverview, Florida and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, August 20, 2018.

This *Full Reserve Study* exceeds the Association of Professional Reserve Analysts (APRA) standards fulfilling the requirements of a "Level I Full Reserve Study."

An ongoing review by the Board and an Update of this Reserve Study are necessary to ensure an equitable funding plan since a Reserve Study is a snapshot in time. We recommend the Board budget for an Update to this Reserve Study in two years. We look forward to continuing to help Moss Creek Homeowners Association plan for a successful future.

As part of our long-term thinking and everyday commitment to our clients, we are available to answer any questions you may have regarding this study.

Respectfully submitted on September 13, 2018 by

Reserve Advisors, Inc.

APRA

Association of Professional Reserve Analysts

Visual Inspection and Report by: Lauren Gibbs Review by: Alan M. Ebert, RS, PRA², Director of Quality Assurance



 ¹ RS (Reserve Specialist) is the reserve provider professional designation of the Community Associations Institute (CAI) representing America's more than 300,000 condominium, cooperative and homeowners associations.
² PRA (Professional Reserve Analyst) is the professional designation of the Association of Professional

² PRA (Professional Reserve Analyst) is the professional designation of the Association of Professional Reserve Analysts. Learn more about APRA at http://www.apra-usa.com.





Long-term thinking. Everyday commitment.



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1.RESERVE STUDY EXECUTIVE SUMMARY

Client: Moss Creek Homeowners Association (Moss Creek) Location: Riverview, Florida Reference: 080231

Property Basics: Moss Creek Homeowners Association is a homeowners association which is responsible for the common elements shared by 68 single family homes. The common elements of the Association were built in 2001.

Reserve Components Identified: 16 Reserve Components.

Inspection Date: August 20, 2018.

Funding Goal: The Funding Goal of this Reserve Study is to maintain reserves above an adequate, not excessive threshold during one or more years of significant expenditures. Our recommended Funding Plan recognizes this threshold funding year in 2045 due to pond and pavement maintenance.

Cash Flow Method: We use the Cash Flow Method to compute the Reserve Funding Plan. This method offsets future variable Reserve Expenditures with existing and future stable levels of reserve funding. Our application of this method also considers:

- Current and future local costs of replacement
- 1.7% anticipated annual rate of return on invested reserves
- 2.1% future Inflation Rate for estimating Future Replacement Costs

Sources for *Local* **Costs of Replacement**: Our proprietary database, historical costs and published sources, i.e., R.S. Means, Incorporated.

Cash Status of Reserve Fund:

- \$148,012 as of July 31, 2018
- 2018 budgeted Reserve Contributions of \$25,152

Recommended Reserve Funding: We recommend the following in order to achieve a stable and equitable Funding Plan:

- Decrease to \$15,000 by 2019 due to fully funding for replacement of the asphalt pavement.
- Inflationary increases through 2048, the limit of this study's Cash Flow Analysis.
- 2019 Reserve Contribution of \$15,000 is equivalent to an average monthly contribution of \$18.38 per homeowner. The Association may ascribe the actual contributions and assessments per owner based upon percent ownership, as defined by the Association's governing documents.



	Reserve	Reserve		Reserve	Reserve		Reserve	Reserve
Year	Contributions (\$)	Balances (\$)	Year	Contributions (\$)	Balances (\$)	Year	Contributions (\$)	Balances (\$)
2019	15,000	133,635	2029	18,400	172,252	2039	22,600	56,263
2020	15,300	142,163	2030	18,800	185,081	2040	23,100	69,364
2021	15,600	137,761	2031	19,200	207,591	2041	23,600	71,962
2022	15,900	146,714	2032	19,600	206,820	2042	24,100	83,208
2023	16,200	127,950	2033	20,000	207,235	2043	24,600	52,460
2024	16,500	146,765	2034	20,400	227,113	2044	25,100	62,669
2025	16,800	132,656	2035	20,800	230,413	2045	25,600	25,903
2026	17,200	136,430	2036	21,200	225,715	2046	26,100	52,665
2027	17,600	156,499	2037	21,600	85,715	2047	26,600	80,386
2028	18,000	177,312	2038	22,100	32,911	2048	27,200	103,286

Moss Creek Recommended Reserve Funding Table and Graph





2.RESERVE STUDY REPORT

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Full Reserve Study* of

Moss Creek Homeowners Association

Riverview, Florida

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, August 20, 2018.

We present our findings and recommendations in the following report sections and spreadsheets:

- Identification of Property Segregates all property into several areas of responsibility for repair or replacement
- **Reserve Expenditures** Identifies reserve components and related quantities, useful lives, remaining useful lives and future reserve expenditures during the next 30 years
- Reserve Funding Plan Presents the recommended Reserve Contributions and year-end Reserve Balances for the next 30 years
- Reserve Component Detail Describes the reserve components, includes photographic documentation of the condition of various property elements, describes our recommendations for repairs or replacement, and includes detailed solutions and procedures for replacements for the benefit of current and future board members
- **Methodology** Lists the national standards, methods and procedures used to develop the Reserve Study
- **Definitions** Contains definitions of terms used in the Reserve Study, consistent with national standards
- **Professional Service Conditions** Describes Assumptions and Professional Service Conditions
- Credentials and Resources



IDENTIFICATION OF PROPERTY



Our investigation includes Reserve Components or property elements as set forth in your Declaration. The Expenditure tables in Section 3 list the elements contained in this study. Our analysis begins by segregating the property elements into several areas of responsibility for repair and replacement.

Our process of identification helps assure that future boards and the management team understand whether reserves, the operating budget or Homeowners fund certain replacements and assists in preparation of the annual budget. We derive these segregated classes of property from our review of the information provided by the Association and through conversations with Management and the Board. These classes of property include:

- Reserve Components
- Long-Lived Property Elements
- Operating Budget Funded Repairs and Replacements
- Property Maintained by Homeowners
- Property Maintained by Others

We advise the Board conduct an annual review of these classes of property to confirm its policy concerning the manner of funding, i.e., from reserves or the operating budget. The Reserve Study identifies Reserve Components as set forth in your Declaration or which were identified as part of your request for proposed services. Reserve Components are defined by CAI as property elements with:



- Moss Creek responsibility
- Limited useful life expectancies
- Predictable remaining useful life expectancies
- Replacement cost above a minimum threshold

Long-Lived Property Elements may not have predictable Remaining Useful Lives or their replacement may occur beyond the 30-year scope of the study. The operating budget should fund infrequent repairs. Funding untimely or unexpected replacements from reserves will necessitate increases to Reserve Contributions. Periodic updates of this Reserve Study will help determine the merits of adjusting the Reserve Funding Plan. We identify the following Long-Lived Property Elements as excluded from reserve funding at this time.

• Pipes, Subsurface Utilities

The operating budget provides money for the repair and replacement of certain Reserve Components. The Association may develop independent criteria for use of operating and reserve funds. For purposes of calculating appropriate Reserve Contributions, we identify the following list of Operating Budget Funded Repairs and Replacements:

- General Maintenance to the Common Elements
- Expenditures less than \$2,000 (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)
- Entrance Monument and Pillars, Interim Repairs and Paint Finishes
- Irrigation System, Controller
- Landscape
- Paint Finishes, Touch Up
- Ponds, Interim Maintenance
- Retaining Walls, Masonry, Inspections and Capital Repairs
- Valves, Small Diameter (We assume replacement as needed in lieu of an aggregate replacement of all small diameter valves as a single event.)
- Other Repairs normally funded through the Operating Budget

Certain items have been designated as the responsibility of the homeowners to repair or replace at their cost. Property Maintained by Homeowners, including items billed back to Homeowners, relates to:

- Homes and Lots
- Driveways

Certain items have been designated as the responsibility of others to repair or replace. Property Maintained by Others relates to:

• Light Poles and Fixtures (TECO)



3.RESERVE EXPENDITURES and FUNDING PLAN

The tables following this introduction present:

Reserve Expenditures

- Line item numbers
- Total quantities
- Quantities replaced per phase (in a single year)
- Reserve component inventory
- Estimated first year of event (i.e., replacement, application, etc.)
- Life analysis showing
 - useful life
 - remaining useful life
- 2018 local cost of replacement
 - Per unit
 - Per phase
 - Replacement of total quantity
- Total future costs of replacement anticipated during the next 30 years
- Schedule of estimated future costs for each reserve component including inflation

Reserve Funding Plan

- Reserves at the beginning of each year
- Total recommended reserve contributions
- Estimated interest earned from invested reserves
- Anticipated expenditures by year
- Anticipated reserves at year end

Financial statements prepared by your association, by you or others might rely in part on information contained in this section. For your convenience, we have provided an electronic data file containing the tables of **Reserve Expenditures** and **Reserve Funding Plan**.

RESERVE EXPENDITURES

Moss Creek

Explanatory Notes:

1) 2.1% is the estimated future Inflation Rate for estimating Future Replacement Costs

		Homeowners Association Riverview, Florida														ber 31,	2018.	15.									
					Estimated	l Li	fe Analysis, _		Cost	s, \$		-					_		_								
Line Item	Total Quantity	Per Phase Quantity L	Jnits	Reserve Component Inventory	1st Year o Event	f Useful	Remaining	Unit (2018)	Per Phase (2018)	Total (2018)	30-Year Total (Inflated)	RUL = 0 FY2018	1 2019	2 2020	3 2021	4 2022	2023	6 2024	2025	8 2026	9 2027	10 2028	11 2029	12 2030	13 2031	14 2032	15 2033
4.020	8,600) 8,600 Squa	ire Yards	Asphalt Pavement, Crack Repair, Patch and Seal Coat	2021	3 to 5	3	1.60	13,760	13,760	112,956				14,645				15,915				17,294				18,793
4.040	8,600) 8,600 Squa	re Yards	Asphalt Pavement, Mill and Overlay	2037	15 to 20	19	10.00	86,000	86,000	127,640																
4.100	16	6 16 Each		Catch Basins, Inspections and Capital Repairs	2037	15 to 20	19	650.00	10,400	10,400	15,436																
4.110	7,700) 290 Linea	ar Feet	Concrete Curbs and Gutters, Partial	2021	to 65	3 to 30+	25.00	7,250	192,500	40,295				7,716								9,112				
4.140	30,800) 1,155 Squa	re Feet	Concrete Sidewalks, Partial	2026	to 65	8 to 30+	8.00	9,240	246,400	53,134									10,911						12,360	
4.200	90) 90 Linea	ar Feet	Fences, Aluminum	2026	to 25	8	45.00	4,050	4,050	4,783									4,783							
4.260	800) 800 Linea	ar Feet	Fences, Vinyl	2023	15 to 20	5	42.00	33,600	33,600	93,770						37,279										
4.310		1 Panel	-	Gate Entry System	2019	10 to 15	1	3,000.00	3,000	3,000	7,246		3,063														
4.320	2	2 2 Each		Gate Operators	2020	to 10	2	3,500.00	7,000	7,000	27,338			7,297										8,983			
4.330	2	2 2 Each		Gates	2022	to 20	4	4,300.00	8,600	8,600	35,011					9,345										11,504	
4.420	(6 Zones	s	Irrigation System	2038	to 40	20	2,250.00	13,500	13,500	20,457																
4.600		1 Allow	ance	Mailboxes	2018	to 25	0	27,350.00	27,350	27,350	68,795	27,350															
4.710		1 Allow	ance	Ponds, Debris Removal and Shoreline Maintenance	2025	to 15	7	15,000.00	15,000	15,000	64,995								17,349								
4.745	620) 620 Squa	ire Feet	Retaining Walls, Masonry	2036	to 35	18	33.00	20,460	20,460	29,742																
4.800		1 1 Allow	ance	Signage, Entrance Monument, Renovation	2019	15 to 20	1	7,000.00	7,000	7,000	19,889		9,500														
4.810		1 1 Allow	ance	Signage, Street and Traffic, Replacement	2018	15 to 20	0	3,135.00	3,135	3,135	13,265	3,135															4,282
		1 Allow	vance	Reserve Study Update with Site Visit	2020	2	2	1,800.00	1,800	1,800	1,800			1,800													
				Anticipated Expenditures, By Year							\$736,552	30,485	12,563	9,097	22,361	9,345	37,279	0	33,264	15,694	0	0	26,406	8,983	0	23,864	23,075

RESERVE EXPENDITURES

Moss Creek

Homeowners Association Riverview, Florida

Line Item	Total F Quantity	Per Phase Quantity Units	Reserve Component Inventory	Estimated 1st Year of Event	Lif Y Useful	fe Analysis, /ears Remaining	Unit (2018)	Cost Per Phase (2018)	ts, \$ Total (2018)	30-Year Total (Inflated)	16 2034	17 2035	18 2036	19 2037	20 2038	21 2039	22 2040	23 204
4.020	8,600	8,600 Square Yards	S Asphalt Pavement, Crack Repair, Patch and Seal Coat	2021	3 to 5	3	1.60	13,760	13,760	112,956								22,19
4.040	8,600	8,600 Square Yards	Asphalt Pavement, Mill and Overlay	2037	15 to 20	19	10.00	86,000	86,000	127,640				127,640				
4.100	16	16 Each	Catch Basins, Inspections and Capital Repairs	2037	15 to 20	19	650.00	10,400	10,400	15,436				15,436				
4.110	7,700	290 Linear Feet	Concrete Curbs and Gutters, Partial	2021	to 65	3 to 30+	25.00	7,250	192,500	40,295				10,760				
4.140	30,800	1,155 Square Feet	Concrete Sidewalks, Partial	2026	to 65	8 to 30+	8.00	9,240	246,400	53,134					14,002			
4.200	90	90 Linear Feet	Fences, Aluminum	2026	to 25	8	45.00	4,050	4,050	4,783								
4.260	800	800 Linear Feet	Fences, Vinyl	2023	15 to 20	5	42.00	33,600	33,600	93,770								
4.310	1	1 Panel	Gate Entry System	2019	10 to 15	1	3,000.00	3,000	3,000	7,246	4,183							
4.320	2	2 Each	Gate Operators	2020	to 10	2	3,500.00	7,000	7,000	27,338							11,058	
4.330	2	2 Each	Gates	2022	to 20	4	4,300.00	8,600	8,600	35,011								
4.420	6	6 Zones	Irrigation System	2038	to 40	20	2,250.00	13,500	13,500	20,457					20,457			
4.600	1	1 Allowance	Mailboxes	2018	to 25	0	27,350.00	27,350	27,350	68,795					41,445			
4.710	1	1 Allowance	Ponds, Debris Removal and Shoreline Maintenance	2025	to 15	7	15,000.00	15,000	15,000	64,995		21,356						
4.745	620	620 Square Feet	Retaining Walls, Masonry	2036	to 35	18	33.00	20,460	20,460	29,742			29,742					
4.800	1	1 Allowance	Signage, Entrance Monument, Renovation	2019	15 to 20	1	7,000.00	7,000	7,000	19,889				10,389				
4.810	1	1 Allowance	Signage, Street and Traffic, Replacement	2018	15 to 20	0	3,135.00	3,135	3,135	13,265								
		1 Allowance	Reserve Study Update with Site Visit	2020	2	2	1,800.00	1,800	1,800	1,800								
			Anticipated Expenditures, By Year							\$736,552	4,183	21,356	29,742	164,225	75,904	0	11,058	22,1

Years 2034 to 2048



RESERVE FUNDING PLAN

CASH FLOW ANALYSIS

-	-	-		-	-
		Moss Creek	(

Homeowners Association		Individual Res	serve Budgets	s & Cash Flow	vs for the Nex	t 30 Years										
Riverview, Florida	FY2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Reserves at Beginning of Year (Note 1)	148,012	128,985	133,635	142,163	137,761	146,714	127,950	146,765	132,656	136,430	156,499	177,312	172,252	185,081	207,591	206,820
Total Recommended Reserve Contributions (Network)	ote 2) 10,480	15,000	15,300	15,600	15,900	16,200	16,500	16,800	17,200	17,600	18,000	18,400	18,800	19,200	19,600	20,000
Plus Estimated Interest Earned, During Year (Note 3	978	2,213	2,325	2,359	2,398	2,315	2,315	2,355	2,268	2,469	2,813	2,946	3,012	3,310	3,493	3,490
Less Anticipated Expenditures, By Year	(30,485)	(12,563)	(9,097)	(22,361)	(9,345)	(37,279)	0	(33,264)	(15,694)	0	0	(26,406)	(8,983)	0	(23,864)	(23,075)
Anticipated Reserves at Year End	<u>\$128,985</u>	<u>\$133,635</u>	<u>\$142,163</u>	<u>\$137,761</u>	<u>\$146,714</u>	<u>\$127,950</u>	<u>\$146,765</u>	<u>\$132,656</u>	<u>\$136,430</u>	<u>\$156,499</u>	<u>\$177,312</u>	<u>\$172,252</u>	<u>\$185,081</u>	<u>\$207,591</u>	<u>\$206,820</u>	<u>\$207,235</u>

(continued)	Individual Re	Individual Reserve Budgets & Cash Flows for the Next 30 Years, Continued													
	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
Reserves at Beginning of Year	207,235	227,113	230,413	225,715	85,715	32,911	56,263	69,364	71,962	83,208	52,460	62,669	25,903	52,665	80,386
Total Recommended Reserve Contributions	20,400	20,800	21,200	21,600	22,100	22,600	23,100	23,600	24,100	24,600	25,100	25,600	26,100	26,600	27,200
Plus Estimated Interest Earned, During Year	3,661	3,856	3,844	2,625	1,000	752	1,059	1,191	1,308	1,143	970	747	662	1,121	1,548
Less Anticipated Expenditures, By Year	(4,183)	(21,356)	(29,742)	(164,225)	(75,904)	0	(11,058)	(22,193)	(14,162)	(56,491)	(15,861)	(63,113)	0	0	(5,848)
Anticipated Reserves at Year End	<u>\$227,113</u>	<u>\$230,413</u>	<u>\$225,715</u>	<u>\$85,715</u>	<u>\$32,911</u>	<u>\$56,263</u>	<u>\$69,364</u>	<u>\$71,962</u>	<u>\$83,208</u>	<u>\$52,460</u>	<u>\$62,669</u>	<u>\$25,903</u> (NOTE 5)	<u>\$52,665</u>	<u>\$80,386</u>	<u>\$103,286</u> (NOTE 4)

Explanatory Notes:

1) Year 2018 starting reserves are as of July 31, 2018; FY2018 starts January 1, 2018 and ends December 31, 2018.

2) Reserve Contributions for 2018 are the remaining budgeted 5 months; 2019 is the first year of recommended contributions.

3) 1.7% is the estimated annual rate of return on invested reserves; 2018 is a partial year of interest earned.

4) Accumulated year 2048 ending reserves consider the age, size, overall condition and complexity of the property.

5) Threshold Funding Year (reserve balance at critical point).



4.RESERVE COMPONENT DETAIL

The Reserve Component Detail of this *Full Reserve Study* includes enhanced solutions and procedures for select significant components. This section describes the Reserve Components, documents specific problems and condition assessments, and may include detailed solutions and procedures for necessary capital repairs and replacements for the benefit of current and future board members. We advise the Board use this information to help define the scope and procedures for repair or replacement when soliciting bids or proposals from contractors. *However, the Report in whole or part is not and should not be used as a design specification or design engineering service.*

Asphalt Pavement, Crack Repair, Patch and Seal Coat

Line Item: 4.020

Quantity: Approximately 8,600 square yards

History: Repaved in 2017

Condition: Good overall with minor cracks evident



Cracks evident

Cracks evident

Useful Life: Three- to five-years

Component Detail Notes: Proposals for seal coat applications should include crack repairs and patching. The contractor should only apply seal coat applications after repairs are completed. A seal coat does not bridge or close cracks, therefore, unrepaired cracks render the seal coat applications useless.



Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our cost includes an allowance for crack repairs and patching of up to two percent (2%) of the pavement.

Asphalt Pavement, Repaving

Line Item: 4.040

Quantity: Approximately 8,600 square yards

History: Repaved in 2017

Condition: Good overall



Pavement overview

Pavement overview



Pavement overview

Useful Life: 15- to 20-years with the benefit of timely crack repairs and patching

Component Detail Notes: The initial installation of asphalt uses at least two lifts, or two separate applications of asphalt, over the base course. The first lift is the binder



course. The second lift is the wearing course. The wearing course comprises a finer aggregate for a smoother more watertight finish. The following diagram depicts the typical components although it may not reflect the actual configuration at Moss Creek:



The manner of repaving is either a mill and overlay or total replacement. A mill and overlay is a method of repaving where cracked, worn and failed pavement is mechanically removed or milled until sound pavement is found. A new layer of asphalt is overlaid atop the remaining base course of pavement. Total replacement includes the removal of all existing asphalt down to the base course of aggregate and native soil followed by the application of two or more new lifts of asphalt. We recommend mill and overlayment on asphalt pavement that exhibits normal deterioration and wear. We recommend total replacement of asphalt pavement that exhibits severe deterioration, inadequate drainage, pavement that has been overlaid multiple times in the past or where the configuration makes overlayment not possible. Based on the apparent visual condition and configuration of the asphalt pavement, we recommend the mill and overlay method of repaving at Moss Creek.

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our cost for milling and overlayment includes area patching of up to ten percent (10%).

Catch Basins

Line Item: 4.100



Quantity: 16 each

History: Original

Condition: Good overall



Catch basin

Catch basin

Useful Life: The useful life of catch basins is up to 65 years. However, achieving this useful life usually requires interim capital repairs or partial replacements every 15- to 20-years.

Component Detail Notes: Erosion causes settlement around the collar of catch basins. Left unrepaired, the entire catch basin will shift and need replacement.

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We recommend the Association plan for inspections and capital repairs to the catch basins in conjunction with repaying.

Concrete Curbs and Gutters

Line Item: 4.110

Quantity: 7,700 linear feet

Condition: Good overall with cracks, standing water and damage evident





Cracks evident

Standing water evident



Damage evident



Concrete curb and gutter

Useful Life: Up to 65 years although interim deterioration of areas is common

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We estimate that up to 1,160 linear feet of curbs and gutters, or fifteen percent (15.1%) of the total, will require replacement during the next 30 years.

Concrete Sidewalks

Line Item: 4.140

Quantity: 30,800 square feet

Condition: Good overall with uneven sections, minor cracks and damage evident





Uneven sidewalk





Damage evident

Repaired section



Sidewalk overview

Useful Life: Up to 65 years although interim deterioration of areas is common



Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We estimate that up to 4,620 square feet of concrete sidewalks, or fifteen percent (15%) of the total, will require replacement during the next 30 years.

Fences, Aluminum

Line Item: 4.200

Quantity: 90 linear feet at the entrance of the property

History: Original

Condition: Good overall





Aluminum fence at entrance

Aluminum fence section



Aluminum fence section

Useful Life: Up to 25 years



Expenditure Detail Notes: Expenditure timing and costs are depicted in the *Reserve Expenditures* table in Section 3.

Fences, Vinyl

Line Item: 4.260

Quantity: 800 linear feet at the east perimeter of the property at the entrance

History: Original

Condition: Good overall with stains and minor damage evident



Stains evident

Damage evident



Vinyl fence at perimeter of the property

Useful Life: 15- to 20-years



Expenditure Detail Notes: Expenditure timing and costs are depicted in the *Reserve Expenditures* table in Section 3.

Gate Entry System

Line Item: 4.310

Quantity: One panel

History: Original

Condition: Reported satisfactory



Entry panel

Useful Life: 10- to 15-years

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the *Reserve Expenditures* table in Section 3.

Gates and Operators

Line Items: 4.320 and 4.330

Quantity: Two gates and two operators

History: Original

Condition: Good overall with deteriorating finishes evident





Gates

Gate operator



Deteriorating finishes evident

Useful Life: Up to 10 years for the operators and up to 20 years for the gates

Priority/Criticality: Not recommended to defer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the *Reserve Expenditures* table in Section 3.

Irrigation System

Line Item: 4.420

Quantity: Six zones with one controller

History: Original

Condition: Good overall and the Board does not report any deficiencies

Useful Life: Up to 40 years



Component Detail Notes: Irrigation systems typically include the following components:

- Electronic controls (timer)
- Impact rotors
- Network of supply pipes
- Pop-up heads
- Valves

Moss Creek should anticipate interim and partial replacements of the system network supply pipes and other components as normal maintenance to maximize the useful life of the irrigation system. The Association should fund these ongoing seasonal repairs through the operating budget.

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the *Reserve Expenditures* table in Section 3.

Mailboxes

Line Item: 4.600

Quantity: 68 mailboxes

History: Original

Condition: Good overall

Useful Life: Up to 25 years

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Although previously, mailboxes were a Homeowners expense, the Board requests mailbox replacement be funded through reserves by the Association.

Ponds, Debris Removal and Shoreline Control

Line Item: 4.710

Quantity: 2,000 linear feet of natural vegetation and 3,000 square yards of pond area

Condition: Good overall condition with low water levels evident





Dry pond

Low water level



Natural vegetation evident



Retention pond



Plantings



Shallow area



Useful Life: Up to 15 years

Component Detail Notes: The shoreline embankments are likely to exacerbate soil movement and erosion. The use and maintenance of landscape, natural vegetation and/or stone rip rap along the pond shoreline will help maintain an attractive appearance and prevent soil erosion.

The gradual build-up of natural debris, including tree leaves, branches and silt, may eventually change the topography of areas of the pond. Silt typically accumulates at inlets, outlets and areas of shoreline erosion. Sediment removal of ponds becomes necessary if this accumulation alters the quality of pond water or the functionality of the ponds as storm water management structures. Sediment removal is the optimal but also the most capital intensive method of pond management.

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our estimate of cost includes sediment removal of up to twenty percent (20%) of the pond areas and installation of plantings at up to ten (10%) of the pond shorelines.

Retaining Walls, Masonry

Line Item: 4.745

Quantity: 620 square feet throughout the community

History: Original

Condition: Good overall with shifted blocks evident



Retaining wall at entrance of community

Masonry retaining wall





Retaining wall at pond

Retaining wall at pond



Shifted blocks evident

Useful Life: Up to 35 years

Component Detail Notes: Properly constructed interlocking masonry retaining walls utilize geosynthetic reinforcement and a drainage system to stabilize the wall and prevent the buildup of hydrostatic pressure behind the wall. Water stains may indicate inadequate drainage or blocked drainage from behind the wall. The following schematic depicts the typical components of a retaining wall system although it may not reflect the actual configuration at Moss Creek:





Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the *Reserve Expenditures* table in Section 3.

Signage, Renovation

Line Item: 4.800

Quantity: Two property identification signs

History: Original

Condition: Good overall with leaning pillar evident





Entrance monument

Stone masonry



Leaning pillar due to tree roots

Useful Life: 15- to 20-years

Component Detail Notes: Community signage contributes to the overall aesthetic appearance of the property to owners and potential buyers. Renovation or replacement of community signs is often predicated upon the desire to "update" the perceived identity of the community rather than for utilitarian concerns. Therefore, the specific times for replacement or renovation are discretionary. The signage includes the following elements:

- Light fixtures
- Signs
- Masonry, Stone (Including columns)

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our cost for renovation includes repointing and repairs to the masonry and replacement of the remaining components listed above. The



near term event includes complete replacement of the leaning column. Interim painting of the signs and column caps should be funded through the operating budget.

Signage, Street and Traffic

Line Item: 4.810

Quantity: Four street and traffic signs

History: Original

Condition: Fair overall with leaning signs and stains evident



Leaning stop sign

Staining evident

Useful Life: 15- to 20-years

Component Detail Notes: The community signs contribute to the overall aesthetic appearance of the property to owners and potential buyers. Replacement of community signs is often predicated upon the desire to "update" the perceived identity of the community rather than for utilitarian concerns. Therefore, the specific time for replacement of the signs is discretionary.

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the *Reserve Expenditures* table in Section 3.



Reserve Study Update

An ongoing review by the Board and an Update of this Reserve Study are necessary to ensure an equitable funding plan since a Reserve Study is a snapshot in time. Many variables change after the study is conducted that may result in significant overfunding or underfunding the reserve account. Variables that may affect the Reserve Funding Plan include, but are not limited to:

- Deferred or accelerated capital projects based on Board discretion
- Changes in the interest rates on reserve investments
- Changes in the *local* construction inflation rate
- Additions and deletions to the Reserve Component Inventory
- The presence or absence of maintenance programs
- Unusually mild or extreme weather conditions
- Technological advancements

Periodic updates incorporate these variable changes since the last Reserve Study or Update. The Association can expense the fee for an Update with site visit from the reserve account. This fee is included in the Reserve Funding Plan. We base this budgetary amount on updating the same property components and quantities of this Reserve Study report. We recommend the Board budget for an Update to this Reserve Study in two- to three-years. Budgeting for an Update demonstrates the Board's objective to continue fulfilling its fiduciary responsibility to maintain the commonly owned property and to fund reserves appropriately.



5.METHODOLOGY

Reserves for replacement are the amounts of money required for future expenditures to repair or replace Reserve Components that wear out before the entire facility or project wears out. Reserving funds for future repair or replacement of the Reserve Components is also one of the most reliable ways of protecting the value of the property's infrastructure and marketability.

Moss Creek can fund capital repairs and replacements in any combination of the following:

- 1. Increases in the operating budget during years when the shortages occur
- 2. Loans using borrowed capital for major replacement projects
- 3. Level monthly reserve assessments annually adjusted upward for inflation to increase reserves to fund the expected major future expenditures
- 4. Special assessments

We do not advocate special assessments or loans unless near term circumstances dictate otherwise. Although loans provide a gradual method of funding a replacement, the costs are higher than if the Association were to accumulate reserves ahead of the actual replacement. Interest earnings on reserves also accumulate in this process of saving or reserving for future replacements, thereby defraying the amount of gradual reserve collections. We advocate the third method of *Level Monthly Reserve Assessments* with relatively minor annual adjustments. The method ensures that Homeowners pay their "fair share" of the weathering and aging of the commonly owned property each year. Level reserve assessments preserve the property and enhance the resale value of the homes.

This Reserve Study is in compliance with and exceeds the National standards¹ set forth by the Community Associations Institute (CAI) and the Association of Professional Reserve Analysts (APRA) fulfilling the requirements of a "Full Reserve Study." These standards require a Reserve Component to have a "predictable remaining Useful Life." Estimating Remaining Useful Lives and Reserve Expenditures beyond 30 years is often indeterminate. Long-Lived Property Elements are necessarily excluded from this analysis. We considered the following factors in our analysis:

- The Cash Flow Method to compute, project and illustrate the 30-year Reserve Funding Plan
- Local² costs of material, equipment and labor
- Current and future costs of replacement for the Reserve Components
- Costs of demolition as part of the cost of replacement
- Local economic conditions and a historical perspective to arrive at our estimate of long term future inflation for construction costs in Riverview, Florida at an annual inflation rate. Isolated or regional markets of greater

¹ Identified in the APRA "Standards - Terms and Definitions" and the CAI "Terms and Definitions".

² See Credentials for additional information on our use of published sources of cost data.



construction (development) activity may experience slightly greater rates of inflation for both construction materials and labor.

- The past and current maintenance practices of Moss Creek and their effects on remaining useful lives
- Financial information provided by the Association pertaining to the cash status of the reserve fund and budgeted reserve contribution
- The anticipated effects of appreciation of the reserves over time in accord with a return or yield on investment of your cash equivalent assets. (We did not consider the costs, if any, of Federal and State Taxes on income derived from interest and/or dividend income).
- The Funding Plan excludes necessary operating budget expenditures. It is our understanding that future operating budgets will provide for the ongoing normal maintenance of Reserve Components.

Updates to this Reserve Study will continue to monitor historical facts and trends concerning the external market conditions.



6.CREDENTIALS

HISTORY AND DEPTH OF SERVICE

Founded in 1991, Reserve Advisors, Inc. is the leading provider of reserve studies, insurance appraisals, developer turnover transition studies, expert witness services, and other engineering consulting services. Clients include community associations, resort properties, hotels, clubs, non-profit organizations, apartment building owners, religious and educational institutions, and office/commercial building owners in 48 states, Canada and throughout the world.

The **architectural engineering consulting firm** was formed to take a leadership role in helping fiduciaries, boards, and property managers manage their property like a business with a long range master plan known as a Reserve Study.

Reserve Advisors employs the **largest staff of Reserve Specialists** with bachelor's degrees in engineering dedicated to Reserve Study services. Our principals are founders of Community Associations Institute's (CAI) Reserve Committee that developed national standards for reserve study providers. One of our principals is a Past President of the Association of Professional Reserve Analysts (APRA). Our vast experience with a variety of building types and ages, on-site examination and historical analyses are keys to determining accurate remaining useful life estimates of building components.

No Conflict of Interest - As consulting specialists, our **independent opinion** eliminates any real or perceived conflict of interest because we do not conduct or manage capital projects.

TOTAL STAFF INVOLVEMENT

Several staff members participate in each assignment. The responsible advisor involves the staff through a Team Review, exclusive to Reserve Advisors, and by utilizing the experience of other staff members, each of whom has served hundreds of clients. We conduct Team Reviews, an internal quality assurance review of each assignment, including: the inspection; building component costing; lifing; and technical report phases of the assignment. Due to our extensive experience with building components, we do not have a need to utilize subcontractors.

OUR GOAL

To help our clients fulfill their fiduciary responsibilities to maintain property in good condition.

VAST EXPERIENCE WITH A VARIETY OF BUILDINGS

Reserve Advisors has conducted reserve studies for a multitude of different communities and building types. We've analyzed thousands of buildings, from as small as a 3,500-square foot day care center to the 2,600,000-square foot 98-story Trump International Hotel and Tower in Chicago. We also routinely inspect buildings with various types of mechanical systems such as simple electric heat, to complex systems with air handlers, chillers, boilers, elevators, and life safety and security systems.

We're familiar with all types of building exteriors as well. Our well versed staff regularly identifies optimal repair and replacement solutions for such building exterior surfaces such as adobe, brick, stone, concrete, stucco, EIFS, wood products, stained glass and aluminum siding, and window wall systems.

OLD TO NEW

Reserve Advisors experience includes ornate and vintage buildings as well as modern structures. Our specialists are no strangers to older buildings. We're accustomed to addressing the unique challenges posed by buildings that date to the 1800's. We recognize and consider the methods of construction employed into our analysis. We recommend appropriate replacement programs that apply cost effective technologies while maintaining a building's character and appeal.



QUALIFICATIONS THEODORE J. SALGADO Principal Owner

CURRENT CLIENT SERVICES

Theodore J. Salgado is a co-founder of Reserve Advisors, Inc., which is dedicated to serving community associations, city and country clubs, religious organizations, educational facilities, and public and private entities throughout the United States. He is responsible for the production, management, review, and quality assurance of all reserve studies, property inspection services and consulting services for a nationwide portfolio of more than 6,000 clients. Under his direction, the firm conducts reserve study services for community associations, apartment complexes, churches, hotels, resorts, office towers and vintage architecturally ornate buildings.



PRIOR RELEVANT EXPERIENCE

Before founding Reserve Advisors, Inc. with John P. Poehlmann in 1991, Mr. Salgado, a professional engineer registered in the State of Wisconsin, served clients for over 15 years through American Appraisal Associates, the world's largest full service valuation firm. Mr. Salgado conducted facilities analyses of hospitals, steel mills and various other large manufacturing and petrochemical facilities and casinos.

He has served clients throughout the United States and in foreign countries, and frequently acted as project manager on complex valuation, and federal and state tax planning assignments. His valuation studies led to negotiated settlements on property tax disputes between municipalities and property owners.

Mr. Salgado has authored articles on the topic of reserve studies and facilities maintenance. He also co-authored *Reserves*, an educational videotape produced by Reserve Advisors on the subject of Reserve Studies and maintaining appropriate reserves. Mr. Salgado has also written in-house computer applications manuals and taught techniques relating to valuation studies.

EXPERT WITNESS

Mr. Salgado has testified successfully before the Butler County Board of Tax Revisions in Ohio. His depositions in pretrial discovery proceedings relating to reserve studies of Crestview Estates Condominium Association in Wauconda, Illinois, Rivers Point Row Property Owners Association, Inc. in Charleston, South Carolina and the North Shore Club Associations in South Bend, Indiana have successfully assisted the parties in arriving at out of court settlements.

EDUCATION - Milwaukee School of Engineering - B.S. Architectural Engineering

PROFESSIONAL AFFILIATIONS/DESIGNATIONS

American Association of Cost Engineers - Past President, Wisconsin Section Association of Construction Inspectors - Certified Construction Inspector Association of Professional Reserve Analysts - Past President & Professional Reserve Analyst (PRA)

Community Associations Institute - Member and Volunteer Leader of multiple chapters Concordia Seminary, St. Louis - Member, National Steering Committee Milwaukee School of Engineering - Member, Corporation Board Professional Engineer, Wisconsin (1982) and North Carolina (2014)

Ted continually maintains his professional skills through American Society of Civil Engineers, ASHRAE, Association of Construction Inspectors, and continuing education to maintain his professional engineer licenses.



JOHN P. POEHLMANN, RS Principal

John P. Poehlmann is a co-founder of Reserve Advisors, Inc. He is responsible for the finance, accounting, marketing, and overall administration of Reserve Advisors, Inc. He also regularly participates in internal Quality Control Team Reviews of Reserve Study reports.

Mr. Poehlmann directs corporate marketing, including business development, advertising, press releases, conference and trade show exhibiting, and electronic marketing campaigns. He frequently speaks throughout the country at seminars and workshops on the benefits of future planning and budgeting for capital repairs and replacements of building components and other assets.



PRIOR RELEVANT EXPERIENCE

Mr. Poehlmann served on the national Board of Trustees of Community Associations Institute. An international organization, Community Associations Institute (CAI) is a nonprofit 501(c)(3) trade association created in 1973 to provide education and resources to America's 335,000 residential condominium, cooperative and homeowner associations and related professionals and service providers.

He is a founding member of the Institute's Reserve Committee. The Reserve Committee developed national standards and the Reserve Specialist (RS) Designation Program for Reserve Study providers. Mr. Poehlmann has authored numerous articles on the topic of Reserve Studies, including Reserve Studies for the First Time Buyer, Minimizing Board Liability, Sound Association Planning Parallels Business Concepts, and Why Have a Professional Reserve Study. He is also a contributing author in Condo/HOA Primer, a book published for the purpose of sharing a wide background of industry knowledge to help boards in making informed decisions about their communities.

INDUSTRY SERVICE AWARDS

CAI Wisconsin Chapter Award CAI National Rising Star Award CAI Michigan Chapter Award

EDUCATION

University of Wisconsin-Milwaukee - Master of Science Management University of Wisconsin - Bachelor of Business Administration

PROFESSIONAL AFFILIATIONS

Community Associations Institute (CAI) - Founding member of Reserve Committee; former member of National Board of Trustees; Reserve Specialist (RS) designation; Member of multiple chapters

Association of Condominium, Townhouse, & Homeowners Associations (ACTHA) – member



LAUREN GIBBS Responsible Advisor

CURRENT CLIENT SERVICES

Lauren Gibbs, a Chemical Engineer, is an Advisor for **Reserve Advisors, Inc.** Ms. Gibbs is responsible for the inspection and analysis of the condition of clients' properties, and recommending engineering solutions to prolong the lives of the components. She also forecasts capital expenditures for the repair and/or replacement of the property components and prepares technical reports on assignments. She is responsible for conducting Life Cycle Cost Analyses and Capital Replacement Forecast services and the preparation of Reserve Study Reports for condominiums, townhomes and homeowner associations.

The following is a partial list of clients served by Lauren Gibbs demonstrating her breadth of experiential knowledge of community associations in construction and related buildings systems.

- Lakeview Pointe Homeowners Association This newly constructed community is located in Orlando, Florida and comprises single family homes and townhomes. The Association maintains a pool house, pool, splash pad, playground, irrigation system, perimeter walls, fitness center, gazebo, fences, entrance monuments, and pond.
- **Bent Pine Homeowners Association** Located in Vero Beach, Florida, this single family home development consists of 150 homes built in 1979. This community includes tennis courts, streets and curbs, a guard house, ponds and aerators, gates, sidewalks and a gazebo.
- **Captivas Condominium Association** This condominium style development, located in St. Petersburg, Florida consists of 48 units in 6 buildings. These buildings were constructed with stucco façade, concrete tile roofs, and include balconies with aluminum railings, concrete breezeways and staircases, two hydraulic elevators with enclosed lobbies per building, first floor parking garages, fire suppression systems, security systems, vinyl windows and doors and plumbing and mechanical systems.
- **Keystone Shores Estates Homeowners Association** A single family home development comprised of 35 homes built in 1992. Located in Odessa, Florida, this community maintains a tennis court and basketball court, playground, gate house, perimeter walls and fences, asphalt pavement, gates, ponds and a large dock with gazebo.
- The Registry at Michigan Park Condominium Association This condominium style community located in Orlando, Florida comprises 264 units. The buildings in this community include a business center, offices, great room area, fitness center, concrete tile roofs, gutters and downspouts, stucco façade, lobbies, hallways and stairwells, balconies and patios, aluminum railings, life safety system, windows and doors, light fixtures and mailboxes.
- Island Club of Vero Beach Homeowners Association Located in Vero Beach, Florida, this community consists of 252 single family homes. Built from 1996-2003, this development includes two clubhouses, two gate houses, two pools, fitness room, kitchen, dock, dune crossover, asphalt pavement, curbs and sidewalks, catch basins, tennis court, mailboxes, balustrades, masonry pavers, fences, irrigation, gates, and entrance monuments.

PRIOR RELEVANT EXPERIENCE

Before joining **Reserve Advisors, Inc.**, Ms. Gibbs successfully completed the bachelors program in Chemical Engineering from University of South Alabama. She has experience as a Process Design Engineer for a chemical manufacturing company where she gained knowledge in the design and manufacturing of specialized chemicals with an expertise in pressure safety devices.

EDUCATION

University of South Alabama - B.S. Chemical Engineering **PROFESSIONAL AFFILIATIONS / DESIGNATIONS** Engineer In Training (E.I.T.) – Alabama, 2014



ALAN M. EBERT, P.E., PRA, RS Director of Quality Assurance

CURRENT CLIENT SERVICES

Alan M. Ebert, a Professional Engineer, is the Director of Quality Assurance for Reserve Advisors. Mr. Ebert is responsible for the management, review and quality assurance of reserve studies. In this role, he assumes the responsibility of stringent report review analysis to assure report accuracy and the best solution for Reserve Advisors' clients.

Mr. Ebert has been involved with thousands of Reserve Study assignments. The following is a partial list of clients served by Alan Ebert demonstrating his breadth of experiential knowledge of community associations in construction and related buildings systems.

- **Brownsville Winter Haven** Located in Brownsville, Texas, this unique homeowners association contains 525 units. The Association maintains three pools and pool houses, a community and management office, landscape and maintenance equipment, and nine irrigation canals with associated infrastructure.
- **Rosemont Condominiums** This unique condominium is located in Alexandria, Virginia and dates to the 1940's. The two mid-rise buildings utilize decorative stone and brick masonry. The development features common interior spaces, multi-level wood balconies and common asphalt parking areas.
- Stillwater Homeowners Association Located in Naperville, Illinois, Stillwater Homeowners Association maintains four tennis courts, an Olympic sized pool and an upscale ballroom with commercial-grade kitchen. The community also maintains three storm water retention ponds and a detention basin.
- **Birchfield Community Services Association** This extensive Association comprises seven separate parcels which include 505 townhome and single family homes. This Community Services Association is located in Mt. Laurel, New Jersey. Three lakes, a pool, a clubhouse and management office, wood carports, aluminum siding, and asphalt shingle roofs are a few of the elements maintained by the Association.
- **Oakridge Manor Condominium Association** Located in Londonderry, New Hampshire, this Association includes 104 units at 13 buildings. In addition to extensive roads and parking areas, the Association maintains a large septic system and significant concrete retaining walls.
- **Memorial Lofts Homeowners Association** This upscale high rise is located in Houston, Texas. The 20 luxury units include large balconies and decorative interior hallways. The 10-story building utilizes a painted stucco facade and TPO roof, while an on-grade garage serves residents and guests.

PRIOR RELEVANT EXPERIENCE

Mr. Ebert earned his Bachelor of Science degree in Geological Engineering from the University of Wisconsin-Madison. His relevant course work includes foundations, retaining walls, and slope stability. Before joining Reserve Advisors, Mr. Ebert was an oilfield engineer and tested and evaluated hundreds of oil and gas wells throughout North America.

EDUCATION

University of Wisconsin-Madison - B.S. Geological Engineering

PROFESSIONAL AFFILIATIONS/DESIGNATIONS

Professional Engineering License – Wisconsin, North Carolina, Illinois Reserve Specialist (RS) - Community Associations Institute Professional Reserve Analyst (PRA) - Association of Professional Reserve Analysts



RESOURCES

Reserve Advisors, Inc. utilizes numerous resources of national and local data to conduct its Professional Services. A concise list of several of these resources follows:

<u>Association of Construction Inspectors</u>, (ACI) the largest professional organization for those involved in construction inspection and construction project management. ACI is also the leading association providing standards, guidelines, regulations, education, training, and professional recognition in a field that has quickly become important procedure for both residential and commercial construction, found on the web at www.iami.org. Several advisors and a Principal of Reserve Advisors, Inc. hold Senior Memberships with ACI.

<u>American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.</u>, (ASHRAE) the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., devoted to the arts and sciences of heating, ventilation, air conditioning and refrigeration; recognized as the foremost, authoritative, timely and responsive source of technical and educational information, standards and guidelines, found on the web at www.ashrae.org. Reserve Advisors, Inc. actively participates in its local chapter and holds individual memberships.

<u>Community Associations Institute</u>, (CAI) America's leading advocate for responsible communities noted as the only national organization dedicated to fostering vibrant, responsive, competent community associations. Their mission is to assist community associations in promoting harmony, community, and responsible leadership.

<u>Marshall & Swift / Boeckh</u>, (MS/B) the worldwide provider of building cost data, co-sourcing solutions, and estimating technology for the property and casualty insurance industry found on the web at www.marshallswift.com.

R.S. Means CostWorks, North America's leading supplier of construction cost information. As a member of the Construction Market Data Group, Means provides accurate and up-to-date cost information that helps owners, developers, architects, engineers, contractors and others to carefully and precisely project and control the cost of both new building construction and renovation projects found on the web at www.rsmeans.com.

Reserve Advisors, Inc., library of numerous periodicals relating to reserve studies, condition analyses, chapter community associations, and historical costs from thousands of capital repair and replacement projects, and product literature from manufacturers of building products and building systems.



7. DEFINITIONS

Definitions are derived from the standards set forth by the Community Associations Institute (CAI) representing America's 305,000 condominium and homeowners associations and cooperatives, and the Association of Professional Reserve Analysts, setting the standards of care for reserve study practitioners.

- **Cash Flow Method** A method of calculating Reserve Contributions where contributions to the reserve fund are designed to offset the variable annual expenditures from the reserve fund. Different Reserve Funding Plans are tested against the anticipated schedule of reserve expenses until the desired funding goal is achieved.
- **Component Method** A method of developing a Reserve Funding Plan with the total contribution is based on the sum of the contributions for individual components.
- **Current Cost of Replacement** That amount required today derived from the quantity of a *Reserve Component* and its unit cost to replace or repair a Reserve Component using the most current technology and construction materials, duplicating the productive utility of the existing property at current *local* market prices for *materials, labor* and manufactured equipment, contractors' overhead, profit and fees, but without provisions for building permits, overtime, bonuses for labor or premiums for material and equipment. We include removal and disposal costs where applicable.
- **Fully Funded Balance** The Reserve balance that is in direct proportion to the fraction of life "used up" of the current Repair or Replacement cost similar to Total Accrued Depreciation.
- Funding Goal (Threshold) The stated purpose of this Reserve Study is to determine the adequate, not excessive, minimal threshold reserve balances.
- **Future Cost of Replacement** *Reserve Expenditure* derived from the inflated current cost of replacement or current cost of replacement as defined above, with consideration given to the effects of inflation on local market rates for materials, labor and equipment.
- **Long-Lived Property Component** Property component of Moss Creek responsibility not likely to require capital repair or replacement during the next 30 years with an unpredictable remaining Useful Life beyond the next 30 years.
- **Percent Funded** The ratio, at a particular point of time (typically the beginning of the Fiscal Year), of the actual (or projected) Reserve Balance to the Fully Funded Balance, expressed as a percentage.
- **Remaining Useful Life** The estimated remaining functional or useful time in years of a *Reserve Component* based on its age, condition and maintenance.
- **Reserve Component** Property elements with: 1) Moss Creek responsibility; 2) limited Useful Life expectancies; 3) predictable Remaining Useful Life expectancies; and 4) a replacement cost above a minimum threshold.
- **Reserve Component Inventory** Line Items in **Reserve Expenditures** that identify a *Reserve Component*.
- **Reserve Contribution** An amount of money set aside or *Reserve Assessment* contributed to a *Reserve Fund* for future *Reserve Expenditures* to repair or replace *Reserve Components*.
- **Reserve Expenditure** Future Cost of Replacement of a Reserve Component.
- **Reserve Fund Status** The accumulated amount of reserves in dollars at a given point in time, i.e., at year end.
- **Reserve Funding Plan** The portion of the Reserve Study identifying the *Cash Flow Analysis* and containing the recommended Reserve Contributions and projected annual expenditures, interest earned and reserve balances.
- **Reserve Study** A budget planning tool that identifies the current status of the reserve fund and a stable and equitable Funding Plan to offset the anticipated future major common area expenditures.

Useful Life - The anticipated total time in years that a *Reserve Component* is expected to serve its intended function in its present application or installation.



8. PROFESSIONAL SERVICE CONDITIONS

Our Services - Reserve Advisors, Inc. (RA) performs its services as an independent contractor in accordance with our professional practice standards and its compensation is not contingent upon our conclusions. The purpose of our reserve study is to provide a budget planning tool that identifies the current status of the reserve fund, and an opinion recommending an annual funding plan to create reserves for anticipated future replacement expenditures of the property.

Our inspection and analysis of the subject property is limited to visual observations, is noninvasive and is not meant to nor does it include investigation into statutory, regulatory or code compliance. RA inspects sloped roofs from the ground and inspects flat roofs where safe access (stairs or ladder permanently attached to the structure) is available. The report is based upon a "snapshot in time" at the moment of inspection. RA may note visible physical defects in our report. The inspection is made by employees generally familiar with real estate and building construction but in the absence of invasive testing RA cannot opine on, nor is RA responsible for, the structural integrity of the property including its conformity to specific governmental code requirements for fire, building, earthquake, and occupancy, or any physical defects that were not readily apparent during the inspection.

RA is not responsible for conditions that have changed between the time of inspection and the issuance of the report. RA does not investigate, nor assume any responsibility for any existence or impact of any hazardous materials, such as asbestos, urea-formaldehyde foam insulation, other chemicals, toxic wastes, environmental mold or other potentially hazardous materials or structural defects that are latent or hidden defects which may or may not be present on or within the property. RA does not make any soil analysis or geological study as part of its services; nor does RA investigate water, oil, gas, coal, or other subsurface mineral and use rights or such hidden conditions. RA assumes no responsibility for any such conditions. The Report contains opinions of estimated costs and remaining useful lives which are neither a guarantee of the actual costs of replacement nor a guarantee of remaining useful lives of any property element.

RA assumes, without independent verification, the accuracy of all data provided to it. You agree to indemnify and hold RA harmless against and from any and all losses, claims, actions, damages, expenses or liabilities, including reasonable attorneys' fees, to which we may become subject in connection with this engagement, because of any false, misleading or incomplete information which we have relied upon supplied by you or others under your direction, or which may result from any improper use or reliance on the Report by you or third parties under your control or direction. Your obligation for indemnification and reimbursement shall extend to any director, officer, employee, affiliate, or agent of RA. Liability of RA and its employees, affiliates, and agents for errors and omissions, if any, in this work is limited to the amount of its compensation for the work performed in this engagement.

Report - RA completes the services in accordance with the Proposal. The Report represents a valid opinion of RA's findings and recommendations and is deemed complete. RA, however, considers any additional information made available to us within 6 months of issuing the Report if a timely request for a revised Report is made. RA retains the right to withhold a revised Report if payment for services was not tendered in a timely manner. All information received by RA and all files, work papers or documents developed by RA during the course of the engagement shall remain the property of RA and may be used for whatever purpose it sees fit.

Your Obligations - You agree to provide us access to the subject property for an on-site visual inspection You agree to provide RA all available, historical and budgetary information, the governing documents, and other information that we request and deem necessary to complete the Report. You agree to pay actual attorneys' fees and any other costs incurred to collect on any unpaid balance for RA's services.

Use of Our Report and Your Name - Use of this Report is limited to only the purpose stated herein. You hereby acknowledge that any use or reliance by you on the Report for any unauthorized purpose is at your own risk and you shall hold RA harmless from any consequences of such use. Use by any unauthorized third party is unlawful. The Report in whole or in part *is not and cannot be used* as a design specification for design engineering purposes or as an appraisal. You may show our Report in its entirety to the following third parties: members of your organization, your accountant, attorney, financial institution and property manager who need to review the information contained herein. Without the written consent of RA, you shall not disclose the Report to any other third party. The Report contains intellectual property developed by RA and *shall not be reproduced or distributed to any party that conducts reserve studies without the written consent of RA.*

RA will include your name in our client lists. RA reserves the right to use property information to obtain estimates of replacement costs, useful life of property elements or otherwise as RA, in its sole discretion, deems appropriate.

Payment Terms, Due Dates and Interest Charges - Retainer payment is due upon authorization and <u>prior to inspection</u>. <u>The balance is due net 30 days from the report shipment date</u>. Any balance remaining 30 days after delivery of the Report shall accrue an interest charge of 1.5% per month. Any litigation necessary to collect an unpaid balance shall be venued in Milwaukee County Circuit Court for the State of Wisconsin.