FULL RESERVE STUDY

The Cove Homeowners Association of Seminole County, Inc.



Lake Mary, Florida February 1, 2017



Long-term thinking. Everyday commitment.

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TABLE OF CONTENTS

1.	RESERVE STUDY EXECUTIVE SUMMARY1.1
2.	RESERVE STUDY REPORT2.1
3.	RESERVE EXPENDITURES and FUNDING PLAN
4.	CONDITION ASSESSMENT4.1
	Asphalt Pavement, Patch and Seal Coat4.1
	Asphalt Pavement, Repaving4.3
	Catch Basins4.8
	Concrete, Flatwork4.9
	Concrete Gutters4.9
	Concrete Sidewalks
	Fences, Aluminum4.12
	Gate Entry System4.12
	Gates and Operators4.13
	Irrigation System4.14
	Perimeter Walls, Masonry4.16
	Reserve Study Update
5.	METHODOLOGY5.1
6.	DEFINITIONS
7.	PROFESSIONAL SERVICE CONDITIONS
8.	CREDENTIALS



Reserve Advisors, Inc. 735 N. Water Street, Suite 175 Milwaukee, WI 53202

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1. RESERVE STUDY EXECUTIVE SUMMARY

Client: The Cove Homeowners Association of Seminole County, Inc. (The Cove Homeowners

Association)

Location: Lake Mary, Florida

Reference: 160925

Property Basics: The Cove Homeowners Association of Seminole County, Inc. is a homeowners association which is responsible for the common elements shared by 129 single family homes. The development was built from 2000 to 2003 and contains asphalt pavement, concrete flatwork, gates and perimeter fences.

Reserve Components Identified: 12 Reserve Components.

Inspection Date: February 1, 2017.

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 these threshold funding years in 2022 and 2042 due to replacement of asphalt pavement.

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
- 1.2% annual rate of return on invested reserves
- 1.5% 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: \$227,119 as of January 1, 2017. A potential deficit in reserves might occur by 2022 based upon continuation of the most recent annual reserve contribution of \$21,572 and the identified Reserve Expenditures.

Recommended Reserve Funding: The Association budgeted \$21,572 for Reserve Contributions in 2017. We recommend the Association budget annual phased increases in Reserve Contributions of approximately \$10,000 from 2018 through 2022. By 2023, the Association will have fully funded for replacement of the asphalt pavement. Therefore, the Association may anticipate a decrease in the annual Reserve Contribution to \$37,000. Afterwards, the Association should budget gradual annual increases in reserve funding that in part consider the effects of inflation through 2047, the limit of this study's Cash Flow Analysis. The initial adjustment in Reserve Contributions of \$10,028 represents about an eleven percent (10.7%) adjustment in the 2017 total Operating Budget of \$93,396. This initial adjustment of \$10,028 is equivalent to an increase of \$6.48 in the monthly contributions per homeowner.

Certification: This Full Reserve Study exceeds the Community Associations Institute (CAI) and the Association of Professional Reserve Analysts (APRA) standards fulfilling the requirements of a "Level I Full Reserve Study."

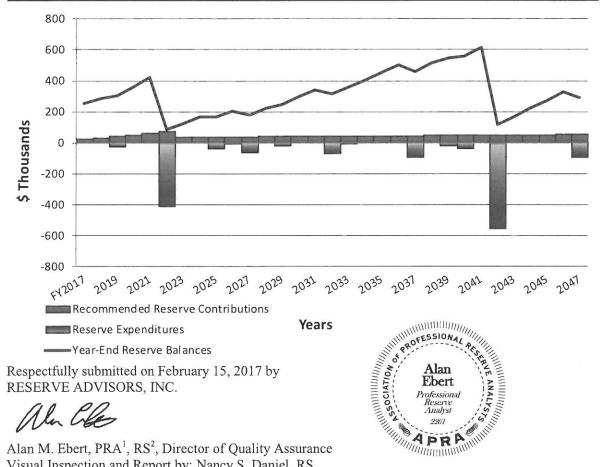






The Cove Homeowners Association Recommended Reserve Funding Table and Graph

	Reserve	Reserve		Reserve	Reserve		Reserve	Reserve
Year	Contributions (\$)	Balances (\$)	Year	Contributions (\$)	Balances (\$)	Year	Contributions (\$)	Balances (\$)
2018	31,600	286,354	2028	40,000	223,937	2038	46,400	512,398
2019	41,600	303,157	2029	40,600	250,148	2039	47,100	545,828
2020	51,600	358,704	2030	41,200	294,597	2040	47,800	561,502
2021	61,600	424,978	2031	41,800	340,183	2041	48,500	617,031
2022	71,600	88,229	2032	42,400	317,272	2042	49,200	116,497
2023	37,000	126,510	2033	43,000	356,996	2043	49,900	168,094
2024	37,600	165,854	2034	43,600	405,142	2044	50,600	221,015
2025	38,200	169,629	2035	44,300	454,570	2045	51,400	275,376
2026	38,800	204,084	2036	45,000	505,295	2046	52,200	331,194
2027	39,400	181,519	2037	45,700	460,197	2047	53,000	292,370



Alan M. Ebert, PRA¹, RS², Director of Quality Assurance Visual Inspection and Report by: Nancy S. Daniel, RS

¹PRA (Professional Reserve Analyst) is the professional designation of the Association of Professional Reserve Analysts. Learn more about APRA at http://www.apra-usa.com.

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. 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

The Cove Homeowners Association of Seminole County, Inc.

Lake Mary, Florida

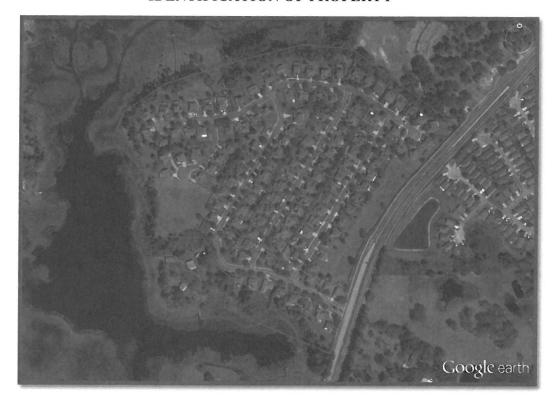
and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, February 1, 2017.

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
- Condition Assessment 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, financial information relied upon for the Financial Analysis of 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



The Cove Homeowners Association of Seminole County, Inc. is a homeowners association which is responsible for the common elements shared by 129 single family homes. The development was built from 2000 to 2003 and contains asphalt pavement, concrete flatwork, gates and perimeter fences. We identify 12 major reserve components that are likely to require capital repair or replacement during the next 30 years.

Our investigation includes Reserve Components or property elements as set forth in your Declaration. 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:

- The Cove Homeowners Association 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.

- Electrical Systems, Common
- Foundations, Common
- Irrigation System, Well Casing
- Pipes, Subsurface Utilities, Storm Drainage



The operating budget provides money for the repair and replacement of certain Reserve Components. Operating Budget Funded Repairs and Replacements relate to:

- General Maintenance to the Common Elements
- Expenditures less than \$3,000 (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)
- Bulletin Board
- Detention Ponds and Control Structures
- Gates, Paint Finishes
- Irrigation System, Controllers
- Landscape
- Paint Finishes, Touch Up
- Signage, Entrance Monument, Renovation
- Signage, Street and Traffic
- 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:

- Driveways
- Homes and Lots
- Pipes, Subsurface Utilities, Water and Sewer, Laterals

Certain items have been designated as the responsibility of others to repair or replace.

Property Maintained by Others relates to:

- Lift Station and Access Driveway (Municipality)
- Light Poles and Fixtures (Leased)
- Mailbox Stations (United States Postal Service)
- Pipes, Subsurface Utilities, Water and Sewer, Mains (Municipality)



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
- Unit cost of replacement
- 2017 local cost of replacement
- 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

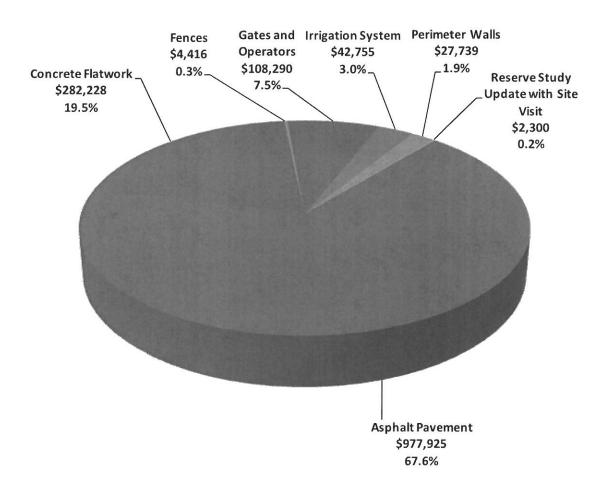
- Reserves at the beginning of each year
- Total recommended reserve contributions
- Estimated interest earned from invested reserves
- Anticipated expenditures by year
- Anticipated reserves at year end
- Predicted reserves based on current funding level

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*.



The following chart illustrates the relative importance of the categories noted in *Reserve**Expenditures* and relative funding during the next 30 years.

The Cove Homeowners AssociationFuture Expenditures Relative Cost Illustration



RESERVE EXPENDITURES

Reserve Advisors, Inc.

				The Cove Homeowners Association of Seminole County, Inc.								ି କର	1.5%	Explanatory Notes: 1.5% is the estin FY2017 is Fiscal Ye	imated fu ear begin	ture Inflat ning Jan	ion Rate f iary 1, 201	tory Notes: is the estimated future Inflation Rate for estimating Future Replacement Costs, Is Fiscal Year beginning January 1, 2017 and ending December 31, 2017.	ting Futu alng Dec	ure Replacember 31	cement C	osts.					
	j			polici (figur ente	Estimated		Life Analysis,		క	Costs, \$																	
	Quantity	Per Phase by Quantity	y Units	Reserve Component Inventory	1st Year of Event		Years Useful Remaining	Unit (2017)	Per Phase (2017)	Total (2017)	30-Year Total (Inflated)	FY2017	1 2018	2 2019	3 2020	4 2021	5 2022 20	6 7 2023 2024		8 9 2025 2026	9 10		11 12 2029	2 13 29 2030	14 14	15 2032	
				Property Site Elements																				1		1	1
4.020	21,700		0 Square Yards	21,700 Square Yards Asphalt Pavement, Patch and Seal Coat	2027	3 to 5	10	1.50	32,550	32,550	173,189	~									377.75	92				300 00	
4.040	21,760		O Square Yards	21,700 Square Yards Asphall Pavement, Mill and Overlay	2022	15 to 20	5	14.00	303,500	303,800	768,076						327.279									40,000	
4.100		29 29	29 Each	Catch Basins, Inspections and Capital Repairs	2022	15 to 20	9	500.00	14,500	14,500	36,660						15 621										
4,116	15,100		0 Linear Feet	1,510 Linear Feet Contrete Gutters, Partial	2022	60 65	5 to 30*	27.00	40,770	407,700	103,076					,	43.921										
4.140	62,300		5 Square Feet	2,075 Square Feet Concrete Sidewalks, Partial	2022	to 65	5 to 30+	11.00	22,825	685,300	179,152						24 589				28.480	08				200	9 -
4.200		80 80	80 Linear Feet	Fences, Aluminum, Entrance	2025	to 25	00	49.00	3,920	3,920									4.4	4 418	201	2				Ze,537	
4.310		1	1 Panel	Gate Entry System and Security Cameras, Phased	2019	10 to 15	2 to 9	11,500.00	5,750	11,500				5,924					ř	6 574	7.4						
4.320		4 4	4 Each	Gate Operators	2019	lo 10	2	3,600.00	14,400	14,400	52,033			14.835							September 1		47.047	0			
4 330		4 4	4 Each	Gates	2025	10.25	60	4,300.00	17,200	17,200	19,376								10.7	10 376			7:1				
4.410		1 1	1 Each	Irrigation System, Well Pump	2019	16.20	67	5,100.00	5,100	5,100				5.254					100								
4.420	14,500		9 Square Feet	14,500 Square Feet Irrigation System	2040	6 40	23	1.50	21,750	21,750																	
4.640	22,430		9 Square Feet	22,430 Square Feel Perimeter Walls, Masonry, Inspections and Capital Repairs	2025	8 to 12	8 0	0.50	11,215	11,215		_							12,6	12,634							
		•	1 Allowance	Reserve Study Update with Site Visit	2019	64	2	2.300.00	2,300	2,300	2,300			2,300													
				Anticipated Expenditures, By Year							\$1,445,653	0	0	28,313	0	0 4	411,410	0 0	i	36,426 6,574	74 64,255	55 0	17,217	17 0	0	69.232	1

Reserve Advisors, Inc.

RESERVE EXPENDITURES

Years 2033 to 2047

The Cove Homeowners Association of Seminole County, Inc.

Line																										
Line		1			Estimated	Life A	Life Analysis,		Cos	Costs, \$																
	Quantity	Quantity	Units	Reserve Component Inventory	1st Year of Event	Useful	Years Useful Remaining	Unit (2017)	Per Phase (2017)	Total (2017)	30-Year Total (Inflated)	16 2033	17 2034	18 2035	19 2036	20 2037	21 2038	22 2039 3	23 2040 2	24 2041 2	25 2042 2	26 2043 2	27 2044 ;	28 2045 2	29 2046 2	30 2047
				Property Site Elements																						
4.020	21,700		quare Yards	21,700 Square Yards Asphall Pavement, Patch and Seal Coat	2027	3 to 5	10	1.50	32,550	32,550	173,189					43,840									S	50 878
4.040	21,700		quare Yards	21,700 Square Yards Asphalt Pavement, Mill and Overlay	2022	15 to 20	2	14.00	303,800	303,800	768,976									44	440 797				3	2
4.100	28	29 Each	tch	Catch Basins, Inspections and Capital Repairs	2022	15 to 20	9	500.00	14,500	14,500											21 039					
4.110	15,100		near Feet	1,510 Linear Feet Concrete Gutters, Partial	2022	to 65	5 to 30+	27.00	40,770	407,700	103,076									26	59 155					
4.140	62,300		quare Feet	2,075 Square Feet Concrete Sidewalks, Partial	2022	to 65	5 to 30+	11.00	22,825	685,300	179,152					30,742				č	33.118				32	75 677
4.290	80		80 Linear Feet	Fences, Aluminum, Entrance	2025	to 25	80	49.00	3,920	3,920	4,416														3	5
4.310	-	1 Panel	anel	Gate Entry System and Security Cameras, Phased	2019	10 to 15	2 to 9	11,500.00	5.750	11,500	.,	7,297						w	8,038						00	8 988
4.320	4	4 Each	tch	Gale Operators	2019	01 of	23	3,600.00	14,400	14,400	52,033							19.981								
4.330	4	4 Each	sch sch	Gates	2025	to 25	00	4,300.00	17,200	17,200	19,376															
4,410	-	1 Each	tch	Irrigation System, Well Pump	2013	10.20	64	5,100,00	5,100	5,100						698.9										
4.420	14,500		juare Feet	14,500 Square Feet Irrigation System	2040	to 40	23	1.50	21,750	21,750	30,632							ń	30.632							
4.640	22,430		quare Feet	22,430 Square Feet Perimeter Walls, Masonry, Inspections and Capital Repairs	2025	8 to 12	00	0.50	11,215	11,215	27,739					15,105		ı.								
		1 Allow	1 Allowance	Reserve Study Update with Site Visit	2019	64	2	2,300,00	2,300	2,300	2,300															
				Anticipated Expenditures, By Year							\$1,445,653	7,297	0	0	0	96,556	0	19,981 34	38,730	0 55	554,109	0	0	0	0 95	95,543

RESERVE FUNDING PLAN

Reserve Advisors, Inc.

CASH FLOW ANALYSIS
The Cove Homeowners Association

		223 937 250 148 294 597 340 183	- 1		1				7 \$340.183 \$317.272		
	203	250 148	44.000	41,200	3 240	1,0	0		\$294,597		
	2029	223 937	100,022	40,600	2 828	0	(17,217)		\$250.148		
	2028	181 519	0000	40,000	2.418	1	0	1	\$223,937		
	2027	204.084	20 400	004,60	2.300		(64,265)		\$181,519		
	2026	169,629	38 900	20,000	2.229		(6,574)		\$204,084		
	2025	165,854	38 200	20,200	2,001		(36,426)		\$169,629		
	2024	126,510	37 600	000,10	1,744		0		\$165,854		
	2023	88,229	37 000	2001	1,281	•	0		\$126,510		(44,332)
30 Years	2022	424,978	71 600	2001	3,061	1000	(411,410)	400000	\$88,229	(NOTE 5)	(65,250)
for the Next 3	2018 2019 2020 2021 202	358,704	61,600	2001	4'674	(0	01010101	3424,978		323,050
& Cash Flows	2020	303,157						101010	\$328,/04		297,775
rve Budgets	2019	286,354	41.600		3,516	(000 00/	(50,313)	477	3303,137		272,800
dividual Rese	2018	251,546	31,600	0000	3,208	c	0		\$500 007¢		276,266
느	FY2017	227,119 251,546 286,354	21,572	1100	2,855	<	>	COE4 EAC	040,1020		251,546
							,				\$21,572 251,546
of Seminole County, Inc.	Lake Mary, Florida	Reserves at Beginning of Year (Note 1)	Total Recommended Reserve Contributions (Note 2)	Dine Ectimated Internet Council During Vaca (Mat. 2)	rius Estimateu IIIterest Earlieu, During Tear (Note 3)	Ass Anticipated Expanditures Ry Vear	בספר ביינים בעלים ביינים בייני	Anticinated Reserves at Vear End	Simple of the selection		Predicted Reserves based on 2017 funding level of:

		707 700	301,134	53.000	2710	0,113	(95,543)	0000	3232,370	(NOTE 4)
	2046	275 376	010,012	52,200	2 619	0,00	0	A004 404	9001.184	
	2045	224 045	641,013	51,400	2 061	100'4	0	\$75 37C	010,012	
	2044	168 004	100,00	20,600	2 321	7007	0	\$224 DAE	010.1228	
	2043	116.497	10,01	49,900	1 697	00.	0	\$168 007 \$221 015 \$275	50'00'A	
	2042	617.031	100,110	49,200	4 375	201	(554,109)	\$116.407 ¢168	2	(NOTE 5)
	2041	561 502	100	48,500	7.029	-	0	\$617.031	201	
	2040	545.828	47 000	47,800	6.604		(38,730)	\$561 502	XXX 1000	
	2039	512.398	17 400	47,100	6.311		(19,981)	\$545 828	***	
finued	2038	460.197	45 400	40,400	5.801		0	\$512.398	*******	
0 Years, Con	2037	505,295	AE 700	43,700	5,758	1000	(96,556)	\$460.197	ACCRECATION OF THE PERSON.	
for the Next 3	2036	454,570	45 000	45,000	5,725	•		\$505,295		
Cash Flows f	2035	405,142	44 200	44,300	5,128	•	0	\$454.570		
ve Budgets &	2034	356,996	43 600	42,000	4,546	•	0	42	ı	
ndividual Rese	2033 2034 2035 2036 2037 20	317,272	43 000	2000	4,021	12000	(1,67,1)	\$356,996		
(continued)			Total Recommended Reserve Contributions		rius estimated interest Earned, During Tear	less Anticipated Expenditures By Vear		Anticipated Reserves at Year End		

- Explanatory Notes:

 1) Year 2017 starting reserves are as of January 1, 2017; FY2017 starts January 1, 2017 and ends December 31, 2017.

 2) Reserve Contributions for 2017 are budgeted; 2018 is the first year of recommended contributions.

 3) 1.2% is the estimated annual rate of return on invested reserves.

 4) Accumulated year 2047 ending reserves consider the age, size, overall condition and complexity of the property.

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



4. CONDITION ASSESSMENT

The Condition Assessment of this FullReserve Study includes Enhanced Solutions and Procedures for select significant components. These narratives describe the Reserve Components, document specific problems and conditions, 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, Patch and Seal Coat - Asphalt pavement comprises approximately 21,700 square yards of streets throughout the community. The pavement is original and in fair to poor overall condition. We note cracks, patches and raveling. Management and the Board inform us the Association applied a seal coat and conducted pavement repairs in 2016. The Association should plan future applications and repairs every three- to five-years. These activities reduce water infiltration and the effects of inclement weather. We elaborate on solutions and procedures necessary for the optimal maintenance of asphalt pavement in the following discussion.

We recommend periodic patching to maintain the pavement. Based on the Association's historic application of seal coat, we include for the application of seal coat concurrent with patching. Asphalt pavement is susceptible to isolated areas of accelerated deterioration in areas at the centerlines of streets and at high traffic areas such as intersections. Depressions often appear at areas where vehicles park such as driveways and parking areas. Isolated areas of depressions, cracks and deterioration indicate the need for patching. The contractor should patch



areas that exhibit potholes, alligator or spider web pattern cracks, and areas of pavement that are severely deteriorated from oil and gasoline deposits from parking vehicles. Area patching requires total replacement of isolated areas of pavement.

There are four main types of seal coats available: fog coat, acrylic sealer, chip seals and asphaltic emulsion. A fog coat is a simple mixture of water and asphalt. Acrylic sealers include an acrylic additive to the water and asphalt mixture for greater resistance to abrasion. Fog coats and acrylic sealers are typically spray applied and are only for aesthetic purposes. Chip seal is the most substantial type of seal coat which involves placement of oil and aggregate on the driving surface. Either a roller or normal vehicular traffic works the gravel into the oil. Asphaltic emulsions combine a sharp sand mixture or mineral fibers, and an emulsifying agent with the water and asphalt mixture. Asphaltic emulsions are typically hand applied with squeegees to ensure that the sealer fills surface abrasions and minor cracks. This prevents the infiltration of water through cracks into the underlying pavement base. Seal coats therefore minimize the damaging effects of water from expansion and contraction. We regard asphaltic emulsions as the most effective and economical type of seal coat.

The Cove Homeowners Association should repair any isolated areas of deteriorated pavement prior to seal coat applications. Proposals for seal coat applications should include patching. The contractor should only apply seal coat applications after repairs are completed. Our future estimates of cost include an allowance for repair activities.

Based on the Association historic application of seal coat, we recommend The Cove Homeowners Association budget for patching and the next application of seal coat by 2027 and subsequent applications every five years thereafter except when repaving occurs. Line Item



4.020 of *Reserve Expenditures* notes our estimate of future costs and anticipated times of these activities.

Although the Association may realize aesthetic benefits of seal coat applications, we do not recommend seal coat applications to street systems due to the cost and the inability to bridge cracks and extend the life of the pavement. After the near term repaving event, the Association should consider discontinuing the application of seal coat. The following table compares the option of asphalt pavement patching with and without a seal coat.

Asphalt Pavement Patch Material	Patch and Seal Coat	Patch
Cost in 2017 Dollars	\$32,000	\$10,500
Divided by its Useful Life (Years)	5	5
Equals Cost of Ownership ¹ Relating to Eventual Replacement, in 2017 Dollars	\$6,400	\$2,100
Total Annual Cost of Ownership (2017 dollars)	\$6,400	\$2,100

If the Association were to elect to discontinue the application of seal coat, a potential cost savings of approximately of \$4,300 annually could be achieved.

Asphalt Pavement, Repaving – As stated previously, asphalt pavement comprises approximately 21,700 square yards of streets throughout the community. The pavement is original and in fair to poor overall condition. We note cracks, patches and raveling.





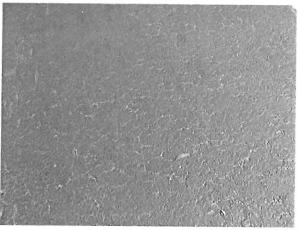
Asphalt pavement at Reagan Trail with patch and longitudinal cracks



Asphalt pavement at Reagan Trail with longitudinal cracks



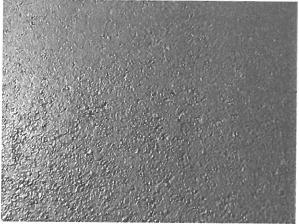
Asphalt pavement at Safe Harbor Lane



Asphalt pavement at Safe Harbor Lane with alligator cracks



Asphalt pavement at Night Breeze Lane



Asphalt pavement at Night Breeze Lane with raveling surface





Asphalt pavement at Reagan Trail



Asphalt pavement at Reagan Trail with longitudinal



Asphalt pavement at Reagan Trail with cracks



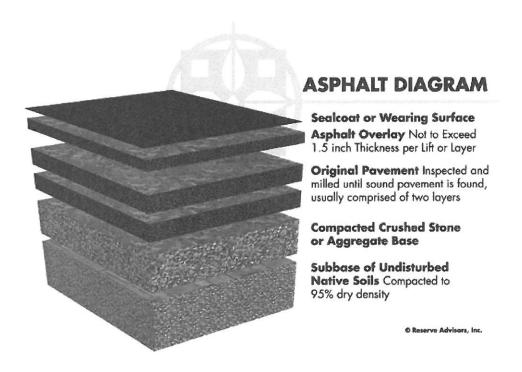
Asphalt pavement at Tidal Pool Cove

The useful life of pavement in Lake Mary is from 15- to 20-years. We include the following repaving solutions and procedures for the benefit of the present and future board members.

Components of asphalt pavement include native soil, aggregate and asphalt. First the contractor creates a base course of aggregate or crushed stone and native soil. The base course is individually compacted to ninety-five percent (95%) dry density prior to the application of the asphalt. Compaction assures a stable base for the asphalt that reduces the possibility of settlement. For street systems, 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 these components:



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 The Cove Homeowners Association.

A variety of repairs are necessary to deteriorated pavement prior to the application of an overlay. The contractor should use a combination of area patching, crack repair and milling before the overlayment. Properly milled pavement removes part of the existing pavement and permits the overlay to match the elevation of adjacent areas not subject to repaving. Milling also allows the contractor to make adjustments to the slope of the pavement to ensure proper drainage. The contractor should clean the milled pavement to ensure proper bonding of the new overlayment. We recommend an overlayment thickness that averages $1\frac{1}{2}$ inches (not less than one inch or more than two inches). Variable thicknesses are often necessary to create an adequate slope for proper drainage. The contractor should identify and quantify areas of pavement that require area patching, crack repair and milling to help the Association compare proposed services.

Total replacement requires the removal of all existing asphalt. For area patching, we recommend the contractor use a rectangular saw cut to remove the deteriorated pavement. For larger areas such as entire parking areas or driveways, we recommend the contractor grind, mill or pulverize the existing pavement to remove it. The contractor should then augment and compact the existing aggregate and native soil to create a stable base. Finally the contractor should install the new asphalt in at least two lifts.

The time of replacement is dependent on the useful life, age and condition of the pavement. The useful life is dependent in part on the maintenance applied to the pavement, the amounts and concentration of auto solvents that penetrate the pavement, the exposure to sunlight



and detrimental effects of inclement weather. The Cove Homeowners Association should periodically repair any isolated areas of deteriorated pavement. We recommend the Association plan for milling and overlayment of the pavement with area patching of up to ten percent (10%) by 2022. A subsequent milling and overlayment event is likely by 2042. We depict this information on Line Item 4.040 of *Reserve Expenditures*. The Association should coordinate asphalt repairs with related activities such as partial replacement of concrete gutters, and capital repairs to catch basins.

Catch Basins - The 29 concrete catch basins collect storm water from the pavement and conduct it into the storm water system. The overall condition of the catch basins is good without settlement visually apparent.



Typical catch basin

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.

The Association should anticipate the occasional displacement or failure of a catch basin and the surrounding pavement from erosion. Erosion causes settlement around the collar of



catch basins. Left unrepaired, the entire catch basin will shift and need replacement. The Cove Homeowners Association should plan to repair or replace any displaced or failed catch basins concurrently with the surrounding pavement, and gutters. The exact times and amount of capital repairs or replacements are dependent upon variable natural forces. Based on the age and condition of the catch basins, we recommend the Association anticipate the inspection, capital repair or partial replacement of the 29 catch basins in conjunction with repaving. We include this information on Line Item 4.100 of *Reserve Expenditures*.

Concrete, Flatwork - The Association maintains various applications of concrete flatwork. These applications of concrete have useful lives of up to 65 years although isolated deterioration of limited areas of concrete is common. Inclement weather, inadequate subsurface preparation and improper concrete mixtures or finishing techniques can result in premature deterioration such as settlement, chips, cracks and spalls. Variable conditions like these result in the need to plan for periodic partial replacements of the concrete flatwork throughout the next 30 years. We comment on the respective quantities, conditions and times of partial replacements of concrete flatwork in the following sections of this narrative.

Concrete Gutters - Concrete gutters line the pavement of The Cove Homeowners Association. These 24-inch gutters comprise approximately 15,100 linear feet and are in good condition overall. We note isolated cracks.





Typical concrete gutter. Note cracked gutter.

We estimate that up to 3,020 linear feet of gutters, or twenty percent (20%) of the total, will require replacement during the next 30 years. We estimate that up to 1,510 linear feet of gutters, or ten percent (10%) of the total, will require replacement in conjunction with each repaving event. We depict this information on Line Item 4.110 of *Reserve Expenditures*. We assume the use of 3,500 pounds per square inch (PSI) concrete.

Concrete Sidewalks - Concrete sidewalks comprise approximately 62,300 square feet throughout the community. The sidewalks are in good overall condition.





Typical concrete sidewalk

We estimate that up to 12,450 square feet of concrete sidewalks, or twenty percent (20%) of the total, will require replacement during the next 30 years. We recommend the Association budget for replacement of 2,075 square feet of concrete sidewalks every five years beginning by 2022. Line Item 4.140 of *Reserve Expenditures* notes our estimate of future costs and anticipated times of replacements. We base our estimate of replacement on four-inch thick, 3,000 PSI concrete with 6x6 - W1.4xW1.4 steel reinforcing mesh. We recommend an annual inspection of the sidewalks to identify potential trip hazards. We suggest the Association grind down or mark these hazards with orange safety paint prior to replacement and fund this ongoing activity through the operating budget.

The Association should coordinate the concrete flatwork partial replacements on Line Items 4.110 and 4.140 of *Reserve Expenditures* to maximize the given amount of concrete in a single event. This will permit the use of a single contractor and likely achieve the most economical unit price for the work. The Association should also coordinate partial replacements of concrete gutters with asphalt pavement, due to the interrelated nature of these items. The



times and costs of these replacements may vary. However, the estimated expenditures detailed in *Reserve Expenditures* are sufficient to budget appropriate reserves.

Fences, Aluminum - Approximately 80 linear feet of aluminum fences are found at the entrance. The fences are original and in good condition.





Typical aluminum fence at entrance

Damaged aluminum fence at entrance

The finish on this type of fence is maintenance free and should last the life of the fence. However, light gauge aluminum fences are prone to damage from pedestrians in high traffic areas, such as near sidewalks and surrounding pool decks. We estimate a useful life of up to 25 years for the aluminum fences and recommend the Association budget for replacement by 2025. We include this information on Line Item 4.200 of *Reserve Expenditures*.

Gate Entry System - The Association utilizes one gate entry system intercom panel and five security cameras for communication between the units and guests at The Cove Homeowners Association.







Gate entry panel

Typical security camera

Management and the Board inform us the panel is original and in satisfactory operational condition. The security cameras are reported in satisfactory operational condition at varying ages. Gate entry systems of this type have useful lives of 10- to 15-years. We recommend the Association anticipate replacement of up to fifty percent (50%) of the gate entry system by 2019 and every seven years thereafter. We include this information on Line Item 4.310 of *Reserve Expenditures*.

Gates and Operators - The four aluminum gates and four single swing operators limit access into the community. The gates and operators are original and in good condition.





Typical gate operator

We anticipate a useful life of up to 10 years for the operators and recommend the Association budget for replacement by 2019 and every 10 years thereafter. The gates have a longer useful life of up to 25 years. The Cove Homeowners Association should anticipate replacement of the gates by 2025. We depict this information on Line Items 4.320 and 4.330 of *Reserve Expenditures*.

Irrigation System - An irrigation system waters approximately 14,500 square feet of the lawn and landscaped areas at the entrance, perimeter walls and common area adjacent to the lift station. The system is original and reported in good condition. Management and the Board do not report any deficiencies.





Irrigation system submersible well

Irrigation systems typically include the following components:

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

Water pressure activates the lawn spray pop-up heads. Controllers operate the main water flow valves. The exact amounts and locations of system components were not ascertained due to the nature of the underground construction and the non-invasive nature of the inspection.

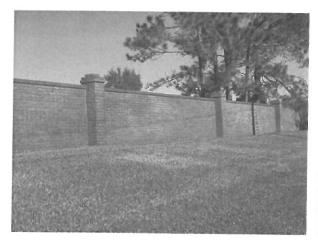
The one well pump is original, in good condition and has a useful lives of up to 20 years. The Association should anticipate replacement of the pump by 2019 and again by 2037. We include this information on Line Item 4.410 of *Reserve Expenditures*.

The system as a whole has a useful life of up to 40 years. The system network supply pipes will dislodge as tree roots grow and soil conditions change. The Cove Homeowners Association 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. In addition, we recommend The Cove Homeowners Association budget for a complete replacement of the system by 2040. We note this information on Line Item 4.420 of *Reserve Expenditures*.

Perimeter Walls, Masonry - The Association maintains approximately 1,800 linear feet of masonry perimeter walls that comprise approximately 22,430 square feet of masonry surface area. This quantity includes both sides of the walls. The walls line the east perimeters of the property. The overall condition of the masonry is good.





Masonry perimeter wall

Masonry perimeter wall

Masonry generally requires less maintenance than other types of exterior elements. However, masonry is not maintenance free. The Cove Homeowners Association should plan for the periodic inspection of the masonry to identify and repair areas of deterioration. Common types of masonry deterioration include efflorescence, spalling and cracking.

Repointing is a process of raking and cutting out defective mortar to a depth of not less than ½ inch nor more than ¾ inch and replacing it with new mortar. We advise a complete inspection of the perimeter walls, and partial repointing with related masonry repairs every 8- to



12-years to forestall deterioration. We suggest that the Association budget for the following by 2025 and every 12 years thereafter:

- Complete inspection of the walls
- Partial brick replacement of up to one half of one percent (0.5%)
- Partial brick repointing of up to five percent (5%)

We depict this information on Line Item 4.640 of Reserve Expenditures.

Reserve Study Update

An ongoing review by the Board and an Update of this Reserve Study in two- to three-years 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. 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.

The Cove Homeowners Association 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

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



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:

Information Furnished by the Asso	ciation
2017 unaudited Cash Status of the Reserve Fund	\$227,119
2017 Budgeted Reserve Contribution	21,572
Anticipated Interest on Reserve Fund	2,855
Less Anticipated Reserve Expenditures	0
Projected 2017 Year-End Reserve Balance	\$251,546

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 Lake Mary, Florida at an annual inflation rate of 1.5%. Isolated or regional markets of greater construction (development) activity may experience slightly greater rates of inflation for both construction materials and labor.

The past and current maintenance practices of The Cove Homeowners Association and their effects on remaining useful lives

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.

The anticipated effects of appreciation of the reserves over time in accord with an anticipated future return or yield on investment of your cash equivalent assets at an annual rate of 1.2% (We did not consider the costs, if any, of Federal and State Taxes on income derived from interest and/or dividend income).

Interest rates on reserves are steady or increasing in concert with the certificates of deposit and money market rates. Overall, no material near term changes in savings rates are anticipated. Without significant differences in these savings rates, shorter term investments are the choice of many investors.

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



We recommend consultation with a professional investment adviser before investing reserves to determine an appropriate investment strategy to maximize a safe return on reserve savings. The following table summarizes rates of inflation and key rates for government securities, generally considered as safe investment alternatives.

Interest Rate and Inflation Data		2	015				2016	
Average or Last Actual = (A)	2015:1 (A)	2015:2 (A)	2015:3 (A)	2015.4 (A)	2016:1 (A)	2016:2 (A)	2016:3 (A)	2016:4 (E)
1-Year Treasury Bill	0.25%	0.27%	0,30%	0.65%	0.60%	0.55%	0.60%	0.65%
10-Year Treasury Note	1.90%	2.50%	2.70%	2.25%	1.80%	1.80%	1.85%	1.85%
30-Year Treasury Bond	2.55%	3.20%	3.40%	3.00%	2.65%	2.60%	2.60%	2.90%
Consumer Price Index (annualized rate)	0.00%	0.00%	0.00%	0.00%	0.10%	0.00%	1 150/	1.15%
Although past indicators are not predictive of future	inflation in "build	ing" construction,	minimal inflation e	xists for past year	Sept 2015 to S	Sept 2016 of app	proximately 1.7%.	1.13%
Savings Rates Results RANGE as found in		0.02 to 1.11%	Money Market Sa	avings		0.15 to 1.35%	for 2-Year Certifica	ate of Deposit
http://www.bankrate.com		0.1 to 1.25%	1-Year Certificate	of Deposit		0.15 to 1.50%	for 3-Year Certifica	
Estimated Near Term Yield Rate for Reserve S	avings			1.2%				
Est. Near Term Local Inflation Rate for Future	Capital Exper	nditures		1.5%				11/11/2016

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



6. 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 The Cove Homeowners Association 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) The Cove Homeowners Association 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.



7. PROFESSIONAL SERVICE CONDITIONS

Our Services - Reserve Advisors, Inc. will perform its services as an independent contractor in accordance with our professional practice standards. Our compensation is not contingent upon our conclusions.

Our inspection and analysis of the subject property is limited to visual observations and is noninvasive. We will inspect sloped roofs from the ground. We will inspect 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 our observation. Conditions can change between the time of inspection and the issuance of the report. Reserve Advisors does not investigate, nor assume any responsibility for any existence or impact of any hazardous materials, structural, latent or hidden defects which may or may not be present on or within the property. Our opinions of estimated costs and remaining useful lives are not a guarantee of the actual costs of replacement, a warranty of the common elements or other property elements, or a guarantee of remaining useful lives.

We assume, without independent verification, the accuracy of all data provided to us. You agree to indemnify and hold us 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 as 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 controlling person of Reserve Advisors, Inc., including any director, officer, employee, affiliate, or agent. Liability of Reserve Advisors, Inc. 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 - Reserve Advisors, Inc. will complete the services in accordance with the Proposal. The Report represents a valid opinion of our findings and recommendations and is deemed complete. However, we will consider any additional information made available to us in the interest of promptly issuing a Revised Report if changes are requested within six months of receiving the Report. We retain the right to withhold a Revised Report if payment for services is not rendered in a timely manner. All files, work papers or documents developed by us during the course of the engagement remains our property.

Your Obligations - You agree to provide us access to the subject property during our on-site visual inspection and tour. You will provide to us to the best of your ability and if reasonably available, historical and budgetary information, the governing documents, and other information that we request and deem necessary to complete our Study. You agree to pay our actual attorneys' fees and any other costs incurred in the event we have to initiate litigation to collect on any unpaid balance for our services.

Use of Our Report and Your Name - Use of this Report is limited to only the purpose stated herein. Any use or reliance for any other purpose, by you or third parties, is invalid. Our Reserve Study Report in whole or part is not and cannot be used as a design specification, design engineering services or an appraisal. You may show our report in its entirety to those third parties who need to review the information contained herein. The Client and other third parties viewing this report should not reference our name or our report, in whole or in part, in any document prepared and/or distributed to third parties without our written consent. This report contains intellectual property developed by Reserve Advisors, Inc. specific to this engagement and cannot be reproduced or distributed to those who conduct reserve studies without the written consent of Reserve Advisors, Inc.



We reserve the right to include our client's name in our client lists, but we will maintain the confidentiality of all conversations, documents provided to us, and the contents of our reports, subject to legal or administrative process or proceedings. These conditions can only be modified by written documents executed by both parties.

Payment Terms, Due Dates and Interest Charges - The retainer payment is due upon authorization and prior to shipment of the report. The final payment of the fee is due immediately upon receipt of the Report. Subsequent changes to the report can be made for up to six months from the initial report date. Any outstanding balance after 30 days of the invoice date is subject to an interest charge of 1.5% per month. Any litigation necessary to collect an unpaid balance shall be venued in Milwaukee County Circuit Court in the State of Wisconsin.

CONDITIONS OF OUR SERVICE ASSUMPTIONS

To the best of our knowledge, all data set forth in this report are true and accurate. Although gathered from reliable sources, we make no guarantee nor assume liability for the accuracy of any data, opinions, or estimates identified as furnished by others that we used in formulating this analysis.

We did not make any soil analysis or geological study with this report; nor were any water, oil, gas, coal, or other subsurface mineral and use rights or conditions investigated.

Substances such as asbestos, urea-formaldehyde foam insulation, other chemicals, toxic wastes, environmental mold or other potentially hazardous materials could, if present, adversely affect the validity of this study. Unless otherwise stated in this report, the existence of hazardous substance, that may or may not be present on or in the property, was not considered. Our opinions are predicated on the assumption that there are no hazardous materials on or in the property. We assume no responsibility for any such conditions. We are not qualified to detect such substances, quantify the impact, or develop the remedial cost.

We have made a visual inspection of the property and noted visible physical defects, if any, in our report. Our inspection and analysis was made by employees generally familiar with real estate and building construction; however, we did not do any invasive testing. Accordingly, we do not opine on, nor are we responsible for, the structural integrity of the property including its conformity to specific governmental code requirements, such as fire, building and safety, earthquake, and occupancy, or any physical defects that were not readily apparent during the inspection.

Our opinions of the remaining useful lives of the property elements do not represent a guarantee or warranty of performance of the products, materials and workmanship.



8. 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. Each Team Review requires the attendance of several engineers, Director of Quality Assurance and other participatory peers. 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 coauthored *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



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

CURRENT CLIENT SERVICES

Alan M. Ebert, a Professional Engineer, is 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 hundreds 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 Reserve Specialist (RS) - Community Associations Institute Professional Reserve Analyst (PRA) - Association of Professional Reserve Analysts



NANCY S. DANIEL, P.E., RS Responsible Advisor

CURRENT CLIENT SERVICES

Nancy S. Daniel, a Mechanical Engineer, is an Advisor for *Reserve Advisors*. Ms. Daniel is responsible for the inspection and analysis of the condition of clients' properties, and for recommending engineering solutions to prolong the lives of the components. She forecasts capital expenditures for the repair and/or replacement of the property components and prepares technical reports on assignments. She is also responsible for conducting Life Cycle Cost Analyses and Capital Replacement Forecast services and the preparation of Reserve Study Reports for apartments, condominiums, townhomes and homeowner associations. Ms. Daniel frequently serves as the Quality Assurance Review Coordinator for all types of developments.

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

- The Chimneys of Marvin Homeowners' Association A homeowner association located in Waxhaw, North Carolina, responsible for the common elements shared by 283 single family homes. The community contains a large clubhouse and pool complex with two pools, a two story water slide and multi-feature aqua playground..
- **Dominion Homeowners Association, Inc.** Located in San Antonio, Texas, this exclusive Master planned community consists of 1,456 single family homes covering over 1,500 acres. The Dominion Homeowners Association is responsible for approximately 30 miles of asphalt roadways, masonry perimeter walls and fences, high level security entrances and office buildings for 20 community developments.
- Goodale Park Condominium A historic brick building located in Columbus, Ohio, originally built in 1910 and converted to condominiums in 2006. The building contains nine units and is comprised of a built up flat roof, asphalt shingle mansard roof, brick and stone masonry exterior, chimneys, wrought iron fire escape and entrance porches.
- Queen's Harbour Yacht and Country Club Owners Association, Inc. Located in Jacksonville, Florida, this exclusive Master planned community comprises 1,000 single family homes. The Queen's Harbour Yacht and Country Club Owners Association contains a marina, a lock and dam, sea walls, as well as community center, fitness center and maintenance facility.
- VillageWalk of Sarasota Homeowners Association, Inc. A homeowner association located in Sarasota, Florida, responsible for the common elements shared by 1,177 single family homes and townhomes. The community contains a Town Center with commercial business spaces, a gas station, commercial kitchen, bar and restaurant. The community also includes a Riverwalk pathway comprised of 11 bridges and approximately 22 miles of sidewalks throughout the community.

PRIOR RELEVANT EXPERIENCE

Before joining *Reserve Advisors*, Ms. Daniel was a licensed Community Association Manager for Condominium Associates in Tampa, Florida. Ms. Daniel also was employed as a Process Engineer for Anheuser Busch and Lockwood Greene Engineering. She was responsible for process engineering design, construction and process start-up for beverage manufacturing facilities across the United States. She currently serves as a Board Member and Treasurer for her condominium association.

EDUCATION

University of Illinois – B.S. Mechanical Engineering North Carolina State University – M.A. Humanities and Social Sciences

PROFESSIONAL AFFILIATIONS

Professional Engineer (P.E.) – State of Texas
Reserve Specialist (RS) - Community Associations Institute
Licensed Community Association Manager (LCAM) – State of Florida



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:

Association of Construction Inspectors, (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.

American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., (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.