Revised
FULL RESERVE STUDY
Leewood
Homeowners Association

Springfield, Virginia

Inspected - January 5, 2017
Revised - June 7, 2017

RESERVE™ ADVISORS
Long-term thinking. Everyday commitment.

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RESERVE ADVISORS

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RESERVE ADVISORS
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Corporate Office
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1. RESERVE STUDY EXECUTIVE SUMMARY

Client: Leewood Homeowners Association (Leewood)
Location: Springfield, Virginia
Reference: 020077

Property Basics: Leewood Homeowners Association is a townhome style development of 195 units in 25 buildings. The development was built in 1978 and contains asphalt pavement, concrete flatwork and wood fences.

Reserve Components Identified: 23 Reserve Components.

Inspection Date: January 5, 2017. We conducted previous inspections in 2002, 2007 and 2012.

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 2040 due to asphalt repaving.

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
- 2.0% 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.

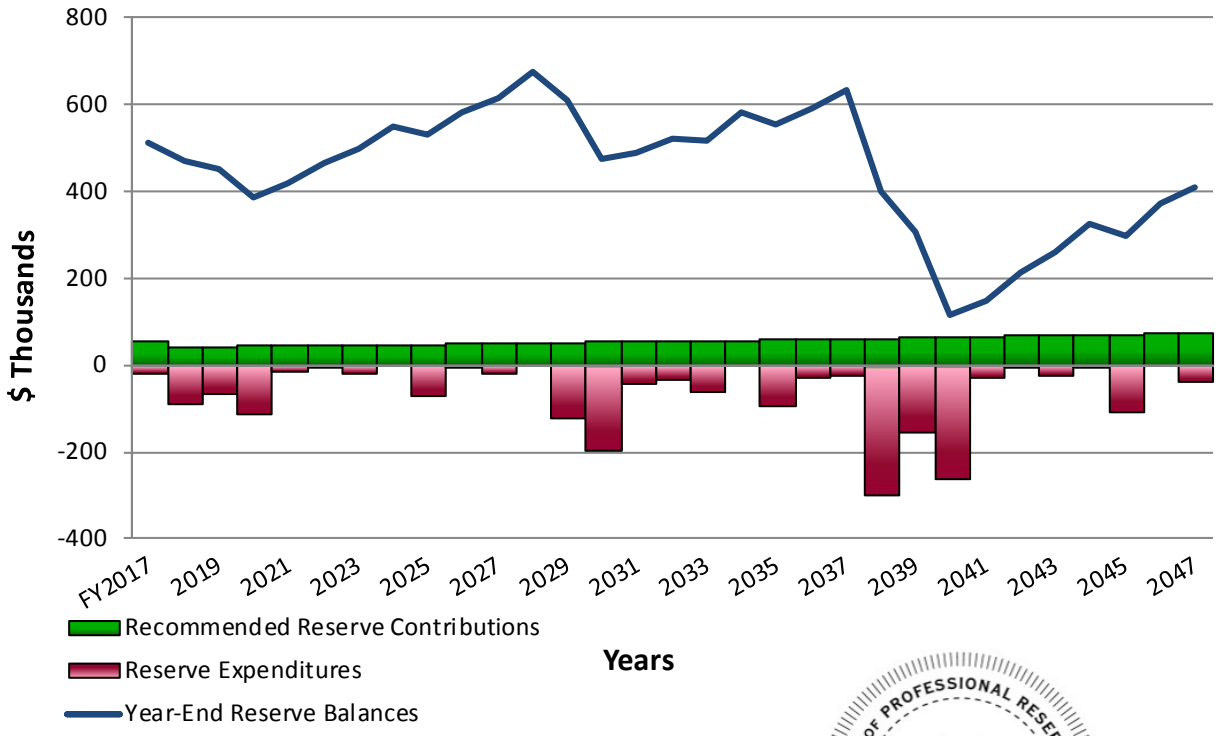
Cash Status of Reserve Fund: $468,851 as of January 1, 2017.

Recommended Reserve Funding: The Association budgeted $55,400 for Reserve Contributions in 2017. The Association may adopt a reduced reserve budget of $41,000 in 2018. 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 recommended year 2018 Reserve Contribution of $41,000 is equivalent to an average monthly contribution of $17.52 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."

Leewood
Recommended Reserve Funding Table and Graph

Year	Reserve Contributions ($)	Reserve Balances ($)	Year	Reserve Contributions ($)	Reserve Balances ($)	Year	Reserve Contributions ($)	Reserve Balances ($)
2018	41,500	468,932	2028	50,600	675,140	2038	61,700	398,730
2019	42,300	452,270	2029	51,600	610,689	2039	62,900	308,852
2020	43,100	385,174	2030	52,600	472,370	2040	64,200	113,269
2021	44,000	417,995	2031	53,700	490,576	2041	65,500	150,178
2022	44,900	465,237	2032	54,800	518,895	2042	66,800	214,807
2023	45,800	495,649	2033	55,900	518,172	2043	68,100	261,058
2024	46,700	548,577	2034	57,000	581,732	2044	69,500	327,239
2025	47,600	530,848	2035	58,100	553,406	2045	70,900	295,209
2026	48,600	581,301	2036	59,300	589,073	2046	72,300	371,485
2027	49,600	616,834	2037	60,500	630,991	2047	73,700	411,085



Respectfully submitted on June 7, 2017 by
RESERVE ADVISORS, INC.

Alan M. Ebert, PRA[1], RS[2], Director of Quality Assurance
Reviewed by: Nicole L. Lowery, PRA, RS, Associate Director of Quality Assurance
Visual Inspection and Report by: Matthew D. Casey

[1]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.
[2] 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

Leewood Homeowners Association

Springfield, Virginia

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, January 5, 2017. We conducted previous inspections in 2002, 2007 and 2012.

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

Leewood Homeowners Association is a homeowners association which is responsible for the common elements shared by 195 homeowners. The development was built in 1978 and contains asphalt pavement, concrete flatwork and wood fences. We identify 23 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 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 Dominion Virginia

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:

- Leewood 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.

- Landscape Catch Basins

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 $4,000 (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)
- Landscape
- Signage, Entrance and Street
- 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

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

- Light Poles and Fixtures

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

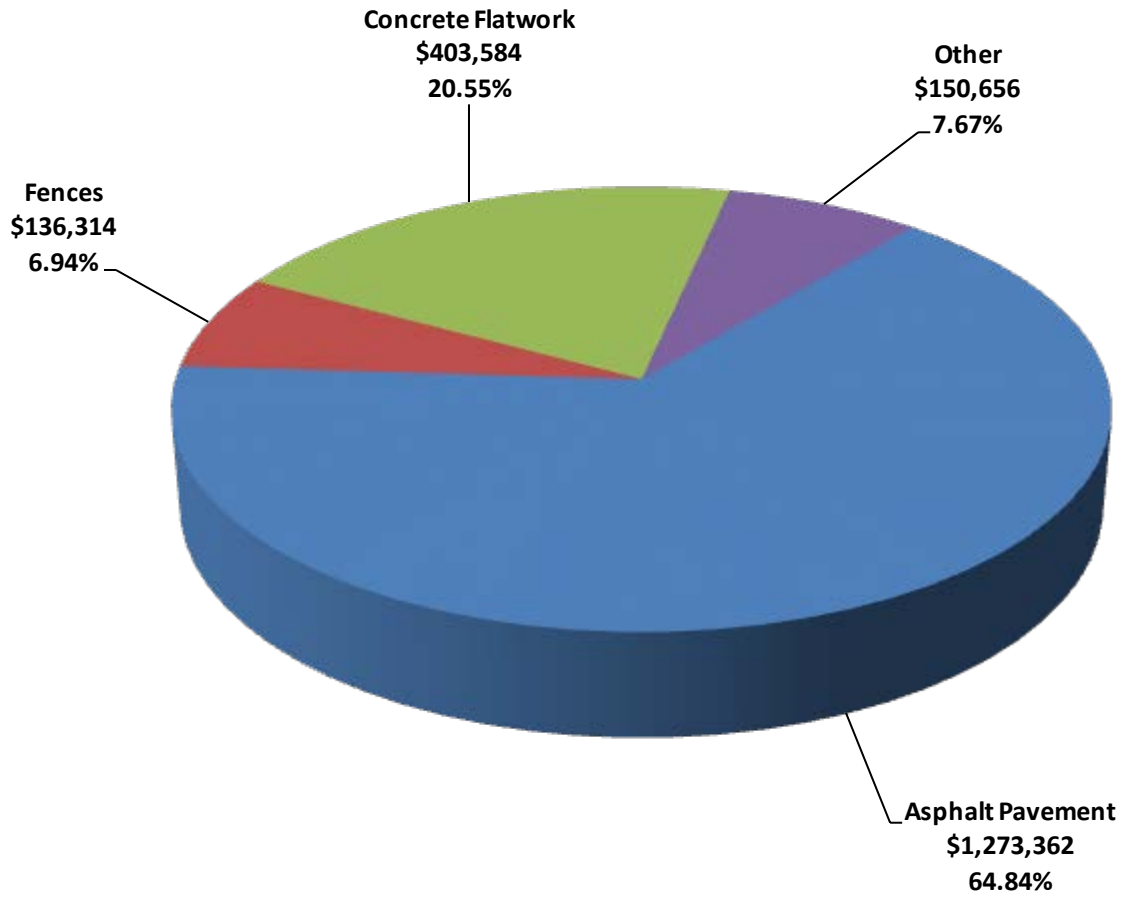
Reserve Funding Plan

- 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

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.

Leewood
Future Expenditures Relative Cost Illustration



RESERVE EXPENDITURES

Leewood
Homeowners Association
Springfield, Virginia

Explanatory Notes:

1) 2.0% is the estimated future Inflation Rate for estimating Future Replacement Costs.

2) FY2017 is Fiscal Year beginning January 1, 2017 and ending December 31, 2017.

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years Useful	Remaining	Costs, $ Unit (2017)	Per Phase (2017)	Total (2017)	30-Year Total (Inflated)	RUL = 0 FY2017	1 2018	2 2019	3 2020	4 2021	5 2022	6 2023	7 2024	8 2025	9 2026	10 2027	11 2028	12 2029	13 2030	14 2031	15 2032
4.020	16,860	8,430	Square Yards	Asphalt Pavement, Crack Repair, Patch and Seal Coat, Phased	2017	3 to 5	0 to 2	1.75	14,753	29,505	322,999	14,752		15,349		15,969		16,614		17,285		17,983		18,710		19,466	
4.040	4,000	4,000	Square Yards	Asphalt Pavement, Mill and Overlay, Bradgen Court, Remaining	2018	15 to 20	1	15.50	62,000	62,000	63,240		63,240														
4.041	2,400	2,400	Square Yards	Asphalt Pavement, Mill and Overlay, Bradwood Court	2019	15 to 20	2	15.50	37,200	37,200	38,703			38,703													
4.042	3,745	3,745	Square Yards	Asphalt Pavement, Mill and Overlay, Leestone Street	2020	15 to 20	3	15.50	58,048	58,048	61,600				61,600												
4.045	5,250	5,250	Square Yards	Asphalt Pavement, Total Replacement, Bradgen Court (Incl. Partial Leebrad)	2038	15 to 20	21	32.00	168,000	168,000	254,632																
4.046	2,400	2,400	Square Yards	Asphalt Pavement, Total Replacement, Bradwood Court	2039	15 to 20	22	32.00	76,800	76,800	118,731																
4.047	3,315	3,315	Square Yards	Asphalt Pavement, Total Replacement, Leebrad Street (Partial Area)	2030	15 to 20	13	32.00	106,080	106,080	137,226													137,226			
4.048	2,150	2,150	Square Yards	Asphalt Pavement, Total Replacement, Leestone Court	2029	15 to 20	12	32.00	68,800	68,800	87,255												87,255				
4.049	3,745	3,745	Square Yards	Asphalt Pavement, Total Replacement, Leestone Street	2040	15 to 20	23	32.00	119,840	119,840	188,976																
4.100	25	13	Each	Catch Basins, Inspections and Capital Repairs, Phased	2019	15 to 20	2 to 12	800.00	10,000	20,000	38,546			10,404									12,682				
4.109	1	1	Allowance	Concrete Curbs and Gutters, Paint Applications, Parking Areas (2017 is Planned)	2017	to 3	0	4,000.00	4,000	4,000	60,269	4,000			4,245			4,505			4,780		5,073				5,383
4.110	8,000	400	Linear Feet	Concrete Curbs and Gutters, Partial	2020	to 65	3 to 30+	34.00	13,600	272,000	112,508				14,432					15,935				17,593			
4.140	33,500	2,790	Square Feet	Concrete Sidewalks, Partial	2020	to 65	3 to 30+	10.00	27,900	335,000	230,807				29,608					32,689				36,092			
4.200	1	1	Allowance	Drainage Improvements	2020	to 5	3	5,000.00	5,000	5,000	41,362				5,306					5,858				6,468			
4.285	340	340	Linear Feet	Fences, Wood, Backlick Road	2036	15 to 20	19	35.00	11,900	11,900	17,336																
4.286	660	660	Linear Feet	Fences, Wood, Bradgen Court	2031	15 to 20	14	25.00	16,500	16,500	21,771														21,771		
4.287	300	300	Linear Feet	Fences, Wood, Bradwood Court	2036	15 to 20	19	30.00	9,000	9,000	13,111																
4.288	500	500	Linear Feet	Fences, Wood, Leebrad Street	2018	15 to 20	1	25.00	12,500	12,500	31,696		12,750														
4.289	1,080	540	Linear Feet	Fences, Wood, Leestone Street, Phased	2018	15 to 20	1 to 15	25.00	13,500	27,000	52,400		13,770														18,169
4.600	14	14	Each	Mailbox Stations	2033	to 25	16	1,900.00	26,600	26,600	36,516																
4.650	8	8	Linear Feet	Message Boards	2033	15 to 20	16	550.00	4,400	4,400	6,040																
4.800	1	1	Allowance	Signage, Renovation (Includes Street and Traffic Signage)	2032	15 to 20	15	4,000.00	4,000	4,000	5,383																5,383
4.800	1	1	Allowance	Reserve Study Updates	2022	15 to 20	5	2,650.00	2,650	2,650	22,809						2,926					3,230					3,567
				Anticipated Expenditures, By Year							$1,963,916	18,752	89,760	64,456	115,191	15,969	2,926	21,119	0	71,767	4,780	21,213	0	123,720	197,379	41,237	32,502

RESERVE EXPENDITURES

Leewood
Homeowners Association
Springfield, Virginia

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years Useful	Life Analysis, Years Remaining	Costs, $ 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	23 2040	24 2041	25 2042	26 2043	27 2044	28 2045	29 2046	30 2047
4.020	16,860	8,430	Square Yards	Asphalt Pavement, Crack Repair, Patch and Seal Coat, Phased	2017	3 to 5	0 to 2	1.75	14,753	29,505	322,999	20,252		21,070		21,921		22,807		23,728		24,687		25,684		26,722
4.040	4,000	4,000	Square Yards	Asphalt Pavement, Mill and Overlay, Bradgen Court, Remaining	2018	15 to 20	1	15.50	62,000	62,000	63,240															
4.041	2,400	2,400	Square Yards	Asphalt Pavement, Mill and Overlay, Bradwood Court	2019	15 to 20	2	15.50	37,200	37,200	38,703															
4.042	3,745	3,745	Square Yards	Asphalt Pavement, Mill and Overlay, Leestone Street	2020	15 to 20	3	15.50	58,048	58,048	61,600															
4.045	5,250	5,250	Square Yards	Asphalt Pavement, Total Replacement, Bradgen Court (Incl. Partial Leebrad)	2038	15 to 20	21	32.00	168,000	168,000	254,632						254,632									
4.046	2,400	2,400	Square Yards	Asphalt Pavement, Total Replacement, Bradwood Court	2039	15 to 20	22	32.00	76,800	76,800	118,731							118,731								
4.047	3,315	3,315	Square Yards	Asphalt Pavement, Total Replacement, Leebrad Street (Partial Area)	2030	15 to 20	13	32.00	106,080	106,080	137,226															
4.048	2,150	2,150	Square Yards	Asphalt Pavement, Total Replacement, Leestone Court	2029	15 to 20	12	32.00	68,800	68,800	87,255															
4.049	3,745	3,745	Square Yards	Asphalt Pavement, Total Replacement, Leestone Street	2040	15 to 20	23	32.00	119,840	119,840	188,976								188,976							
4.100	25	13	Each	Catch Basins, Inspections and Capital Repairs, Phased	2019	15 to 20	2 to 12	800.00	10,000	20,000	38,546							15,460								
4.109	1	1	Allowance	Concrete Curbs and Gutters, Paint Applications, Parking Areas (2017 is Planned)	2017	to 3	0	4,000.00	4,000	4,000	60,269			5,713			6,063			6,434			6,828			7,245
4.110	8,000	400	Linear Feet	Concrete Curbs and Gutters, Partial	2020	to 65	3 to 30+	34.00	13,600	272,000	112,508			19,424					21,446				23,678			
4.140	33,500	2,790	Square Feet	Concrete Sidewalks, Partial	2020	to 65	3 to 30+	10.00	27,900	335,000	230,807			39,848					43,995				48,575			
4.200	1	1	Allowance	Drainage Improvements	2020	to 5	3	5,000.00	5,000	5,000	41,362			7,141					7,884				8,705			
4.285	340	340	Linear Feet	Fences, Wood, Backlick Road	2036	15 to 20	19	35.00	11,900	11,900	17,336				17,336											
4.286	660	660	Linear Feet	Fences, Wood, Bradgen Court	2031	15 to 20	14	25.00	16,500	16,500	21,771															
4.287	300	300	Linear Feet	Fences, Wood, Bradwood Court	2036	15 to 20	19	30.00	9,000	9,000	13,111				13,111											
4.288	500	500	Linear Feet	Fences, Wood, Leebrad Street	2018	15 to 20	1	25.00	12,500	12,500	31,696						18,946									
4.289	1,080	540	Linear Feet	Fences, Wood, Leestone Street, Phased	2018	15 to 20	1 to 15	25.00	13,500	27,000	52,400						20,461									
4.600	14	14	Each	Mailbox Stations	2033	to 25	16	1,900.00	26,600	26,600	36,516	36,516														
4.650	8	8	Linear Feet	Message Boards	2033	15 to 20	16	550.00	4,400	4,400	6,040	6,040														
4.800	1	1	Allowance	Signage, Renovation (Includes Street and Traffic Signage)	2032	15 to 20	15	4,000.00	4,000	4,000	5,383															
4.800	1	1	Allowance	Reserve Study Updates	2022	15 to 20	5	2,650.00	2,650	2,650	22,809					3,938					4,348					4,800
				Anticipated Expenditures, By Year							$1,963,916	62,808	0	93,196	30,447	25,859	300,102	156,998	262,301	30,162	4,348	24,687	6,828	106,642	0	38,767

RESERVE FUNDING PLAN

CASH FLOW ANALYSIS
Leewood
Homeowners Association
Springfield, Virginia

Individual Reserve Budgets & Cash Flows for the Next 30 Years

		FY2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
	Reserves at Beginning of Year (Note 1)	468,851	511,345	468,932	452,270	385,174	417,995	465,237	495,649	548,577	530,848	581,301	616,834	675,140	610,689	472,370	490,576
	Total Recommended Reserve Contributions (Note 2)	55,400	41,500	42,300	43,100	44,000	44,900	45,800	46,700	47,600	48,600	49,600	50,600	51,600	52,600	53,700	54,800
Plus	Estimated Interest Earned, During Year (Note 3)	5,846	5,847	5,494	4,995	4,790	5,268	5,731	6,228	6,438	6,633	7,146	7,706	7,669	6,460	5,743	6,021
Less	Anticipated Expenditures, By Year	(18,752)	(89,760)	(64,456)	(115,191)	(15,969)	(2,926)	(21,119)	0	(71,767)	(4,780)	(21,213)	0	(123,720)	(197,379)	(41,237)	(32,502)
	Anticipated Reserves at Year End	$511,345	$468,932	$452,270	$385,174	$417,995	$465,237	$495,649	$548,577	$530,848	$581,301	$616,834	$675,140	$610,689	$472,370	$490,576	$518,895

(continued)

Individual Reserve Budgets & Cash Flows for the Next 30 Years, Continued

		2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047
	Reserves at Beginning of Year	518,895	518,172	581,732	553,406	589,073	630,991	398,730	308,852	113,269	150,178	214,807	261,058	327,239	295,209	371,485
	Total Recommended Reserve Contributions	55,900	57,000	58,100	59,300	60,500	61,700	62,900	64,200	65,500	66,800	68,100	69,500	70,900	72,300	73,700
Plus	Estimated Interest Earned, During Year	6,185	6,560	6,770	6,814	7,277	6,141	4,220	2,518	1,571	2,177	2,838	3,509	3,712	3,976	4,667
Less	Anticipated Expenditures, By Year	(62,808)	0	(93,196)	(30,447)	(25,859)	(300,102)	(156,998)	(262,301)	(30,162)	(4,348)	(24,687)	(6,828)	(106,642)	0	(38,767)
	Anticipated Reserves at Year End	$518,172	$581,732	$553,406	$589,073	$630,991	$398,730	$308,852	$113,269	$150,178	$214,807	$261,058	$327,239	$295,209	$371,485	$411,085
									(NOTE 5)							(NOTE 4)

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 Year (reserve balance at critical point).

4. CONDITION ASSESSMENT

The Condition Assessment of this *Full Reserve 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, Crack Repair, Patch and Seal Coat - Asphalt pavement comprises 16,860 square yards of streets and parking areas throughout the community. The pavement is in good to poor overall condition at ages varying up to 23 years. The Board informs us the Association conducted pavement repairs in 2016. To maximize the life of the pavement, the Association should plan for seal coat 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 seal coat applications, crack repairs and patching to maintain the pavement. These activities minimize the damaging effects of vehicle fluids, maintain a uniform and positive appearance, and maximize the useful life of the pavement. Asphalt pavement is susceptible to isolated areas of accelerated deterioration in areas that experience freeze-thaw cycles, 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 crack repairs and 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. The contractor should mechanically rout and fill all cracks with hot emulsion. Crack repair minimizes the chance of the cracks transmitting through the 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.

Leewood should repair any isolated areas of deteriorated pavement prior to seal coat applications. 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. Our future estimates of cost include an allowance for repair activities.

Based on historic practices, we include seal coat, crack repairs and patching at up to 8,430 square yards, or fifty percent (50%), of the streets and parking areas beginning in 2017, and subsequent events every other year thereafter. Line Item 4.020 of ***Reserve Expenditures*** notes our estimate of future costs and anticipated times of these activities.

Asphalt Pavement, Repaving - Asphalt pavement comprises 16,860 square yards of streets and parking areas throughout the community. We depict the quantity, age and condition at each respective pavement area on the following chart:

Location	Quantity (Square Yards)	Age	Condition	Notes
Bradgen Court	5,250	1- to 23-years	Good to poor	Cracks and previously sealed cracks.
Bradwood Court	2,400	up to 23 years	Fair to poor	Cracks and previously sealed cracks.
Leebrad Street	3,315	Six years	Good to fair	Minor centerline cracks.
Leestone Court	2,150	Seven years	Good to fair	Isolated cracks.
Leestone Street	3,745	up to 23 years	Fair to poor	Cracks and deterioration.

Bradgen Court replaced section overview

Bradgen Court overview

Bradgen Court cracks

Bradwood Court pavement overview
Note: Cracks and previously sealed cracks

Leebrad Street pavement overview

Leebrad Street pavement overview

Leestone Court pavement overview

Leestone Court cracks

Leestone Street pavement overview

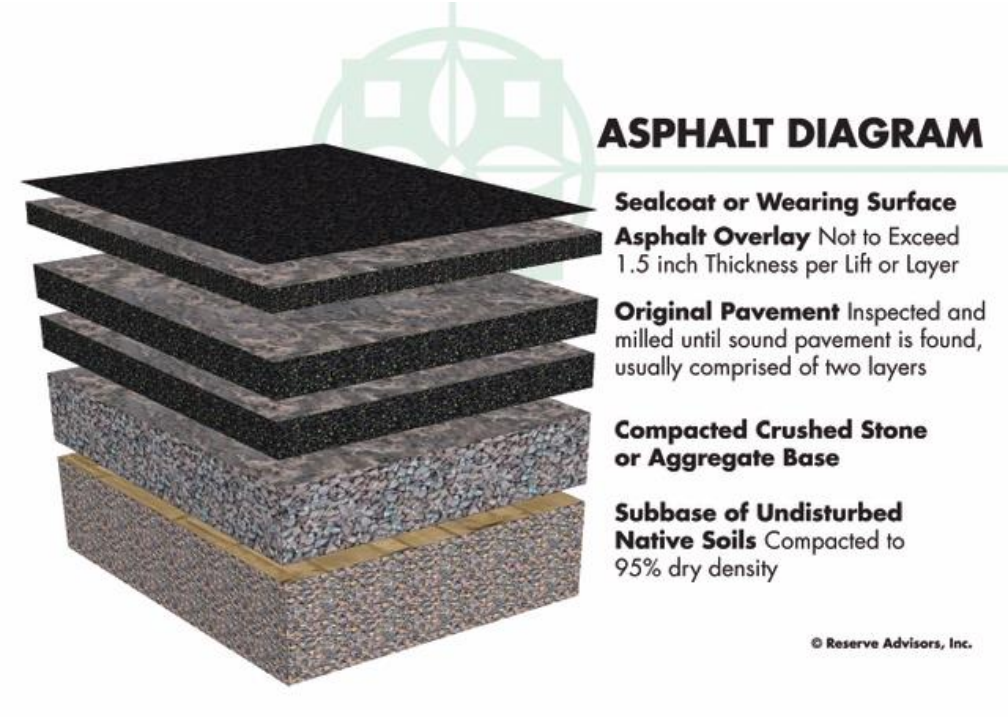
Leestone Street pavement deterioration

Leestone Street pavement deterioration

The useful life of pavement in Springfield 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 milling and overlayment method for initial repaving and the total replacement method for subsequent repaving at Leewood. See the chart below for our recommend method of repaving at each pavement section.

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 1½ 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. Leewood should repair any isolated areas of deteriorated pavement concurrent with periodic seal coat applications. We include our recommendations for each of the sections of pavement on the following chart:

Location	Mill and Overlay	Total Replacement	Notes
Bradgen Court	2018	2038	2017 event is remaining only; 2036 includes section of Leebrad Street up to Bradwood Road.
Bradwood Court	2019	2039	
Leebrad Street	N/A	2030	East of Bradwood Road only.
Leestone Court	N/A	2029	Existing deterioration should be repaired as part of routine crack repairs and patching.
Leestone Street	2020	2040	

We depict this information on Line Items 4.040 through 4.049 of ***Reserve Expenditures***. When possible, the Association should coordinate asphalt repaving with related activities such as partial replacement of concrete curbs and gutters, and capital repairs to catch basins. The estimates of cost for milling and overlayment include area patching of up to ten percent (10%) of the relevant pavement.

Catch Basins - The 25 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 to fair with minor settlement visually apparent.

Typical curb inlet catch basin

Minor settlement at catch basin inlets

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 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 25 catch basins in a phased manner beginning in 2018 and concluding by 2028. Subsequent phased events are likely beginning by 2037 and concluding by 2047. 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 Curbs and Gutters - Concrete curbs and gutters line the pavement of Leewood. These curbs and gutters comprise 8,000 linear feet and are in good to fair condition overall. We note previous replacements, isolated cracks and paint finish deterioration.

Recently replaced section of curb and gutter

Recently replaced curb and gutter

Crack at recently replaced section of curb and gutter

Curb paint finish deterioration

We estimate that up to 2,400 linear feet of curbs and gutters, or thirty percent (30%) of the total, will require replacement during the next 30 years. We estimate that up to 400 linear feet of curbs and gutters, or five percent (5%) of the total, will require replacement by 2020 and every five years thereafter. We assume the use of 3,500 pounds per square inch (PSI) concrete. Additionally, the Board informs us the Association paints the stripes and reserved parking space text on the concrete curbs and gutters every three years. At the request of the Board, we include curb and gutter paint applications in 2017 and every three years thereafter. The estimate of cost for paint applications is based on historical costs furnished by the Board. We depict this information on Line Item 4.109 and 4.110 of ***Reserve Expenditures***.

Concrete Sidewalks - Concrete sidewalks comprise 33,500 square feet throughout the community. The sidewalks are in good to fair overall condition. We note minor settlement.

Previous sidewalk replacement

Sidewalk overview and previous replacements

Minor sidewalk settlement

We estimate that up to 16,740 square feet of concrete sidewalks, or fifty percent (50%) of the total, will require replacement during the next 30 years. We recommend the Association budget for replacement of 2,790 square feet of concrete sidewalks every five years beginning by 2020. 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 times and costs of these replacements may vary. However, the estimated expenditures detailed in ***Reserve Expenditures*** are sufficient to budget appropriate reserves.

Drainage Improvements – The Board informs us of a history of drainage problems at Leewood. Based on historical necessity, we include allowances for drainage improvements in the amount of $5,000 plus inflation every five years. Based on conversations with the Board we include the next event by 2020. We depict this information on Line Item 4.200 of ***Reserve Expenditures***.

Fences, Wood – The Association maintains various types of wood fences throughout the property. We depict the locations, quantities, ages and conditions of the various fences throughout the property in the following table:

Location	Quantity (Linear Feet)	Age	Condition	Notes
Backlick Road	340	Less than one year	Good	
Bradgen Court	660	Five years	Good to fair	Organic growth
Bradwood Court	300	Less than one year	Good	
Leebrad Street	500	20 years	Fair	Weathered wood and deterioration
Leestone Street	1,080	5- to 20-years	Good to fair	Weathered wood

Backlick Road fence overview

Bradgen Court fence overview
Note: Organic growth.

Bradwood Court fence overview

Leebrad Street fence overview

Leebrad Street fence deterioration

Leestone Street fence overview

Newer section of Leestone Street fence

Wood fences of this type have useful lives of 15- to 20-years. The Association should anticipate periodic partial replacements due to the non-uniform nature of wood deterioration and fund these activities through the operating budget. We depict the recommended replacement timings for each of the respective fences on the following table:

Location	Replacement
Backlick Road	2036
Bradgen Court	2031
Bradwood Court	2036
Leebrad Street	2018, 2038
Leestone Street	2018, 2031-2038

We depict this information on Line Items 4.285 through 4.289 of ***Reserve Expenditures***. The 2017 event for replacement of the fences at Leestone Street is for the remaining sections only. The estimates of cost are based on historical costs furnished by the Board.

Mailbox Stations - The Association maintains 14 metal mailbox stations throughout the property which serve the residents of Leewood.

Typical mailbox station

The mailbox stations are in good condition at an age of eight years and have a useful life of up to 25 years. Leewood should budget for replacement of the mailbox stations by 2033. We depict this information on Line Item 4.600 of ***Reserve Expenditures***. The Association should verify the new mailboxes meet the specifications of the *United States Postal Service*. The estimate of cost is based on historical costs furnished by the Board.

Message Boards - The Association maintains eight composite message boards throughout the property. The message boards are in good condition at an age of two years and have a useful life of 15- to 20-years. Leewood should budget for replacement of the message boards by 2033. We depict this information on Line Item 4.650 of ***Reserve Expenditures***. The estimate of cost is based on historical costs furnished by the Board.

Signage, Renovation - The Association maintains six masonry monuments with signs, as well as street and traffic signage throughout the property. The signage is in good condition at ages varying from two- to four- years and have a useful life of 15- to 20-years. Leewood should budget renovation of the monuments and replacement of the street and traffic signage by 2032. We depict this information on Line Item 4.800 of ***Reserve Expenditures***. The estimate of cost

reflects replacement of the sign panels with masonry repairs at the monuments and replacement of the street and traffic signage.

Reserve Study Updates - The State of Virginia requires reserve study updates every five years. At the request of the Board, we include an estimate of cost for these recurring expenditures, beginning by 2022 and every five years thereafter. These costs are subject to change at the time of the study updates. We depict this information on the last Line Item of ***Reserve Expenditures***. Please see the following section for additional information regarding reserve study updates.

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. 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.

Leewood 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 standards[1] 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:

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

Information Furnished by the Association	
2017 unaudited Cash Status of the Reserve Fund	468,851
2017 Budgeted Reserve Contribution	55,400
Anticipated Interest on Reserve Fund	5,846
Less Anticipated Reserve Expenditures	(18,752)
Projected 2017 Year-End Reserve Balance	$511,345

The Cash Flow Method to compute, project and illustrate the 30-year Reserve Funding Plan

Local[2] 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 Springfield, Virginia at an annual inflation rate of 2.0%. 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 Leewood 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. 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

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

table summarizes rates of inflation and key rates for government securities, generally considered as safe investment alternatives.

Interest Rate and Inflation Data	2015				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%	1.15%	1.15%
Although past indicators are not predictive of future inflation in "building" construction, minimal inflation exists for past year Sept. 2015 to Sept. 2016 of approximately 1.7%.								
Savings Rates Results RANGE as found in http://www.bankrate.com		0.02 to 1.11%	Money Market Savings			0.15 to 1.35%	for 2-Year Certificate of Deposit	
		0.1 to 1.25%	1-Year Certificate of Deposit			0.15 to 1.50%	for 3-Year Certificate of Deposit	
Estimated Near Term Yield Rate for Reserve Savings				1.2%				
Est. Near Term Local Inflation Rate for Future Capital Expenditures				2.0%				**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 Leewood 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) Leewood 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 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

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

NICOLE L. LOWERY, PRA, RS
Associate Director of Quality Assurance

CURRENT CLIENT SERVICES

Nicole L. Lowery, a Civil Engineer, is an Associate Director of Quality Assurance for Reserve Advisors. Ms. Lowery is responsible for the management, review and quality assurance of reserve studies. In this role, she assumes the responsibility of stringent report review analysis to assure report accuracy and the best solution for Reserve Advisors' clients.

Ms. Lowery has been involved with hundreds of Reserve Study assignments. The following is a partial list of clients served by Nicole Lowery demonstrating her breadth of experiential knowledge of community associations in construction and related buildings systems.

Amelia Surf & Racquet Club This oceanfront condominium community comprises 156 units in three mid rise buildings. This Fernandina Beach, Florida development contains amenities such as clay tennis courts, two pools and boardwalks.

Ten Museum Park This boutique, luxury 50-story high rise building in downtown Miami, Florida consists of 200 condominium units. The amenities comprise six pools including resistance and plunge pools, a full-service spa and a state-of-the-art fitness center. The property also contains a multi-level parking garage.

3 Chisolm Street Homeowners Association This historic Charleston, South Carolina community was constructed in 1929 and 1960 and comprises brick and stucco construction with asphalt shingle and modified bitumen roofs. The unique buildings were originally the Murray Vocational School. The buildings were transformed in 2002 to 27 high-end condominiums. The property includes a courtyard and covered parking garage.

Lakes of Pine Run Condominium Association This condominium community comprises 112 units in 41 buildings of stucco construction with asphalt shingle roofs. Located in Ormond Beach, Florida, it has a domestic water treatment plant and wastewater treatment plant for the residents of the property.

Rivertowne on the Wando Homeowners Association This exclusive river front community is located on the Wando River in Mount Pleasant, South Carolina. This unique Association includes several private docks along the Wando River, a pool and tennis courts for use by its residents.

Biltmore Estates Homeowners Association This private gated community is located in Miramar, Florida, just northwest of Miami, Florida and consists of 128 single family homes. The lake front property maintains a pool, a pool house and private streets.

Bellavista at Miromar Lakes Condominium Association Located in the residential waterfront resort community of Miromar Lakes Beach & Golf Club in Fort Myers, Florida, this property comprises 60 units in 15 buildings. Amenities include a clubhouse and a pool.

PRIOR RELEVANT EXPERIENCE

Before joining Reserve Advisors, Ms. Lowery was a project manager with Kipcon in New Brunswick, New Jersey and the Washington, D.C. Metro area for eight years, where she was responsible for preparing reserve studies and transition studies for community associations. Ms. Lowery successfully completed the bachelors program in Civil Engineering from West Virginia University in Morgantown, West Virginia.

EDUCATION

West Virginia University - B.S. Civil Engineering

PROFESSIONAL AFFILIATIONS / DESIGNATIONS

Reserve Specialist (RS) - Community Associations Institute
Professional Reserves Analyst (PRA) - Association of Professional Reserve Analysts

MATTHEW D. CASEY
Responsible Advisor

CURRENT CLIENT SERVICES

Matthew D. Casey, a Civil Engineer, is an Advisor for Reserve Advisors. Mr. Casey is responsible for the inspection and analysis of the condition of clients' property, and recommending engineering solutions to prolong the lives of the components. He also forecasts capital expenditures for the repair and/or replacement of the property components and prepares technical reports on assignments. He is responsible for conducting Life Cycle Cost Analysis 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 Matthew Casey demonstrating his breadth of experiential knowledge of community associations in construction and related buildings systems.

Cameron Station Community Association Cameron Station Community Association is a planned unit development in Alexandria, Virginia which maintains common elements shared by 1,769 homeowners. The development contains over five miles of private roads and an extensive network of masonry paver walkways.

Hudson Harbor I Condominium Located along the Hudson River in Tarrytown, New York, this community was built in 2009 and contains a three-story midrise building comprising 20 residential units and three commercial units as well as 36 townhome style units in five buildings. Residents of the midrise enjoy terraces and covered balconies. Each of the townhomes has a large rooftop terrace.

Old Farm Condominium, Inc. A condominium style development in Frederick, Maryland, this community includes 144 units in 12 three story buildings. This complex includes private balconies and shared stairwells at the entrances to the units. The site contains concrete patios, sidewalks and curbs and gutters.

Bay Crossing Homeowners Association An upscale homeowners association located in Lewes, Delaware comprised of 241 townhomes and single family homes. Residents enjoy amenities such as a bocce court, pool and clubhouse. The clubhouse includes a game room, banquet room, commercial kitchen and fitness center. The site contains asphalt pavement streets and parking areas as well as four ponds.

Palmer Landing This gated condominium community contains 78 units in seven buildings and is located on Long Island Sound in Stamford, Connecticut. The development features hardwood balconies and detached garages. The site is supported by extensive seawalls.

Ronald McDonald House Charities of Southern West Virginia Located on the Elk River in Charleston, West Virginia, this Ronald McDonald House was constructed in 2016 and contains 14 guest suites, an office area, a manager’s apartment and common areas. The common areas include lounge areas for guests to relax, a playroom for younger guests and a dual kitchen for the guests to prepare meals.

PRIOR RELEVANT EXPERIENCE

Before joining Reserve Advisors, Mr. Casey attended the University of Connecticut in Storrs, Connecticut where he attained his Bachelor of Science degree in Civil Engineering. His studies focused on transportation engineering and environmental engineering. Mr. Casey also worked as an intern for Fay, Spofford and Thorndike Engineers where he took part in design of small municipal infrastructure projects in Connecticut and Massachusetts.

EDUCATION

University of Connecticut - B.S. Civil Engineering

PROFESSIONAL AFFILIATIONS

Engineer in Training (E.I.T.)

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.

Community Associations Institute, (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.

Marshall & Swift / Boeckh, (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.