

Westwoods Homes Association

July 11, 2024 • Liberty, MO

RESERVE STUDY





Long-term thinking. Everyday commitment.

Corporate Office

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

Westwoods Homes Association
Liberty, Missouri

Dear Board of Directors of Westwoods Homes Association:

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Reserve Study* of Westwoods Homes Association in Liberty, Missouri and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, July 11, 2024.

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

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

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

Respectfully submitted on July 22, 2024 by

Reserve Advisors, LLC

Visual Inspection and Report by: Stephanie A. Mueller, RS¹

Review by: Alan M. Ebert, RS, PRA², Director of Quality Assurance



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

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



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1. RESERVE STUDY EXECUTIVE SUMMARY

Client: Westwoods Homes Association (Westwoods)

Location: Liberty, Missouri

Reference: 131129

Property Basics: Westwoods Homes Association is a homeowners association which is responsible for the common elements shared by 79 townhome units. The community was built in the 1980s.

Reserve Components Identified: 19 Reserve Components.

Inspection Date: July 11, 2024. We conducted the original inspection on March 6, 2013.

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 2028 due to the repaving of the streets and in 2050 due to the subsequent sediment removal of the south pond.

Methodology: 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
- 2.0% anticipated annual rate of return on invested reserves
- 3.5% 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.

Unaudited Cash Status of Reserve Fund:

- \$292,479 as of April 30, 2024
- 2024 budgeted Reserve Contributions of \$60,000

Project Prioritization: We note anticipated Reserve Expenditures for the next 30 years in the **Reserve Expenditures** tables and include a **Five-Year Outlook** table following the **Reserve Funding Plan** in Section 3. We recommend the Association prioritize the following projects in the next five years based on the conditions identified:

- Asphalt repaving due to noted deterioration
- Sediment removal at south pond (north pond currently in progress)

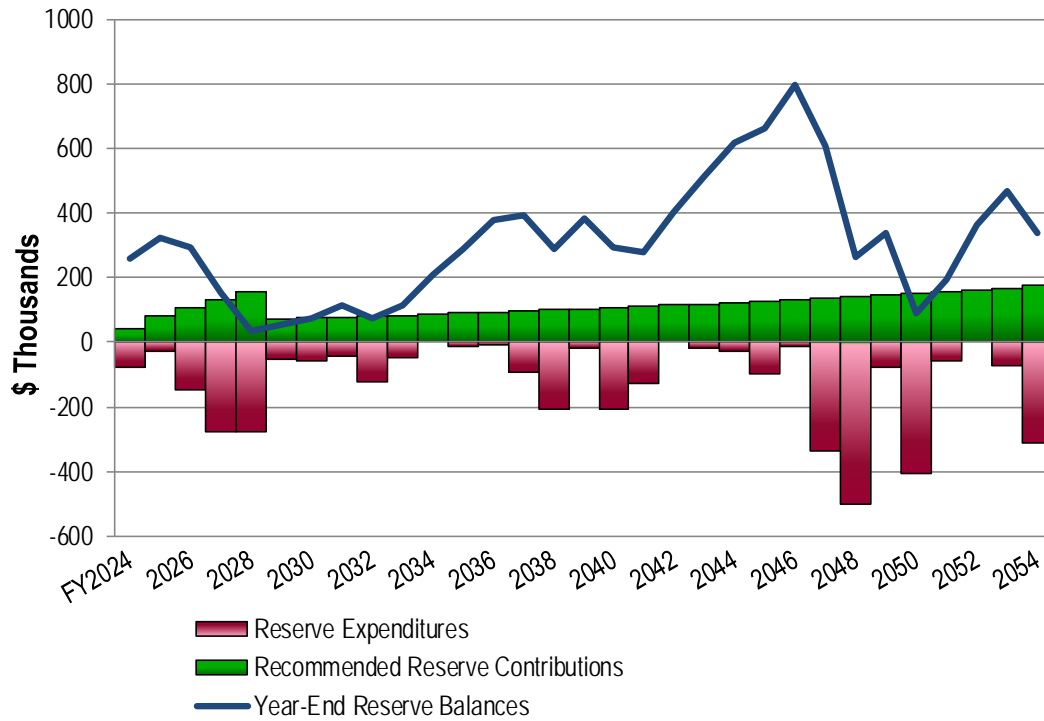
Recommended Reserve Funding: We recommend the following in order to achieve a stable and equitable Cash Flow Methodology Funding Plan:

- Phased increases of \$24,000 from 2025 through 2028
- Decrease to \$73,500 by 2029 due to fully funding for repaving of the streets
- Inflationary increases thereafter through 2054, the limit of this study's Cash Flow Analysis
- Initial adjustment in Reserve Contributions of \$24,000 represents an average monthly increase of \$25.32 per owner and about a nine percent (9.4%) adjustment in the 2024 total Operating Budget of \$255,960.

Westwoods

Recommended Reserve Funding Table and Graph

Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)
2025	84,000	324,212	2035	90,600	287,496	2045	127,800	662,254
2026	108,000	293,850	2036	93,800	378,827	2046	132,300	796,205
2027	132,000	151,939	2037	97,100	391,050	2047	136,900	609,415
2028	156,000	33,182	2038	100,500	289,680	2048	141,700	261,672
2029	73,500	56,739	2039	104,000	383,593	2049	146,700	338,692
2030	76,100	76,134	2040	107,600	291,532	2050	151,800	90,485
2031	78,800	114,454	2041	111,400	280,012	2051	157,100	193,436
2032	81,600	74,939	2042	115,300	402,065	2052	162,600	361,531
2033	84,500	115,911	2043	119,300	511,182	2053	168,300	468,009
2034	87,500	206,604	2044	123,500	618,005	2054	174,200	339,209





2. RESERVE STUDY REPORT

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

Westwoods Homes Association

Liberty, Missouri

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, July 11, 2024. We conducted the original inspection on March 6, 2013.

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
- **Five-Year Outlook** - Identifies reserve components and anticipated reserve expenditures during the first five years
- **Reserve Component Detail** - Describes the reserve components, includes photographic documentation of the condition of various property elements, describes our recommendations for repairs or replacement, and includes detailed solutions and procedures for replacements for the benefit of current and future board members
- **Methodology** - Lists the national standards, methods and procedures used to develop the Reserve Study
- **Definitions** - Contains definitions of terms used in the Reserve Study, consistent with national standards
- **Professional Service Conditions** - Describes Assumptions and Professional Service Conditions
- **Credentials and Resources**

IDENTIFICATION OF PROPERTY



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

Our process of identification helps assure that future boards and the management team understand whether reserves, the operating budget or Owners 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. These classes of property include:

- Reserve Components
- Long-Lived Property Elements
- Operating Budget Funded Repairs and Replacements
- Property Maintained by Owners
- 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. Reserve Components are defined by CAI as property elements with:

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

The following tables depict the items excluded from the Reserve Expenditure plan:

Excluded Components

for
Westwoods
Homes Association
Liberty, Missouri

Operating Budget Components

Repairs normally funded through the Operating Budget and Expenditures less than \$3,000 (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)

The operating budget provides money for the repair and replacement of certain Reserve Components. The Association may develop independent criteria for use of operating and reserve funds.

- Catch Basins, Landscape
- Electrical System, Common
- Fences, Wood, Split Rail, By Ponds
- Gazebo, Paint Finishes and Repairs
- Irrigation System, Controls and Maintenance
- Landscape, Maintenance
- Paint Finishes, Gazebo and Signage
- Paint Finishes, Homes¹
- Parking Area, Guest, Cobblestone Court
- Ponds, Chemical Treatments and Maintenance

¹ The Association currently funds for paint finishes and sealant replacement at the exterior siding every seven years and the owners are assessed separately for this expense.

Long-Lived Components

These elements may not have predictable Remaining Useful Lives or their replacement may occur beyond the scope of this 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.

Useful Life

Estimated Cost

- Structural Frame, Gazebo

Indeterminate

N/A

Excluded Components

for
Westwoods
Homes Association
Liberty, Missouri

Owners Responsibility Components
Certain items have been designated as the responsibility of the Owners to repair or replace at their cost, including items billed back.
<ul style="list-style-type: none">• Driveways• Homes and Lots (Excluding aggregate paint finishes and sealants)• Pipes, Subsurface Utilities, Laterals

Others Responsibility Components
Certain items have been designated as the responsibility of Others to repair or replace.
<ul style="list-style-type: none">• Pipes, Subsurface Utilities, Mains (City of Liberty)• Street System, Westwoods Drive (City of Liberty)

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
- 2024 local cost of replacement
 - Per unit
 - Per phase
 - Replacement of total quantity
- Percentage of future expenditures 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

Five-Year Outlook

- Line item numbers
- Reserve component inventory of only the expenditures anticipated to occur within the first five years
- Schedule of estimated future costs for each reserve component anticipated to occur within the first five years

The purpose of a Reserve Study is to provide an opinion of reasonable annual Reserve Contributions. Prediction of exact timing and costs of minor Reserve Expenditures typically will not significantly affect the 30-year cash flow analysis. Adjustments to the times and/or costs of expenditures may not always result in an adjustment in the recommended Reserve Contributions.

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

RESERVE EXPENDITURES

Explanatory Notes:

- 1) 3.5% is the estimated Inflation Rate for estimating Future Replacement Costs.
- 2) FY2024 is Fiscal Year beginning January 1, 2024 and ending December 31, 2024.

Westwoods Homes Association Liberty, Missouri											2) FY2024 is Fiscal Year beginning January 1, 2024 and ending December 31, 2024.																
Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years		Costs, \$			Percentage of Future Expenditures	RUL = 0 FY2024	1 2025	2 2026	3 2027	4 2028	5 2029	6 2030	7 2031	8 2032	9 2033	10 2034	11 2035	12 2036	13 2037	14 2038	15 2039
						Useful	Remaining	Unit (2024)	Per Phase (2024)	Total (2024)																	
4.020	10,550	10,550	Square Yards	Asphalt Pavement, Crack Repair and Patch	2025	3 to 5	1	1.50	15,825	15,825	4.5%		16,379								21,568					24,750	
4.040	10,550	5,275	Square Yards	Asphalt Pavement, Mill and Overlay, Streets, Phased	2047	15 to 20	23 to 24	17.50	92,313	184,625	11.2%																
4.045	10,550	5,275	Square Yards	Asphalt Pavement, Total Replacement, Streets, Phased	2027	15 to 20	3 to 4	37.50	197,813	395,625	12.0%				219,318	226,994											
4.100	18	9	Each	Catch Basins, Inspections and Capital Repairs, Phased	2027	15 to 20	3 to 4	1,100.00	9,900	19,800	1.8%				10,976	11,360											
4.110	8,100	680	Linear Feet	Concrete Curbs and Gutters, Partial	2027	to 65	3 to 30+	49.00	33,320	396,900	9.1%				36,942	38,235									52,111		
4.140	6,000	400	Square Feet	Concrete Sidewalks, Partial	2026	to 65	2 to 30+	15.00	6,000	90,000	1.7%			6,427				7,634						9,066			
4.360	1	1	Each	Gazebo, Renovation	2044	to 25	20	14,000.00	14,000	14,000	0.8%																
4.420	1	1	Allowance	Irrigation System	2054	to 40+	30	100,000.00	100,000	100,000	7.6%																
4.500	1	1	Allowance	Landscape, Partial Replacements	2025	to 2	1	10,000.00	10,000	10,000	7.1%		10,350		11,087		11,877		12,723		13,629		14,600		15,640		16,753
4.560	16	4	Each	Light Poles and Fixtures, Phased	2029	to 25	5 to 8	2,700.00	10,800	43,200	2.3%						12,827	13,276	13,741	14,222							
4.600	11	11	Each	Mailbox Stations	2045	to 25	21	1,900.00	20,900	20,900	1.2%																
4.700	1	1	Each	Ponds, Aerator, South Pond	2033	10 to 15	9	7,500.00	7,500	7,500	0.7%										10,222						
4.710	700	700	Linear Feet	Ponds, Bulkheads, Inspections and Capital Repairs, North	2032	8 to 12	8	25.00	17,500	17,500	2.5%								23,044								
4.711	980	980	Linear Feet	Ponds, Bulkheads, Inspections and Capital Repairs, South	2026	8 to 12	2	20.00	19,600	19,600	2.7%			20,996												31,726	
4.715	500	500	Linear Feet	Ponds, Drainage Channel, Inspections and Capital Repairs	2031	8 to 12	7	13.00	6,500	6,500	1.0%							8,270									
4.730	1,400	1,400	Square Yards	Ponds, Sediment Removal, North (2024 Budgeted)	2024	7 to 10	0	46.50	65,100	65,100	11.4%	75,000							85,724								
4.731	4,700	2,350	Square Yards	Ponds, Sediment Removal, South, Partial	2026	10 to 15	2	46.50	109,275	218,550	15.1%			117,058												176,883	
4.740	5,200	5,200	Square Feet	Retaining Walls, Concrete and Masonry, Inspection and Capital Repairs	2030	8 to 12	6	7.00	36,400	36,400	5.3%							44,745									
4.810	11	11	Each	Signage, Replacement, Traffic and Street	2029	15 to 20	5	2,000.00	22,000	22,000	2.1%						26,129										
Anticipated Expenditures, By Year (\$3,706,847 over 30 years)											75,000	26,729	144,481	278,324	276,590	50,833	58,021	42,367	122,990	45,419	0	14,600	9,066	92,500	208,609	16,753	

RESERVE EXPENDITURES

Westwoods Homes Association Liberty, Missouri				Estimated 1st Year of Event	Life Analysis, Years		Costs, \$			Percentage of Future Expenditures	16 2040	17 2041	18 2042	19 2043	20 2044	21 2045	22 2046	23 2047	24 2048	25 2049	26 2050	27 2051	28 2052	29 2053	30 2054
Line Item	Total Quantity	Per Phase Quantity	Units		Useful	Remaining	Unit (2024)	Per Phase (2024)	Total (2024)																
Reserve Component Inventory																									
4.020	10,550	10,550	Square Yards	Asphalt Pavement, Crack Repair and Patch	2025	3 to 5	1	1.50	15,825	15,825	4.5%		28,401			32,591								42,915	
4.040	10,550	5,275	Square Yards	Asphalt Pavement, Mill and Overlay, Streets, Phased	2047	15 to 20	23 to 24	17.50	92,313	184,625	11.2%							203,652	210,780						
4.045	10,550	5,275	Square Yards	Asphalt Pavement, Total Replacement, Streets, Phased	2027	15 to 20	3 to 4	37.50	197,813	395,625	12.0%														
4.100	18	9	Each	Catch Basins, Inspections and Capital Repairs, Phased	2027	15 to 20	3 to 4	1,100.00	9,900	19,800	1.8%							21,841	22,605						
4.110	8,100	680	Linear Feet	Concrete Curbs and Gutters, Partial	2027	to 65	3 to 30+	49.00	33,320	396,900	9.1%		59,799					73,508	76,081						
4.140	6,000	400	Square Feet	Concrete Sidewalks, Partial	2026	to 65	2 to 30+	15.00	6,000	90,000	1.7%		10,768				12,789					15,189			
4.360	1	1	Each	Gazebo, Renovation	2044	to 25	20	14,000.00	14,000	14,000	0.8%				27,857										
4.420	1	1	Allowance	Irrigation System	2054	to 40+	30	100,000.00	100,000	100,000	7.6%													280,679	
4.500	1	1	Allowance	Landscape, Partial Replacements	2025	to 2	1	10,000.00	10,000	10,000	7.1%		17,947		19,225		20,594		22,061		23,632		25,316		27,119
4.560	16	4	Each	Light Poles and Fixtures, Phased	2029	to 25	5 to 8	2,700.00	10,800	43,200	2.3%													30,313	
4.600	11	11	Each	Mailbox Stations	2045	to 25	21	1,900.00	20,900	20,900	1.2%					43,042									
4.700	1	1	Each	Ponds, Aerator, South Pond	2033	10 to 15	9	7,500.00	7,500	7,500	0.7%							16,546							
4.710	700	700	Linear Feet	Ponds, Bulkheads, Inspections and Capital Repairs, North	2032	8 to 12	8	25.00	17,500	17,500	2.5%	30,345							39,958						
4.711	980	980	Linear Feet	Ponds, Bulkheads, Inspections and Capital Repairs, South	2026	8 to 12	2	20.00	19,600	19,600	2.7%										47,941				
4.715	500	500	Linear Feet	Ponds, Drainage Channel, Inspections and Capital Repairs	2031	8 to 12	7	13.00	6,500	6,500	1.0%		11,665									16,455			
4.730	1,400	1,400	Square Yards	Ponds, Sediment Removal, North (2024 Budgeted)	2024	7 to 10	0	46.50	65,100	65,100	11.4%	112,882						148,645							
4.731	4,700	2,350	Square Yards	Ponds, Sediment Removal, South, Partial	2026	10 to 15	2	46.50	109,275	218,550	15.1%										267,282				
4.740	5,200	5,200	Square Feet	Retaining Walls, Concrete and Masonry, Inspection and Capital Repairs	2030	8 to 12	6	7.00	36,400	36,400	5.3%	63,117									89,033				
4.810	11	11	Each	Signage, Replacement, Traffic and Street	2029	15 to 20	5	2,000.00	22,000	22,000	2.1%							51,991							
Anticipated Expenditures, By Year (\$3,706,847 over 30 years)											206,344	128,580	0	19,225	27,857	96,227	12,789	337,607	498,068	75,624	404,256	56,960	0	70,034	310,993

RESERVE FUNDING PLAN

CASH FLOW ANALYSIS		Individual Reserve Budgets & Cash Flows for the Next 30 Years															
Westwoods																	
Homes Association																	
Liberty, Missouri		FY2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Reserves at Beginning of Year	(Note 1)	292,479	261,145	324,212	293,850	151,939	33,182	56,739	76,134	114,454	74,939	115,911	206,604	287,496	378,827	391,050	289,680
Total Recommended Reserve Contributions	(Note 2)	40,000	84,000	108,000	132,000	156,000	73,500	76,100	78,800	81,600	84,500	87,500	90,600	93,800	97,100	100,500	104,000
Estimated Interest Earned, During Year	(Note 3)	3,666	5,796	6,119	4,414	1,833	890	1,316	1,887	1,875	1,890	3,193	4,892	6,597	7,623	6,740	6,666
Anticipated Expenditures, By Year		(75,000)	(26,729)	(144,481)	(278,324)	(276,590)	(50,833)	(58,021)	(42,367)	(122,990)	(45,419)	0	(14,600)	(9,066)	(92,500)	(208,609)	(16,753)
Anticipated Reserves at Year End		<u>\$261,145</u>	<u>\$324,212</u>	<u>\$293,850</u>	<u>\$151,939</u>	<u>\$33,182</u>	<u>\$56,739</u>	<u>\$76,134</u>	<u>\$114,454</u>	<u>\$74,939</u>	<u>\$115,911</u>	<u>\$206,604</u>	<u>\$287,496</u>	<u>\$378,827</u>	<u>\$391,050</u>	<u>\$289,680</u>	<u>\$383,593</u>
		(NOTE 5)															

(continued)	Individual Reserve Budgets & Cash Flows for the Next 30 Years, Continued														
	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
Reserves at Beginning of Year	383,593	291,532	280,012	402,065	511,182	618,005	662,254	796,205	609,415	261,672	338,692	90,485	193,436	361,531	468,009
Total Recommended Reserve Contributions	107,600	111,400	115,300	119,300	123,500	127,800	132,300	136,900	141,700	146,700	151,800	157,100	162,600	168,300	174,200
Estimated Interest Earned, During Year	6,684	5,659	6,753	9,042	11,180	12,676	14,440	13,917	8,625	5,944	4,249	2,811	5,495	8,213	7,992
Anticipated Expenditures, By Year	(206,344)	(128,580)	0	(19,225)	(27,857)	(96,227)	(12,789)	(337,607)	(498,068)	(75,624)	(404,256)	(56,960)	0	(70,034)	(310,993)
Anticipated Reserves at Year End	<u>\$291.532</u>	<u>\$280.012</u>	<u>\$402.065</u>	<u>\$511.182</u>	<u>\$618.005</u>	<u>\$662.254</u>	<u>\$796.205</u>	<u>\$609.415</u>	<u>\$261.672</u>	<u>\$338.692</u>	<u>\$90.485</u>	<u>\$193.436</u>	<u>\$361.531</u>	<u>\$468.009</u>	<u>\$339.209</u>
											(NOTE 5)				(NOTE 4)

Explanatory Notes:

- 1) Year 2024 starting reserves are as of April 30, 2024; FY2024 starts January 1, 2024 and ends December 31, 2024.
- 2) Reserve Contributions for 2024 are the remaining budgeted 8 months; 2025 is the first year of recommended contributions.
- 3) 2.0% is the estimated annual rate of return on invested reserves; 2024 is a partial year of interest earned.
- 4) Accumulated year 2054 ending reserves consider the age, size, overall condition and complexity of the property.
- 5) Threshold Funding Years (reserve balance at critical point).

FIVE-YEAR OUTLOOK**Westwoods
Homes Association**
Liberty, Missouri

Line Item	Reserve Component Inventory	RUL = 0 FY2024	1 2025	2 2026	3 2027	4 2028	5 2029
4.020	Asphalt Pavement, Crack Repair and Patch		16,379				
4.045	Asphalt Pavement, Total Replacement, Streets, Phased				219,318	226,994	
4.100	Catch Basins, Inspections and Capital Repairs, Phased				10,976	11,360	
4.110	Concrete Curbs and Gutters, Partial				36,942	38,235	
4.140	Concrete Sidewalks, Partial			6,427			
4.500	Landscape, Partial Replacements		10,350		11,087		11,877
4.560	Light Poles and Fixtures, Phased						12,827
4.711	Ponds, Bulkheads, Inspections and Capital Repairs, South			20,996			
4.730	Ponds, Sediment Removal, North (2024 Budgeted)	75,000					
4.731	Ponds, Sediment Removal, South, Partial			117,058			
4.810	Signage, Replacement, Traffic and Street						26,129
Anticipated Expenditures, By Year (\$3,706,847 over 30 years)		75,000	26,729	144,481	278,324	276,590	50,833

4. RESERVE COMPONENT DETAIL

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

Asphalt Pavement, Repaving

Line Items: 4.020, 4.040 and 4.045

Quantity: Approximately 10,550 square yards at the streets

History:

- Repaving: Milled and overlaid approximately 10 years ago.
- Repairs: Repaired in 2023.

Condition: Fair to poor overall with frequent cracks, patches, standing water, potholes, alligator cracks, settlement near curb and raveling evident.



Pavement overview at Cobblestone Ct, note deterioration throughout



Pavement overview at Lakeside Dr, note various cracks and repairs



Alligator cracks and pothole formation



Pavement settlement at Lakeside Dr



Pavement overview at Westwoods Circle



Pavement deterioration at Melanae Ct



Lakeside Drive



Pavement overview at Seaport Circle

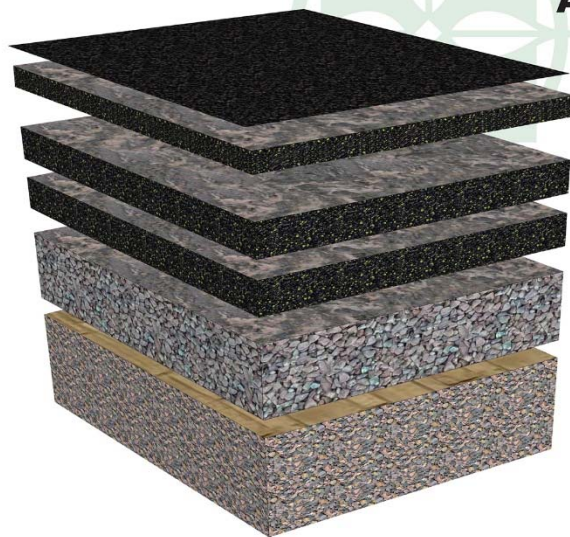


Edge deterioration, cracks and patches at Seaport Circle

Useful Life: 15- to 20-years with the benefit of crack repair and patch events every three- to five-years

Component Detail Notes: Proposals should include mechanically routing and filling all cracks with hot emulsion. Crack repair minimizes the chance of the cracks transmitting through the pavement. Patch repairs are conducted at areas exhibiting settlement, potholes, or excessive cracking. These conditions typically occur near high traffic areas, catch basins, and pavement edges.

The initial installation of asphalt uses at least two lifts, or two separate applications of asphalt, over the base course. The first lift is the binder course. The second lift is the wearing course. The wearing course comprises a finer aggregate for a smoother more watertight finish. The following diagram depicts the typical components although it may not reflect the actual configuration at Westwoods:



ASPHALT DIAGRAM

Sealcoat or Wearing Surface

Asphalt Overlay Not to Exceed
1.5 inch Thickness per Lift or Layer

Original Pavement Inspected and
milled until sound pavement is found,
usually comprised of two layers

**Compacted Crushed Stone
or Aggregate Base**

**Subbase of Undisturbed
Native Soils** Compacted to
95% dry density

© Reserve Advisors

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 total replacement method for initial repaving followed by the mill and overlay method for subsequent repaving at Westwoods.

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
 - Inspect for settlement, large cracks and trip hazards, and ensure proper drainage
 - Repair areas which could cause vehicular damage such as potholes
- As needed:
 - Perform crack repairs and patching

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

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our cost includes an allowance for crack repairs and patching of up to two percent (2%) of the pavement. Our cost for milling and overlayment includes area patching of up to ten percent (10%).

Catch Basins

Line Item: 4.100

Quantity: 18 catch basins¹

History: Original

Condition: Good to fair overall with debris accumulation evident.



Curb inlet

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

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

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
 - Inspect and repair any settlement and collar cracks
 - Ensure proper drainage and inlets are free of debris
 - If property drainage is not adequate in heavy rainfall events, typically bi-annual cleaning of the catch basins is recommended

¹ We utilize the terminology catch basin to refer to all storm water collection structures including curb inlets.

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

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

Concrete Curbs and Gutters

Line Item: 4.110

Quantity: Approximately 8,100 linear feet

Condition: Fair overall with frequent cracks, settlement and previous repairs evident.



Concrete crack and settlement



Concrete cracks



Concrete curb and gutter deterioration

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

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
 - Inspect and repair major cracks, spalls and trip hazards
 - Mark with orange safety paint prior to replacement or repair
 - Repair or perform concrete leveling in areas in immediate need of repair or possible safety hazard

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We estimate that up to 4,080 linear feet of curbs and gutters, or fifty percent (50.4%) of the total, will require replacement during the next 30 years.

Concrete Sidewalks

Line Item: 4.140

Quantity: Approximately 6,000 square feet located along Westwoods Drive

Condition: Good to fair overall with periodic cracks, settlement, spalled concrete, trip hazards and previous repairs evident.



Sidewalk trip hazard



Sidewalk repair and otherwise settlement noted



Sidewalk spalls and cracks

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

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
 - Inspect and repair major cracks, spalls and trip hazards
 - Mark with orange safety paint prior to replacement or repair
 - Repair or perform concrete leveling in areas in immediate need of repair or possible safety hazard

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We estimate that up to 2,400 square feet of concrete sidewalks, or forty percent (40%) of the total, will require replacement during the next 30 years.

Gazebo, Renovation

Line Item: 4.360

Quantity: One each

History: Renovated recently and which included paint finishes, repairs and replacement of railings and deck boards.

Condition: Good overall



Gazebo overview



Composite decking

Useful Life: Up to 25 years with periodic maintenance

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We recommend the Association budget for paint applications and repairs through the operating budget. Our cost for renovation includes allowances for replacement of the asphalt shingle roof and repairs at the gazebo structure.

Irrigation System

Line Item: 4.420

History: Replaced in 2015.

Condition: Satisfactory operational condition and Management does not report any deficiencies



Irrigation system controller

Useful Life: Up to and sometimes beyond 40 years

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

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

Westwoods 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.

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Semi-annually:
 - Conduct seasonal repairs which includes valve repairs, controller repairs, partial head replacements and pipe repairs
 - Blow out irrigation water lines and drain building exterior faucets each fall if applicable

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

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

Landscape

Line Item: 4.500

Component Detail Notes: The Association contains a large quantity of trees, shrubbery and other landscape elements. Replacement of these elements is an ongoing need. Many associations budget for these replacements as normal maintenance. Other associations fund ongoing replacements from reserves. Large amounts of landscape may need replacement due to disease, drought or other forces of nature. If the cost of removal and replacement is substantial, funding from reserves is logical. The Association may also desire to periodically update the appearance of the community through major improvements to the landscape.

Useful Life: At the request of Management, we include a landscape allowance for tree removal and replacement every two years.

Priority/Criticality: Per Board discretion

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

Light Poles and Fixtures

Line Item: 4.560

Quantity: 16 poles with light fixtures

History: The age was unavailable at the time of our inspection. The fixtures have been upgraded in the last 5- to 10-years.

Condition: Fair overall with finish deterioration and leaning poles evident.



Light pole and fixture

Useful Life: Up to 25 years

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- As-needed:
 - Inspect and repair broken or dislodged fixtures, and leaning or damaged poles
 - Replaced burned out bulbs as needed

Priority/Criticality: Per Board discretion

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

Mailbox Stations

Line Item: 4.600

Quantity: 11 stations

History: Replaced in 2020.

Condition: Good overall



Mailbox station

Useful Life: Up to 25 years

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- As-needed:
 - Inspect and repair damage, vandalism, and finish deterioration
 - Verify posts are anchored properly

Priority/Criticality: Per Board discretion

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

Ponds, Aerator

Line Item: 4.700

Quantity: One aerator at the south pond

History: Installed in approximately 2019. Motor was also replaced recently.

Condition: Reported satisfactory without operational deficiencies



Pond fountain aerator at south pond



Aerator equipment

Useful Life: 10- to 15-years

Component Detail Notes: The use of small pumps, motors and aerators circulates pond water and increases the amount of entrained oxygen in the water, increasing water quality and reducing algae growths.

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

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

Ponds, Bulkheads, Drainage Channel and Sediment Removal

Line Items: 4.710 through 4.731

Quantity: The ponds comprise approximately 1,400 square yards of water surface area at the north pond and 4,700 square yards at the south pond. Stone bulkheads around the shoreline comprise approximately 700 linear feet at the north pond and 980 linear feet

at the south pond. In addition, a concrete drainage channel between the ponds comprises 500 linear feet.

History: A major restoration of the south pond was completed in approximately 2015 and which included replacement or rebuilding of the bulkheads. We were previously informed that the bulkheads were constructed on concrete footings at the south pond. At the north pond, the bulkhead construction is older and the timing of last sediment removal is less recent than the south pond. We are informed that sediment removal at the north pond will be completed in the near term for approximately \$65,000 and an additional amount of \$10,000 will fund landscaping and related activities in conjunction with this project.

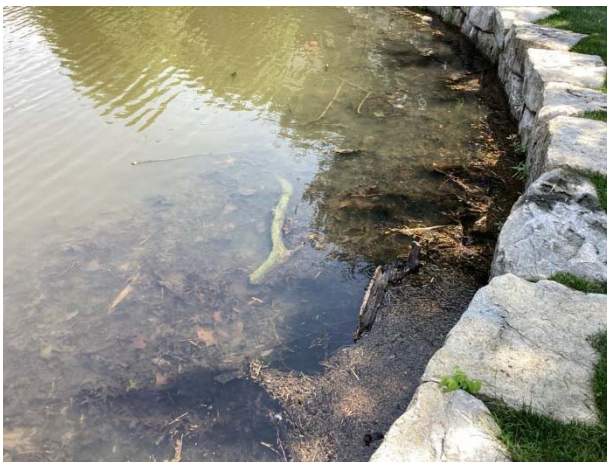
Condition: Fair overall with minor shoreline erosion behind the bulkheads, vegetation overgrowth and sediment accumulation evident. We note isolated concrete cracks and deterioration at the drainage channel. The north pond historically receives more sediment and silt than the south pond.



South pond overview



Concrete spillway at south pond



Leaves and debris at south pond



Bulkhead overview at south pond



Erosion at wall backside



Erosion at wall backside



North end of south pond



Concrete channel between ponds



Concrete channel deterioration and erosion



Concrete channel cracks and spalls



North pond overview



Vegetation growth near spillway at north pond



Sediment accumulation at north pond



Sediment accumulation at north pond



Shoreline erosion and sediment accumulation at north pond



North pond overview

Useful Life: Based on the visual condition, construction, adjacent deciduous trees and visibly apparent erosion, we recommend the Association anticipate the need to remove

pond sediment at the north pond more frequently every 7- to 10-years and at the south pond less frequently every 10- to 15-years.

The bulkheads have long indeterminate useful lives with the benefit of periodic inspections, capital repairs and erosion control measures every 8- to 12-years. We also recommend similar activities at the drainage channel every 8- to 12-years.

Component Detail Notes: The gradual build-up of natural debris, including tree leaves, branches and silt, may eventually change the topography of areas of the pond. Silt typically accumulates at inlets, outlets and areas of shoreline erosion. Sediment removal of ponds becomes necessary if this accumulation alters the quality of pond water or the functionality of the ponds as storm water management structures. Sediment removal is the optimal but also the most capital intensive method of pond management. Excavation equipment used for sediment removal includes clamshells, draglines and suction pipe lines. Sediment removal can also include shoreline regrading. Regrading includes removal of collapsed and eroded soil, and redefining the shoreline.

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

Shoreline plantings are referred to as buffer zones. Buffer zones provide the following advantages:

- Control insects naturally
- Create an aesthetically pleasing shoreline
- Enhance water infiltration and storage
- Filter nutrients and pollutants
- Increase fish and wildlife habitat
- Reduce lawn maintenance
- Stabilize shoreline and reduce erosion
- Trap sediments

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
 - Inspect and remediate shoreline erosion and areas of sediment accumulation
 - Clear and remove debris and vegetation overgrowth at pond edges, and inlet and outlet structures
 - Inspect for algae blooms and remedy as needed through a chemical treatment program or aeration

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

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We recommend the Association plan for inspections,

partial resetting and replacement, and erosion control measures at ten- to fifteen-percent (10-15%) of the shorelines per event.

For reserve budgeting purposes, we estimate the need to remove an average depth of one yard from approximately one hundred percent (100%) of the surface area at the north pond and fifty percent (50%) of the surface area at the south pond. However, the actual volume of material to remove may vary dependent upon an invasive analysis at the time of removal. A visual inspection of a body of water cannot reveal the amount of accumulated silt. This is especially true on larger bodies of water. It is therefore inaccurate to assume an entire body of water will require sediment removal. It is more cost effective to spot remove in areas of intense silt accumulation as noted through bathymetric surveys. The amount or depth of silt is determined through prodding into the silt until a relatively solid base is found or through bathymetric surveys. A bathymetric survey establishes a base of data about the depth of the body of water over many locations against which the data of future surveys is compared. These invasive procedures are beyond the scope of a Reserve Study and require multiple visits to the site. We recommend Westwoods contract with a local engineer for periodic bathymetric surveys. Future updates of the Reserve Study can incorporate future anticipated expenditures based on the results of the bathymetric surveys.

Unit costs per cubic yard to remove can vary significantly based on the type of equipment used, quantity of removed material and disposal of removed material. Sediment removal costs must also include mobilization, or getting the equipment to and from the site. Also, the portion of the overall cost to remove associated with mobilization varies based on the volume removed. Costs for sediment disposal also vary depending on the site. Compact sites will require hauling and in some cases disposal fees.

Retaining Walls, Concrete and Masonry

Line Item: 4.740

Quantity: Approximately 5,200 square feet throughout the community. The walls are primarily located behind the homes east of Lakeside Drive, at the Melanae Court cul-de-sac, behind the homes that back up to the north pond, at Westwoods Drive and the west side of Seaport Circle.

History: Varied ages. The exact history was unavailable at the time of our inspection.

Condition: Good to fair overall with periodic efflorescence, erosion at wall backside, wall displacement and ground erosion at side or base of wall evident.



Masonry retaining walls behind homes at Lakeside Dr, note efflorescence



Wall backside



Efflorescence and wall displacement between trees at Lakeside Ct



Retaining wall behind homes at Cobblestone Ct



Retaining wall at Melanae Ct



Concrete retaining wall behind east side homes on Lakeside Dr



Isolated, minor displacement



Minimal amount of wall lean noted towards southern end of wall



Mortar-set retaining wall at Seaport Circle



Mortar and stone deterioration

Useful Life: Concrete and masonry retaining walls have indeterminate useful lives. However, we recommend the Association plan for inspections and capital repairs every 8- to 12-years to forestall deterioration.

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

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our cost includes an allowance for an inspection, crack repairs, partial resetting and replacement of up to eight percent (8%). Updates of this Reserve Study will continue to monitor the rate of deterioration and incorporate any available inspection reports.

Signage, Traffic and Street

Line Item: 4.810

Quantity: 11 wood posts with signs

History: Unknown

Condition: Fair overall with wood rot and deterioration evident.



Street signage



Wood rot at post

Useful Life: 15- to 20-years

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

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
 - Inspect and repair damage, vandalism and loose components
 - Verify lighting is working properly if applicable
 - Touch-up paint finish applications if applicable

Priority/Criticality: Per Board discretion

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

Reserve Study Update

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

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

Periodic updates incorporate these variable changes since the last Reserve Study or Update. We recommend the Board budget for an Update to this Reserve Study every three years. Budgeting for an Update demonstrates the Board's objective to continue fulfilling its fiduciary responsibility to maintain the commonly owned property and to fund reserves appropriately.

5.METHODOLOGY

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

Westwoods 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 Owners 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 Association of Professional Reserve Analysts (APRA) fulfilling the requirements of a "Level II Reserve Study Update." These standards require a Reserve Component to have a "predictable remaining Useful Life." Estimating Remaining Useful Lives and Reserve Expenditures beyond 30 years is often indeterminate. Long-Lived Property Elements are necessarily excluded from this analysis. We considered the following factors in our analysis:

- The Cash Flow Method to compute, project and illustrate the 30-year Reserve Funding Plan
- Local² costs of material, equipment and labor
- Current and future costs of replacement for the Reserve Components
- Costs of demolition as part of the cost of replacement
- Local economic conditions and a historical perspective to arrive at our estimate of long-term future inflation for construction costs in Liberty, Missouri at an annual inflation rate³. Isolated or regional markets of

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

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

³ Derived from Marshall & Swift, historical costs and the Bureau of Labor Statistics.

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

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

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

6. CREDENTIALS

HISTORY AND DEPTH OF SERVICE

Founded in 1991, Reserve Advisors 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 founders are also founders of Community Associations Institute's (CAI) Reserve Committee that developed national standards for reserve study providers. One of our founders is a Past President of the Association of Professional Reserve Analysts (APRA). Our vast experience with a variety of building types and ages, on-site examination and historical analyses are keys to determining accurate remaining useful life estimates of building components.

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

TOTAL STAFF INVOLVEMENT

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

OUR GOAL

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

VAST EXPERIENCE WITH A VARIETY OF BUILDINGS

Reserve Advisors has conducted reserve studies for a multitude of different communities and building types. We've analyzed thousands of buildings, from as small as a 3,500-square foot day care center to a 2,600,000-square foot 98-story highrise. 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.

STEPHANIE A. MUELLER, P.E., RS
Responsible Advisor

CURRENT CLIENT SERVICES

Stephanie A. Mueller, a Civil Engineer, is an Advisor for Reserve Advisors. Ms. Mueller is responsible for the inspection and analysis of the condition of clients' properties, and recommending engineering solutions to prolong the lives of the components. She also forecasts capital expenditures for the repair and/or replacement of the property components and prepares technical reports on assignments. She is responsible for conducting Life Cycle Cost Analysis and Capital Replacement Forecast services on townhomes and planned unit developments.

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



Western Auto Lofts An iconic building in the Crossroads neighborhood of Kansas City, this vintage building from the 1910s was originally built for *The Coca-Cola Company* and more recently converted into condominiums. From its triangular shape and terra cotta details to its 70-by-73-foot LED lit sign atop the main roof, it remains a unique part of Kansas City history.

One Park Place Tower Situated south of downtown Kansas City, this 19-story previously used office building was converted into condominiums in 2005. Great views, an indoor pool and wine cellar are among the many amenities.

Kirkwood Consisting of several community associations, Kirkwood is located near the Country Club Plaza in Kansas City, and features various condominium units, rowhomes, coach homes, townhomes and single family homes. In addition to the great location, amenities include a fitness center, pool and ample outdoor space with fountain features.

Canyon Gate at Cinco Ranch Recreational facilities include sport courts, walking trail, skate park, playgrounds, a clubhouse and pools for the 721 homes located in Katy, Texas. The Association also maintains the gated entrances, street systems, and perimeter fencing and walls.

Mountain Park Ranch A large-scale community with more than 7,000 units in southern Phoenix with views of South Mountain Park features three amenity centers with multiple pools, tennis courts and playgrounds.

Palazzo Tornabuoni Associazione Located in the heart of Florence, Italy, this 15th century palace includes 38 luxury residences. The ground floor includes upscale retail spaces and a restaurant. The building features many historic details such as the tile roofs and original fresco paintings. Members enjoy the private lounge, sauna and steam room.

PRIOR RELEVANT EXPERIENCE

Before joining Reserve Advisors, Ms. Mueller attended the University of Wisconsin in Madison, Wisconsin where she attained her Bachelor of Science degree in Civil Engineering. Her studies focused on structural engineering. At the University of Wisconsin, she managed a team responsible for the design of a new drinking water facility for a rural Wisconsin town.

EDUCATION

University of Wisconsin-Madison - B.S. Civil Engineering
University of Wisconsin-Milwaukee - M.S. Civil Engineering

PROFESSIONAL AFFILIATIONS

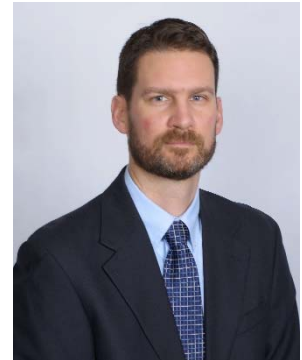
Reserve Specialist (RS) – Community Associations Institute
Professional Engineer (P.E.) – Arizona, Florida

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

CURRENT CLIENT SERVICES

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

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



Brownsville Winter Haven Located in Brownsville, Texas, this unique homeowners association contains 525 units. The Association maintains three pools and pool houses, a community and management office, landscape and maintenance equipment, and nine irrigation canals with associated infrastructure.

Rosemont Condominiums This unique condominium is located in Alexandria, Virginia and dates to the 1940's. The two mid-rise buildings utilize decorative stone and brick masonry. The development features common interior spaces, multi-level wood balconies and common asphalt parking areas.

Stillwater Homeowners Association Located in Naperville, Illinois, Stillwater Homeowners Association maintains four tennis courts, an Olympic sized pool and an upscale ballroom with commercial-grade kitchen. The community also maintains three storm water retention ponds and a detention basin.

Birchfield Community Services Association This extensive Association comprises seven separate parcels which include 505 townhome and single family homes. This Community Services Association is located in Mt. Laurel, New Jersey. Three lakes, a pool, a clubhouse and management office, wood carports, aluminum siding, and asphalt shingle roofs are a few of the elements maintained by the Association.

Oakridge Manor Condominium Association Located in Londonderry, New Hampshire, this Association includes 104 units at 13 buildings. In addition to extensive roads and parking areas, the Association maintains a large septic system and significant concrete retaining walls.

Memorial Lofts Homeowners Association This upscale high rise is located in Houston, Texas. The 20 luxury units include large balconies and decorative interior hallways. The 10-story building utilizes a painted stucco facade and TPO roof, while an on-grade garage serves residents and guests.

PRIOR RELEVANT EXPERIENCE

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

EDUCATION

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

PROFESSIONAL AFFILIATIONS/DESIGNATIONS

Professional Engineering License – Wisconsin, North Carolina, Illinois, Colorado

Reserve Specialist (RS) - Community Associations Institute

Professional Reserve Analyst (PRA) - Association of Professional Reserve Analysts



RESOURCES

Reserve Advisors 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.

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

7. DEFINITIONS

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

Cash Flow Method - A method of calculating Reserve Contributions where contributions to the reserve fund are designed to offset the variable annual expenditures from the reserve fund. Different Reserve Funding Plans are tested against the anticipated schedule of reserve expenses until the desired funding goal is achieved.

Component Method - A method of developing a Reserve Funding Plan with the total contribution is based on the sum of the contributions for individual components.

Current Cost of Replacement - That amount required today derived from the quantity of a *Reserve Component* and its unit cost to replace or repair a Reserve Component using the most current technology and construction materials, duplicating the productive utility of the existing property at current *local*/market prices for *materials*, *labor* and manufactured equipment, contractors' overhead, profit and fees, but without provisions for building permits, overtime, bonuses for labor or premiums for material and equipment. We include removal and disposal costs where applicable.

Fully Funded Balance - The Reserve balance that is in direct proportion to the fraction of life "used up" of the current Repair or Replacement cost similar to Total Accrued Depreciation.

Funding Goal (Threshold) - The stated purpose of this Reserve Study is to determine the adequate, not excessive, minimal threshold reserve balances.

Future Cost of Replacement - *Reserve Expenditure* derived from the inflated current cost of replacement or current cost of replacement as defined above, with consideration given to the effects of inflation on local market rates for materials, labor and equipment.

Long-Lived Property Component - Property component of Westwoods 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) Westwoods responsibility; 2) limited Useful Life expectancies; 3) predictable Remaining Useful Life expectancies; and 4) a replacement cost above a minimum threshold.

Reserve Component Inventory - Line Items in *Reserve Expenditures* that identify a *Reserve Component*.

Reserve Contribution - An amount of money set aside or *Reserve Assessment* contributed to a *Reserve Fund* for future *Reserve Expenditures* to repair or replace *Reserve Components*.

Reserve Expenditure - Future Cost of Replacement of a Reserve Component.

Reserve Fund Status - The accumulated amount of reserves in dollars at a given point in time, i.e., at year end.

Reserve Funding Plan - The portion of the Reserve Study identifying the *Cash Flow Analysis* and containing the recommended Reserve Contributions and projected annual expenditures, interest earned and reserve balances.

Reserve Study - A budget planning tool that identifies the current status of the reserve fund and a stable and equitable Funding Plan to offset the anticipated future major common area expenditures.

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

8. PROFESSIONAL SERVICE CONDITIONS

Our Services - Reserve Advisors, LLC ("RA") performs its services as an independent contractor in accordance with our professional practice standards and its compensation is not contingent upon our conclusions. The purpose of our reserve study is to provide a budget planning tool that identifies the current status of the reserve fund, and an opinion recommending an annual funding plan, to create reserves for anticipated future replacement expenditures of the subject property. The purpose of our energy benchmarking services is to track, collect and summarize the subject property's energy consumption over time for your use in comparison with other buildings of similar size and establishing a performance baseline for your planning of long-term energy efficiency goals.

Our inspection and analysis of the subject property is limited to visual observations, is noninvasive and is not meant to nor does it include investigation into statutory, regulatory or code compliance. RA inspects sloped roofs from the ground and inspects flat roofs where safe access (stairs or ladder permanently attached to the structure) is available. Our energy benchmarking services with respect to the subject property is limited to collecting energy and utility data and summarizing such data in the form of an Energy Star Portfolio Manager Report or any other similar report, and hereby expressly excludes any recommendations with respect to the results of such energy benchmarking services or the accuracy of the energy information obtained from utility companies and other third-party sources with respect to the subject property. The reserve report and any energy benchmarking report (i.e., any Energy Star Portfolio Manager Report) (including any subsequent revisions thereto pursuant to the terms hereof, collectively, the "Report") are based upon a "snapshot in time" at the moment of inspection. RA may note visible physical defects in the Report. The inspection is made by employees generally familiar with real estate and building construction. Except to the extent readily apparent to RA, RA cannot and shall not opine on the structural integrity of or other physical defects in the property under any circumstances. Without limitation to the foregoing, RA cannot and shall not opine on, nor is RA responsible for, the property's conformity to specific governmental code requirements for fire, building, earthquake, occupancy or otherwise.

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

RA assumes, without independent verification, the accuracy of all data provided to it. Except to the extent resulting from RA's willful misconduct in connection with the performance of its obligations under this agreement, you agree to indemnify, defend, and hold RA and its affiliates, officers, managers, employees, agents, successors and assigns (each, an "RA Party") harmless from and against (and promptly reimburse each RA Party for) any and all losses, claims, actions, demands, judgments, orders, damages, expenses or liabilities, including, without limitation, reasonable attorneys' fees, asserted against or to which any RA Party may become subject in connection with this engagement, including, without limitation, as a result of any false, misleading or incomplete information which RA relied upon that was 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 or to whom you provided the Report. NOTWITHSTANDING ANY OTHER PROVISION HEREIN TO THE CONTRARY, THE AGGREGATE LIABILITY (IF ANY) OF RA WITH RESPECT TO THIS AGREEMENT AND RA'S OBLIGATIONS HEREUNDER IS LIMITED TO THE AMOUNT OF THE FEES ACTUALLY RECEIVED BY RA FROM YOU FOR THE SERVICES AND REPORT PERFORMED BY RA UNDER THIS AGREEMENT, WHETHER ARISING IN CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR OTHERWISE. YOUR REMEDIES SET FORTH HEREIN ARE EXCLUSIVE AND ARE YOUR SOLE REMEDIES FOR ANY FAILURE OF RA TO COMPLY WITH ITS OBLIGATIONS HEREUNDER OR OTHERWISE. RA SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES OF ANY KIND, INCLUDING, BUT NOT LIMITED TO, ANY LOST PROFITS AND LOST SAVINGS, LOSS OF USE OR INTERRUPTION OF BUSINESS, HOWEVER CAUSED, WHETHER ARISING IN CONTRACT, TORT (INCLUDING NEGLIGENCE), BREACH OF WARRANTY, STRICT LIABILITY OR OTHERWISE, EVEN IF RA HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT WILL RA BE LIABLE FOR THE COST OF PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES. RA DISCLAIMS ALL REPRESENTATIONS AND WARRANTIES WHATSOEVER, EXPRESS OR IMPLIED OR OF ANY NATURE, WITH REGARD TO THE SERVICES AND THE REPORT, INCLUDING, WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Report - RA will complete the services in accordance with the Proposal. The Report represents a valid opinion of RA's findings and recommendations with respect to the reserve study and is deemed complete. RA will consider any additional information made available to RA within 6 months of issuing the Report and issue a revised Report based on such additional information if a timely request for a revised Report is made by you. RA retains the right to withhold a revised Report if payment for services was not tendered in a timely manner. All information received by RA and all files, work papers or documents developed by RA during the course of the engagement shall remain the property of



RA and may be used for whatever purpose it sees fit. RA reserves the right to, and you acknowledge and agree that RA may, use any data provided by you in connection with the services, or gathered as a result of providing such services, including in connection with creating and issuing any Report, in a de-identified and aggregated form for RA's business purposes.

Your Obligations - You agree to provide us access to the subject property for an inspection. You agree to provide RA all available, historical and budgetary information, the governing documents, and other information that we request and deem necessary to complete the Report. Additionally, you agree to provide historical replacement schedules, utility bills and historical energy usage files that RA requests and deems necessary to complete the energy benchmarking services, and you agree to provide any utility release(s) reasonably requested by RA permitting RA to obtain any such data and/or information from any utility representative or other third party. You agree to pay actual attorneys' fees and any other costs incurred to collect on any unpaid balance for RA's services.

Use of Our Report and Your Name - Use of the Report is limited to only the purpose stated herein. You acknowledge that RA is the exclusive owner of all intellectual property rights in and relating to the Report. You hereby acknowledge that any use or reliance by you on the Report for any unauthorized purpose is at your own risk and that you will be liable for the consequences of any unauthorized use or distribution of the Report. Use or possession of the Report by any unauthorized third party is prohibited. The Report in whole or in part ***is not and cannot be used as a design specification for design engineering purposes or as an appraisal.*** You may show the Report in its entirety to the following third parties: members of your organization (including your directors, officers, tenants and prospective purchasers), your accountants, attorneys, financial institutions and property managers who need to review the information contained herein, and any other third party who has a right to inspect the Report under applicable law including, but not limited to, any government entity or agency, or any utility companies. Without the written consent of RA, you shall not disclose the Report to any other third party. By engaging our services, you agree that the Report contains intellectual property developed (and owned solely) by RA and agree that you will not reproduce or distribute the Report ***to any party that conducts reserve studies without the written consent of RA.***

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

Payment Terms, Due Dates and Interest Charges - If reserve study and energy benchmarking services are performed by RA, then the retainer payment is due upon execution of this agreement and prior to the inspection by RA, and any balance is due net 30 days from the Report shipment date. If only energy benchmarking services are performed by RA, then the retainer payment is due upon execution of this agreement and any balance is due net 30 days from the Report shipment date. In any case, any balance remaining 30 days after delivery of the Report shall accrue an interest charge of 1.5% per month. Unless this agreement is earlier terminated by RA in the event you breach or otherwise fail to comply with your obligations under this agreement, RA's obligations under this agreement shall commence on the date you execute and deliver this agreement and terminate on the date that is 6 months from the date of delivery of the Report by RA. Notwithstanding anything herein to the contrary, each provision that by its context and nature should survive the expiration or early termination of this agreement shall so survive, including, without limitation, any provisions with respect to payment, intellectual property rights, limitations of liability and governing law. We reserve the right to limit or decline refunds in our sole discretion. Refunds vary based on the applicable facts and circumstances.

Miscellaneous – Neither party shall be liable for any failures or delays in performance due to fire, flood, strike or other labor difficulty, act of God, act of any governmental authority, riot, embargo, fuel or energy shortage, pandemic, wrecks or delays in transportation, or due to any other cause beyond such party's reasonable control; provided, however, that you shall not be relieved from your obligations to make any payment(s) to RA as and when due hereunder. In the event of a delay in performance due to any such cause, the time for completion or date of delivery will be extended by a period of time reasonably necessary to overcome the effect of such delay. You may not assign or otherwise transfer this agreement, in whole or in part, without the prior written consent of RA. RA may freely assign or otherwise transfer this agreement, in whole or in part, without your prior consent. This agreement shall be governed by the laws of the State of Wisconsin without regard to any principles of conflicts of law that would apply the laws of another jurisdiction. Any dispute with respect to this agreement shall be exclusively venued in Milwaukee County Circuit Court or in the United States District Court for the Eastern District of Wisconsin. Each party hereto agrees and hereby waives the right to a trial by jury in any action, proceeding or claim brought by or on behalf of the parties hereto with respect to any matter related to this agreement.