

FULL RESERVE STUDY

Beechwood Shores Homeowners Association



Moneta, Virginia

May 4, 2021



This Report contains intellectual property developed by Reserve Advisors, LLC and cannot be reproduced or distributed to those who conduct reserve studies without their written consent.

Beechwood Shores Homeowners Association
Moneta, Virginia

Dear Board of Directors of Beechwood Shores Homeowners Association:

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Full Reserve Study* of Beechwood Shores Homeowners Association in Moneta, Virginia and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, May 4, 2021.

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

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

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

Respectfully submitted on June 3, 2021 by

Reserve Advisors, LLC

Visual Inspection and Report by: Justin B. Klein

Review by: Alan M. Ebert, RS¹, 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>.



Long-term thinking. Everyday commitment.



Table of Contents

1. RESERVE STUDY EXECUTIVE SUMMARY	1.1
2. RESERVE STUDY REPORT	2.1
3. RESERVE EXPENDITURES and FUNDING PLAN.....	3.1
4. RESERVE COMPONENT DETAIL.....	4.1
Exterior Clubhouse Elements	4.1
Decks, Screens and Wood	4.1
Roof Assemblies, Asphalt Shingles	4.3
Walls, Siding, Wood, Paint Finishes	4.7
Walls, Siding, Wood, Replacement	4.9
Windows and Doors	4.10
Interior Clubhouse Elements.....	4.12
Exercise Equipment (Including Room Finishes)	4.12
Floor Coverings, Wood Laminate	4.13
Furnishings	4.14
Kitchen	4.15
Light Fixtures	4.16
Paint Finishes	4.17
Rest Rooms.....	4.18
Clubhouse Building Services Elements	4.19
Air Handling and Condensing Unit, Split System.....	4.19
Security System.....	4.20
Property Site Elements	4.21
Fences, Wood, Split Rail	4.21
Light Fixtures, Landscape	4.22
Tennis Court and Sport Court, Color Coat.....	4.23
Tennis Court and Sport Court, Fence.....	4.24
Tennis Court and Sport Court, Surface	4.24
Pool Elements.....	4.25
Concrete Deck.....	4.25
Cover, Vinyl	4.27
Fence, Wood	4.27



Furniture	4.29
Mechanical Equipment	4.30
Pool Finish, Plaster.....	4.31
Pool House, Interior Renovations	4.31
Retaining Walls, Masonry, Pool Deck.....	4.32
Structure and Deck.....	4.33
Reserve Study Update.....	4.35
5. METHODOLOGY	5.1
6. CREDENTIALS	6.1
7. DEFINITIONS	7.1
8. PROFESSIONAL SERVICE CONDITIONS	8.1



1. RESERVE STUDY EXECUTIVE SUMMARY

Client: Beechwood Shores Homeowners Association (Beechwood Shores)

Location: Moneta, Virginia

Reference: 210375

Property Basics: Beechwood Shores Homeowners Association is a mixed-use style development which is responsible for the common elements shared by 200 lots. The Association was established in 1979. The clubhouse and pool elements date to 1984.

Reserve Components Identified: 29 Reserve Components.

Inspection Date: May 4, 2021.

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 multiple threshold funding years in 2024 and 2048 due to replacement of the tennis court surface and fence and in 2041 due to replacement of the pool structure and deck.

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
- 0.9% anticipated 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.

Unaudited Cash Status of Reserve Fund:

- \$37,756 as of April 30, 2021
- 2021 budgeted Reserve Contributions of \$13,000
- A potential deficit in reserves might occur by 2024 based upon continuation of the most recent annual reserve contribution of \$13,000 and the identified Reserve Expenditures.

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:

- Replacement of the asphalt shingle roofs at the clubhouse and pool house
- Replacement of the surface at the tennis and sport court
- Partial replacement of the interior clubhouse furnishings
- Paint finish applications to the wood siding at the clubhouse and pool house
- Replacement of the vinyl pool cover
- Partial replacement of the pool furniture
- Renovation of the kitchen
- Replacement of the rest room fixtures

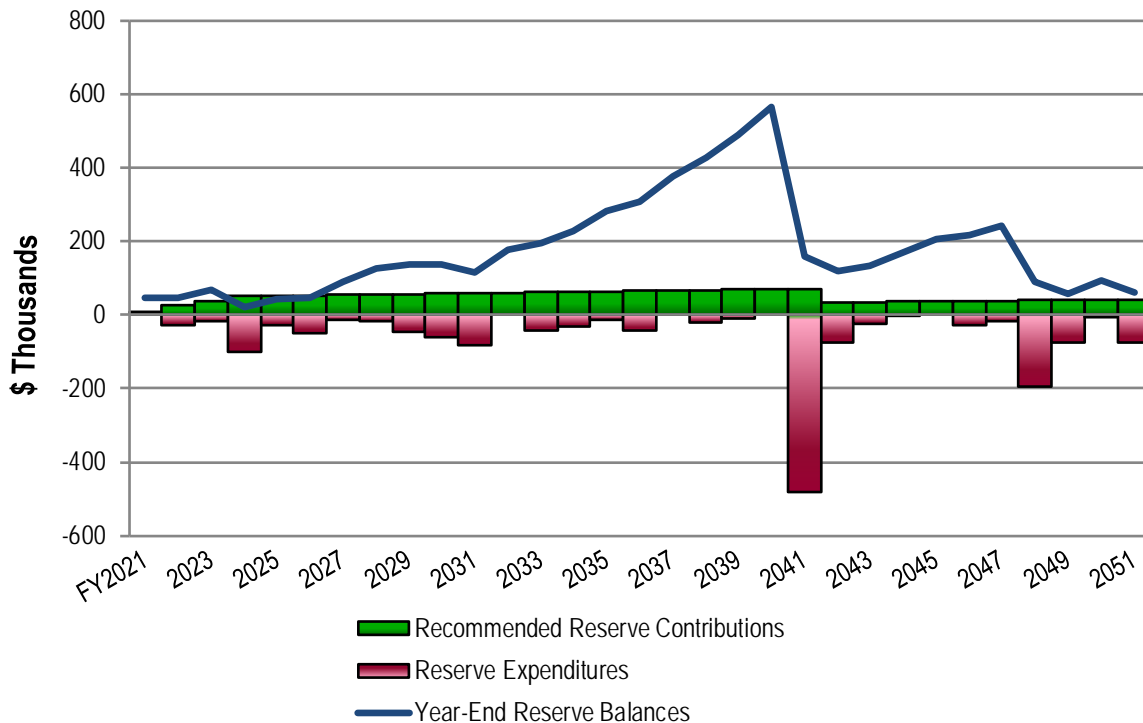


Recommended Reserve Funding: We recommend the following in order to achieve a stable and equitable Funding Plan:

- Phased increases of \$12,800 from 2022 through 2024
- Inflationary increases from 2025 through 2041
- Decrease to \$35,000 by 2042 due to fully funding for replacement of pool structure and deck
- Inflationary increases from 2043 through 2051, the limit of this study's Cash Flow Analysis
- Initial adjustment in Reserve Contributions of \$12,800 represents an average monthly increase of \$5.33 per homeowner and about a nineteen percent (18.7%) adjustment in the 2021 total Operating Budget of \$68,490.
- The Association may ascribe the actual contributions and assessments per owner based upon percent ownership, as defined by the Association’s governing documents.

Beechwood Shores
Recommended Reserve Funding Table and Graph

Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)
2022	25,800	46,373	2032	60,200	177,044	2042	35,000	119,413
2023	38,600	67,850	2033	61,400	196,636	2043	35,700	133,830
2024	51,400	19,943	2034	62,600	228,308	2044	36,400	168,391
2025	52,400	43,090	2035	63,900	281,362	2045	37,100	207,173
2026	53,400	46,234	2036	65,200	306,559	2046	37,800	219,024
2027	54,500	88,952	2037	66,500	376,117	2047	38,600	243,043
2028	55,600	127,141	2038	67,800	426,509	2048	39,400	90,290
2029	56,700	138,157	2039	69,200	489,099	2049	40,200	57,533
2030	57,800	137,341	2040	70,600	564,419	2050	41,000	93,777
2031	59,000	115,533	2041	72,000	159,552	2051	41,800	60,372





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

Beechwood Shores Homeowners Association

Moneta, Virginia

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, May 4, 2021.

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. The Expenditure tables in Section 3 list the elements contained in this study. Our analysis begins by segregating the property elements into several areas of responsibility for repair and replacement.

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

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

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

- Beechwood Shores 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 the 30-year Reserve Expenditures at this time:

- Electrical Systems, Common
- Foundations, Clubhouse and Pool House
- Pipes, Interior Building, Domestic Water, Sanitary Waste, Common
- Structural Frames, Clubhouse and Pool House

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

- General Maintenance to the Common Elements
- Expenditures less than \$2,000 (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)
- Acoustical Ceiling Tiles, Clubhouse
- Basketball Hoop
- Catch Basins, Landscape
- Concrete, Sidewalks, Partial Replacements
- Decks, Wood, Interim Replacements
- Fence, Wood, Pool, Paint Finishes and Partial Replacements, Interim
- Fireplace, Masonry, Inspections and Capital Repairs
- Floor Coverings, Wood Vinyl, Clubhouse
- Landscape, General Maintenance
- Light Fixtures, Clubhouse Exterior
- Light Pole and Fixture, Parking Area
- Paint Finishes, Touch Up
- Parking Area, Gravel Replenishment
- Retaining Wall, Masonry, Entrance Monument
- Signage, Entrance Monument
- Standards, Tennis Court
- Walking Trails, Grass, General Maintenance
- Water Heater, Clubhouse
- Other Repairs normally funded through the Operating Budget



Basketball hoop overview



Gravel parking area



Masonry fireplace overview



Retaining wall overview

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 unit:

- Homes and Lots

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

- Asphalt Pavement Street System (Bedford County)
- Hales Ford Public Boat Ramp (American Electric Power)

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
- 2021 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
- Predicted reserves based on current funding level

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

Beechwood Shores
Homeowners Association
Moneta, Virginia

Explanatory Notes:

- 1) **2.0%** is the estimated Inflation Rate for estimating Future Replacement Costs.
- 2) **FY2021 is Fiscal Year beginning January 1, 2021 and ending December 31, 2021.**

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 FY2021	1 2022	2 2023	3 2024	4 2025	5 2026	6 2027	7 2028	8 2029	9 2030	10 2031	11 2032	12 2033	13 2034	14 2035	15 2036
						Useful	Remaining	Unit (2021)	Per Phase (2021)	Total (2021)																	
Exterior Clubhouse Elements																											
1.110	450	450	Square Feet	Deck, Screens	2029	to 15	8	4.50	2,025	2,025	0.4%																2,373
1.157	530	530	Square Feet	Decks, Wood, Replacement	2029	15 to 25	8	28.00	14,840	14,840	1.1%																17,387
1.280	50	50	Squares	Roof Assemblies, Asphalt Shingles (Incl. Pool House)	2022	15 to 20	1	520.00	26,000	26,000	4.2%	26,520															
1.865	1	1	Allowance	Walls, Siding, Wood, Paint Finishes	2023	4 to 6	2	7,500.00	7,500	7,500	4.7%		7,803				8,446									9,896	
1.870	4,000	4,000	Square Feet	Walls, Siding, Wood, Replacement	2031	35 to 40	10	8.50	34,000	34,000	2.6%											41,446					
1.980	630	630	Square Feet	Windows and Doors (Incl. Pool House)	2031	to 40	10	44.00	27,720	27,720	2.1%											33,791					
Interior Clubhouse Elements																											
2.160	1	1	Allowance	Exercise Equipment (Including Room Finishes)	2034	to 15	13	15,000.00	15,000	15,000	2.9%															19,404	
2.400	80	80	Square Yards	Floor Coverings, Wood Laminate	2034	18 to 25	13	86.00	6,880	6,880	0.6%															8,900	
2.450	4	1	Allowance	Furnishings, Phased	2023	to 20	2 to 17	7,000.00	7,000	28,000	3.6%		7,283						8,041			8,878					
2.520	1	1	Allowance	Kitchen, Renovation	2026	to 25	5	21,000.00	21,000	21,000	3.9%						23,186										
2.560	35	35	Each	Light Fixtures	2026	to 20	5	120.00	4,200	4,200	0.7%						4,637										
2.800	5,600	5,600	Square Feet	Paint Finishes	2026	8 to 12	5	1.30	7,280	7,280	1.9%						8,038									9,798	
2.900	2	2	Each	Rest Rooms, Renovation	2026	to 25	5	6,700.00	13,400	13,400	2.5%						14,795										
Clubhouse Building Services Elements																											
3.070	1	1	Each	Air Handling and Condensing Unit, Split System	2038	15 to 20	17	8,000.00	8,000	8,000	0.7%																
3.820	1	1	Allowance	Security System	2031	10 to 15	10	5,500.00	5,500	5,500	1.0%											6,704					
Property Site Elements																											
4.286	870	870	Linear Feet	Fences, Wood, Split Rail	2030	to 25	9	26.00	22,620	22,620	1.7%															27,033	
4.299	17	17	Each	Light Fixtures, Landscape	2030	to 20	9	180.00	3,060	3,060	0.6%															3,657	
4.830	1,400	1,400	Square Yards	Tennis Court and Sport Court, Color Coat	2030	4 to 6	9	11.00	15,400	15,400	3.9%															18,404	20,726
4.840	450	450	Linear Feet	Tennis Court and Sport Court, Fence	2024	to 25	3	41.00	18,450	18,450	3.2%				19,579												
4.860	1,400	1,400	Square Yards	Tennis Court and Sport Court, Surface Replacement	2024	to 25	3	47.50	66,500	66,500	11.6%				70,570												
Pool Elements																											
6.200	3,870	3,870	Square Feet	Concrete Deck, Textured Coating, Partial Replacements and Repairs	2025	8 to 12	4	5.50	21,285	21,285	5.5%					23,040										26,995	
6.300	2,000	2,000	Square Feet	Cover, Vinyl	2025	6 to 8	4	3.00	6,000	6,000	2.1%				6,495											7,609	
6.400	250	250	Linear Feet	Fence, Wood	2028	15 to 20	7	36.00	9,000	9,000	1.6%							10,338									
6.500	2	1	Allowance	Furniture, Phased	2024	to 12	3 to 9	9,000.00	9,000	18,000	3.9%				9,551							10,756				12,113	
6.600	2	1	Allowance	Mechanical Equipment, Phased	2027	to 15	6 to 13	3,500.00	3,500	7,000	1.2%						3,942								4,528		
6.800	1,780	1,780	Square Feet	Pool Finish, Plaster	2029	8 to 12	8	13.00	23,140	23,140	1.7%											27,112					
6.840	1	1	Allowance	Pool House, Interior, Renovation	2041	to 20	20	11,000.00	11,000	11,000	1.0%																
6.888	350	350	Square Feet	Retaining Walls, Masonry, Inspection and Capital Repairs, Pool Deck	2023	10 to 15	2	7.00	2,450	2,450	0.6%		2,549													3,233	
6.900	1,780	1,780	Square Feet	Structure and Deck, Total Replacement	2041	to 60	20	170.00	302,600	302,600	28.4%																
Anticipated Expenditures, By Year (\$1,582,485 over 30 years)												0	26,520	17,635	99,700	29,535	50,656	12,388	18,379	46,872	59,850	81,941	0	43,482	32,832	13,129	42,637

RESERVE EXPENDITURES

Beechwood Shores Homeowners Association Moneta, Virginia

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years		Costs, \$			Percentage of Future Expenditures	16 2037	17 2038	18 2039	19 2040	20 2041	21 2042	22 2043	23 2044	24 2045	25 2046	26 2047	27 2048	28 2049	29 2050	30 2051	
						Useful	Remaining	Unit (2021)	Per Phase (2021)	Total (2021)																	
<u>Exterior Clubhouse Elements</u>																											
1.110	450	450	Square Feet	Deck, Screens	2029	to 15	8	4.50	2,025	2,025	0.4%															3,193	
1.157	530	530	Square Feet	Decks, Wood, Replacement	2029	15 to 25	8	28.00	14,840	14,840	1.1%																
1.280	50	50	Squares	Roof Assemblies, Asphalt Shingles (Incl. Pool House)	2022	15 to 20	1	520.00	26,000	26,000	4.2%						39,407										
1.865	1	1	Allowance	Walls, Siding, Wood, Paint Finishes	2023	4 to 6	2	7,500.00	7,500	7,500	4.7%			10,712				11,595				12,551				13,585	
1.870	4,000	4,000	Square Feet	Walls, Siding, Wood, Replacement	2031	35 to 40	10	8.50	34,000	34,000	2.6%																
1.980	630	630	Square Feet	Windows and Doors (Incl. Pool House)	2031	to 40	10	44.00	27,720	27,720	2.1%																
<u>Interior Clubhouse Elements</u>																											
2.160	1	1	Allowance	Exercise Equipment (Including Room Finishes)	2034	to 15	13	15,000.00	15,000	15,000	2.9%															26,115	
2.400	80	80	Square Yards	Floor Coverings, Wood Laminate	2034	18 to 25	13	86.00	6,880	6,880	0.6%																
2.450	4	1	Allowance	Furnishings, Phased	2023	to 20	2 to 17	7,000.00	7,000	28,000	3.6%		9,802					10,822							11,948		
2.520	1	1	Allowance	Kitchen, Renovation	2026	to 25	5	21,000.00	21,000	21,000	3.9%															38,039	
2.560	35	35	Each	Light Fixtures	2026	to 20	5	120.00	4,200	4,200	0.7%															6,891	
2.800	5,600	5,600	Square Feet	Paint Finishes	2026	8 to 12	5	1.30	7,280	7,280	1.9%															11,944	
2.900	2	2	Each	Rest Rooms, Renovation	2026	to 25	5	6,700.00	13,400	13,400	2.5%															24,272	
<u>Clubhouse Building Services Elements</u>																											
3.070	1	1	Each	Air Handling and Condensing Unit, Split System	2038	15 to 20	17	8,000.00	8,000	8,000	0.7%		11,202														
3.820	1	1	Allowance	Security System	2031	10 to 15	10	5,500.00	5,500	5,500	1.0%															9,023	
<u>Property Site Elements</u>																											
4.286	870	870	Linear Feet	Fences, Wood, Split Rail	2030	to 25	9	26.00	22,620	22,620	1.7%																
4.299	17	17	Each	Light Fixtures, Landscape	2030	to 20	9	180.00	3,060	3,060	0.6%															5,434	
4.830	1,400	1,400	Square Yards	Tennis Court and Sport Court, Color Coat	2030	4 to 6	9	11.00	15,400	15,400	3.9%						23,341										
4.840	450	450	Linear Feet	Tennis Court and Sport Court, Fence	2024	to 25	3	41.00	18,450	18,450	3.2%															31,492	
4.860	1,400	1,400	Square Yards	Tennis Court and Sport Court, Surface Replacement	2024	to 25	3	47.50	66,500	66,500	11.6%															113,508	
<u>Pool Elements</u>																											
6.200	3,870	3,870	Square Feet	Concrete Deck, Textured Coating, Partial Replacements and Repairs	2025	8 to 12	4	5.50	21,285	21,285	5.5%															37,058	
6.300	2,000	2,000	Square Feet	Cover, Vinyl	2025	6 to 8	4	3.00	6,000	6,000	2.1%					8,916										10,446	
6.400	250	250	Linear Feet	Fence, Wood	2028	15 to 20	7	36.00	9,000	9,000	1.6%															15,362	
6.500	2	1	Allowance	Furniture, Phased	2024	to 12	3 to 9	9,000.00	9,000	18,000	3.9%						13,641								15,362		
6.600	2	1	Allowance	Mechanical Equipment, Phased	2027	to 15	6 to 13	3,500.00	3,500	7,000	1.2%					5,201									5,974		
6.800	1,780	1,780	Square Feet	Pool Finish, Plaster	2029	8 to 12	8	13.00	23,140	23,140	1.7%																
6.840	1	1	Allowance	Pool House, Interior, Renovation	2041	to 20	20	11,000.00	11,000	11,000	1.0%						16,345										
6.888	350	350	Square Feet	Retaining Walls, Masonry, Inspection and Capital Repairs, Pool Deck	2023	10 to 15	2	7.00	2,450	2,450	0.6%														4,100		
6.900	1,780	1,780	Square Feet	Structure and Deck, Total Replacement	2041	to 60	20	170.00	302,600	302,600	28.4%						449,648										
Anticipated Expenditures, By Year (\$1,582,485 over 30 years)												0	21,004	10,712	0	480,110	76,389	22,417	3,193	0	27,858	16,651	193,646	73,619	5,434	75,896	

RESERVE FUNDING PLAN

CASH FLOW ANALYSIS
Beechwood Shores
Homeowners Association

		Individual Reserve Budgets & Cash Flows for the Next 30 Years															
Moneta, Virginia		FY2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Reserves at Beginning of Year	(Note 1)	37,756	46,676	46,373	67,850	19,943	43,090	46,234	88,952	127,141	138,157	137,341	115,533	177,044	196,636	228,308	281,362
Total Recommended Reserve Contributions	(Note 2)	8,667	25,800	38,600	51,400	52,400	53,400	54,500	55,600	56,700	57,800	59,000	60,200	61,400	62,600	63,900	65,200
Estimated Interest Earned, During Year	(Note 3)	253	417	512	393	282	400	606	968	1,188	1,234	1,133	1,311	1,674	1,904	2,283	2,634
Anticipated Expenditures, By Year		0	(26,520)	(17,635)	(99,700)	(29,535)	(50,656)	(12,388)	(18,379)	(46,872)	(59,850)	(81,941)	0	(43,482)	(32,832)	(13,129)	(42,637)
Anticipated Reserves at Year End		<u>\$46,676</u>	<u>\$46,373</u>	<u>\$67,850</u>	<u>\$19,943</u>	<u>\$43,090</u>	<u>\$46,234</u>	<u>\$88,952</u>	<u>\$127,141</u>	<u>\$138,157</u>	<u>\$137,341</u>	<u>\$115,533</u>	<u>\$177,044</u>	<u>\$196,636</u>	<u>\$228,308</u>	<u>\$281,362</u>	<u>\$306,559</u>
Predicted Reserves based on 2021 funding level of:	\$13,000	46,676	33,515	29,161	(57,667)	(74,795)											

(continued)

		Individual Reserve Budgets & Cash Flows for the Next 30 Years, Continued														
		2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051
Reserves at Beginning of Year		306,559	376,117	426,509	489,099	564,419	159,552	119,413	133,830	168,391	207,173	219,024	243,043	90,290	57,533	93,777
Total Recommended Reserve Contributions		66,500	67,800	69,200	70,600	72,000	35,000	35,700	36,400	37,100	37,800	38,600	39,400	40,200	41,000	41,800
Estimated Interest Earned, During Year		3,058	3,596	4,102	4,720	3,243	1,250	1,134	1,354	1,682	1,909	2,070	1,493	662	678	691
Anticipated Expenditures, By Year		0	(21,004)	(10,712)	0	(480,110)	(76,389)	(22,417)	(3,193)	0	(27,858)	(16,651)	(193,646)	(73,619)	(5,434)	(75,896)
Anticipated Reserves at Year End		<u>\$376,117</u>	<u>\$426,509</u>	<u>\$489,099</u>	<u>\$564,419</u>	<u>\$159,552</u>	<u>\$119,413</u>	<u>\$133,830</u>	<u>\$168,391</u>	<u>\$207,173</u>	<u>\$219,024</u>	<u>\$243,043</u>	<u>\$90,290</u>	<u>\$57,533</u>	<u>\$93,777</u>	<u>\$60,372</u>

Explanatory Notes:

- 1) Year 2021 starting reserves are as of April 30, 2021; FY2021 starts January 1, 2021 and ends December 31, 2021.
- 2) Reserve Contributions for 2021 are the remaining budgeted 8 months; 2022 is the first year of recommended contributions.
- 3) 0.9% is the estimated annual rate of return on invested reserves; 2021 is a partial year of interest earned.
- 4) Accumulated year 2051 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**Beechwood Shores
Homeowners Association**
Moneta, Virginia

Line Item	Reserve Component Inventory	RUL = 0 FY2021	1 2022	2 2023	3 2024	4 2025	5 2026
<u>Exterior Clubhouse Elements</u>							
1.280	Roof Assemblies, Asphalt Shingles (Incl. Pool House)		26,520				
1.865	Walls, Siding, Wood, Paint Finishes			7,803			
<u>Interior Clubhouse Elements</u>							
2.450	Furnishings, Phased			7,283			
2.520	Kitchen, Renovation						23,186
2.560	Light Fixtures						4,637
2.800	Paint Finishes						8,038
2.900	Rest Rooms, Renovation						14,795
<u>Property Site Elements</u>							
4.840	Tennis Court and Sport Court, Fence				19,579		
4.860	Tennis Court and Sport Court, Surface Replacement				70,570		
<u>Pool Elements</u>							
6.200	Concrete Deck, Textured Coating, Partial Replacements and Repairs					23,040	
6.300	Cover, Vinyl					6,495	
6.500	Furniture, Phased				9,551		
6.888	Retaining Walls, Masonry, Inspection and Capital Repairs, Pool Deck			2,549			
Anticipated Expenditures, By Year (\$1,582,485 over 30 years)		0	26,520	17,635	99,700	29,535	50,656

4. RESERVE COMPONENT DETAIL

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

Exterior Clubhouse Elements



Clubhouse elevation overview



Clubhouse elevation overview

Decks, Screens and Wood

Line Items: 1.110 and 1.157

Quantity: Three wood decks which comprise a total of 530 square feet with one deck enclosed by approximately 450 square feet of screens

History: Unknown age; the Association reportedly performed a stain application to the decks approximately five to six years ago

Condition: The decks are in good to fair overall condition with warped components evident. The screens are in good to fair overall condition



Wood deck overview at southeast elevation



Wood deck overview at southwest entrance



Stairs with railing at southeast deck



Wood deflection



Screen overview



Screen overview

Useful Life: Wood decks last 15- to 25-years with proper maintenance; we recommend interim replacement of the deck boards be funded through the operating budget. The rates and types of deterioration are not uniform due to the nature of wood. Replacement

is normally an ongoing process which eventually leads to a complete replacement for economic or aesthetic reasons. We anticipate a useful life of up to 15 years for the screens.

Component Detail Notes: Deck construction includes the following:

- Deck boards fastened with nails. Nail fasteners have a tendency to pull out as the wood warps.
- Wood column supported frames
- Exposed concrete footings

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

- Annually:
 - Inspect to identify and correct any unsafe conditions
 - Secure loose fasteners and replace deteriorated fasteners
 - Replace deteriorated wood components
 - Check railing stability and fasteners
- Every three years:
 - Power wash with algaecide and application of sealer/stain 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. We recommend the Association fund for interim replacements of the deck boards through the operating budget.

Roof Assemblies, Asphalt Shingles

Line Item: 1.280

Quantity: Approximately 50 squares¹ at the clubhouse and pool house

History: Unknown age; the Association plans to replace the roof in the near term.

Condition: Fair to poor overall with shingle lift and organic growth shingles evident from our visual inspection from the ground. The Board does not report a history of leaks.

¹ We quantify the roof area in squares where one square is equal to 100 square feet of surface area.



Clubhouse roof overview



Clubhouse roof overview – Note: organic growth



Clubhouse roof shingle lift and organic growth



Pool house roof overview



Pool house shingle lift



Pool house shingle lift

Useful Life: 15- to 20-years

Component Detail Notes: The existing roof assembly comprises the following:

- Laminate three tab shingles
- Boston style ridge caps
- Rubber seal with metal base boot flashing at waste pipes
- Soffit and gable vents
- Lack metal drip edge at the roof perimeters (this condition increases the likelihood of water infiltration)

Insulation and ventilation are two major components of a sloped roof system. Together, proper insulation and ventilation help to control attic moisture and maintain an energy efficient building. Both insulation and ventilation prevent moisture buildup which can cause wood rot, mold and mildew growth, warp sheathing, deteriorate shingles, and eventually damage building interiors. Sufficient insulation helps to minimize the quantity of moisture that enters the attic spaces and adequate ventilation helps to remove any moisture that enters the attic spaces. These two roof system components also help to reduce the amount of energy that is required to heat and cool a building. Proper attic insulation minimizes heat gain and heat loss between the residential living spaces and attic spaces. This reduces energy consumption year-round. Proper attic ventilation removes excessive heat from attic spaces that can radiate into residential living spaces and cause air conditioners to work harder. Properly installed attic insulation and ventilation work together to maximize the useful life of sloped roof systems.

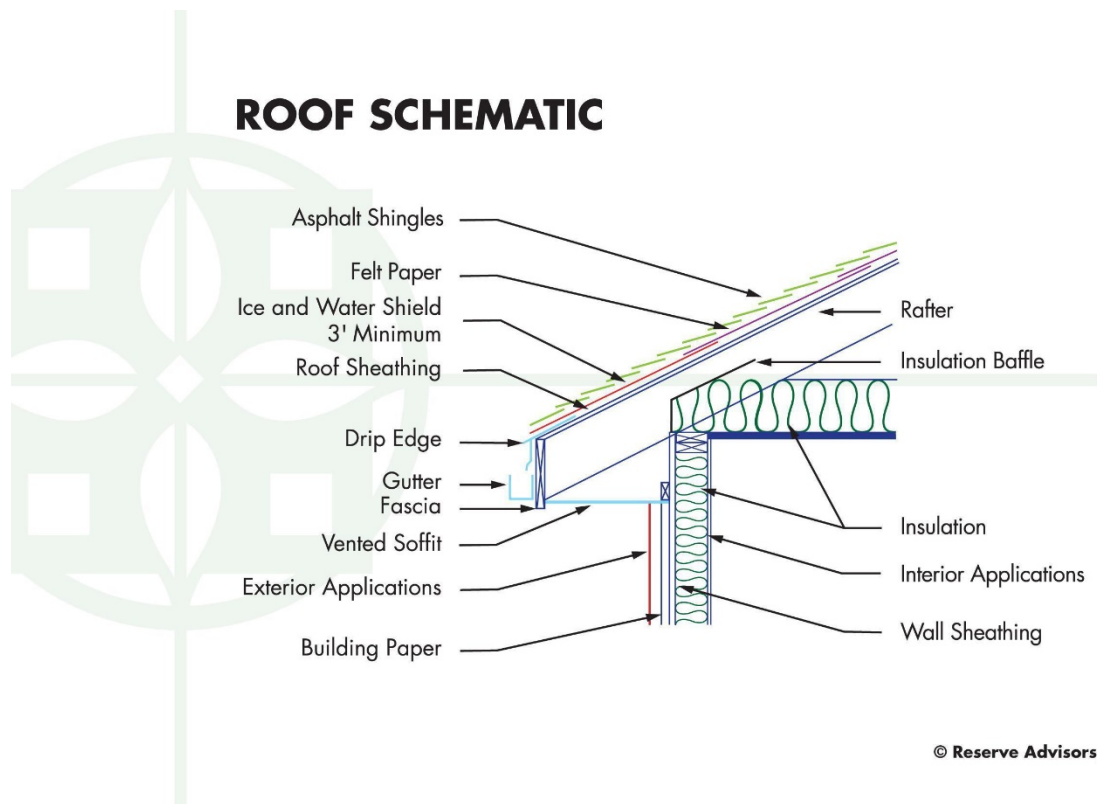
In addition to moisture control and energy conservation, proper attic insulation and ventilation are essential components to prevent the formation of ice dams. Ice dams occur when warm air accumulates at the peak of an attic while the roof eaves remain cold. Warm air from the attic melts the snow at the ridge of the roof and the water runs down the slope of the roof. At the cold roof eaves, the water refreezes and forms a buildup of snow and ice. This buildup often traps water that can prematurely deteriorate asphalt shingles and ultimately seep under the shingles and cause water damage to the roof deck and building interiors. Proper insulation minimizes the amount of heat that enters attic spaces in the winter and adequate ventilation helps to remove any heat that enters the attic spaces. Together, these components prevent ice dams with a cold roof deck that melts snow and ice evenly.

The vents should be clear of debris and not blocked from above by attic insulation. If the soffit vents are blocked from above, installation of polystyrene vent spaces or baffles between the roof joists at these locations can ensure proper ventilation.

Certain characteristics of condition govern the times of replacement. Replacement of an asphalt shingle roof becomes necessary when there are multiple or recurring leaks and when the shingles begin to cup, curl and lift. These conditions are indications that the asphalt shingle roof is near the end of its useful life. Even if the shingles are largely watertight, the infiltration of water in one area can lead to permanent damage to the underlying roof sheathing. This type of deterioration requires replacement of saturated sections of sheathing and greatly increases the cost of roof replacement. Roof leaks may occur from interrelated roof system components, i.e., flashings. Therefore, the warranty period, if any, on the asphalt shingles, may exceed the useful life of the roof system.

Warranties are an indication of product quality and are not a product guarantee. Asphalt shingle product warranties vary from 20- to 50-years and beyond. However, the scope is usually limited to only the material cost of the shingles as caused by manufacturing defects. Warranties may cover defects such as thermal splitting, granule loss, cupping, and curling. Labor cost is rarely included in the remedy so if roof materials fail, the labor to tear off and install new shingles is extra. Other limitations of warranties are exclusions for "incidental and consequential" damages resulting from age, hurricanes, hail storms, ice dams, severe winds, tornadoes, earthquakes, etc. There are some warranties which offer no dollar limit for replacement at an additional cost (effectively an insurance policy) but again these warranties also have limits and may not cover all damages other than a product defect. We recommend a review of the manufacturers' warranties as part of the evaluation of competing proposals to replace a roof system. This evaluation should identify the current costs of remedy if the roof were to fail in the near future. A comparison of the costs of remedy to the total replacement cost will assist in judging the merits of the warranties.

The following cross-sectional schematic illustrates a typical asphalt shingle roof system although it may not reflect the actual configuration at Beechwood Shores:



Contractors use one of two methods for replacement of sloped roofs, either an overlayment or a tear-off. Overlayment is the application of new shingles over an existing roof. However, there are many disadvantages to overlayment including hidden defects of the underlying roof system, absorption of more heat resulting in accelerated deterioration of the new and old shingles, and an uneven visual appearance. Therefore, we recommend only the tear-off method of replacement. The tear-off method of

replacement includes removal of the existing shingles, flashings if required and underlayments.

The Association should plan to coordinate the replacement of gutters and downspouts with the adjacent roofs. This will result in the most economical unit price and minimize the possibility of damage to other roof components as compared to separate replacements.

Preventative Maintenance Notes: We recommend the Association maintain a service and inspection contract with a qualified professional and record all documentation of repairs conducted. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
 - Record any areas of water infiltration, flashing deterioration, damage or loose shingles
 - Inspect for ice dams and implement repairs as needed if issues are reoccurring
 - Trim tree branches that are near or in contact with roof
- As-needed:
 - Ensure proper ventilation and verify vents are clear of debris and not blocked from attic insulation

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 base our cost on replacement with architectural dimensional shingles.

Walls, Siding, Wood, Paint Finishes

Line Item: 1.865

Quantity: Approximately 4,000 square feet of wood trim, siding, and soffit and fascia at the clubhouse and pool house

History: Unknown age

Condition: Fair overall with faded and chipped paint evident



Wood trim deterioration



Wood trim overview



Wood siding finish deterioration



Wood siding finish deterioration

Useful Life: 4- to 6-years

Component Detail Notes: Correct and complete preparation of the surface before application of the paint finish maximizes the useful life of the paint finish and surface. The contractor should remove all loose, peeled or blistered paint before application of the new paint finish. The contractor should then power wash the surface to remove all dirt or chalking of the prior paint finish.

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 assume the following activities per event:

- Paint finish applications
- Replacement of 100 square feet, or up to five percent (5%), of the siding and trim (The exact amount of material in need of replacement will depend on the actual future conditions and desired appearance. We recommend replacement wherever holes, cracks and deterioration impair the ability of the material to prevent water infiltration.)

- Replacement of sealants as needed

Walls, Siding, Wood, Replacement

Line Item: 1.870

Quantity: Approximately 4,000 square feet of the exterior walls at the clubhouse and pool house

History: Original

Condition: Fair overall with loose pieces evident



Siding overview



Siding overview



Siding overview



Loose trim

Useful Life: 35- to 40-years. This useful life is dependent upon timely paint applications and partial replacements of deteriorated siding.

Component Detail Notes: Wood siding is not watertight and is especially prone to water penetration at joints and knots. Therefore, wood siding should be installed over a

continuous weather resistant barrier. The weather resistant barrier should include water-vapor permeable building paper and properly integrated flashing around all penetrations.

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

- Annually:
 - Inspect and repair loose siding, warping, wildlife damage and sealant deterioration
 - Inspect and repair finish deterioration, peeling and chipping
 - Touch-up paint finishes as necessary to ensure a uniform finish in between complete finish applications

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.

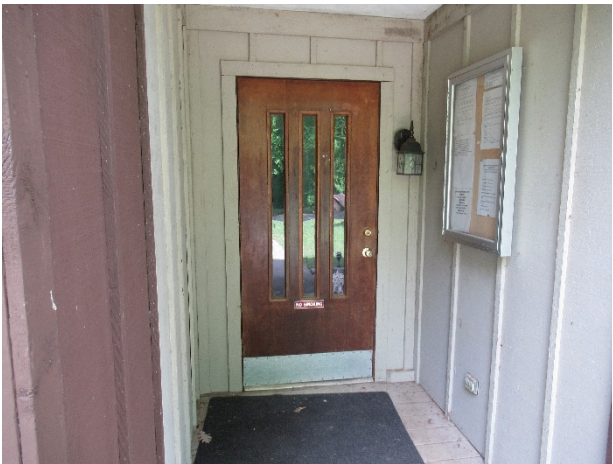
Windows and Doors

Line Item: 1.980

Quantity: 630 square feet of windows and doors at the clubhouse and pool house

History: Mostly original; the Association replaced two screen doors in 2019.

Condition: Reported satisfactory



Door overview



Window overview



Screen door overview

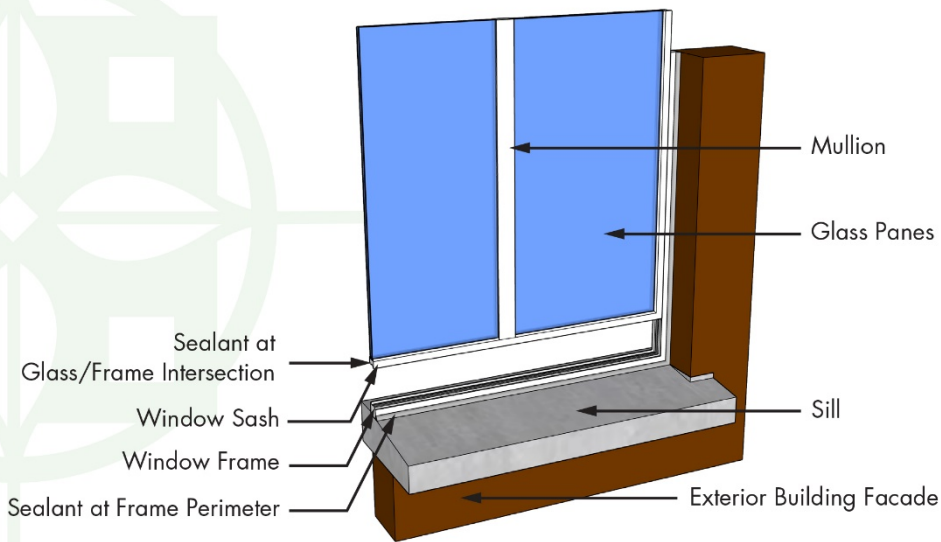


Window and door overview

Useful Life: Up to 40 years

Component Detail Notes: The following schematic depicts the typical components of a window system although it may not reflect the actual configuration at Beechwood Shores:

WINDOW DETAIL



© Reserve Advisors

The thermal efficiencies of the window and door assemblies are affected by their design and construction components. These components include glazings, thickness of air space between glazings, low-conductivity gas, tinted coatings, low-e coatings and thermal barriers. The Association should thoroughly investigate these component options at the time of replacement. Some manufacturers may include these components as part of the

standard product and other manufacturers may consider these components as options for an additional cost. Beechwood Shores should review the specifications provided by the manufacturers to understand the thermal design and construction components of the proposed assemblies.

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

- Annually:
 - Inspect and repair loose weather stripping and/or lock damage
 - Inspect for broken glass and damaged screens
 - Record instances of water infiltration, trapped moisture or leaks

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.

Interior Clubhouse Elements

Exercise Equipment (Including Room Finishes)

Line Items: 2.160

Quantity: The exercise room contains the following types of cardiovascular aerobic training equipment:

- Stationary cycle
- Television
- Treadmill

The exercise room contains the following types of strength training equipment:

- Benches
- Dumbbells

History: Exercise equipment is various ages. The Association performed a renovation two years ago that included installation of the rubber flooring, replacement of exercise equipment and painting the walls.

Conditions: Good overall



Exercise room overview

Useful Life: The useful life of the exercise equipment and finishes is up to 15 years.

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We recommend Beechwood Shores anticipate replacement of all cardiovascular equipment and up to one hundred percent (100%) of the strength training equipment per renovation. Each renovation also includes replacement of the rubber flooring and paint finish applications to the walls.

Floor Coverings, Wood Laminate

Line Item: 2.400

Quantity: 80 square yards at the hallways and grand room

History: Reportedly replaced ten years ago

Condition: Good overall



Grand room overview



Hallway overview

Useful Life: 18- to 25-years

Priority/Criticality: Per Board discretion

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

Furnishings

Line Item: 2.450

Quantity: Furnishings and components in the clubhouse include but are not limited to the following elements:

- Benches
- Bookcases
- Chairs
- Folding chairs
- Folding tables
- Lamp
- Poker Table
- Sofa
- Swivel Chairs
- Tables
- Window treatments

History: Various unknown ages

Condition: Good to fair overall



Furnishings overview



Furnishings overview

Useful Life: Varies significantly up to 20 years

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Due to varied uses, ages and useful lives, we recommend the Association budget \$7,000 plus inflation for phased replacements of up to twenty-five percent (25%) of the furnishings per event.

Kitchen

Line Item: 2.520

Quantity: Components of the kitchen include:

- Wood laminate floor covering
- Paint finishes at the walls and ceilings
- Appliances
- Cabinets and countertops
- Light fixtures

History: Components are of unknown age

Condition: Fair overall



Kitchen overview

Useful Life: Renovation up to every 25 years

Priority/Criticality: Per Board discretion

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

Light Fixtures

Line Item: 2.560

Quantity: Approximately 35 interior wall and ceiling mounted light fixtures located throughout the clubhouse

History: Various unknown ages

Condition: Reported satisfactory



Light fixture overview



Light fixture overview

Useful Life: Up to 20 years

Priority/Criticality: Per Board discretion

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

Paint Finishes

Line Item: 2.800

Quantity: Approximately 5,600 square feet on the walls at the hallways and rooms

History: The Association reportedly repainted five to six years ago

Condition: Good to fair overall



Paint finish overview



Paint finish overview

Useful Life: 8- to 12-years

Priority/Criticality: Per Board discretion

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

Rest Rooms

Line Item: 2.900

Quantity: Two common located at in the clubhouse. The rest room components include:

- Tile floor coverings
- Wall coverings
- Painted ceiling finishes
- Paint finishes
- Light fixtures
- Plumbing fixtures

History: Components are of unknown age; the wall coverings were reportedly replaced 15 years ago.

Condition: Fair overall



Rest room overview



Rest room overview

Useful Life: Renovation up to every 25 years

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our cost for renovation includes replacement of the tile floor coverings, wall coverings, paint applications to the ceilings and replacement of the plumbing and light fixtures.

Clubhouse Building Services Elements

Air Handling and Condensing Unit, Split System

Line Item: 3.070

Quantity: One Heil split system

History: Installed in 2018

Condition: Reported satisfactory without operational deficiencies



Split system overview

Useful Life: 15- to 20-years

Component Detail Notes: A split system air conditioner consists of an outside condensing unit, an interior evaporator coil, refrigerant lines and an interior electric air handling unit. The condensing unit has a cooling capacity of 5-tons. The split system uses R-410A refrigerant.

Preventative Maintenance Notes: We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. We also recommend the Association maintain a maintenance contract with a qualified professional. The required preventative maintenance may vary in frequency and scope based on the unit's age, operational condition, or changes in technology. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Semi-annually:
 - Lubricate motors and bearings
 - Change or clean air filters as needed
 - Inspect condenser base and piping insulation
 - Inspect base pan, coil, cabinet and clear obstructions as necessary
- Annually:
 - Clean coils and drain pans, clean fan assembly, check refrigerant charge, inspect fan drive system and controls

- Inspect and clean accessible ductwork as needed
- Clean debris from inside cabinet, inspect condenser compressor and associated tubing for damage

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. The condensing unit may require replacement prior to replacement of the related interior forced air unit. For purposes of this Reserve Study, we assume coordination of replacement of the interior forced air unit, evaporator coil, refrigerant lines and exterior condensing unit.

Security System

Line Item: 3.820

Quantity: Beechwood Shores utilizes the following security system components:

- Cameras
- Multiplexer
- Recorder

History: Reportedly installed five years ago

Condition: Reported satisfactory



Security system overview

Useful Life: 10- to 15-years

Preventative Maintenance Notes: We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. The required preventative maintenance may vary in frequency and scope based on the unit's age, operational condition, or changes in technology. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Monthly:
 - Check cameras for proper focus, fields of view are unobstructured and camera and lenses are clean and dust-free
 - Check recording equipment for proper operation
 - Verify monitors are free from distortion with correct brightness and contrast
- Annually:
 - Check exposed wiring and cables for wear, proper connections and signal transmission
 - Check power connections, and if applicable, functionality of battery power supply systems

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. The Association should anticipate replacement of all of the security system components per event.

Property Site Elements

Fences, Wood, Split Rail

Line Item: 4.286

Quantity: 870 linear feet along Meadow Point Drive and Timberwood Lane

History: Unknown ages

Condition: Good to fair overall condition with missing rails and replaced sections evident



Wood rail fence overview



Missing rail

Useful Life: Up to 25 years

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

- Annually:
 - Inspect and repair loose sections, and damage
 - Repair leaning sections and clear vegetation from fence areas which could cause damage

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. The Association should anticipate periodic partial replacements funded through the operating budget due to the non-uniform nature of wood deterioration.

Light Fixtures, Landscape

Line Item: 4.299

Quantity: 17 landscape light fixtures that line the concrete sidewalk leading to the clubhouse

History: Original

Condition: Fair overall



Light fixture overview

Useful Life: Up to 20 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.

Tennis Court and Sport Court, Color Coat

Line Item: 4.830

Quantity: 1,400 square yards comprising one tennis court and one sport court

History: Likely original

Condition: Poor overall with cracks, deterioration and evidence of standing water



Tennis court and sport court overview



Cracks and deterioration



Cracks



Cracks and evidence of standing water

Useful Life: Four- to six-years

Component Detail Notes: Prior to the application of the color coat, the Association should require the contractor to rout and fill all cracks with hot emulsion. This deters water infiltration and further deterioration of the asphalt playing surface.

Priority/Criticality: Not recommended to defer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We defer based on other funding priorities, but recommend earlier replacement if funds become available.

Tennis Court and Sport Court, Fence

Line Item: 4.840

Quantity: 450 linear feet

History: Likely original

Condition: Fair overall with rust evident



Fence overview



Rust at fence

Useful Life: Up to 25 years

Priority/Criticality: Per Board discretion

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

Tennis Court and Sport Court, Surface

Line Item: 4.860

Quantity: 1,400 square yards of asphalt comprising one tennis court and one sport court

History: Likely original

Condition: Good overall with cracks and deterioration evident

Useful Life: Up to 25 years

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

- Annually:
 - Inspect and repair large cracks, trip hazards and possibly safety hazards
 - Verify gate and fencing is secure
 - Verify lighting is working properly if applicable
 - Inspect and repair standards and windscreens as needed

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.

Pool Elements



Pool overview



Pool overview

Concrete Deck

Line Item: 6.200

Quantity: 3,870 square feet

History: The Association reportedly performed repairs and a coating application to the concrete deck three to four years ago.

Condition: Good to fair condition with cracks evident



Concrete deck overview



Concrete deck cracks

Useful Life: The useful life of a concrete pool deck is up to 60 years or more with timely repairs. We recommend the Association conduct inspections, partial replacements and repairs to the deck every 8- to 12-years.

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

- Semi-annually:
 - Inspect and repair large cracks, trip hazards, and possible safety hazards
 - Inspect and repair pool coping for cracks, settlement, heaves or sealant deterioration
 - Conduct coating repairs in areas with delamination and concrete spalling
 - Schedule periodic pressure cleanings as needed

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 budget for the following per event:

- Selective cut out and replacements of up to ten percent (10%) of concrete
- Application of textured coating
- Crack repairs as needed
- Mortar joint repairs
- Caulk replacement

Cover, Vinyl

Line Item: 6.300

Quantity: 2,000 square feet

History: Reportedly replaced eight years ago

Condition: Fair overall



Pool cover overview

Useful Life: Six- to eight-years

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Based on condition at the time of inspection, we defer replacement of the cover to 2024.

Fence, Wood

Line Item: 6.400

Quantity: 250 linear feet at the perimeter of the pool deck

History: Unknown age; the Association installed the top composite railing and painted the fence a few years ago

Condition: Good to fair overall condition with leaning sections evident



Wood fence overview



Wood fence overview



Fence lean

Useful Life: 15- to 20-years

Component Detail Notes: The Association should anticipate periodic partial replacements due to the non-uniform nature of wood deterioration. Along with these partial replacements, the Association should apply periodic paint applications as needed and fund these activities through the operating budget.

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

- Annually:
 - Inspect and repair loose sections, finish deterioration and damage
 - Repair leaning sections and clear vegetation from fence areas which could cause damage

Priority/Criticality: Not recommended to defer

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

Furniture

Line Item: 6.500

Quantity: The pool furniture includes the following:

- Chairs
- Lounges
- Tables
- Ladders and life safety equipment

History: Various unknown ages

Condition: Good to fair overall



Pool furniture overview

Useful Life: Up to 12 years

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We recommend interim re-strapping and other repairs to the furniture as normal maintenance to maximize its useful life.

Mechanical Equipment

Line Item: 6.600

Quantity: The mechanical equipment includes the following:

- Automatic chlorinator
- Controls
- Filter
- Interconnected pipe, fittings and valves
- Pumps
- Electrical panel
- Water heater

History: The Association recently replaced the pool pump and filters

Condition: Reported satisfactory



Mechanical equipment overview

Useful Life: Up to 15 years

Preventative Maintenance Notes: We recommend the Association maintain a maintenance contract with a qualified professional and follow the manufacturer's specific recommended maintenance and local, state and/or federal inspection guidelines.

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. Failure of the pool mechanical equipment as a single event is unlikely. Therefore, we include replacement of up to fifty percent (50%) of the equipment per event. We consider interim replacement of motors and minor repairs as normal maintenance.

Pool Finish, Plaster

Line Items: 6.800

Quantity: 1,780 square feet of plaster based on the horizontal surface area

History: The plaster was refinished three to four years ago.

Condition: We were unable to inspect the pool due to the cover.

Useful Life: 8- to 12-years for the plaster

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

- Semi-annually:
 - Inspect and patch areas of significant plaster delamination, coping damage and structure cracks
 - Inspect main drain connection and anti-entrapment covers, pressure test circulation piping and valves
 - Test handrails and safety features for proper operation

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 budget for full tile replacement every other plaster replacement event. Removal and replacement of the finish provides the opportunity to inspect the pool structure and to allow for partial repairs of the underlying concrete surfaces as needed. To maintain the integrity of the pool structure, we recommend the Association budget for the following:

- Removal and replacement of the plaster finish
- Partial replacements of the scuppers and coping as needed
- Replacement of joint sealants as needed
- Concrete structure repairs as needed

Pool House, Interior Renovations

Line Item: 6.840

Quantity: The components of the pool interior include:

- Concrete floorings
- Paint finishes on the walls and ceilings
- Plumbing fixtures

History: The Association last renovated the pool house interior in 2021.

Condition: Good overall



Rest room overview



Rest room overview

Useful Life: Complete interior renovation every 20 years.

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. The complete renovation should include replacement of all the plumbing fixtures and paint finish applications to the floor, wall and ceilings.

Retaining Walls, Masonry, Pool Deck

Line Item: 6.888

Quantity: Approximately 350 square feet at the perimeter of the pool deck

History: Original

Condition: Good to fair overall with step cracks and efflorescence evident



Masonry retaining wall overview



Masonry retaining wall overview



Masonry retaining wall step cracks



Efflorescence

Useful Life: Masonry retaining walls have indeterminate useful lives. However, we recommend the Association plan for inspections and capital repairs every 10- to 15-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, partial resetting and replacement of up to fifteen percent (15%).

Structure and Deck

Line Item: 6.900

Quantity: 1,780 square feet of horizontal surface area

History: Installed in 1984

Conditions: Visually appears in good to fair condition. The concrete floors and walls have a plaster finish. This finish makes it difficult to thoroughly inspect the concrete structure during a noninvasive visual inspection.

Useful Life: Up to 60 years

Component Detail Notes: The need to replace a pool structure depends on the condition of the concrete structure, the condition of the embedded or concealed water circulation piping, possible long-term uneven settlement of the structure, and the increasing cost of repair and maintenance. Deterioration of any one of these component systems could result in complete replacement of the pool. For example, deferral of a deteriorated piping system could result in settlement and cracks in the pool structure. This mode of failure is more common as the system ages and deterioration of the piping system goes undetected. For reserve budgeting purposes, we recommend Beechwood Shores plan to replace the following components:



- Concrete deck
- Fence, wood
- Pool structure
- Subsurface piping

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.

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 in two- to three-years. Budgeting for an Update demonstrates the Board's objective to continue fulfilling its fiduciary responsibility to maintain the commonly owned property and to fund reserves appropriately.

5.METHODOLOGY

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

Beechwood Shores can fund capital repairs and replacements in any combination of the following:

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

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

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

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

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

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

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

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

- The past and current maintenance practices of Beechwood Shores 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.

JUSTIN B. KLEIN
Engineer, Northeast Region
Responsible Advisor

CURRENT CLIENT SERVICES

Justin B. Klein, an Associate Engineer, is an Advisor for Reserve Advisors, LLC. Mr. Klein 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 and Transition Study Reports for apartments, high rises, condominiums, townhomes, and homeowners associations.



The following is a partial list of clients served by Justin Klein demonstrating his breadth of experiential knowledge of community associations in construction and related buildings systems.

Cherry View Park – This 15 building condominium-style community located in Laurel, Maryland contains many elements such as a centrally located clubhouse and long access drive. Residents enjoy the gazebo and site furnishings spread throughout the property.

North Point Villas – Located in Reston, Virginia, this eight building apartment-style community features 106 units. The apartment buildings were constructed with vinyl siding, asphalt shingle roofs, masonry facades, and composite wood decking. The Association also maintains asphalt pavement, sidewalks, and four garage buildings.

Aldie Estates 1 – Located just off Lee Jackson Memorial Highway in Aldie, Virginia, this Association maintains asphalt walking paths, pedestrian bridges, natural wetlands and wood fencing.

Charlestown Oaks – This development contains 60 townhome-style buildings containing 252 units in Trappe, Pennsylvania. The property includes retaining walls, multiple playgrounds, tennis courts, and turf pavers.

Park Towers East – Located in the Cross Country area of Baltimore, Maryland this nine-story building features construction elements that date back to 1967. The 100 condominium owners enjoy concrete balconies and a common area at the lobby.

Forest Reach – Conveniently situated between Bear Trap Dunes Golf Club and Bethany Beach, Delaware, this community of 58 single family homes is a short drive to the shores of the Atlantic Ocean. The Association maintains asphalt pavement, alleyways, sidewalks, concrete aprons, multiple ponds, a pool and pool house. The community also utilizes a solar system for some of its common area power needs.

PRIOR RELEVANT EXPERIENCE

Before joining Reserve Advisors, LLC, Mr. Klein attended Rose-Hulman Institute of Technology in Terre Haute, Indiana where he attained his Bachelor of Science degree in Mechanical Engineering. His rigorous coursework focused on using problem solving to understand mechanical systems and principles. During his undergraduate education, Mr. Klein worked to develop a debris displacement apparatus to be mounted inside a D-155 bulldozer for Komatsu America Corporation.

EDUCATION

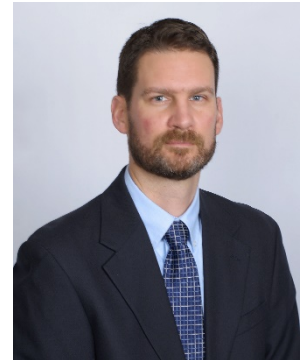
Rose-Hulman Institute of Technology - B.S. Mechanical Engineering

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 Beechwood Shores 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) Beechwood Shores 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 property.

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

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

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

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

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

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

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

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