

Reserve Study

FULL RESERVE STUDY

Heritage Highlands Homeowners Association, Inc.



Lovettsville, Virginia

May 5, 2021



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Heritage Highlands Homeowners Association, Inc.
Lovettsville, Virginia

Dear Board of Directors of Heritage Highlands Homeowners Association, Inc.:

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Full Reserve Study* of Heritage Highlands Homeowners Association, Inc. in Lovettsville, Virginia and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, May 5, 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 Heritage Highlands Homeowners Association, Inc. 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 15, 2021 by

Reserve Advisors, LLC

Visual Inspection and Report by: Nicholas R. Julia, 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>.



Long-term thinking. Everyday commitment.



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1. RESERVE STUDY EXECUTIVE SUMMARY

Client: Heritage Highlands Homeowners Association, Inc. (Heritage Highlands)

Location: Lovettsville, Virginia

Reference: 201016

Property Basics: Heritage Highlands Homeowners Association, Inc. consists of the 80 units. The community began construction in 2005 and concluded in 2020. The community includes a clubhouse which was constructed in 2018.

Reserve Components Identified: 24 Reserve Components.

Inspection Date: May 5, 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 this threshold funding year in 2039 due to repaving of the asphalt pavement streets.

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:

- \$54,308 as of October 31, 2021
- 2021 budgeted Reserve Contributions of \$15,000¹
- A potential deficit in reserves might occur by 2035 based upon continuation of the most recent annual reserve contribution of \$15,000 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 up to fifty percent (50%) of the exercise equipment
- Crack repairs and patching at the asphalt pavement streets and walking paths
- Replacement of up to fifty percent (50%) of the mailboxes and posts

¹ The Fiscal Year (FY 2021) for Heritage Highlands begins July 1, 2020 and ends June 30, 2021. For brevity, we refer to the Fiscal Year by its beginning year, i.e. Fiscal Year 2020-21 is FY 2021 or simply 2021.

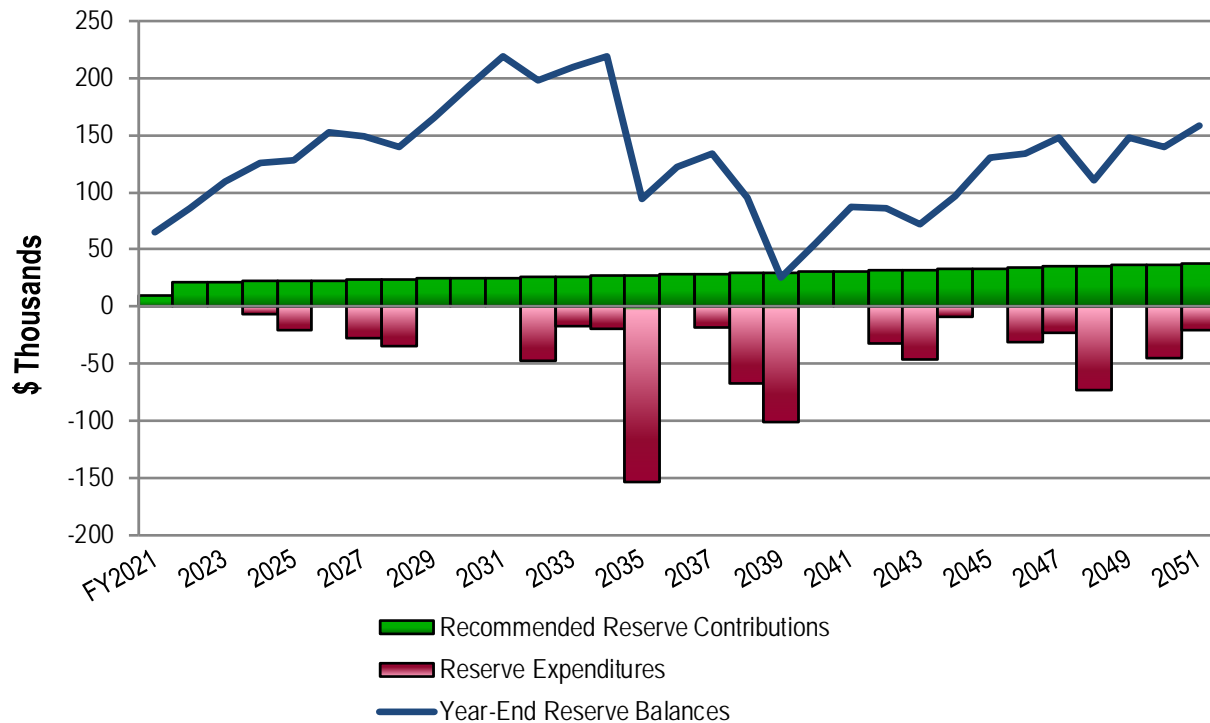


Recommended Reserve Funding: We recommend the following in order to achieve a stable and equitable Funding Plan:

- Increase to \$21,200 in 2022
- Inflationary increases thereafter through 2051, the limit of this study's Cash Flow Analysis
- Initial adjustment in Reserve Contributions of \$6,200 represents an average monthly increase of \$6.46 per homeowner and about a five percent (5.1%) adjustment in the 2021 total Operating Budget of \$120,847.

Heritage Highlands
Recommended Reserve Funding Table and Graph

Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)
2022	21,200	86,541	2032	25,800	198,461	2042	31,400	86,065
2023	21,600	109,017	2033	26,300	209,696	2043	32,000	72,120
2024	22,000	125,755	2034	26,800	219,013	2044	32,600	96,091
2025	22,400	128,186	2035	27,300	93,754	2045	33,300	130,406
2026	22,800	152,242	2036	27,800	122,523	2046	34,000	134,338
2027	23,300	148,785	2037	28,400	133,262	2047	34,700	147,374
2028	23,800	139,703	2038	29,000	95,374	2048	35,400	110,413
2029	24,300	165,370	2039	29,600	24,785	2049	36,100	147,669
2030	24,800	191,770	2040	30,200	55,344	2050	36,800	140,190
2031	25,300	218,910	2041	30,800	86,781	2051	37,500	158,638





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

Heritage Highlands Homeowners Association, Inc.

Lovettsville, Virginia

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, May 5, 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 Management and the Board. These classes of property include:

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

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

- Heritage Highlands 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
- Foundation, Clubhouse
- Pipes, Interior Building, Domestic Water, Sanitary Waste, and Vent, Clubhouse
- Pipes, Subsurface Utilities, Private Streets
- Structural Frame, Clubhouse
- Walls, Vinyl Siding, Soffit, and Fascia, Clubhouse
- Windows, Clubhouse

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 \$2,500 (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)
- Catch Basins, Landscape
- Doors, Interior, Clubhouse
- Fans and Recessed Light Fixtures, Clubhouse
- Fence, Metal Clubhouse
- Irrigation System, Controls and Maintenance, Clubhouse
- Landscape, Maintenance
- Light Fixtures, Landscape
- Paint Finishes, Clubhouse and Touch Up
- Signage, Traffic Management, Pipestem Streets and Clubhouse Parking Area
- Site Furniture, Bench
- Utility Sink, Clubhouse
- Walls, Masonry, Clubhouse
- Water Heater, Clubhouse
- Other Repairs normally funded through the Operating Budget



Clubhouse fan and interior recessed light fixtures



Clubhouse water heater



Clubhouse area irrigation system pop-up head



Bench

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:

- Driveways
- Exterior and Interior Building Elements

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

- Asphalt Pavement Streets, Harpers Mill Way and Meadows Way (Virginia Department of Transportation)
- Concrete Sidewalks, Adjacent to Harpers Mill Way and Meadows Way (Virginia Department of Transportation)
- Culvert and Detention Basin, North End of the Community (Town of Lovettsville)
- Light Poles and Fixtures (Dominion Utility Company)

- Water Tower and Building, Including the Perimeter Fence (Town of Lovettsville)



Culvert and detention basin



Water tower and building structure

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

Heritage Highlands
Homeowners Association, Inc.
Lovettsville, Virginia

Explanatory Notes:

- 1) **2.0%** is the estimated Inflation Rate for estimating Future Replacement Costs.
- 2) FY2021 is Fiscal Year beginning July 1, 2020 and ending June 30, 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 Building Elements																											
1.180	4	4 Each		Doors, Entrances	2035	to 30	14	1,500.00	6,000	6,000	1.0%																7,917
1.226	1	1 Allowance		Furniture, Patio and Stoop	2032	10 to 15	11	5,000.00	5,000	5,000	1.8%											6,217					
1.240	250	250 Linear Feet		Gutters and Downspouts, Aluminum	2038	15 to 20	17	10.00	2,500	2,500	0.4%																
1.271	820	820 Square Feet		Patio, Stamped Concrete	2050	to 35	29	13.00	10,660	10,660	2.4%																
1.280	20	20 Squares		Roofs, Asphalt Shingles	2038	15 to 20	17	450.00	9,000	9,000	1.6%																
Interior Clubhouse Building Elements																											
2.160	2	1 Allowance		Exercise Equipment, Phased	2025	5 to 15	4 to 11	11,500.00	11,500	23,000	7.8%				12,448								14,299				
2.300	30	30 Square Yards		Floor Coverings, Rubber, Exercise Room	2032	10 to 15	11	85.00	2,550	2,550	0.9%												3,171				
2.400	120	120 Square Yards		Floor Coverings, Wood Laminate	2038	18 to 25	17	100.00	12,000	12,000	2.1%																
2.450	2	1 Allowance		Furnishings, Phased	2028	to 20	7 to 17	16,000.00	16,000	32,000	8.5%								18,379								
2.520	1	1 Allowance		Kitchen, Renovation	2038	to 20	17	9,000.00	9,000	9,000	1.6%																
2.900	2	2 Each		Rest Rooms, Renovation	2043	to 25	22	4,600.00	9,200	9,200	1.8%																
Clubhouse Building Services Elements																											
3.070	2	2 Each		Air Handling and Condensing Units, Split Systems	2034	12 to 18	13	7,500.00	15,000	15,000	5.8%															19,404	
3.560	1	1 Allowance		Life Safety System, Control Panel and Emergency Devices	2043	to 25	22	4,000.00	4,000	4,000	0.8%																
3.820	1	1 Allowance		Security and Access System	2033	10 to 15	12	7,000.00	7,000	7,000	2.6%													8,878			
Property Site Elements																											
4.020	8,500	8,500 Square Yards		Asphalt Pavement, Crack Repair and Patch	2024	3 to 5	3	0.70	5,950	5,950	6.0%			6,314				6,835				7,398				3,926	
4.040	7,150	3,575 Square Yards		Asphalt Pavement, Mill and Overlay, Streets, Phased	2035	15 to 20	14 to 18	14.00	50,050	100,100	17.2%															66,040	
4.080	1,350	1,350 Square Yards		Asphalt Pavement, Total Replacement, Walking Paths	2035	15 to 20	14	24.00	32,400	32,400	5.4%															42,751	
4.100	15	8 Each		Catch Basins, Inspections and Capital Repairs, Phased	2035	15 to 20	14 to 18	800.00	6,000	12,000	2.1%															7,917	
4.110	5,700	285 Linear Feet		Concrete Curbs and Gutters, Partial	2027	to 65	6 to 30+	39.50	11,258	225,150	8.2%							12,678								14,854	
4.140	22,800	1,370 Square Feet		Concrete Sidewalks and Aprons, Partial	2027	to 65	6 to 30+	10.00	13,700	228,000	11.9%							15,428				17,034					
4.200	130	130 Linear Feet		Fence, Aluminum	2043	to 25	22	44.00	5,720	5,720	1.1%																
4.600	80	40 Each		Mailboxes and Posts, Phased	2025	15 to 20	4 to 14	200.00	8,000	16,000	3.9%				8,659											10,556	
4.740	790	790 Square Feet		Retaining Wall, Masonry, Inspection and Capital Repairs	2033	10 to 15	12	8.00	6,320	6,320	2.4%													8,015			
4.800	1	1 Allowance		Signage, Entrance Monument, Renovation	2028	15 to 20	7	7,800.00	7,800	7,800	2.8%								8,960								
Anticipated Expenditures, By Year (\$798,107 over 30 years)												0	0	0	6,314	21,107	0	28,106	34,174	0	0	0	48,119	16,893	19,404	153,961	0

RESERVE EXPENDITURES

Heritage Highlands
Homeowners Association, Inc.
Lovettsville, 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 Building Elements</u>																										
1.180	4	4 Each		Doors, Entrances	2035	to 30	14	1,500.00	6,000	6,000	1.0%															
1.226	1	1 Allowance		Furniture, Patio and Stoop	2032	10 to 15	11	5,000.00	5,000	5,000	1.8%										8,203					
1.240	250	250 Linear Feet		Gutters and Downspouts, Aluminum	2038	15 to 20	17	10.00	2,500	2,500	0.4%		3,501													
1.271	820	820 Square Feet		Patio, Stamped Concrete	2050	to 35	29	13.00	10,660	10,660	2.4%													18,931		
1.280	20	20 Squares		Roofs, Asphalt Shingles	2038	15 to 20	17	450.00	9,000	9,000	1.6%		12,602													
<u>Interior Clubhouse Building Elements</u>																										
2.160	2	1 Allowance		Exercise Equipment, Phased	2025	5 to 15	4 to 11	11,500.00	11,500	23,000	7.8%			16,425							18,867					
2.300	30	30 Square Yards		Floor Coverings, Rubber, Exercise Room	2032	10 to 15	11	85.00	2,550	2,550	0.9%										4,184					
2.400	120	120 Square Yards		Floor Coverings, Wood Laminate	2038	18 to 25	17	100.00	12,000	12,000	2.1%		16,803													
2.450	2	1 Allowance		Furnishings, Phased	2028	to 20	7 to 17	16,000.00	16,000	32,000	8.5%		22,404										27,310			
2.520	1	1 Allowance		Kitchen, Renovation	2038	to 20	17	9,000.00	9,000	9,000	1.6%		12,602													
2.900	2	2 Each		Rest Rooms, Renovation	2043	to 25	22	4,600.00	9,200	9,200	1.8%							14,223								
<u>Clubhouse Building Services Elements</u>																										
3.070	2	2 Each		Air Handling and Condensing Units, Split Systems	2034	12 to 18	13	7,500.00	15,000	15,000	5.8%													26,638		
3.560	1	1 Allowance		Life Safety System, Control Panel and Emergency Devices	2043	to 25	22	4,000.00	4,000	4,000	0.8%							6,184								
3.820	1	1 Allowance		Security and Access System	2033	10 to 15	12	7,000.00	7,000	7,000	2.6%												11,948			
<u>Property Site Elements</u>																										
4.020	8,500	8,500 Square Yards		Asphalt Pavement, Crack Repair and Patch	2024	3 to 5	3	0.70	5,950	5,950	6.0%			4,249				9,383					10,156			
4.040	7,150	3,575 Square Yards		Asphalt Pavement, Mill and Overlay, Streets, Phased	2035	15 to 20	14 to 18	14.00	50,050	100,100	17.2%			71,484												
4.080	1,350	1,350 Square Yards		Asphalt Pavement, Total Replacement, Walking Paths	2035	15 to 20	14	24.00	32,400	32,400	5.4%															
4.100	15	8 Each		Catch Basins, Inspections and Capital Repairs, Phased	2035	15 to 20	14 to 18	800.00	6,000	12,000	2.1%			8,569												
4.110	5,700	285 Linear Feet		Concrete Curbs and Gutters, Partial	2027	to 65	6 to 30+	39.50	11,258	225,150	8.2%							17,404						20,391		
4.140	22,800	1,370 Square Feet		Concrete Sidewalks and Aprons, Partial	2027	to 65	6 to 30+	10.00	13,700	228,000	11.9%	18,807					20,765				22,926					
4.200	130	130 Linear Feet		Fence, Aluminum	2043	to 25	22	44.00	5,720	5,720	1.1%							8,843								
4.600	80	40 Each		Mailboxes and Posts, Phased	2025	15 to 20	4 to 14	200.00	8,000	16,000	3.9%						12,125									
4.740	790	790 Square Feet		Retaining Wall, Masonry, Inspection and Capital Repairs	2033	10 to 15	12	8.00	6,320	6,320	2.4%												10,788			
4.800	1	1 Allowance		Signage, Entrance Monument, Renovation	2028	15 to 20	7	7,800.00	7,800	7,800	2.8%												13,314			
Anticipated Expenditures, By Year (\$798,107 over 30 years)												18,807	67,912	100,727	0	0	32,890	46,654	9,383	0	31,254	22,926	73,516	0	45,569	20,391

RESERVE FUNDING PLAN

CASH FLOW ANALYSIS

Heritage Highlands

Homeowners Association, Inc.

Lovettsville, Virginia

Individual Reserve Budgets & Cash Flows for the Next 30 Years

		FY2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Reserves at Beginning of Year	<i>(Note 1)</i>	54,308	64,664	86,541	109,017	125,755	128,186	152,242	148,785	139,703	165,370	191,770	218,910	198,461	209,696	219,013	93,754
Total Recommended Reserve Contributions	<i>(Note 2)</i>	10,000	21,200	21,600	22,000	22,400	22,800	23,300	23,800	24,300	24,800	25,300	25,800	26,300	26,800	27,300	27,800
Estimated Interest Earned, During Year	<i>(Note 3)</i>	356	677	876	1,052	1,138	1,256	1,349	1,292	1,367	1,600	1,840	1,870	1,828	1,921	1,401	969
Anticipated Expenditures, By Year		0	0	0	(6,314)	(21,107)	0	(28,106)	(34,174)	0	0	0	(48,119)	(16,893)	(19,404)	(153,961)	0
Anticipated Reserves at Year End		<u>\$64,664</u>	<u>\$86,541</u>	<u>\$109,017</u>	<u>\$125,755</u>	<u>\$128,186</u>	<u>\$152,242</u>	<u>\$148,785</u>	<u>\$139,703</u>	<u>\$165,370</u>	<u>\$191,770</u>	<u>\$218,910</u>	<u>\$198,461</u>	<u>\$209,696</u>	<u>\$219,013</u>	<u>\$93,754</u>	<u>\$122,523</u>
Predicted Reserves based on 2021 funding level of:	\$15,000	64,664	80,313	96,103	105,693	100,510	116,482	104,365	86,044	101,886	117,870	133,998	101,936	100,952	97,437	(41,272)	(26,576)

(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		122,523	133,262	95,374	24,785	55,344	86,781	86,065	72,120	96,091	130,406	134,338	147,374	110,413	147,669	140,190
Total Recommended Reserve Contributions		28,400	29,000	29,600	30,200	30,800	31,400	32,000	32,600	33,300	34,000	34,700	35,400	36,100	36,800	37,500
Estimated Interest Earned, During Year		1,146	1,024	538	359	637	774	709	754	1,015	1,186	1,262	1,155	1,156	1,290	1,339
Anticipated Expenditures, By Year		(18,807)	(67,912)	(100,727)	0	0	(32,890)	(46,654)	(9,383)	0	(31,254)	(22,926)	(73,516)	0	(45,569)	(20,391)
Anticipated Reserves at Year End		<u>\$133,262</u>	<u>\$95,374</u>	<u>\$24,785</u>	<u>\$55,344</u>	<u>\$86,781</u>	<u>\$86,065</u>	<u>\$72,120</u>	<u>\$96,091</u>	<u>\$130,406</u>	<u>\$134,338</u>	<u>\$147,374</u>	<u>\$110,413</u>	<u>\$147,669</u>	<u>\$140,190</u>	<u>\$158,638</u>
				<i>(NOTE 5)</i>												<i>(NOTE 4)</i>

Explanatory Notes:

- 1) Year 2021 starting reserves are as of October 31, 2020; FY2021 starts July 1, 2020 and ends June 30, 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 Year (reserve balance at critical point).

FIVE-YEAR OUTLOOK

Heritage Highlands
Homeowners Association, Inc.
Lovettsville, Virginia

Line Item	Reserve Component Inventory	RUL = 0 FY2021	1 2022	2 2023	3 2024	4 2025	5 2026
<u>Interior Clubhouse Building Elements</u>							
2.160	Exercise Equipment, Phased					12,448	
<u>Property Site Elements</u>							
4.020	Asphalt Pavement, Crack Repair and Patch				6,314		
4.600	Mailboxes and Posts, Phased					8,659	
Anticipated Expenditures, By Year (\$798,107 over 30 years)		0	0	0	6,314	21,107	0

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 Building Elements



Clubhouse front elevation overview



Clubhouse rear elevation overview

Doors, Entrances

Line Item: 1.180

Quantity: Four doors provided access to the clubhouse at the front and rear entrances

History: Original to clubhouse construction in 2018

Condition: Good overall



Clubhouse front entrance doors

Useful Life: Up to 30 years

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

- Annually:
 - Inspect and repair any damage, base corrosion or alignment issues
 - Replace deteriorated hardware and loose weather stripping
 - Periodic touch-up paint finish applications 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.

Furniture, Patio and Stoop

Line Item: 1.226

Quantity: The Association maintains the outdoor furniture at the front stoop and patio

History: Original to clubhouse construction in 2018

Condition: Good overall



Stoop furniture



Patio furniture

Useful Life: 10- to 15-years

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.

Gutters and Downspouts, Aluminum

Line Item: 1.240

Quantity: Approximately 250 linear feet of aluminum five-inch seamless gutters and two-inch by three-inch downspouts

History: Original to clubhouse construction in 2018

Condition: Good overall; however, we note the lack of downspout extensions. Downspouts that discharge directly onto roofs cause premature deterioration of the roofs due to the high concentration of storm water. We recommend either routing these downspouts directly to the ground, connecting the downspouts to the gutters of the lower roof or distributing the storm water discharge over a large area.



Missing downspout extension at the gutter discharge point

Useful Life: 15- to 20-years

Component Detail Notes: The size of the gutter is determined by the roof's watershed area, a roof pitch factor and the rainfall intensity number of the Association's region. We recommend sloping gutters 1/16 inch per linear foot and providing fasteners a maximum of every three feet.

Downspouts can drain 100 square feet of roof area per one square inch of downspout cross sectional area. We recommend the use of downspout extensions and splash blocks at the downspout discharge to direct storm water away from the foundations.

The useful life of gutters and downspouts coincides with that of the asphalt shingle roofs. Coordinated replacement 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 note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Semi-annually:
 - Clean out debris and leaves that collect in the gutters
 - Repair and refasten any loose gutter fasteners
 - Repair and seal any leaking seams or end caps
 - Verify downspouts discharge away from foundations

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.

Patio, Stamped Concrete

Line Item: 1.271

Quantity: 820 square feet comprise a stamped and colored concrete patio at the rear of the clubhouse

History: Original to clubhouse construction in 2018

Condition: Good to fair with minor cracks evident



Patio overview



Concrete crack

Useful Life: Up to 35 years

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. Due to difficulty in matching the stamped pattern and color of the original concrete slab, we recommend the Association budget for replacement of one hundred percent (100%) of the patio at the time of replacement.

Roofs, Asphalt Shingles

Line Item: 1.280

Quantity: Approximately 20 squares¹

History: Original to clubhouse construction in 2018

Condition: Good overall with isolated shingle lift evident

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



Asphalt shingle roof overview



Asphalt shingle roof overview including square hood box vents for ventilation



Isolated shingle lift at the ridge

Useful Life: 15- to 20-years

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

- Laminate shingles
- Boston style ridge caps
- Rubber seal with metal base boot flashing at waste pipes
- Soffit, ridge, and square hood box vents
- Enclosed half weaved valleys

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.

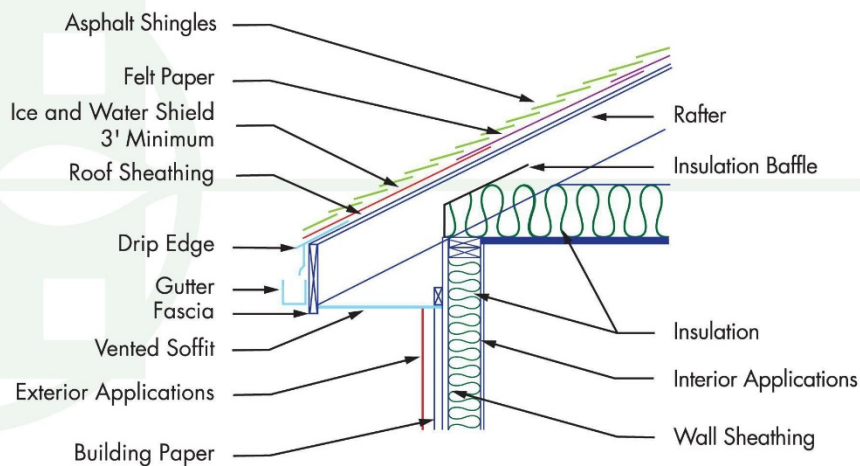
The vents should be clear of debris and not blocked from above by attic insulation. If the soffit vents are blocked from above, installation of polystyrene vent spaces or baffles between the roof joists at these locations can ensure proper ventilation.

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 Heritage Highlands:

ROOF SCHEMATIC



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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.

Interior Clubhouse Building Elements

Exercise Equipment

Line Items: 2.160

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

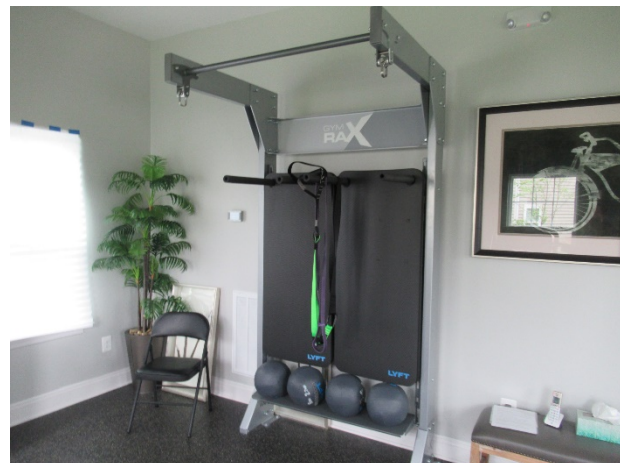
- Elliptical
- Stationary cycle
- Treadmills
- Mats
- Wight balls
- Weight machine

History: Original to clubhouse construction in 2018

Conditions: Reported in satisfactory overall condition



Exercise equipment



Exercise equipment

Useful Life: The useful life of exercise equipment ranges from 5- 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 the Association budget for phased replacement of up to fifty percent (50%) of the exercise equipment per event.

Floor Coverings, Rubber, Exercise Room

Line Item: 2.300

Quantity: 30 square yards located in the exercise room

History: Original to clubhouse construction in 2018

Condition: Good overall



Rubber floor coverings

Useful Life: 10- to 15-years

Priority/Criticality: Per Board discretion

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

Floor Coverings, Wood Laminate

Line Item: 2.400

Quantity: 120 square yards of wood laminate floor coverings at the majority of the clubhouse floor coverings

History: Original to clubhouse construction in 2018

Condition: Good overall with minor scratches evident



Engineered tile floor coverings



Tile floor scratch

Useful Life: 18- to 25-yers

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:

- Billiard table
- Bookcases
- Chairs
- File cabinet
- Folding chairs
- Folding tables
- Lamps
- Pictures/decorations
- Plants
- Sofa
- Tables

History: Original to clubhouse construction in 2018

Condition: Good overall



Clubhouse furniture



Clubhouse furniture

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 phased replacements of up to fifty percent (50%) of the furnishings per event.

Kitchen

Line Item: 2.520

Quantity: The clubhouse includes a kitchen area comprising appliances such as a refrigerator, microwave, dishwasher and sink, as well as cabinets and countertops

History: Components are original to clubhouse construction in 2018

Condition: Good overall



Kitchen area

Useful Life: Renovation up to 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.

Rest Rooms

Line Item: 2.900

Quantity: The clubhouse includes two single use rest rooms. The rest room components include:

- Tile floor coverings
- Plumbing fixtures including a sink and toilet
- Countertops and cabinets
- Wall fixtures

History: Components are original to clubhouse construction in 2018

Condition: Good overall



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.

Clubhouse Building Services Elements

Air Handling and Condensing Units, Split Systems

Line Item: 3.070

Quantity: Two Trane split systems

History: Original to clubhouse construction in 2018

Condition: Reported satisfactory without operational deficiencies



Split system condensing units

Useful Life: 12- to 18-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. Each condensing unit has a cooling capacity of 5-tons.

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.

Life Safety System

Line Items: 3.560

Quantity: The life safety system at the clubhouse includes the following components:

- Control panel
- Emergency light fixtures
- Exit light fixtures
- Wiring

History: Original to clubhouse construction in 2018

Conditions: Reported satisfactory



Emergency light fixture

Useful Life: Up to 25 years

Preventative Maintenance Notes: We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. In accordance with *NFPA 72* (National Fire Alarm and Signaling Code) 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 age of the components,

operational condition, or changes in technology. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Semi-annually:
 - Inspect and test all components and devices, including, but not limited to, control panels, annunciators, detectors, audio/visual fixtures, signal transmitters and magnetic door holders
 - Test backup batteries
- As-needed:
 - Ensure clear line of access to components such as pull stations
 - Ensure detectors are properly positioned and clean of debris

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. Changes in technology or building codes may make a replacement desirable prior to the end of the functional life. Our estimate of future cost considers only that amount necessary to duplicate the same functionality. Local codes or ordinances at the actual time of replacement may require a betterment as compared to the existing system. A betterment could result in a higher, but at this time unknown, cost of replacement.

Security System

Line Item: 3.820

Quantity: Heritage Highlands utilizes the following security system components:

- Automated card reading system
- Cameras
- Recorder

History: Original to clubhouse construction in 2018

Condition: Reported satisfactory



Security camera

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 unobstructed 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

Asphalt Pavement, Crack Repair and Patch

Line Item: 4.020

Quantity: Approximately 8,500 square yards comprise the asphalt pavement throughout the community including 7,150 square yards of Association maintained streets and 1,350 square yards of walking paths

History: Original; the base course of the streets were constructed in 2007 and the final wear course was installed between 2015 and 2018. The walking paths were constructed in 2018.

Condition: The streets are in good overall condition, and the walking paths are also in good overall condition with minor cracks evident.

Useful Life: Three- to five-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 includes an allowance for crack repairs and patching of up to two percent (2%) of the pavement.

Asphalt Pavement, Repaving, Streets

Line Item: 4.040

Quantity: Approximately 7,150 square yards of Association maintained streets. This includes the pipestems and Fox Mill Way.

History: Original; the base course of the streets were constructed in 2007 and the final wear course was installed between 2015 and 2018.

Condition: The streets are in good overall condition



Fox Mill Way pavement overview



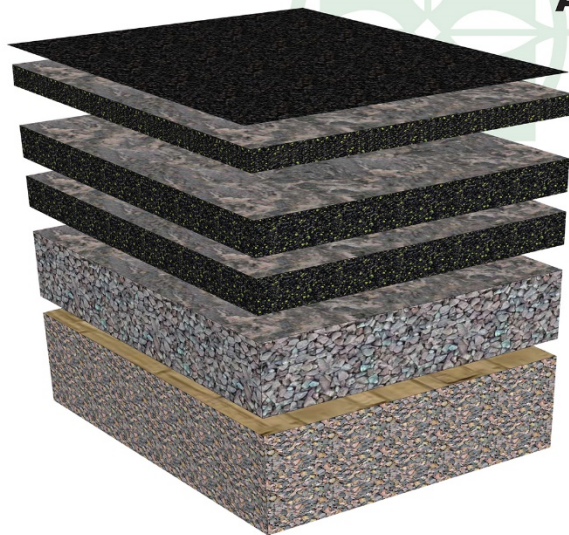
Pipestem street overview



Pipestem street overview

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

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



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

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

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 for milling and overlayment includes area patching of up to ten percent (10%).

Asphalt Pavement, Repaving, Walking Paths

Line Item: 4.080

Quantity: 1,350 square yards

History: Constructed in 2018

Condition: Good overall with minor cracks evident



Asphalt pavement walking path overview



Asphalt pavement walking path overview



Pavement crack



Pavement crack

Useful Life: 15- to 20-years with the benefit of timely crack repairs and patching, and the need to maintain a safe pedestrian surface

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 coordinate repaving of the walking paths with the streets.

Catch Basins

Line Item: 4.100

Quantity: 15 catch basins²

History: Original to the construction of the streets in 2007

Condition: Good overall with isolated cracks evident adjacent to the catch basin structure



Catch basin overview



Concrete gutter crack adjacent to the catch basin structure

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

² 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 5,700 linear feet at the Association maintained streets

Condition: Good overall with isolated cracks and spall evident; we also note partial replacements



Concrete curb spall



Concrete curb and gutter crack



Concrete curb and gutter partial replacements

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 1,140 linear feet of curbs and gutters, or twenty percent (20%) of the total, will require replacement during the next 30 years.

Concrete Sidewalks and Aprons

Line Item: 4.140

Quantity: Approximately 22,800 square feet at the Association maintained streets

Condition: Good overall with isolated cracks and spall; additionally, we note partial replacements



Concrete sidewalk crack



Minor apron spall



Concrete sidewalk crack



Partial concrete sidewalk replacements

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 6,850 square feet of concrete sidewalks, or thirty percent (30%) of the total, will require replacement during the next 30 years.

Fence, Aluminum

Line Item: 4.200

Quantity: 130 linear feet are located atop the masonry retaining wall at the north corner of the community

History: Dates to approximately 2018

Condition: Good overall



Aluminum fence

Useful Life: Up to 25 years (The useful life of the finish is indeterminate. Future updates of this Reserve Study will again consider the need to refinish the railings based on condition.)

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

- Annually:
 - Inspect and repair loose fasteners or 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.

Mailboxes and Posts

Line Item: 4.600

Quantity: The Association maintains the 80 mailboxes and wood posts

History: Original dating from 2008 through 2018

Condition: Varying from good to fair overall; we note a portion of the mailbox posts that exhibit paint finish deterioration and wood deterioration. Additionally, we note isolated leaning posts.



Mailboxes and posts overview



Paint finish and wood deterioration



Paint finish and wood deterioration



Paint finish and wood deterioration



Leaning mailbox post

Useful Life: 15- 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 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.

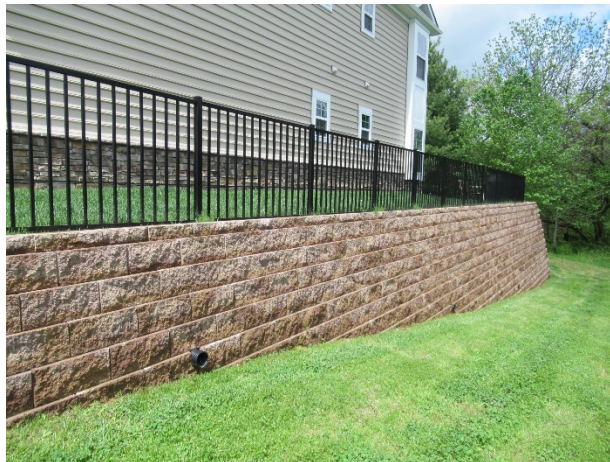
Retaining Wall, Masonry

Line Item: 4.740

Quantity: 790 square feet comprise a masonry retaining wall located at the north corner of the community

History: Dates to 2018

Condition: Good overall



Masonry retaining wall

Useful Life: Masonry retaining walls of this size and construction 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 ten percent (10%).

Signage, Entrance Monument

Line Item: 4.800

Quantity: The Association maintains one entrance monument sign at the corner of Harpers Mill Way and Lutheran Church Road. The signage includes the following elements:

- Masonry
- Property identification letters
- Flagpoles
- Landscaped Components

History: Dates to 2008

Condition: Good overall; Management and the Board inform us one light fixture at the flagpole requires replacement. The Association plans to remediate this issue in the near term through the operating budget.



Entrance monument overview

Useful Life: 15- to 20-years

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

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
 - 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. Our cost for renovation includes repointing and repairs to the masonry, and replacement of the remaining components listed above.

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.

Heritage Highlands 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 Lovettsville, 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 Heritage Highlands 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.

NICHOLAS R. JULIA, RS
Regional Engineering Manager, Northeast Region

CURRENT CLIENT SERVICES

Nicholas R. Julia, a Civil Engineer, is an Advisor for Reserve Advisors, LLC. Mr. Julia is responsible for the inspection and analysis of the condition of clients' property, and recommending engineering solutions to prolong the lives of the components. He also forecasts capital expenditures for the repair and/or replacement of the property components and prepares technical reports on assignments. He is responsible for conducting Life Cycle Cost Analysis and Capital Replacement Forecast services and the preparation of Reserve Study Reports for condominiums, townhomes and homeowner associations. Nicholas Julia often serves as Quality Assurance Reviewer for all types of developments to ensure our reports maintain the level of quality which is expected of our firm.



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

One Park Crest Condominium is an upscale 19-story high rise building located in McLean, Virginia just outside of Washington, D.C. Residents enjoy an 18th floor club room and outdoor pool. The building also contains an exercise room, library, professionally decorated lobby and underground parking.

The Maryland Club is an exclusive club located in the heart of Baltimore, Maryland. The elegant white marble main building dates back to 1892. The club contains squash courts, a banquet area, a dining hall, and a professional kitchen amongst many other amenities.

Town of St. Michaels, a scenic town located on the Eastern Shore of Maryland. The town includes an administrative building, police station, public works garage and offices, and a historic log cabin. The municipality also maintains the asphalt pavement streets throughout the town, multiple parks, two water towers and a complex arsenic removal water treatment system.

One Loudoun Neighborhood Association is an upscale planned unit development comprising townhomes and single family homes located in Ashburn, Virginia. The property includes a high-end clubhouse with over 12,000 square feet of interior space including a gymnasium and yoga studio. The property also includes walking trails, multiple playgrounds, a tennis court, sports court, and a pool.

3883 Connecticut Avenue Condominium is a 10-story midrise located in Washington, D.C. The building was constructed in 2002 and contains luxurious amenities including an elevated outdoor pool on the 8th floor, party room, exercise facility and an underground parking garage.

Lake Petersburg Association This man-made lake community of 380 single family homes is located in Petersburg, Illinois. Components of the property include a community boat launch, dock, three tennis courts, a basketball court, two maintenance buildings, an office, and vehicular equipment. The Association also maintains an earthen dam on the far side of the lake.

PRIOR RELEVANT EXPERIENCE

Before joining Reserve Advisors, Mr. Julia attended Marquette University in Milwaukee, Wisconsin where he attained his Bachelor of Science degree in Civil Engineering. His studies focused on transportation engineering and construction management engineering.

EDUCATION

Marquette University - B.S. Civil Engineering

PROFESSIONAL AFFILIATIONS / DESIGNATIONS

Engineer in Training (E.I.T.) – Washington D.C.

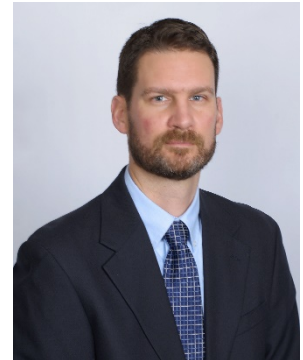
Reserve Specialist (RS) - Community Association Institute

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 Heritage Highlands 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) Heritage Highlands 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.