

FULL RESERVE STUDY

Pheasant Run Condominium Homeowners Association, Inc.



Topeka, Kansas
November 17, 2020



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Pheasant Run Condominium Homeowners Association, Inc.
Topeka, Kansas

Dear Board of Directors of Pheasant Run Condominium 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 Pheasant Run Condominium Homeowners Association, Inc. in Topeka, Kansas and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, November 17, 2020.

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 Pheasant Run Condominium 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 January 15, 2021 by

Reserve Advisors, LLC

Visual Inspection and Report by: Nicholas M. Johannig, 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: Pheasant Run Condominium Homeowners Association, Inc. (Pheasant Run)

Location: Topeka, Kansas

Reference: 200147

Property Basics: Pheasant Run Condominium Homeowners Association, Inc. is a condominium style development consisting of 102 units in 32 buildings. The buildings were built from 1979 to 1981.

Reserve Components Identified: 35 Reserve Components.

Inspection Date: November 17, 2020.

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 2025 due to replacement of the asphalt pavement and again in 2031 and 2049 due to replacement of the asphalt shingle roofs previously replaced in 2011.

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:

- \$62,056 as of January 1, 2021
- 2021 budgeted Reserve Contributions of \$20,546
- A potential deficit in reserves might occur by 2023 based upon continuation of the most recent annual reserve contribution of \$20,546 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 roofs at Building 5859 and the carports to avoid risk of water intrusion issues and costly leak repairs
- Ongoing replacement of the vinyl and fiber cement siding to avoid risk of water intrusion issues and costly leak repairs
- Repaving of the asphalt pavement, and ongoing partial replacement of the concrete driveways and sidewalks to maintain safe driving and walking surfaces throughout the community



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

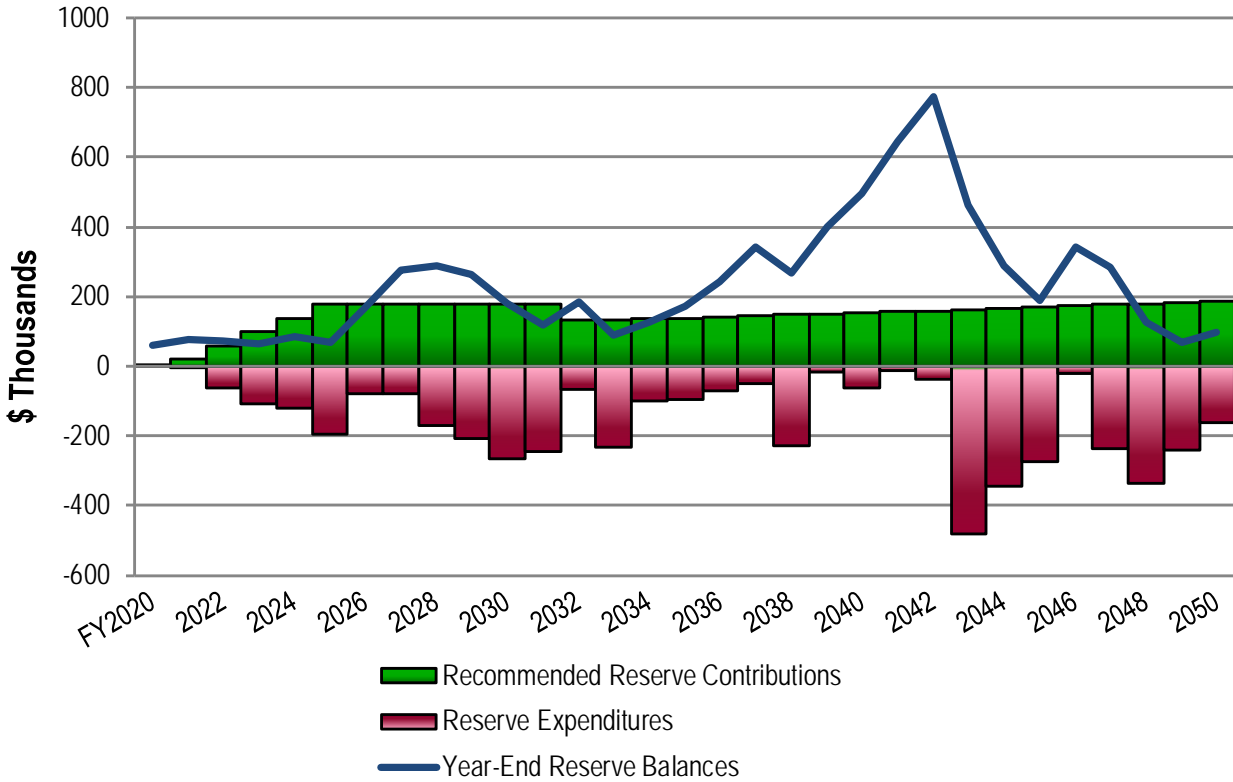
- Phased increases of approximately \$39,000 from 2022 through 2025
- Inflationary increases from 2026 through 2031
- Decrease to \$131,000 by 2032 due to fully funding for replacement of the asphalt shingle roofs originally replaced in 2011
- Inflationary increases through 2050, the limit of this study's Cash Flow Analysis
- Initial recommended adjustment in Reserve Contributions of \$38,954 represents an average monthly increase of \$31.83 per unit owner and about a sixteen percent (16.1%) adjustment in the 2021 total Operating Budget of \$242,100.

These recommended Reserve Contributions ensure that each owner funds their use of the Association maintained elements annually. The actual Reserve Contributions approved by the Board may vary based on factors external to the Reserve Study such as the financial impact on unit owners, desire to utilize funding mechanisms other than reserves and the market value of the units. We include stepped or phased annual increases in the Reserve Contribution based on the current financial conditions of the Association, significant recommended Reserve Contributions and the critical Reserve Balances. Any phase in the required Reserve Contribution increase defers the cost burden to future owners. We therefore limit the number of phased increases to limit the deferred cost burden to future owners. We opine this funding method adheres to APRA Standards of Practice which state in part "... any Funding Plan shall meet the Following Funding Principles: Sufficient funds when required, stable contribution rate over the years, evenly distributed contributions over the years, and fiscally responsible."



Pheasant Run
Recommended Reserve Funding Table and Graph

Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)
2021	20,546 (Budgeted)	77,106	2031	180,500	117,338	2041	156,600	644,047
2022	59,500	73,418	2032	131,000	185,027	2042	159,700	772,984
2023	98,500	65,925	2033	133,600	88,649	2043	162,900	461,936
2024	137,500	83,916	2034	136,300	124,855	2044	166,200	288,361
2025	176,500	68,239	2035	139,000	170,864	2045	169,500	187,950
2026	180,500	170,036	2036	141,800	244,529	2046	172,900	341,374
2027	180,500	275,768	2037	144,600	342,993	2047	176,400	282,260
2028	180,500	286,784	2038	147,500	266,461	2048	179,900	126,624
2029	180,500	263,208	2039	150,500	402,110	2049	183,500	68,605
2030	180,500	179,919	2040	153,500	496,162	2050	187,200	96,193





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

Pheasant Run Condominium Homeowners Association, Inc.

Topeka, Kansas

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, November 17, 2020.

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

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:

- Pheasant Run 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
- Pipes, Subsurface Utilities
- Structural Frames
- Walls, Siding, Vinyl, Building 5827 (Replaced in 2020)

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 \$4,000 (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)
- Carpet, Staircase Landings and Covered Entrances
- Catch Basins, Landscape
- Garage Doors, Pool House
- Furniture, Pool
- Landscape
- Light Fixtures, Exterior
- Paint Finishes, Touch Up
- Pool House, Interim Interior Renovations
- Railings and Pool Fence, Steel, Paint Finishes
- Security System
- Signage
- Storm Shelter, Interior Finishes
- Sump Pump, Storm Shelter
- Walls, Siding and Trim, Paint Finishes
- Other Repairs normally funded through the Operating Budget



Staircase landing carpet floor covering



Pool furniture

Certain items have been designated as the responsibility of the unit owners to repair or replace at their cost. Property Maintained by Unit Owners, including items billed back to Unit Owners, relates to unit:

- Balconies, Decks and Patios
- Electrical Systems (Including Circuit Protection Panels)
- Fences, Privacy
- Garage Doors
- Heating, Ventilating and Air Conditioning (HVAC) Units
- Interiors
- Light Fixtures
- Mailboxes
- Pipes (Within Units)
- Windows and Doors



Balcony, patio and privacy fence



Mailboxes

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
- 2020 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

Pheasant Run Condominium
Homeowners Association, Inc.
Topeka, Kansas

Explanatory Notes:

- 1) **2.0%** is the estimated Inflation Rate for estimating Future Replacement Costs.
- 2) FY2020 is Fiscal Year beginning January 1, 2020 and ending December 31, 2020.

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 FY2020	1 2021	2 2022	3 2023	4 2024	5 2025	6 2026	7 2027	8 2028	9 2029	10 2030	11 2031	12 2032	13 2033	14 2034	15 2035
						Useful	Remaining	Unit (2020)	Per Phase (2020)	Total (2020)																	
Exterior Building Elements																											
1.140	45	15	Each	Chimney Caps, Metal, Phased	2029	to 25	9 to 11	500.00	7,500	22,500	0.6%										8,963	9,142	9,325				
1.240	5,420	1,807	Linear Feet	Gutters and Downspouts, Aluminum, Remaining, Phased	2029	15 to 20	9 to 11	9.50	17,163	51,490	3.3%										20,512	20,922	21,340				
1.280	65	65	Squares	Roofs, Asphalt Shingles, Building 5823 and 5837 (Incl. Gutters and Downspouts)	2035	15 to 20	15	450.00	29,250	29,250	0.9%															39,367	
1.281	30	30	Squares	Roof, Asphalt Shingles, Building 5827 (Incl. Gutters and Downspouts)	2038	15 to 20	18	450.00	13,500	13,500	0.4%																
1.282	40	40	Squares	Roof, Asphalt Shingles, Building 5839 (Incl. Gutters and Downspouts)	2026	15 to 20	6	450.00	18,000	18,000	1.1%							20,271									
1.283	30	30	Squares	Roof, Asphalt Shingles, Building 5859 (Incl. Gutters and Downspouts)	2022	15 to 20	2	450.00	13,500	13,500	0.7%		14,045														
1.284	105	105	Squares	Roofs, Asphalt Shingles, Carports (Incl. Gutters and Downspouts)	2025	15 to 25	5	380.00	39,900	39,900	2.5%						44,053										
1.285	850	283	Squares	Roofs, Asphalt Shingles, Replaced in 2011, Phased	2029	15 to 20	9 to 11	400.00	113,332	340,000	21.9%										135,442	138,151	140,914				
1.600	19	5	Each	Staircases, Wood, Phased (Incl. Landings)	2025	to 35	5 to 14	5,000.00	23,750	95,000	2.5%						26,222		27,827				29,530		31,338		
1.860	111,450	6,966	Square Feet	Walls, Siding, Vinyl and Fiber Cement, Remaining, Phased (Replacement of Fiber Cement Siding with Vinyl)	2022	to 40	2 to 17	5.00	34,828	557,250	14.7%			36,235	36,960	37,699	38,453	39,222	40,007	40,807	41,623	42,455	43,304	44,171	45,054	45,955	46,874
Building Services Elements																											
3.605	76	3	Units	Pipes, Domestic Water, Waste and Vent, Partial	2038	to 80+	18 to 30+	3,000.00	9,120	228,000	1.6%																
Property Site Elements																											
4.020	10,100	10,100	Square Yards	Asphalt Pavement, Crack Repair, Patch and Seal Coat	2028	3 to 5	8	1.60	16,160	16,160	3.0%								18,934				20,495				
4.040	10,100	5,050	Square Yards	Asphalt Pavement, Mill and Overlay, Phased	2024	15 to 20	4 to 5	14.50	73,225	146,450	3.5%				79,261	80,846											
4.045	10,100	5,050	Square Yards	Asphalt Pavement, Total Replacement, Phased	2044	15 to 20	24 to 25	30.50	154,025	308,050	10.9%																
4.100	7	4	Each	Catch Basins, Inspections and Capital Repairs, Phased	2024	15 to 20	4 to 5	850.00	2,975	5,950	0.4%				3,220	3,285											
4.120	8,900	405	Square Feet	Concrete Driveways, Partial	2022	to 65	2 to 30+	12.00	4,860	106,800	1.7%		5,056				5,473				5,924			6,413			
4.140	16,300	745	Square Feet	Concrete Sidewalks, Partial	2022	to 65	2 to 30+	11.00	8,195	179,300	2.9%		8,526				9,229				9,990			10,813			
4.285	1,980	495	Linear Feet	Fences, Wood, Perimeter, Phased	2023	15 to 25	3 to 18	41.00	20,295	81,180	3.7%				21,537					23,779			26,254				
4.560	80	40	Each	Light Poles and Fixtures, Phased	2027	to 25	7 to 8	800.00	32,000	64,000	1.6%								36,758	37,493							
4.733	180	180	Linear Feet	Railings, Steel	2045	to 35	25	49.00	8,820	8,820	0.3%																
4.745	3,070	3,070	Square Feet	Retaining Walls, Masonry	2038	to 35	18	29.00	89,030	89,030	2.8%																
4.830	1,530	1,530	Square Yards	Sport Courts, Color Coat	2023	4 to 6	3	9.00	13,770	13,770	2.5%				14,613				16,134				17,813				
4.840	470	470	Linear Feet	Sport Courts, Fence	2033	to 25	13	46.00	21,620	21,620	0.6%												27,968				
4.860	1,530	1,530	Square Yards	Sport Courts, Surface Replacement	2033	to 25	13	40.50	61,965	61,965	1.7%												80,158				
Pool House Elements																											
5.500	1	1	Allowance	Interior, Renovation, Complete	2030	to 25	10	17,000.00	17,000	17,000	1.1%											20,723					
5.600	10	10	Squares	Roof, Asphalt Shingles, Pool House (Incl. Gutters and Downspouts)	2030	15 to 20	10	450.00	4,500	4,500	0.3%											5,485					
5.800	800	800	Square Feet	Walls, Siding, Vinyl	2030	to 40	10	6.00	4,800	4,800	0.1%											5,851					
5.800	130	130	Square Feet	Windows and Doors	2030	to 40	10	45.00	5,850	5,850	0.2%											7,131					
Pool Elements																											
6.200	3,500	3,500	Square Feet	Concrete Deck, Inspections, Partial Replacements and Repairs	2023	8 to 12	3	1.50	5,250	5,250	0.3%				5,571									6,791			
6.300	1,650	1,650	Square Feet	Cover, Vinyl	2026	6 to 8	6	3.00	4,950	4,950	0.6%						5,575								6,531		
6.400	250	250	Linear Feet	Fence, Steel	2039	to 35	19	49.00	12,250	12,250	0.4%																
6.600	2	1	Allowance	Mechanical Equipment, Phased	2021	to 15	1 to 8	6,000.00	6,000	12,000	0.9%	6,120							7,030							8,075	
6.800	1,500	1,500	Square Feet	Pool Finish, Plaster	2023	8 to 12	3	14.00	21,000	21,000	1.1%				22,285									27,166			
6.801	150	150	Linear Feet	Pool Finish, Tile	2023	15 to 25	3	35.50	5,325	5,325	0.1%				5,651												
6.900	1,500	1,500	Square Feet	Structure and Deck, Total Replacement	2043	to 60	23	180.00	270,000	270,000	9.3%																
Anticipated Expenditures, By Year (\$4,598,846 over 30 years)												0	6,120	63,862	106,617	120,180	192,859	79,770	76,765	172,004	206,540	265,774	244,413	64,666	231,204	101,050	94,316

RESERVE EXPENDITURES

Pheasant Run Condominium
Homeowners Association, Inc.
Topeka, Kansas

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 2036	17 2037	18 2038	19 2039	20 2040	21 2041	22 2042	23 2043	24 2044	25 2045	26 2046	27 2047	28 2048	29 2049	30 2050
						Useful	Remaining	Unit (2020)	Per Phase (2020)	Total (2020)																
<u>Exterior Building Elements</u>																										
1.140	45	15 Each		Chimney Caps, Metal, Phased	2029	to 25	9 to 11	500.00	7,500	22,500	0.6%															
1.240	5,420	1,807 Linear Feet		Gutters and Downspouts, Aluminum, Remaining, Phased	2029	15 to 20	9 to 11	9.50	17,163	51,490	3.3%												29,296	29,882	30,479	
1.280	65	65 Squares		Roofs, Asphalt Shingles, Building 5823 and 5837 (Incl. Gutters and Downspouts)	2035	15 to 20	15	450.00	29,250	29,250	0.9%															
1.281	30	30 Squares		Roof, Asphalt Shingles, Building 5827 (Incl. Gutters and Downspouts)	2038	15 to 20	18	450.00	13,500	13,500	0.4%			19,281												
1.282	40	40 Squares		Roof, Asphalt Shingles, Building 5839 (Incl. Gutters and Downspouts)	2026	15 to 20	6	450.00	18,000	18,000	1.1%									28,952						
1.283	30	30 Squares		Roof, Asphalt Shingles, Building 5859 (Incl. Gutters and Downspouts)	2022	15 to 20	2	450.00	13,500	13,500	0.7%				20,060											
1.284	105	105 Squares		Roofs, Asphalt Shingles, Carports (Incl. Gutters and Downspouts)	2025	15 to 25	5	380.00	39,900	39,900	2.5%															72,273
1.285	850	283 Squares		Roofs, Asphalt Shingles, Replaced in 2011, Phased	2029	15 to 20	9 to 11	400.00	113,332	340,000	21.9%												193,445	197,314	201,260	
1.600	19	5 Each		Staircases, Wood, Phased (Incl. Landings)	2025	to 35	5 to 14	5,000.00	23,750	95,000	2.5%															
1.860	111,450	6,966 Square Feet		Walls, Siding, Vinyl and Fiber Cement, Remaining, Phased (Replacement of Fiber Cement Siding with Vinyl)	2022	to 40	2 to 17	5.00	34,828	557,250	14.7%	47,812	48,768													
<u>Building Services Elements</u>																										
3.605	76	3 Units		Pipes, Domestic Water, Waste and Vent, Partial	2038	to 80+	18 to 30+	3,000.00	9,120	228,000	1.6%			13,026		13,823				14,669			15,567			16,520
<u>Property Site Elements</u>																										
4.020	10,100	10,100 Square Yards		Asphalt Pavement, Crack Repair, Patch and Seal Coat	2028	3 to 5	8	1.60	16,160	16,160	3.0%	22,184			24,013					25,992					28,135	
4.040	10,100	5,050 Square Yards		Asphalt Pavement, Mill and Overlay, Phased	2024	15 to 20	4 to 5	14.50	73,225	146,450	3.5%															
4.045	10,100	5,050 Square Yards		Asphalt Pavement, Total Replacement, Phased	2044	15 to 20	24 to 25	30.50	154,025	308,050	10.9%									247,740	252,694					
4.100	7	4 Each		Catch Basins, Inspections and Capital Repairs, Phased	2024	15 to 20	4 to 5	850.00	2,975	5,950	0.4%									4,785	4,881					
4.120	8,900	405 Square Feet		Concrete Driveways, Partial	2022	to 65	2 to 30+	12.00	4,860	106,800	1.7%			6,941	7,222	7,513			7,817			8,133	8,461	8,803		
4.140	16,300	745 Square Feet		Concrete Sidewalks, Partial	2022	to 65	2 to 30+	11.00	8,195	179,300	2.9%			11,704	12,177	12,669			13,181			13,714	14,268	14,844		
4.285	1,980	495 Linear Feet		Fences, Wood, Perimeter, Phased	2023	15 to 25	3 to 18	41.00	20,295	81,180	3.7%			28,986					32,003						35,334	
4.560	80	40 Each		Light Poles and Fixtures, Phased	2027	to 25	7 to 8	800.00	32,000	64,000	1.6%															
4.733	180	180 Linear Feet		Railings, Steel	2045	to 35	25	49.00	8,820	8,820	0.3%													14,470		
4.745	3,070	3,070 Square Feet		Retaining Walls, Masonry	2038	to 35	18	29.00	89,030	89,030	2.8%			127,157												
4.830	1,530	1,530 Square Yards		Sport Courts, Color Coat	2023	4 to 6	3	9.00	13,770	13,770	2.5%			19,667					21,714						23,974	
4.840	470	470 Linear Feet		Sport Courts, Fence	2033	to 25	13	46.00	21,620	21,620	0.6%															
4.860	1,530	1,530 Square Yards		Sport Courts, Surface Replacement	2033	to 25	13	40.50	61,965	61,965	1.7%															
<u>Pool House Elements</u>																										
5.500	1	1 Allowance		Interior, Renovation, Complete	2030	to 25	10	17,000.00	17,000	17,000	1.1%															30,793
5.600	10	10 Squares		Roof, Asphalt Shingles, Pool House (Incl. Gutters and Downspouts)	2030	15 to 20	10	450.00	4,500	4,500	0.3%															8,151
5.800	800	800 Square Feet		Walls, Siding, Vinyl	2030	to 40	10	6.00	4,800	4,800	0.1%															
5.800	130	130 Square Feet		Windows and Doors	2030	to 40	10	45.00	5,850	5,850	0.2%															
<u>Pool Elements</u>																										
6.200	3,500	3,500 Square Feet		Concrete Deck, Inspections, Partial Replacements and Repairs	2023	8 to 12	3	1.50	5,250	5,250	0.3%															
6.300	1,650	1,650 Square Feet		Cover, Vinyl	2026	6 to 8	6	3.00	4,950	4,950	0.6%								7,653							8,966
6.400	250	250 Linear Feet		Fence, Steel	2039	to 35	19	49.00	12,250	12,250	0.4%			17,846												
6.600	2	1 Allowance		Mechanical Equipment, Phased	2021	to 15	1 to 8	6,000.00	6,000	12,000	0.9%								9,276						10,655	
6.800	1,500	1,500 Square Feet		Pool Finish, Plaster	2023	8 to 12	3	14.00	21,000	21,000	1.1%															
6.801	150	150 Linear Feet		Pool Finish, Tile	2023	15 to 25	3	35.50	5,325	5,325	0.1%															
6.900	1,500	1,500 Square Feet		Structure and Deck, Total Replacement	2043	to 60	23	180.00	270,000	270,000	9.3%									425,763						
Anticipated Expenditures, By Year (\$4,598,846 over 30 years)												69,996	48,768	226,762	17,846	63,472	13,823	37,111	479,480	343,136	272,045	21,847	238,308	337,368	242,394	160,350

RESERVE FUNDING PLAN

CASH FLOW ANALYSIS
Pheasant Run Condominium
Homeowners Association, Inc.

		Individual Reserve Budgets & Cash Flows for the Next 30 Years															
Topeka, Kansas		FY2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Reserves at Beginning of Year	<i>(Note 1)</i>	N/A	62,056	77,106	73,418	65,925	83,916	68,239	170,036	275,768	286,784	263,208	179,919	117,338	185,027	88,649	124,855
Total Recommended Reserve Contributions	<i>(Note 2)</i>	N/A	20,546	59,500	98,500	137,500	176,500	180,500	180,500	180,500	180,500	180,500	180,500	131,000	133,600	136,300	139,000
Estimated Interest Earned, During Year	<i>(Note 3)</i>	N/A	623	674	624	671	682	1,067	1,997	2,520	2,464	1,985	1,332	1,355	1,226	956	1,325
Anticipated Expenditures, By Year		N/A	(6,120)	(63,862)	(106,617)	(120,180)	(192,859)	(79,770)	(76,765)	(172,004)	(206,540)	(265,774)	(244,413)	(64,666)	(231,204)	(101,050)	(94,316)
Anticipated Reserves at Year End		<u>\$62,056</u>	<u>\$77,106</u>	<u>\$73,418</u>	<u>\$65,925</u>	<u>\$83,916</u>	<u>\$68,239</u>	<u>\$170,036</u>	<u>\$275,768</u>	<u>\$286,784</u>	<u>\$263,208</u>	<u>\$179,919</u>	<u>\$117,338</u>	<u>\$185,027</u>	<u>\$88,649</u>	<u>\$124,855</u>	<u>\$170,864</u>
Predicted Reserves based on 2021 funding level of:	\$20,546	62,056	77,106	34,289	(51,861)	(152,410)											

(continued)

		Individual Reserve Budgets & Cash Flows for the Next 30 Years, Continued														
		2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
Reserves at Beginning of Year		170,864	244,529	342,993	266,461	402,110	496,162	644,047	772,984	461,936	288,361	187,950	341,374	282,260	126,624	68,605
Total Recommended Reserve Contributions		141,800	144,600	147,500	150,500	153,500	156,600	159,700	162,900	166,200	169,500	172,900	176,400	179,900	183,500	187,200
Estimated Interest Earned, During Year		1,861	2,632	2,730	2,995	4,024	5,108	6,348	5,532	3,361	2,134	2,371	2,794	1,832	875	738
Anticipated Expenditures, By Year		(69,996)	(48,768)	(226,762)	(17,846)	(63,472)	(13,823)	(37,111)	(479,480)	(343,136)	(272,045)	(21,847)	(238,308)	(337,368)	(242,394)	(160,350)
Anticipated Reserves at Year End		<u>\$244,529</u>	<u>\$342,993</u>	<u>\$266,461</u>	<u>\$402,110</u>	<u>\$496,162</u>	<u>\$644,047</u>	<u>\$772,984</u>	<u>\$461,936</u>	<u>\$288,361</u>	<u>\$187,950</u>	<u>\$341,374</u>	<u>\$282,260</u>	<u>\$126,624</u>	<u>\$68,605</u>	<u>\$96,193</u>
															<i>(NOTE 5)</i>	<i>(NOTE 4)</i>

Explanatory Notes:

- 1) Year 2020 starting reserves are projected by the Board as of January 1, 2021; FY2020 starts January 1, 2020 and ends December 31, 2020.
- 2) Reserve Contributions for 2020 are budgeted; 2021 is budgeted; 2022 is the first year of recommended contributions.
- 3) 0.9% is the estimated annual rate of return on invested reserves.
- 4) Accumulated year 2050 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

**Pheasant Run Condominium
Homeowners Association, Inc.**
Topeka, Kansas

Line Item	Reserve Component Inventory	RUL = 0 FY2020	1 2021	2 2022	3 2023	4 2024	5 2025
<u>Exterior Building Elements</u>							
1.283	Roof, Asphalt Shingles, Building 5859 (Incl. Gutters and Downspouts)			14,045			
1.284	Roofs, Asphalt Shingles, Carports (Incl. Gutters and Downspouts)						44,053
1.600	Staircases, Wood, Phased (Incl. Landings)						26,222
1.860	Walls, Siding, Vinyl and Fiber Cement, Remaining, Phased (Replacement of Fiber Cement Siding with Vinyl)			36,235	36,960	37,699	38,453
<u>Property Site Elements</u>							
4.040	Asphalt Pavement, Mill and Overlay, Phased					79,261	80,846
4.100	Catch Basins, Inspections and Capital Repairs, Phased					3,220	3,285
4.120	Concrete Driveways, Partial			5,056			
4.140	Concrete Sidewalks, Partial			8,526			
4.285	Fences, Wood, Perimeter, Phased				21,537		
4.830	Sport Courts, Color Coat				14,613		
<u>Pool Elements</u>							
6.200	Concrete Deck, Inspections, Partial Replacements and Repairs				5,571		
6.600	Mechanical Equipment, Phased		6,120				
6.800	Pool Finish, Plaster				22,285		
6.801	Pool Finish, Tile				5,651		
Anticipated Expenditures, By Year (\$4,598,846 over 30 years)		0	6,120	63,862	106,617	120,180	192,859

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 Building Elements



Apartment style fourplex front elevation



Apartment style fourplex side and rear elevation



Duplex front elevation



Duplex front elevation



Duplex rear elevation



Duplex side and rear elevation

Chimney Caps, Metal

Line Item: 1.140

Quantity: Approximately 45 metal chimney caps

History: Unknown

Condition: Good to fair overall with rust evident based on our visual inspection from the ground



Metal chimney cap; Note rust



Rust

Useful Life: Up to 25 years

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

- As-needed:
 - Clean flues

- With roof inspection, inspect for wildlife damage, corrosion, sealant deterioration and water infiltration

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 6,580 linear feet of aluminum five-inch seamless gutters and two-inch by three-inch downspouts at the buildings and 1,210 linear feet of aluminum five-inch seamless gutters and two-inch by three-inch downspouts at the carports.

History: The Association replaced the gutters and downspouts at Building 5827 in 2020 and the remaining gutters and downspouts are at an unknown age. We include an allowance for replacement of the gutters and downspouts with the roofs at Buildings 5823, 5827, 5837, 5839, 5859 and the carports.

Condition: Good to fair overall with downspout drainage directly onto the roof evident



Gutter and downspout assembly



Downspout drainage directly onto the roof

Useful Life: 15- to 20-years for replacement of the gutters and downspouts at the buildings and 15- to 25-years for replacement of the gutters and downspouts at the carports

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. 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.

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.

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.

Roofs, Asphalt Shingles

Line Items: 1.280 through 1.285

Quantity: Approximately 1,015 *squares*¹ of the buildings and 105 squares of the carports. Our estimate of cost for replacement of the roofs at buildings 5823, 5827, 5837, 5839, 5859 and the carports include an allowance for replacement of the aluminum gutters and downspouts.

History:

- Buildings 5823 and 5837 – Replaced in 2017
- **Building 5827 – Replaced in 2020**
- **Building 5839 – Replaced in 2008**
- **Building 5859 – Replaced in 2001**
- Remaining building roofs where replaced in 2011 due to storm damage

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

- Carports – Unknown

Condition: The building roofs are in good to fair overall condition with the exception of the roof at Building 5859 which is in fair to poor overall condition, and the carport roofs are in fair overall condition. We note shingle lift from our visual inspection from the ground. The Board does not report a history of leaks.



Asphalt shingle roof overview



Shingle lift at Building 5803



Shingle lift at Building 5851



Shingle lift at Building 5811



Shingle lift at Building 5821



Shingle lift at Building 5859



Shingle lift at the carport



Shingle lift at the carport

Useful Life: 15- to 20-years for the building roofs and 15- to 25-years for the carport roofs

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

- Laminate shingles at the majority of the buildings and pool house
- Three tab shingles at Building 5859 and the carports
- Boston style ridge caps
- Rubber seal with metal base boot flashing at waste pipes
- Soffit and square hood box vents
- Metal drip edge
- 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.

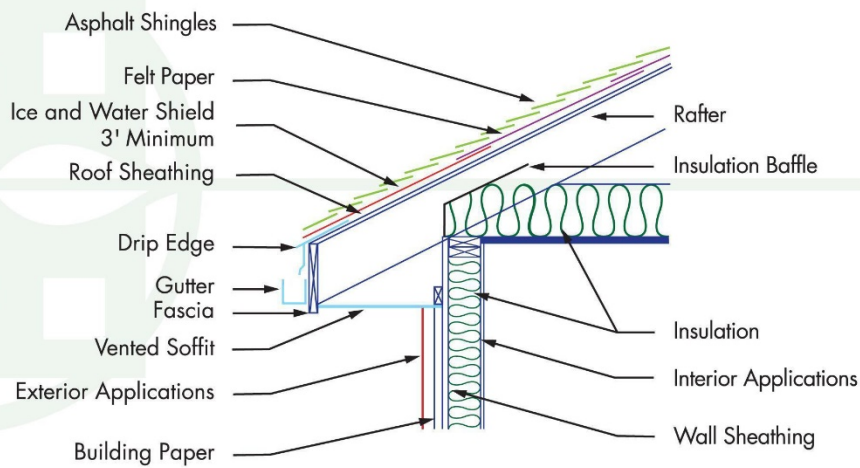
Certain characteristics of condition govern the times of replacement. Replacement of an asphalt shingle roof becomes necessary when there are multiple or recurring leaks and when the shingles begin to cup, curl and lift. These conditions are indications that the asphalt shingle roof is near the end of 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 Pheasant Run:

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.

Staircases, Wood

Line Item: 1.600

Quantity: 19 sets of wood staircases located at the fourplex buildings

History: Various ages

Condition: Good overall



Wood staircase

Useful Life: Up to 35 years

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

- Semi-annually:
 - Check railing stability and fasteners.
 - Apply finish applications at areas with excessive finish deterioration

- Replace damage or broken stair treads and ensure proper attachment to the building
- Every three years:
 - Power wash with algaecide and application of sealer/stain

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 note carpet at a limited quantity of the second floor landings. Carpet conceals wood deterioration, retains water and inhibits drainage. Water trapped by the carpet can result in accelerated wood rot and deterioration. Therefore, we do not recommend the use of carpet on the landings and recommend the Association replace the carpet through the operating budget as needed.

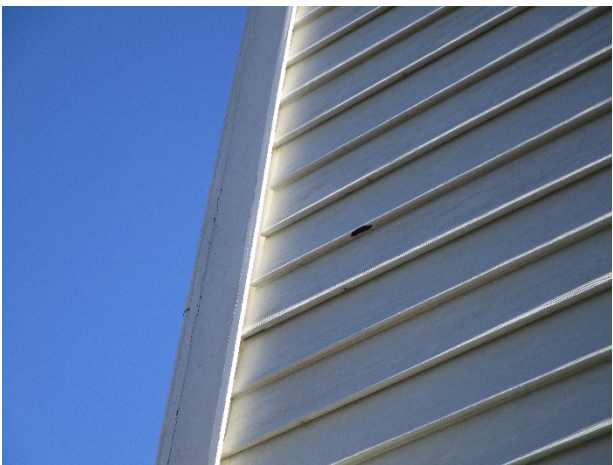
Walls, Siding, Vinyl

Line Item: 1.860

Quantity: Approximately 115,780 square feet of the exterior walls. This quantity includes the exterior walls which comprise of fiber cement siding.

History: The Association replaced approximately 4,330 square feet of vinyl siding at Building 5827 in 2020. Based on the age and condition of the siding at Building 5827 we do not anticipate replacement of the siding over the next 30 years. **The remaining siding is at various ages and the Association plans to replace the siding at two buildings per year beginning in 2022.**

Condition: Good to fair overall with siding damage and loose siding evident



Siding damage at Building 5803



Siding damage at Building 5849



Siding damage at Building 5859



Loose siding at 5835

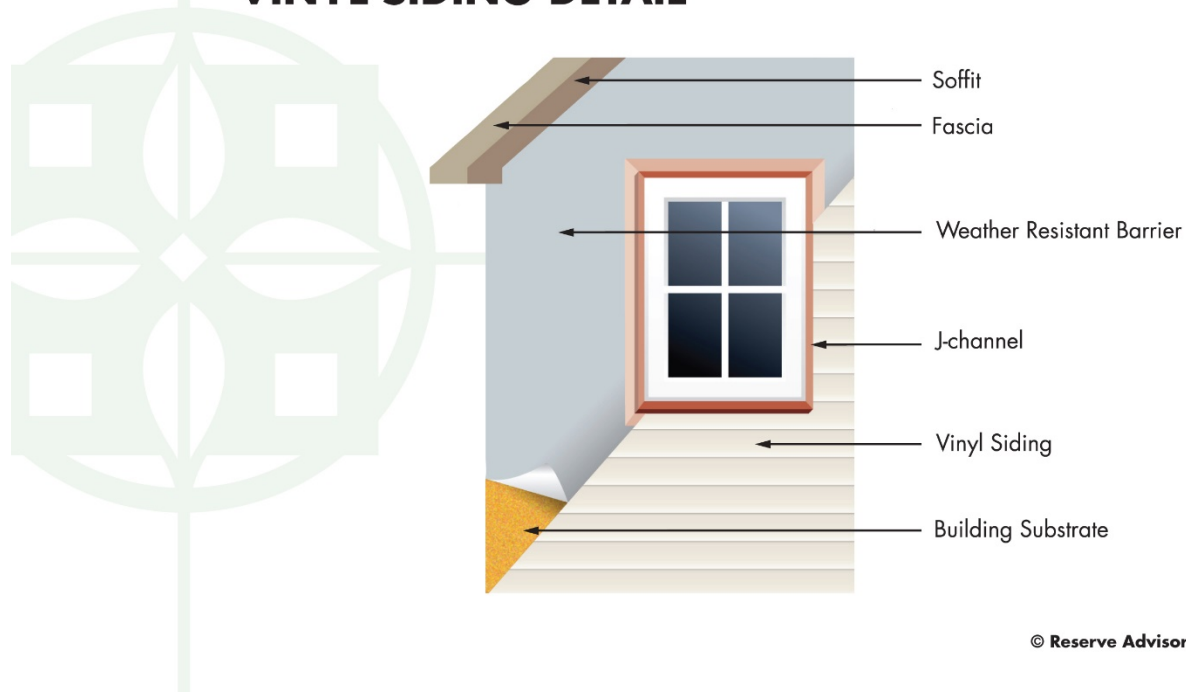
Useful Life: Up to 40 years

Component Detail Notes: The siding at Pheasant Run consists of the following:

- Clapboard double four-inch profile
- J-channel trim at window and door perimeters, and other penetrations
- Water-vapor permeable building paper protects the buildings

The following diagram details the use of building wrap in a vinyl siding system:

VINYL SIDING DETAIL



© Reserve Advisors

The Association should install new vinyl siding as recommended by the *Vinyl Institute, Inc.* The vinyl siding should be installed over a continuous weather resistant barrier and

properly integrated flashing around all penetrations. Fasteners used should include aluminum, galvanized steel or other corrosion-resistant fasteners. Siding panels should overlap by approximately one inch. Joints should be staggered so that no two courses are aligned vertically, unless separated by at least three courses. The siding should not be caulked where the siding meets trim accessories, such as J-channel, or at overlap joints. J-channel should be installed a minimum of ½ inch off of roof lines.

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 or damage from wind driven objects or lawn care equipment
 - Periodically clean siding as necessary at areas of organic growth. A non-abrasive household cleaner or manufacturer specified vinyl siding cleaner will remove more intense stains. **We do not recommend pressure cleaning at vinyl siding due to the siding's brittle nature.**

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 Association plans to replace the fiber cement siding and trim with vinyl siding trim at the time of replacement and we recommend the Association apply paint finish applications to the fiber cement siding through the operating budget as needed.

Building Services Elements

Pipes

Line Item: 3.605

Quantity: We estimate that each fourplex unit shares domestic water plumbing pipes for both the kitchen and bathroom with the adjacent unit.

History and Condition:

- Domestic Water, Supply and Return – Original and reported in satisfactory condition
- Sanitary Waste Disposal and Vent – Original and reported in satisfactory condition

Component Detail Notes: The Association is responsible for maintenance and replacement of the piping systems arranged in vertical and horizontal segments. These pipes comprise the following:

- Domestic cold water
- Vent plumbing fixtures

- Sanitary waste disposal

The exact locations and conditions of the pipes were not ascertained due to the nature of their location and the non-invasive nature of our inspection. We comment on the respective quantities and conditions of the piping systems in the following sections of this narrative.

Domestic Water - Copper piping is the predominant type of pipe used in new construction for domestic water piping. With low mineral content in the water, the useful life of copper domestic water pipes is up to and sometimes beyond 80 years. However, there is recent evidence that copper piping prematurely develops pinhole leaks. Studies have shown that changes in water treatment practices, recently required in response to U.S. Environmental Protection Agency regulations, are dramatically increasing the risk of pitting corrosion in many geographic locations. Utility companies are implementing higher chloride levels to prevent outbreaks of waterborne disease. These higher chloride levels can accelerate corrosion of copper pipes and indeterminately reduce their useful life.

In the event that numerous pinhole leaks develop or occur throughout the system of pipes, Pheasant Run should also consider “in-place” pipe restoration technology. This process includes drying, sandblasting away interior pipe occlusions and applying an epoxy lining to the interior surfaces of the pipes. Future updates of this study will consider the possibility of the pipe restoration process in lieu of pipe replacement at Pheasant Run. Restoration technology can extend the useful life of a pipe system thus avoiding a system pipe replacement.

Sanitary Waste Disposal and Vent - The material pipes typically deteriorate from the inside out as a result of sewer gases, condensation and rust.

Valves - The piping systems include various valves. Identification of a typical useful life and remaining useful life for individual valves is difficult. Associations typically replace valves on an as needed basis in our experience.

Preventative Maintenance Notes: The required preventative maintenance may vary in frequency and scope based on the building’s age and demands of the piping systems. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Quarterly:
 - Inspect all visible piping for corrosion and leaks, including common areas or areas immediately surrounding pipes such as insulation, ceiling tiles or the floor for moisture, water accumulation, mold or mildew
- Annually:
 - Verify system pressure is sufficient
 - Check accessible valves for proper operation
 - Test backflow prevention devices
 - Inspect and obtain certification for pressure relief valves
 - Test drain line flow rates



- Mechanically or chemically clean sewer lines 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. Our cost assumes replacement of all pipes located within each wall opening, associated branch piping, fittings and minimal interior finishes. However, the cost does not include temporary housing for affected residents, pipes within the units or significant interior finishes.

The Association budgets an amount in the annual operating budget for minor pipe repairs and replacements. **We recommend the Association continue to fund interim pipe replacements, prior to more aggregate replacements identified in the following paragraphs, from the operating budget. We also recommend the Association contract for an invasive investigation of the condition of the piping system prior to beginning more aggregate replacements, funded through the operating budget.**

We recommend the Association budget for replacement of the common pipes at 15 units, or approximately twenty percent (19.7%) of the fourplex units during the next 30 years.

An invasive analysis of the piping systems will provide various replacement options. Replacement of the systems as an aggregate event will likely require the use of special assessments or loans to fund the replacements.

Although it is likely that the times of replacement and extent of repair costs may vary from the budgetary allowance, Pheasant Run could budget sufficient reserves for the beginning of these pipe replacements and have the opportunity to adjust its future reserves up or down to meet any changes to these budgetary estimates. Updates of this Reserve Study would incorporate changes to budgetary costs through a continued historical analysis of the rate of deterioration and actual pipe replacements to budget sufficient reserves.

We recommend the Association budget for replacement of the following items through the operating budget:

- Replacement of valves on an as-needed basis
- Minor pipe repairs and replacements
- invasive investigation of the condition of the piping system prior to beginning more aggregate replacements
- Rodding of waste pipes

Property Site Elements

Asphalt Pavement, Crack Repair, Patch and Seal Coat

Line Item: 4.020

Quantity: Approximately 10,100 square yards

History: The Association seal coated the pavement in 2020

Condition: Fair overall

Useful Life: Three- to five-years

Component Detail Notes: Proposals for seal coat applications should include crack repairs and patching. The contractor should only apply seal coat applications after repairs are completed. A seal coat does not bridge or close cracks; therefore, unrepaired cracks render the seal coat applications useless.

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

Line Items: 4.040 and 4.045

Quantity: Approximately 10,100 square yards

History: Unknown

Condition: Fair overall with significant cracking and settlement evident



Pavement alligator cracks



Pavement alligator cracks



Pavement alligator cracks



Pavement edge cracks



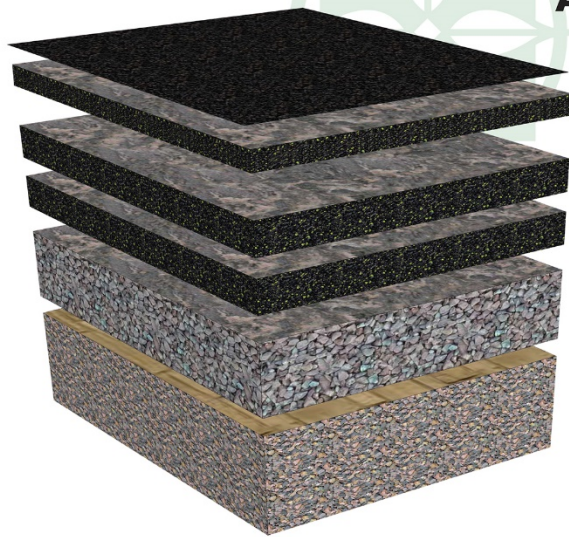
Pavement edge cracks



Pavement cracks and settlement

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 Pheasant Run:



ASPHALT DIAGRAM

Sealcoat or Wearing Surface

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

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

Compacted Crushed Stone or Aggregate Base

Subbase of Undisturbed Native Soils Compacted to 95% dry density

© Reserve Advisors

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

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%).

Catch Basins

Line Item: 4.100

Quantity: Seven catch basins²

History: Original

Condition: Good overall without settlement visually apparent



Catch basin overview

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

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

² We utilize the terminology catch basin to refer to all storm water collection structures including curb inlets.

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 Driveways

Line Item: 4.120

Quantity: Approximately 8,900 square feet. This quantity includes the concrete aprons at the common entrances to the community.

Condition: Various conditions ranging from good to poor overall with cracks and concrete spall evident



Concrete driveway overview



Driveway cracks at Building 5837



Driveway cracks at Building 5821



Concrete apron cracks



Driveway cracks and concrete spall at Building 5843



Concrete spall at Building 5831

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

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

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

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We estimate that up to 4,455 square feet of concrete driveways, or fifty percent (50.1%) of the total, will require replacement during the next 30 years. We account for an increased frequency of partial replacement events as the property ages.

Concrete Sidewalks

Line Item: 4.140

Quantity: Approximately 16,300 square feet

Condition: Various conditions ranging from good to poor overall with cracks and concrete spall evident



Common sidewalk cracks



Common sidewalk cracks



Sidewalk cracks at Building 5817



Sidewalk cracks at Building 5829



Common sidewalk cracks and concrete spall



Common sidewalk concrete spall

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 8,195 square feet of concrete sidewalks, or fifty percent (50.3%) of the total, will require replacement during the next 30 years. We account for an increased frequency of partial replacement events as the property ages.

Fences, Wood

Line Item: 4.285

Quantity: 1,980 linear feet surrounding the perimeter of the Association

History: Unknown

Condition: Good overall condition with leaning sections, and board warp and damage evident



Front side of the wood perimeter fence



Rear side of the wood perimeter fence



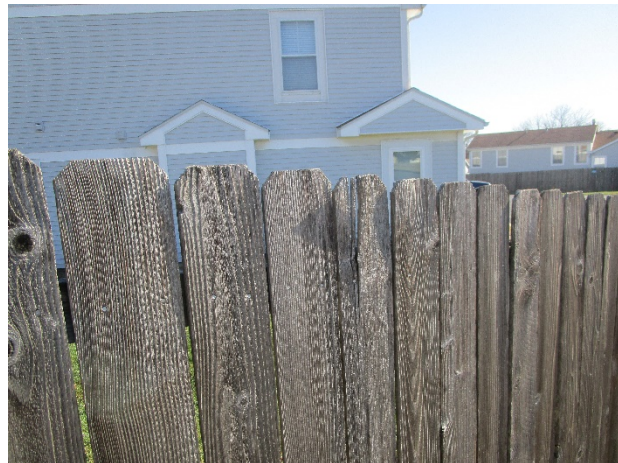
Leaning fence section



Board warp



Board damage



Board damage

Useful Life: 15- to 20-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, finish deterioration 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 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.

Light Poles and Fixtures

Line Item: 4.560

Quantity: Approximately 80 metal poles with light fixtures

History: Unknown

Condition: Good to fair overall rust at the base of the light pole evident



Light pole and fixture overview



Rust at the base of the light pole

Useful Life: Up to 25 years

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

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

Priority/Criticality: Per Board discretion

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

Railings, Steel

Line Items: 4.733

Quantity: 180 linear feet

History: Installed around 2016

Condition: Good to fair overall with rust evident



Steel railing



Rust

Useful Life: Up to 35 years

Component Detail Notes: Steel components at grade and key structural connections are especially prone to failure if not thoroughly maintained. Secure and rust free fasteners and connections will prevent premature deterioration. Preparation of the steel before application of the paint finish is critical to maximize the useful life of the finish.

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

- Annually:
 - Inspect for damage, and excessive finish deterioration or corrosion
 - Test security of railings and inspect connection fasteners

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 apply paint finish applications to the metal railings through the operating budget as needed.

Retaining Walls, Masonry

Line Item: 4.745

Quantity: Approximately 3,070 square feet

History: Replaced around 2005

Condition: Good to fair overall with settlement and efflorescence evident



Masonry retaining wall



Retaining wall settlement



Retaining wall settlement

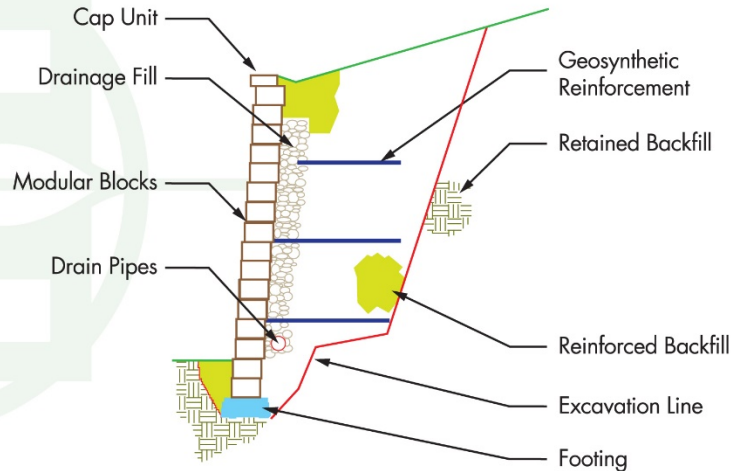


Retaining wall efflorescence

Useful Life: Up to 35 years

Component Detail Notes: Properly constructed interlocking masonry retaining walls utilize geosynthetic reinforcement and a drainage system to stabilize the wall and prevent the buildup of hydrostatic pressure behind the wall. Water stains may indicate inadequate drainage or blocked drainage from behind the walls. The following schematic depicts the typical components of a retaining wall system although it may not reflect the actual configuration at Pheasant Run:

MASONRY RETAINING WALL DETAIL



© Reserve Advisors

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

- Annually:
 - Inspect and repair leaning sections or damaged areas
 - Water stains which may indicate possible blocked drainage should be investigated further
 - Inspect and repair erosion at the wall base and backside

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.

Sport Courts, Color Coat

Line Item: 4.830

Quantity: 1,530 square yards comprising of a tennis, basketball and shuffleboard sport court

History: The color coat is at an unknown age and the court was replaced around 2010

Condition: Fair to poor overall with cracks and coating deterioration evident



Sport courts overview; Note cracks and coating deterioration

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.

Sport Courts, Fence

Line Item: 4.840

Quantity: 470 linear feet

History: Unknown, likely replaced in coordination with the court around 2010

Condition: Good overall



Sport courts 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.

Sport Courts, Surface

Line Item: 4.860

Quantity: 1,530 square yards of asphalt comprising of a tennis, basketball and shuffleboard sport court

History: Replaced around 2010

Condition: Fair to poor overall with cracks evident



Surface cracks



Surface cracks



Surface cracks

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. Although condition warrants near term replacement of the sport courts, the Board informs us replacement of the sport courts is a low priority for the Association. Based on this and at the request of the Board we defer replacement of the sport courts and future updates to this study will consider changes to the timing of replacement as needed.

Pool House Elements



Pool house front and side elevation



Pool house rear elevation

Interior Renovations

Line Item: 5.500

Quantity: The components of the clubhouse interior include:

- Carpet floor coverings
- Paint finishes on the walls and ceilings
- Plumbing fixtures
- Light fixtures
- Kitchen cabinets and countertops
- Furnishings including tables and chairs
- Various appliances including a sink and refrigerator

History: Various ages

Condition: Good to fair overall



Pool house interior



Pool house interior



Pool house interior

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 Board informs us the Association plans to complete interim partial renovations, including replacement of the carpet floor coverings and paint finish applications through the operating budget as needed. The complete renovation should include replacement of all the interior components listed above.**

Roof, Asphalt Shingles

Line Item: 5.600

Quantity: 10 squares and 120 linear feet of gutters and downspouts

History: The pool house roof was likely replaced around 2011 in coordination with replacement of the building roofs replaced due to storm damage.

Condition: Good overall

Useful Life: 15- to 20-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. Our estimate of cost includes an allowance for replacement of the gutters and downspouts. See the “**Roofs, Asphalt Shingle**” narrative in the “**Exterior Elements**” section of the report for our recommendation on replacement of the asphalt shingle roof.

Walls, Siding, Vinyl

Line Item: 5.800

Quantity: Approximately 800 square feet

History: Unknown

Condition: Good to fair overall with siding damage evident



Siding damage

Useful Life: Up to 40 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. See the “**Walls, Siding Vinyl**” narrative in the “**Exterior Elements**” section of the report for our recommendation on replacement of the vinyl siding.

Windows and Doors

Line Item: 5.800

Quantity: 130 square feet

History: Unknown

Condition: Good condition

Useful Life: Up to 40 years

Priority/Criticality: Not recommended to defer

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

Pool Elements

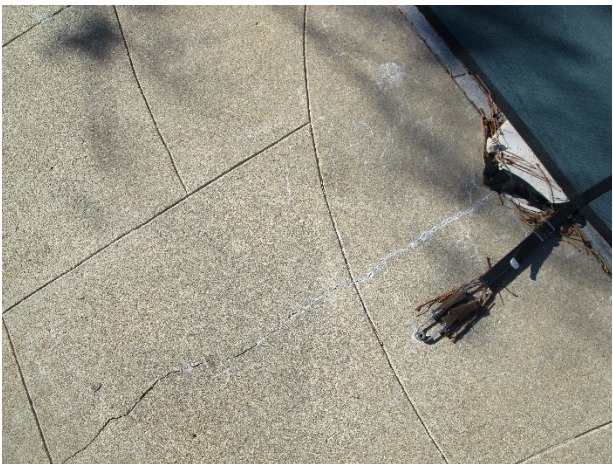
Concrete Deck

Line Item: 6.200

Quantity: 3,500 square feet

History: Original

Condition: Good to fair condition with cracks evident



Pool deck cracks



Pool 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
 - 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
- Crack repairs as needed
- Mortar joint repairs
- Caulk replacement

Cover, Vinyl

Line Item: 6.300

Quantity: 1,650 square feet

History: Unknown

Condition: Good condition



Vinyl cover

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.

Fence, Steel

Line Item: 6.400

Quantity: 250 linear feet

History: Unknown

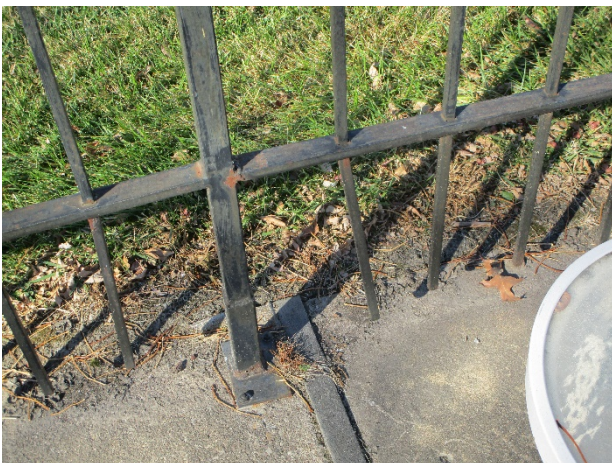
Condition: Good to fair overall condition with rust and damage evident



Metal pool fence overview



Rust



Rust and fence damage



Rust and fence damage

Useful Life: Up to 35 years

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: Not recommended to defer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We recommend the Association apply paint finish applications to the fence through the operating budget as needed.

Mechanical Equipment

Line Item: 6.600

Quantity: The mechanical equipment includes the following:

- Automatic chlorinator
- Controls
- Filter
- Heater
- Interconnected pipe, fittings and valves
- Pumps
- Electrical panel
- Exhaust fan

History: Various ages, the Association plans to replace a pump in 2021

Condition: Reported satisfactory



Mechanical equipment



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 Finishes, Plaster and Tile

Line Items: 6.800 and 6.801

Quantity: 1,500 square feet of plaster based on the horizontal surface area and approximately 150 linear feet of tile

History: The plaster finish is at an unknown age. The Board informs us the Association's pool maintenance company reports the plaster finish has a remaining useful life of three- to four-years.

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

Useful Life: 8- to 12-years for the plaster and 15- to 25-years for the tile

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 structures and to allow for partial repairs of the underlying concrete surfaces as needed. To maintain the integrity of the pool structures, we recommend the Association budget for the following:

- Removal and replacement of the plaster finishes

- Partial replacements of the scuppers and coping as needed
- Replacement of tiles as needed
- Replacement of joint sealants as needed
- Concrete structure repairs as needed

Structure and Deck

Line Item: 6.900

Quantity: 1,500 square feet of horizontal surface area

History: Original

Conditions: Visually appear in good condition. The concrete floor 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 Pheasant Run plan to replace the following components:

- Concrete deck
- 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.

Pheasant Run 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 Topeka, Kansas 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 Pheasant Run 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 the 2,600,000-square foot 98-story Trump International Hotel and Tower in Chicago. We also routinely inspect buildings with various types of mechanical systems such as simple electric heat, to complex systems with air handlers, chillers, boilers, elevators, and life safety and security systems.

We're familiar with all types of building exteriors as well. Our well-versed staff regularly identifies optimal repair and replacement solutions for such building exterior surfaces such as adobe, brick, stone, concrete, stucco, EIFS, wood products, stained glass and aluminum siding, and window wall systems.

OLD TO NEW

Reserve Advisors' experience includes ornate and vintage buildings as well as modern structures. Our specialists are no strangers to older buildings. We're accustomed to addressing the unique challenges posed by buildings that date to the 1800's. We recognize and consider the methods of construction employed into our analysis. We recommend appropriate replacement programs that apply cost effective technologies while maintaining a building's character and appeal.

NICHOLAS M. JOHANNING, E.I.T., RS
Responsible Advisor

CURRENT CLIENT SERVICES

Nicholas M. Johanning, a Civil Engineer, is an Advisor for Reserve Advisors. Mr. Johanning is responsible for the inspection and analysis of the condition of clients' properties, 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 on townhomes, homeowners associations, planned unit developments and recreational associations.



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

Ranch at Roaring Fork Homeowners Association, Inc. Situated in Carbondale, Colorado, this community features 162 single family homes and 60 units in 14 condominium buildings. The Association features a golf course, water treatment facility and asphalt pavement streets.

Hampden Terrace Homeowners Association Built in 2002, this community of 50 units in seven buildings is located in Aurora, CO. These uniquely shaped buildings feature masonry veneer walls, balconies, patios and asphalt shingle roofs. The property includes concrete access streets and sidewalks, masonry retaining walls and an inviting entrance monument.

Lorian at Prospect Creek Owners Association, Inc. Located in picturesque Mountain Village, Colorado, this condominium style development of 20 units features an outdoor pool, concrete plaza deck and two common underground garages.

The Town Homes at Coal Creek Homeowners Association This townhome style development of 112 units in 29 buildings and is located in Louisville, Colorado. Exterior features of the buildings include stucco wall finishes and asphalt shingle roofs and the site contains a pool, concrete flatwork and asphalt pavement streets.

Cornerstone Lake Condominium Association, Inc. This townhome style development of 122 units in 16 buildings is located in Farmington, Minnesota. Exterior features of the buildings include vinyl siding, brick masonry and asphalt shingle roofs. The site consists of a pond, asphalt pavement, concrete flatwork, vinyl fences and an irrigation system.

Blue Water Keyes Horizontal Property Regime Built in 2006, this 14-story mid-rise in Myrtle Beach, South Carolina includes stucco exterior finishes, a modified bitumen roof, indoor and outdoor poles, and concrete breezeways and balconies. The building also utilizes two elevators, and various pool mechanical equipment, including a dehumidifier.

PRIOR RELEVANT EXPERIENCE

Before joining Reserve Advisors, Mr. Johanning attended the University of Toledo in Toledo, Ohio where he attained his Bachelor of Science degree in Civil Engineering. During his time at the University of Toledo, Mr. Johanning helped his senior design group develop a water reduction plan for the buildings on the University of Toledo's campus. This project included designs for improving fixture efficiencies within selected buildings and estimations of water reduction and financial savings. Mr. Johanning also interned for The Douglas Company and R.A. Plumbing and Heating as an estimating engineer.

EDUCATION

University of Toledo - B.S. Civil Engineering

PROFESSIONAL AFFILIATIONS / DESIGNATIONS

Engineer In Training (E.I.T.) Registration

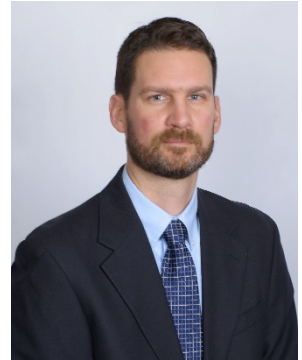
Reserve Specialist (RS) - Community Associations Institute



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 Pheasant Run 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) Pheasant Run 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.