Barclay Park Condominium

Inspected: August 6, 2024 • Revised on: May 23, 2025
Ann Arbor, MI

RESERVE STUDY

RESERVE™ ADVISORS
Long-term thinking. Everyday commitment.

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

Barclay Park Condominium
Ann Arbor, Michigan

Dear Board of Directors of Barclay Park Condominium:

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Reserve Study* of Barclay Park Condominium in Ann Arbor, Michigan and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, August 6, 2024.

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

An ongoing review by the Board and an Update of this Reserve Study are necessary to ensure an equitable funding plan since a Reserve Study is a snapshot in time. We recommend the Board budget for an Update to this Reserve Study in two- to three-years. We look forward to continuing to help Barclay Park Condominium 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 May 23, 2025 by

Reserve Advisors, LLC

Visual Inspection and Report by: Matthew D. Neike, RS[1]
Revised by: Andrew K. McGowan, RS, Regional Engineering Manager
Review by: Justin B. Klein, RS, Great Lakes Quality Assurance Engineer
Alan M. Ebert, RS, PRA[2], Director of Quality Assurance

1 RS (Reserve Specialist) is the reserve provider professional designation of the Community Associations Institute (CAI) representing America's more than 300,000 condominium, cooperative and homeowners associations.
2 PRA (Professional Reserve Analyst) is the professional designation of the Association of Professional Reserve Analysts. Learn more about APRA at http://www.apra-usa.com.

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1. RESERVE STUDY EXECUTIVE SUMMARY

Client: Barclay Park Condominium (Barclay Park)
Location: Ann Arbor, Michigan
Reference: 070930

Property Basics: Barclay Park Condominium is a condominium style development which consists of 291 units in 29 buildings. The buildings were built from 1999 to 2004.

Reserve Components Identified: 44 Reserve Components.

Inspection Date: August 6, 2024. We conducted previous inspections in 2007, 2012 and 2019.

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 2042 due to the replacement of the vinyl siding.

In addition, the Reserve Funding Plan recommends 2054 year end accumulated reserves of approximately $1,631,200. We judge this amount of accumulated reserves in 2054 necessary to fund the likely replacement of the roofs after 2054. These future needs, although beyond the limit of the Cash Flow Analysis of this Reserve Study, are reflected in the amount of accumulated 2054 year end reserves.

Methodology: We use the Cash Flow Method to compute the Reserve Funding Plan. This method offsets future variable Reserve Expenditures with existing and future stable levels of reserve funding. Our application of this method also considers:

- Current and future local costs of replacement
- 2.7% anticipated annual rate of return on invested reserves
- 3.3% 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:

- $1,610,433 as of June 30, 2024
- 2024 budgeted Reserve Contributions of $349,548
- 2025 budgeted Reserve Contributions of $340,348

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:

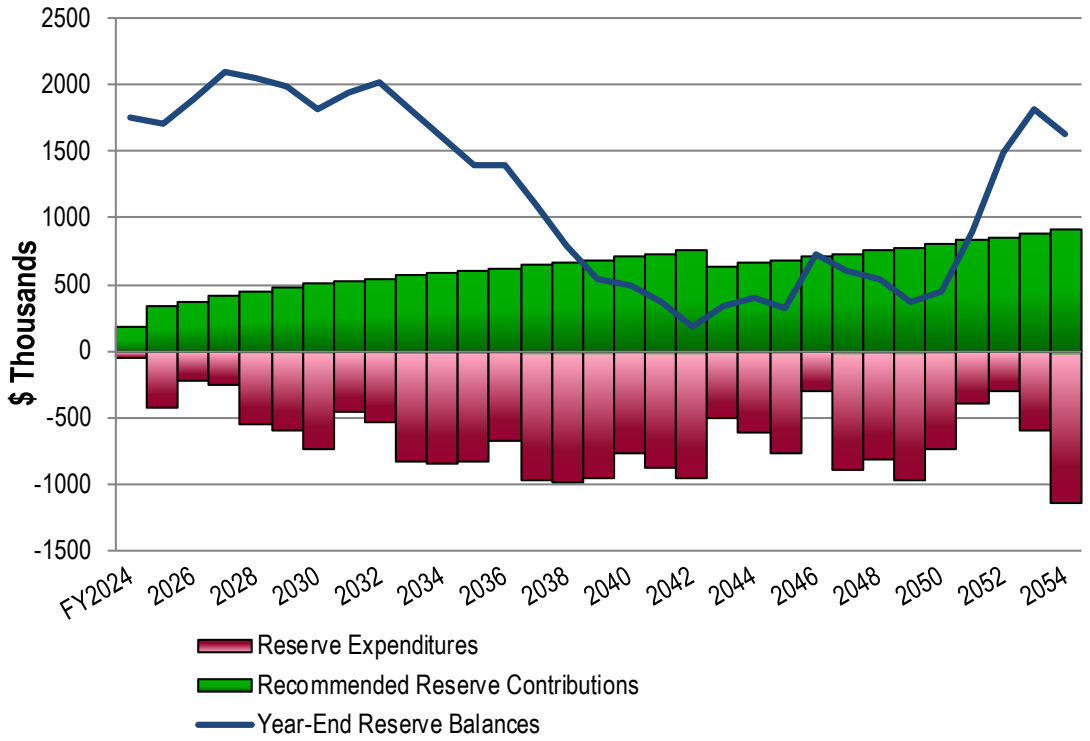
- Repaving as deferral will result in dangerous road conditions and vehicle damage
- Replacement of the Boardwalk due to noted deterioration
- Replacement of the fire suppression systems exterior components
- Replacement of the tennis court surface due to noted deterioration

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

- Phased increases of $34,600 from 2026 through 2030
- Inflationary increases from 2031 through 2042
- Decrease to $640,000 by 2043 due to fully funding for replacement of the vinyl siding
- Inflationary increases thereafter through 2054, the limit of this study's Cash Flow Analysis
- The Association may ascribe the actual contributions and assessments per owner based upon percent ownership, as defined by the Association's governing documents.

Barclay Park
Recommended Reserve Funding Table and Graph

Year	Reserve Contributions ($)	Reserve Balances ($)	Year	Reserve Contributions ($)	Reserve Balances ($)	Year	Reserve Contributions ($)	Reserve Balances ($)
2025	340,348 (Budgeted)	1,706,881	2035	603,800	1,401,948	2045	682,900	318,773
2026	374,900	1,901,619	2036	623,700	1,389,220	2046	705,400	734,050
2027	409,500	2,105,125	2037	644,300	1,094,568	2047	728,700	595,431
2028	444,100	2,055,977	2038	665,600	794,395	2048	752,700	543,141
2029	478,700	1,992,147	2039	687,600	545,471	2049	777,500	370,358
2030	513,300	1,823,227	2040	710,300	500,495	2050	803,200	446,376
2031	530,200	1,940,212	2041	733,700	373,118	2051	829,700	900,568
2032	547,700	2,013,587	2042	757,900	188,750	2052	857,100	1,487,789
2033	565,800	1,805,052	2043	640,000	331,114	2053	885,400	1,813,130
2034	584,500	1,594,088	2044	661,100	393,050	2054	914,600	1,631,180



2. RESERVE STUDY REPORT

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

Barclay Park Condominium

Ann Arbor, Michigan

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, August 6, 2024. We conducted previous inspections in 2007, 2012 and 2019.

We present our findings and recommendations in the following report sections and spreadsheets:

- **Identification of Property -** Segregates all property into several areas of responsibility for repair or replacement
- **Reserve Expenditures -** Identifies reserve components and related quantities, useful lives, remaining useful lives and future reserve expenditures during the next 30 years
- **Reserve Funding Plan -** Presents the recommended Reserve Contributions and year-end Reserve Balances for the next 30 years
- **Five-Year Outlook -** Identifies reserve components and anticipated reserve expenditures during the first five years
- **Reserve Component Detail -** Describes the reserve components, includes photographic documentation of the condition of various property elements, describes our recommendations for repairs or replacement, and includes detailed solutions and procedures for replacements for the benefit of current and future board members
- **Methodology -** Lists the national standards, methods and procedures used to develop the Reserve Study
- **Definitions -** Contains definitions of terms used in the Reserve Study, consistent with national standards
- **Professional Service Conditions -** Describes Assumptions and Professional Service Conditions
- **Credentials and Resources**

IDENTIFICATION OF PROPERTY

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

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

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

We advise the Board to conduct an annual review of these classes of property to confirm its policy concerning the manner of funding, i.e., from reserves or the operating budget. Reserve Components are defined by CAI as property elements with:

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

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

Excluded Components

for
Barclay Park
Condominium
Ann Arbor, Michigan

Operating Budget Components

Repairs normally funded through the Operating Budget and Expenditures less than $8,000 (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)

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

- Asphalt Pavement, Crack Repair, Patch and Seal Coat Applications[1]
- Benches and Trash Receptacles
- Catch Basins, Landscape
- Clubhouse, Air Handling Unit and Condensing Unit
- Clubhouse, Balcony Terrace, Interim Waterproof Coating Applications
- Clubhouse, Water Heater
- Drainage and Grade Improvements
- Exercise Equipment
- Fences, Wood, Patio Partition
- Fire Suppression System, Annual Testing and Interim Component Replacements
- Fountain [2]
- Golf Carts
- Irrigation System, Controllers
- Landscape, General (Including Wetlands)
- Light Fixtures, Landscape
- Maintenance Garage Structure
- Paint Finishes, Railings and Light Fixtures[3]
- Pavers, Grid Type
- Pipes, Interior Building, Common, Interim Repairs
- Ponds, Aerators and Bubblers
- Ponds, Clubhouse, Circulation System (Including Pump)
- Ponds, Shorelines
- Pump, Storm Water, Wetland D
- Retaining Wall, Tennis Court [2]
- Retaining Walls, Stone
- Signage
- Valves, Small Diameter [4]

[1] At the request of the Board. We include costs for near term major patching/replacements in excess of assumed routine maintenance and annual

[2] Future updates of this Reserve Study will again consider the need for complete replacement of this component based on the conditions.

[3] At the request of the Board

[4] We assume replacement as needed in lieu of an aggregate replacement of all small diameter valves as a single event.

Excluded Components

for
Barclay Park
Condominium
Ann Arbor, Michigan

Long-Lived Components		
These elements may not have predictable Remaining Useful Lives or their replacement may occur beyond the scope of this study. The operating budget should fund infrequent repairs. Funding untimely or unexpected replacements from reserves will necessitate increases to Reserve Contributions. Periodic updates of this Reserve Study will help determine the merits of adjusting the Reserve Funding Plan.	**Useful Life**	**Estimated Cost**
• Electrical Systems, Common	Indeterminate	N/A
• Foundations	Indeterminate	N/A
• Pipes, Interior Building, Domestic Water, Sanitary Waste, Vent, Sprinkler, Common	Indeterminate	N/A
• Pipes, Subsurface Utilities	Indeterminate	N/A
• Structural Frames	Indeterminate	N/A

Owners Responsibility Components
Certain items have been designated as the responsibility of the Owners to repair or replace at their cost, including items billed back.
• Balconies, Stain/Seal Applications and Interim Repairs
• Electrical Systems (Including Circuit Protection Panels)
• Heating, Ventilating and Air Conditioning (HVAC) Units
• Interiors
• Pipes (Within Units)
• Windows and Doors

3. RESERVE EXPENDITURES and FUNDING PLAN

The tables following this introduction present:

Reserve Expenditures

- Line item numbers
- Total quantities
- Quantities replaced per phase (in a single year)
- Reserve component inventory
- Estimated first year of event (i.e., replacement, application, etc.)
- Life analysis showing
  - useful life
  - remaining useful life
- 2024 local cost of replacement
  - Per unit
  - Per phase
  - Replacement of total quantity
- Percentage of future expenditures anticipated during the next 30 years
- Schedule of estimated future costs for each reserve component including inflation

Reserve Funding Plan

- Reserves at the beginning of each year
- Total recommended reserve contributions
- Estimated interest earned from invested reserves
- Anticipated expenditures by year
- Anticipated reserves at year end

Five-Year Outlook

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

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

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

Years 2024 to 2039

RESERVE EXPENDITURES

Barclay Park Condominium
Ann Arbor, Michigan

Explanatory Notes:

1) **3.3% is the estimated Inflation Rate for estimating Future Replacement Costs.**
2) **FY2024 is Fiscal Year beginning January 1, 2024 and ending December 31, 2024.**

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years Useful	Life Analysis, Years Remaining	Costs, $ Unit (2024)	Costs, $ Per Phase (2024)	Costs, $ Total (2024)	Percentage of Future Expenditures	RUL = 0 FY2024	1 2025	2 2026	3 2027	4 2028	5 2029	6 2030	7 2031	8 2032	9 2033	10 2034	11 2035	12 2036	13 2037	14 2038	15 2039
				Exterior Building Elements																							
1.115	15,800	5,267	Square Feet	Balconies, Wood, Deck Boards and Interim Repairs, Phased	2047	12 to 18	23 to 25	16.00	84,267	252,800	**2.7%**																
1.120	15,800	3,160	Square Feet	Balconies, Wood, Replacement, Phased	2030	to 35	6 to 10	65.00	205,400	1,027,000	**6.5%**							249,576	257,812	266,320	275,108	284,187					
1.199	1	1	Allowance	Doors, Garage, Initial Repairs and Replacements (2024 is Budgeted)	2024	N/A	0	50,000.00	50,000	50,000	**0.2%**	50,000															
1.200	291	97	Each	Doors, Garage, Subsequent Replacement, Phased	2037	to 25	13 to 15	1,500.00	145,500	436,500	**3.3%**														221,905	229,228	236,792
1.233	29	29	Buildings	Fire Suppression Systems, Exterior Components (Heads, Audio Fixtures)	2028	to 25	4	4,400.00	127,600	127,600	**2.3%**					145,295											
1.240	21,600	4,320	Linear Feet	Gutters and Downspouts, Aluminum, Phased	2033	to 25	9 to 13	10.00	43,200	216,000	**1.5%**										57,861	59,771	61,743	63,780	65,885		
1.260	875	219	Each	Light Fixtures, Phased	2026	to 20	2 to 5	125.00	27,344	109,375	**1.7%**			29,178	30,141	31,136	32,163										
1.277	9	9	Buildings	Radon Mitigation System, Installation, Remaining	2025	N/A	1	5,500.00	49,500	49,500	**0.2%**		51,134														
1.278	10	10	Buildings	Radon Mitigation System, Motor Replacements and Partial Repairs	2038	10 to 15	14	750.00	7,500	7,500	**0.2%**															11,816	
1.280	2,750	550	Squares	Roofs, Asphalt Shingles, Phased	2033	20 to 25	9 to 13	530.00	291,500	1,457,500	**13.9%**										390,428	403,313	416,622	430,370	444,573		
1.820	1	1	Allowance	Walls, Masonry, Inspections and Repairs	2025	ongoing	1	25,000.00	25,000	25,000	**6.3%**		25,825	26,677	27,558	28,467	29,406	30,377	31,379	32,415	33,484	34,589	35,731	36,910	38,128	39,386	40,686
1.860	168,000	33,600	Square Feet	Walls, Siding, Vinyl, Phased	2038	35 to 40	14 to 18	10.00	336,000	1,680,000	**13.8%**															529,351	546,820
1.905	3	1	Allowance	Walls, Trim, Paint Finishes, Phased	2025	4 to 6	1 to 3	60,000.00	60,000	180,000	**8.7%**		61,980	64,025	66,138			72,904	75,310	77,795			85,754	88,584	91,507		
1.906	86,000	4,300	Linear Feet	Walls, Trim, Replace with Composite, Phased	2025	to 40	1 to 30+	8.50	36,550	731,000	**5.3%**		37,756	39,002	40,289			44,411	45,876	47,390			52,239	53,962	55,743		
				Property Site Elements																							
4.020	1	1	Allowance	Asphalt Pavement, Near Term Major Repairs/Patching	2025	15 to 20	1	50,000.00	varies	varies	**1.0%**		130,000	21,342	55,115												
4.040	5,300	2,650	Square Yards	Asphalt Pavement, Mill and Overlay, Barclay Way, Phased	2043	15 to 20	19 to 21	20.00	53,000	106,000	**1.0%**																
4.046	17,960	5,987	Square Yards	Asphalt Pavement, Total Replacement, Remaining, Phased	2028	15 to 20	4 to 6	42.50	254,433	763,300	**4.4%**					289,718	299,279	309,155									
4.047	18,960	3,160	Square Yards	Asphalt Pavement, Total Replacement, Access Drives and Parking Areas, Subsequent, Phased	2043	15 to 20	19 to 26	42.50	134,300	805,800	**8.3%**																
4.061	2,200	2,200	Square Feet	Boardwalk, Deck Boards, Interim Repairs and Partial Structure (2025 is Planned)	2025	15 to 25	1	60.00	132,000	132,000	**2.0%**		115,000														
4.100	40	10	Each	Catch Basins, Inspections and Capital Repairs, Phased	2028	15 to 20	4 to 19	950.00	9,500	38,000	**0.6%**					10,817	11,174	11,543									
4.110	4,100	150	Linear Feet	Concrete Curbs and Gutters, Partial	2028	to 65	4 to 30+	46.50	6,975	190,650	**0.6%**					7,942	8,204	8,475									
4.130	118	3	Each	Concrete Patios, Partial	2026	to 65	2 to 30+	1,400.00	4,200	165,200	**0.4%**			4,482			4,940			5,446			6,003			6,617	
4.140	38,700	1,550	Square Feet	Concrete Sidewalks, Entrance Flatwork and Garage Aprons, Partial	2026	to 65	2 to 30+	11.50	17,825	445,050	**1.5%**			19,021			20,967			23,112			25,476			28,082	
4.160	16,300	820	Square Feet	Concrete Stairs, Porches and Landings, Partial	2026	to 65	2 to 30+	28.00	22,960	456,400	**1.9%**			24,500			27,007			29,770			32,815			36,172	
4.420	115	29	Zones	Irrigation System, Phased	2039	to 40	15 to 24	2,500.00	71,875	287,500	**2.6%**																116,972
4.560	70	70	Each	Light Poles and Fixtures	2044	to 35	20	2,700.00	189,000	189,000	**1.8%**																
4.600	19	19	Each	Mailbox Stations	2029	to 25	5	2,100.00	39,900	39,900	**0.7%**						46,933										
4.620	1,200	1,200	Square Feet	Pavers, Masonry	2029	to 25	5	19.50	23,400	23,400	**0.4%**						27,524										
4.630	1	1	Each	Pergola, Wood	2028	15 to 25	4	14,000.00	14,000	14,000	**0.3%**					15,942											
4.660	1	1	Allowance	Playground Equipment	2037	15 to 20	13	35,600.00	35,600	35,600	**0.3%**														54,294		
4.710	1,400	1,400	Square Yards	Ponds, Sediment Removal, Center Pond	2027	to 30	3	26.00	36,400	36,400	**0.2%**				40,124												
4.711	600	600	Square Yards	Ponds, Sediment Removal and Liner Replacement, Clubhouse Ponds	2031	to 20	7	52.00	31,200	31,200	**0.6%**								39,161								
4.731	3,210	803	Linear Feet	Railings, Aluminum, Phased	2032	to 25	8 to 11	43.00	34,508	138,030	**0.9%**									44,742	46,219	47,744	49,319				
4.745	600	300	Square Feet	Retaining Walls, Masonry and Planters, Phased	2043	25 to 35	19 to 20	90.00	27,000	54,000	**0.5%**																
4.830	700	700	Square Yards	Tennis Court, Color Coat (2024 is Budgeted)	2024	4 to 6	0	11.50	8,050	8,050	**0.3%**	8,050										11,138					13,101
4.840	330	330	Linear Feet	Tennis Court, Fence	2029	to 25	5	48.00	15,840	15,840	**0.3%**						18,632										
4.860	700	700	Square Yards	Tennis Court, Surface Replacement	2029	to 25	5	51.00	35,700	35,700	**0.7%**						41,992										

RESERVE EXPENDITURES

Barclay Park Condominium
Ann Arbor, Michigan

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years Useful	Remaining	Costs, $ Unit (2024)	Per Phase (2024)	Total (2024)	Percentage of Future Expenditures	16 2040	17 2041	18 2042	19 2043	20 2044	21 2045	22 2046	23 2047	24 2048	25 2049	26 2050	27 2051	28 2052	29 2053	30 2054
				Exterior Building Elements																						
1.115	15,800	5,267	Square Feet	Balconies, Wood, Deck Boards and Interim Repairs, Phased	2047	12 to 18	23 to 25	16.00	84,267	252,800	**2.7%**								177,813	183,681	189,742					
1.120	15,800	3,160	Square Feet	Balconies, Wood, Replacement, Phased	2030	to 35	6 to 10	65.00	205,400	1,027,000	**6.5%**															
1.199	1	1	Allowance	Doors, Garage, Initial Repairs and Replacements (2024 is Budgeted)	2024	N/A	0	50,000.00	50,000	50,000	**0.2%**															
1.200	291	97	Each	Doors, Garage, Subsequent Replacement, Phased	2037	to 25	13 to 15	1,500.00	145,500	436,500	**3.3%**															
1.233	29	29	Buildings	Fire Suppression Systems, Exterior Components (Heads, Audio Fixtures)	2028	to 25	4	4,400.00	127,600	127,600	**2.3%**														327,160	
1.240	21,600	4,320	Linear Feet	Gutters and Downspouts, Aluminum, Phased	2033	to 25	9 to 13	10.00	43,200	216,000	**1.5%**															
1.260	875	219	Each	Light Fixtures, Phased	2026	to 20	2 to 5	125.00	27,344	109,375	**1.7%**							55,855	57,699	59,603	61,570					
1.277	9	9	Buildings	Radon Mitigation System, Installation, Remaining	2025	N/A	1	5,500.00	49,500	49,500	**0.2%**															
1.278	10	10	Buildings	Radon Mitigation System, Motor Replacements and Partial Repairs	2038	10 to 15	14	750.00	7,500	7,500	**0.2%**														19,230	
1.280	2,750	550	Squares	Roofs, Asphalt Shingles, Phased	2033	20 to 25	9 to 13	530.00	291,500	1,457,500	**13.9%**															772,055
1.820	1	1	Allowance	Walls, Masonry, Inspections and Repairs	2025	ongoing	1	25,000.00	25,000	25,000	**6.3%**	42,029	43,416	44,848	46,328	47,857	49,436	51,068	52,753	54,494	56,292	58,150	60,069	62,051	64,099	66,214
1.860	168,000	33,600	Square Feet	Walls, Siding, Vinyl, Phased	2038	35 to 40	14 to 18	10.00	336,000	1,680,000	**13.8%**	564,865	583,505	602,761												
1.905	3	1	Allowance	Walls, Trim, Paint Finishes, Phased	2025	4 to 6	1 to 3	60,000.00	60,000	180,000	**8.7%**	100,869	104,197	107,636			118,647	122,563	126,607			139,560	144,165	148,922		
1.906	86,000	4,300	Linear Feet	Walls, Trim, Replace with Composite, Phased	2025	to 40	1 to 30+	8.50	36,550	731,000	**5.3%**	61,446	63,474	65,568			72,276	74,661	77,125			85,015	87,821	90,719		
				Property Site Elements																						
4.020	1	1	Allowance	Asphalt Pavement, Near Term Major Repairs/Patching	2025	15 to 20	1	50,000.00	varies	varies	**1.0%**															
4.040	5,300	2,650	Square Yards	Asphalt Pavement, Mill and Overlay, Barclay Way, Phased	2043	15 to 20	19 to 21	20.00	53,000	106,000	**1.0%**				98,216		104,805									
4.046	17,960	5,987	Square Yards	Asphalt Pavement, Total Replacement, Remaining, Phased	2028	15 to 20	4 to 6	42.50	254,433	763,300	**4.4%**															
4.047	18,960	3,160	Square Yards	Asphalt Pavement, Total Replacement, Access Drives and Parking Areas, Subsequent, Phased	2043	15 to 20	19 to 26	42.50	134,300	805,800	**8.3%**				248,875		265,572	283,389	292,741	302,402	312,381					
4.061	2,200	2,200	Square Feet	Boardwalk, Deck Boards, Interim Repairs and Partial Structure (2025 is Planned)	2025	15 to 25	1	60.00	132,000	132,000	**2.0%**										297,223					
4.100	40	10	Each	Catch Basins, Inspections and Capital Repairs, Phased	2028	15 to 20	4 to 19	950.00	9,500	38,000	**0.6%**				17,605					20,708	21,391	22,097					
4.110	4,100	150	Linear Feet	Concrete Curbs and Gutters, Partial	2028	to 65	4 to 30+	46.50	6,975	190,650	**0.6%**				12,926		13,793	14,718	15,204	15,706	16,224					
4.130	118	3	Each	Concrete Patios, Partial	2026	to 65	2 to 30+	1,400.00	4,200	165,200	**0.4%**	7,294		8,040			8,863			9,769			10,769		
4.140	38,700	1,550	Square Feet	Concrete Sidewalks, Entrance Flatwork and Garage Aprons, Partial	2026	to 65	2 to 30+	11.50	17,825	445,050	**1.5%**	30,955		34,122			37,613			41,461			45,702		
4.160	16,300	820	Square Feet	Concrete Stairs, Porches and Landings, Partial	2026	to 65	2 to 30+	28.00	22,960	456,400	**1.9%**	39,873		43,952			48,448			53,405			58,868		
4.420	115	29	Zones	Irrigation System, Phased	2039	to 40	15 to 24	2,500.00	71,875	287,500	**2.6%**		128,939				142,130		156,670							
4.560	70	70	Each	Light Poles and Fixtures	2044	to 35	20	2,700.00	189,000	189,000	**1.8%**			361,800												
4.600	19	19	Each	Mailbox Stations	2029	to 25	5	2,100.00	39,900	39,900	**0.7%**															105,678
4.620	1,200	1,200	Square Feet	Pavers, Masonry	2029	to 25	5	19.50	23,400	23,400	**0.4%**															61,976
4.630	1	1	Each	Pergola, Wood	2028	15 to 25	4	14,000.00	14,000	14,000	**0.3%**														35,895	
4.660	1	1	Allowance	Playground Equipment	2037	15 to 20	13	35,600.00	35,600	35,600	**0.3%**															
4.710	1,400	1,400	Square Yards	Ponds, Sediment Removal, Center Pond	2027	to 30	3	26.00	36,400	36,400	**0.2%**															
4.711	600	600	Square Yards	Ponds, Sediment Removal and Liner Replacement, Clubhouse Ponds	2031	to 20	7	52.00	31,200	31,200	**0.6%**												74,966			
4.731	3,210	803	Linear Feet	Railings, Aluminum, Phased	2032	to 25	8 to 11	43.00	34,508	138,030	**0.9%**															
4.745	600	300	Square Feet	Retaining Walls, Masonry and Planters, Phased	2043	25 to 35	19 to 20	90.00	27,000	54,000	**0.5%**				50,035	51,686										
4.830	700	700	Square Yards	Tennis Court, Color Coat (2024 is Budgeted)	2024	4 to 6	0	11.50	8,050	8,050	**0.3%**					15,410				18,126						
4.840	330	330	Linear Feet	Tennis Court, Fence	2029	to 25	5	48.00	15,840	15,840	**0.3%**															41,953
4.860	700	700	Square Yards	Tennis Court, Surface Replacement	2029	to 25	5	51.00	35,700	35,700	**0.7%**															94,554

Years 2024 to 2039

RESERVE EXPENDITURES

Barclay Park Condominium
Ann Arbor, Michigan

Explanatory Notes:

1) **3.3% is the estimated Inflation Rate for estimating Future Replacement Costs.**
2) **FY2024 is Fiscal Year beginning January 1, 2024 and ending December 31, 2024.**

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years Useful	Remaining	Costs, $ Unit (2024)	Per Phase (2024)	Total (2024)	Percentage of Future Expenditures	RUL = 0 FY2024	1 2025	2 2026	3 2027	4 2028	5 2029	6 2030	7 2031	8 2032	9 2033	10 2034	11 2035	12 2036	13 2037	14 2038	15 2039
				Clubhouse Elements																							
5.070	1	1	Each	Air Handling and Condensing Units, Split System	2031	15 to 20	7	11,000.00	11,000	11,000	**0.2%**								13,807								
5.103	280	280	Square Feet	Balcony, Concrete	2035	25 to 35	11	73.00	20,440	20,440	**0.1%**												29,214				
5.500	1	1	Allowance	Interior Renovations, Complete	2038	20 to 25	14	70,000.00	70,000	70,000	**0.5%**															110,281	
5.510	1	1	Allowance	Interior Renovations, Partial	2028	8 to 12	4	17,000.00	17,000	17,000	**0.3%**					19,358											
5.720	1	1	Allowance	Security System	2029	10 to 15	5	24,000.00	24,000	24,000	**0.4%**						28,230										
5.750	2	1	Allowance	Solar Photovoltaic System, Phased	2033	20 to 25	9 to 19	16,500.00	16,500	33,000	**0.5%**										22,100						
5.800	400	400	Square Feet	Windows and Doors (2025 is Back Door Only, 2035 is Remaining)	2025	to 40	1	80.00	32,000	32,000	**0.2%**		7,500										40,933				
	1	1	Allowance	Reserve Study Update with Site Visit	2030	3 to 5	6	5,500.00	5,500	5,500	**0.0%**							6,600									
				Anticipated Expenditures, By Year ($20,559,224 over 30 years)								58,050	429,195	228,228	259,365	548,675	596,452	733,041	463,346	526,989	825,200	840,741	835,849	673,607	972,036	990,934	954,371

RESERVE EXPENDITURES

Barclay Park Condominium
Ann Arbor, Michigan

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years Useful	Remaining	Costs, $ Unit (2024)	Per Phase (2024)	Total (2024)	Percentage of Future Expenditures	16 2040	17 2041	18 2042	19 2043	20 2044	21 2045	22 2046	23 2047	24 2048	25 2049	26 2050	27 2051	28 2052	29 2053	30 2054
				Clubhouse Elements																						
5.070	1	1	Each	Air Handling and Condensing Units, Split System	2031	15 to 20	7	11,000.00	11,000	11,000	**0.2%**												26,430			
5.103	280	280	Square Feet	Balcony, Concrete	2035	25 to 35	11	73.00	20,440	20,440	**0.1%**															
5.500	1	1	Allowance	Interior Renovations, Complete	2038	20 to 25	14	70,000.00	70,000	70,000	**0.5%**															
5.510	1	1	Allowance	Interior Renovations, Partial	2028	8 to 12	4	17,000.00	17,000	17,000	**0.3%**									37,056						
5.720	1	1	Allowance	Security System	2029	10 to 15	5	24,000.00	24,000	24,000	**0.4%**					45,943										
5.750	2	1	Allowance	Solar Photovoltaic System, Phased	2033	20 to 25	9 to 19	16,500.00	16,500	33,000	**0.5%**				30,577										42,305	
5.800	400	400	Square Feet	Windows and Doors (2025 is Back Door Only, 2035 is Remaining)	2025	to 40	1	80.00	32,000	32,000	**0.2%**															
	1	1	Allowance	Reserve Study Update with Site Visit	2030	3 to 5	6	5,500.00	5,500	5,500	**0.0%**															
				Anticipated Expenditures, By Year ($20,559,224 over 30 years)								769,208	872,714	949,752	504,561	608,809	766,660	304,147	885,028	820,156	962,451	738,061	393,450	301,692	604,028	1,142,429

RESERVE FUNDING PLAN

CASH FLOW ANALYSIS
Barclay Park
Condominium
Ann Arbor, Michigan

Individual Reserve Budgets & Cash Flows for the Next 30 Years

		FY2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Reserves at Beginning of Year	*(Note 1)*	1,610,433	1,749,686	1,706,881	1,901,619	2,105,125	2,055,977	1,992,147	1,823,227	1,940,212	2,013,587	1,805,052	1,594,088	1,401,948	1,389,220	1,094,568	794,395
Total Recommended Reserve Contributions	*(Note 2)*	**174,774**	**340,348**	**374,900**	**409,500**	**444,100**	**478,700**	**513,300**	**530,200**	**547,700**	**565,800**	**584,500**	**603,800**	**623,700**	**644,300**	**665,600**	**687,600**
Estimated Interest Earned, During Year	*(Note 3)*	22,529	46,042	48,066	53,371	55,427	53,922	50,821	50,130	52,665	50,865	45,277	39,908	37,179	33,084	25,161	17,847
Anticipated Expenditures, By Year		(58,050)	(429,195)	(228,228)	(259,365)	(548,675)	(596,452)	(733,041)	(463,346)	(526,989)	(825,200)	(840,741)	(835,849)	(673,607)	(972,036)	(990,934)	(954,371)
Anticipated Reserves at Year End		$1,749,686	$1,706,881	$1,901,619	$2,105,125	$2,055,977	$1,992,147	$1,823,227	$1,940,212	$2,013,587	$1,805,052	$1,594,088	$1,401,948	$1,389,220	$1,094,568	$794,395	$545,471

(continued)

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

	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
Reserves at Beginning of Year	545,471	500,495	373,118	188,750	331,114	393,050	318,773	734,050	595,431	543,141	370,358	446,376	900,568	1,487,789	1,813,130
Total Recommended Reserve Contributions	**710,300**	**733,700**	**757,900**	**640,000**	**661,100**	**682,900**	**705,400**	**728,700**	**752,700**	**777,500**	**803,200**	**829,700**	**857,100**	**885,400**	**914,600**
Estimated Interest Earned, During Year	13,932	11,637	7,484	6,925	9,646	9,482	14,024	17,709	15,166	12,168	10,879	17,942	31,813	43,969	45,879
Anticipated Expenditures, By Year	(769,208)	(872,714)	(949,752)	(504,561)	(608,809)	(766,660)	(304,147)	(885,028)	(820,156)	(962,451)	(738,061)	(393,450)	(301,692)	(604,028)	(1,142,429)
Anticipated Reserves at Year End	$500,495	$373,118	$188,750 *(NOTE 5)*	$331,114	$393,050	$318,773	$734,050	$595,431	$543,141	$370,358	$446,376	$900,568	$1,487,789	$1,813,130	$1,631,180 *(NOTE 4)*

Explanatory Notes:

1) Year 2024 starting reserves are as of June 30, 2024; FY2024 starts January 1, 2024 and ends December 31, 2024.
2) Reserve Contributions for 2024 are the remaining budgeted 6 months; 2025 is budgeted; 2026 is the first year of recommended contributions.
3) **2.7%** is the estimated annual rate of return on invested reserves; 2024 is a partial year of interest earned.
4) Accumulated year 2054 ending reserves consider the need to fund for replacement of the roofs shortly after 2054, and the age, size, overall condition and complexity of the property.
5) Threshold Funding Year (reserve balance at critical point).

*Refer to the Reserve Expenditures pages for the full list of reserve elements

FIVE-YEAR OUTLOOK

Barclay Park Condominium
Ann Arbor, Michigan

Line Item	Reserve Component Inventory	RUL = 0 FY2024	1 2025	2 2026	3 2027	4 2028	5 2029
	Exterior Building Elements						
1.199	Doors, Garage, Initial Repairs and Replacements (2024 is Budgeted)	50,000					
1.233	Fire Suppression Systems, Exterior Components (Heads, Audio Fixtures)					145,295	
1.260	Light Fixtures, Phased			29,178	30,141	31,136	32,163
1.277	Radon Mitigation System, Installation, Remaining		51,134				
1.820	Walls, Masonry, Inspections and Repairs		25,825	26,677	27,558	28,467	29,406
1.905	Walls, Trim, Paint Finishes, Phased		61,980	64,025	66,138		
1.906	Walls, Trim, Replace with Composite, Phased		37,756	39,002	40,289		
	Property Site Elements						
4.020	Asphalt Pavement, Near Term Major Repairs/Patching		130,000	21,342	55,115		
4.046	Asphalt Pavement, Total Replacement, Remaining, Phased					289,718	299,279
4.061	Boardwalk, Deck Boards, Interim Repairs and Partial Structure (2025 is Planned)		115,000				
4.100	Catch Basins, Inspections and Capital Repairs, Phased					10,817	11,174
4.110	Concrete Curbs and Gutters, Partial					7,942	8,204
4.130	Concrete Patios, Partial			4,482			4,940
4.140	Concrete Sidewalks, Entrance Flatwork and Garage Aprons, Partial			19,021			20,967
4.160	Concrete Stairs, Porches and Landings, Partial			24,500			27,007
4.600	Mailbox Stations						46,933
4.620	Pavers, Masonry						27,524
4.630	Pergola, Wood					15,942	
4.710	Ponds, Sediment Removal, Center Pond				40,124		
4.830	Tennis Court, Color Coat (2024 is Budgeted)	8,050					
4.840	Tennis Court, Fence						18,632
4.860	Tennis Court, Surface Replacement						41,992
	Clubhouse Elements						
5.510	Interior Renovations, Partial					19,358	
5.720	Security System						28,230
5.800	Windows and Doors (2025 is Back Door Only, 2035 is Remaining)		7,500				
	Anticipated Expenditures, By Year ($20,559,224 over 30 years)	58,050	429,195	228,228	259,365	548,675	596,452

4. RESERVE COMPONENT DETAIL

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

Exterior Building Elements

Front elevation

Front elevation

Rear elevation

Rear elevation

Balconies, Wood

Line Items: 1.115 and 1.120

Quantity: The wood balconies comprise a total of approximately 15,800 square feet of wood deck boards and 6,250 linear feet of wood railings

History: Original

Condition: Fair to poor overall with periodic deflection, wood rot, loose fasteners, fastener rust, warped components and weathered wood evident.

Balcony overview

Balcony overview

Balcony deflection (unit 2896 shown)

Structure detail

Beam cracks (unit 2968 shown)

Beam deflection (unit 2958 shown)

Beam cracks

Balcony settlement (unit 2972 shown)

Balcony trim rot

Damage (unit 3046 shown)

Balcony settlement

Finish deterioration

Balcony railing rot (unit 2793 shown)

Deck board deflection (unit 2839 shown)

Useful Life: Up to 35 years with proper maintenance and interim replacement of the deck boards every 12- to 18-years. The rates and types of deterioration are not uniform due to the nature of wood. Replacement is normally an ongoing process which eventually leads to a complete replacement for economic or aesthetic reasons.

Component Detail Notes: Balcony construction includes the following:

- Deck boards fastened with nails. Nail fasteners have a tendency to pull out as the wood warps.
- Wood railings with vertical pickets
- Wood column supported frames
- Columns in contact with ground (This condition results in accelerated deterioration at the column bases.)
- Metal joist hanger fasteners
- Cross bracing does not exist to stabilize the frames
- No toe-nailed connections

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

- Annually:
  - Inspect to identify and correct any unsafe conditions
  - Secure loose fasteners and replace deteriorated fasteners
  - Replace deteriorated wood components
  - Check railing stability and fasteners
- Every three years:
  - Power wash with algaecide and application of sealer/stain if applicable

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

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. Our cost for interim repairs includes replacement of the deck boards and partial replacement of deteriorated wood components.

Doors, Garage

Line Items: 1.199 and 1.200

Quantity: 291 metal single and double uninsulated garage doors

History: Original; the Association plans to start replacing the base panel of the deteriorated garage doors in 2024 for a total cost of approximately $50,000. The Association also informs us that they will be replacing cables with stainless steel.

Condition: Fair to poor overall with systemic rust, dents and damage primarily evident at the base panel.

Base panel rust

Base panel rust

Garage door displacement

Base panel 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:

- Annually:
  - Inspect and repair any vehicle damage, base panel corrosion or alignment issues
  - Replace loose weather stripping 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 for repairs and partial replacements in 2024 is based on information provided by the Association.

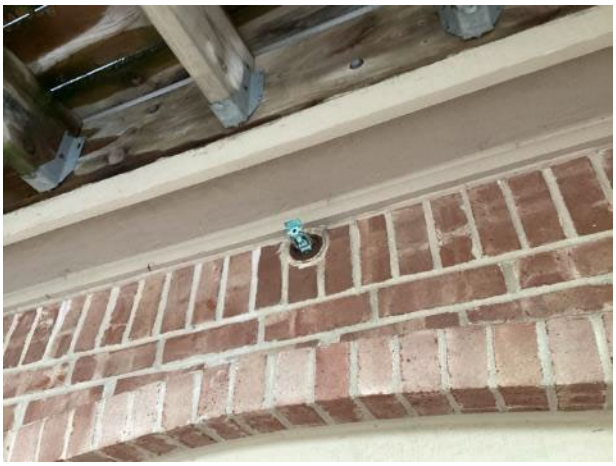
Fire Suppression Systems

Line Item: 1.233

Quantity: Automatic fire suppression systems serve the 29 buildings.

History: Primarily original, the Association conducts repairs and partial replacements as needed and inspects and maintains the systems annual as normal maintenance.

Condition: Fair to poor with aging of devices evident. We also note rust and corrosion at the sprinkler heads.



Corroded sprinkler head

Sprinkler head

Useful Life: The exterior system components comprise sprinkler heads and annunciators and have a useful life of up to 25 years. The interior heads and piping have a useful life of up to 60 years. We therefore do not anticipate the need for their replacement during the next 30 years.

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

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

Gutters and Downspouts, Aluminum

Line Item: 1.240

Quantity: Approximately 21,600 linear feet of aluminum five-inch seamless gutters and two-inch by three-inch downspouts. This quantity includes the clubhouse.

History: Original

Condition: Fair to poor overall with frequent deflection, fastener rust, leakage at seams, dented sections and missing downspout extensions evident. We defer replacement based on our conversation with Management following our inspection and due to reported maintenance practices. We recommend the Association budget for replacement of the gutters and downspouts in conjunction with the next roof replacements due to interrelated nature of the components. Prior to full replacement in conjunction with the roofs, we recommend the Association adjust their operating budget accordingly to make appropriate repairs and to limit damage to adjacent components such as the trim.

Gutter deflection (clubhouse shown)

Downspout displacement (clubhouse shown)

Gutter deflection (garage shown)

Downspout leakage (unit 2804 shown)

Leakage (unit 2812 shown)

Gutter sloped away from downspout

Gutter deflection (unit 2858 shown)

Damage (unit 2846 shown)

Gutter sloped away from downspout

Missing downspout extension (unit 3044 shown)

Missing gutter and downspout (unit 2723 shown)

Damage (unit 2764 shown)

Loose fasteners

Loose fastener

Loose gutter (unit 2792 shown)

Gutter deflection (unit 2825 shown)

Useful Life: Up to 25 years

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

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

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.

Light Fixtures

Line Item: 1.260

Quantity: Approximately 875 exterior metal light fixtures accent the garages, front entries and rear entries

History: Original

Condition: Poor overall with finish deterioration, loose fixtures and damaged fixtures evident.

Clubhouse light fixtures

Fixture finish deterioration

Useful Life: Up to 20 years

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

- As-needed:
  - Replace burned out bulbs at common fixtures as needed
  - Inspect and repair broken or dislodged fixtures
  - Ensure a waterproof seal between the fixture and building exists

Priority/Criticality: Per Board discretion

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

Radon Mitigation System

Line Items: 1.277 and 1.278

Quantity: The Association has plans to install a total of 10 radon mitigation systems at the buildings with basements.

History: The Association has previously installed one radon mitigation system and plans on installing the remaining 9 soon.

Condition: The installed system is reported to be in satisfactory operational condition.

Useful Life: We recommend the Association budget motor replacements and partial repairs to the systems every 10- to 15- years

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

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

Roofs, Asphalt Shingles

Line Item: 1.280

Quantity: Approximately 2,750 *squares*[1]. This quantity includes the clubhouse.

History: Replaced from 2012 through 2017. At that time, the Association extended the ice and water shield. The Association informs us of isolated repairs. The Association conducts inspections of the roofs annually. We concur with this preventive maintenance practice and recommend the Association continue to fund these inspections through the operating budget.

Condition: Fair overall with shingle lift, sheathing deflection, loose shingles, missing shingles and weathering evident from our visual inspection from the ground. The Board does not report a history of leaks. The Association reports a history of ice dams. Subsequent to our inspection, Management informs us mansard roof repairs will be conducted through a warranty claim.

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

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

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**.**

We defer replacement contingent upon warranty repairs and proper maintenance. We do not recommend using warranty terms to budget for roof replacement timing for the reasons described above. In addition, insurance requirements may dictate the timing of roof replacements. Future updates of this Reserve Study will again consider the need for adjustments in roof replacement timing.

Roof overview

Roof overview

Weathering

Weathering

Loose and missing shingles (unit 3030 shown)

Loose shingles and organic growth (unit 3060 shown)

Loose shingles (unit 3047 shown)

Nail pop (unit 2791 shown)

Loose shingles (unit 2767 shown)

Loose shingles (unit 2723 shown)

Shingle lift (unit 2865 shown)

Sheathing deflection

Useful Life: 20- to 25-years

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

- Laminate architectural shingles
- Boston style ridge caps
- Rubber seal with plastic base boot flashing at waste pipes
- Soffit, gable, square hood box and ridge vents
- Metal drip edge
- Enclosed half weaved valleys

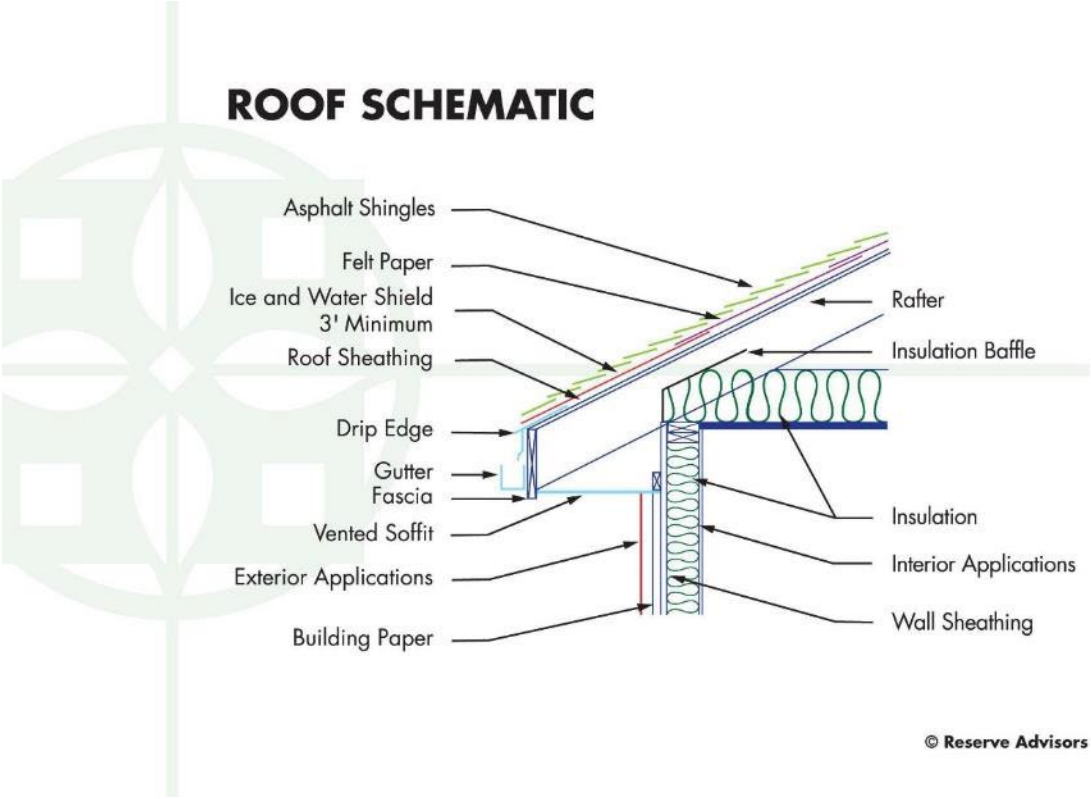
Insulation and ventilation are two major components of a sloped roof system. Together, proper insulation and ventilation help to control attic moisture and maintain an energy efficient building. Both insulation and ventilation prevent moisture buildup which can cause wood rot, mold and mildew growth, 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.

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.

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



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.

Shingles installed on steep pitched roofs typically require the use of additional roofing sealant. This roofing sealant, as recommended by the manufacturer, is applied to the back of the shingles prior to installation and ensures that the shingles properly seal to the underlying roofing. The Association should verify the contractor follows the manufacturer's instructions for installing shingles on steep pitched roofs.

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
    - 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.

Walls, Masonry

Line Item: 1.820

Quantity: Approximately 97,200 square feet of masonry comprises the exterior walls

History: The Association has historically conducted inspections, tuckpointing and repairs to the masonry annually. At the request of the Board, we include an annual allowance of $25,000 plus inflation for repairs to the masonry.

Condition: Fair to poor overall with the following evident:

- No reported history of recent water infiltration
- Face brick masonry
- Extensive previous repairs evident
- Systemic efflorescence is visible (Efflorescence is not a safety concern. However, it can be an indication of water infiltration, masonry saturation, improper drainage behind the façade or another underlying issue.)
- Lintels exhibit rust jacking (cracks in the masonry due to rusting and expanding of the lintel steel)
- Masonry exhibits step cracks
- Masonry exhibits systemic spalls
- Mortar deterioration is evident
- Mortar joints are tooled
- Weeps and flashing at lintels are not visible

Masonry step cracks (clubhouse shown)

Masonry cracks (clubhouse shown)

Masonry cracks (clubhouse shown)

Rust jacking (clubhouse shown)

Mortar deterioration

Masonry spall (unit 2768 shown)

Previous repairs

Masonry spalls and mortar deterioration (unit 2874 shown)

Masonry staining

Mortar deterioration and masonry spalls

Mortar deterioration and cracks (unit 2798 shown)

Mortar deterioration

Masonry cracks (unit 2830 shown)

Efflorescence

Rust jacking

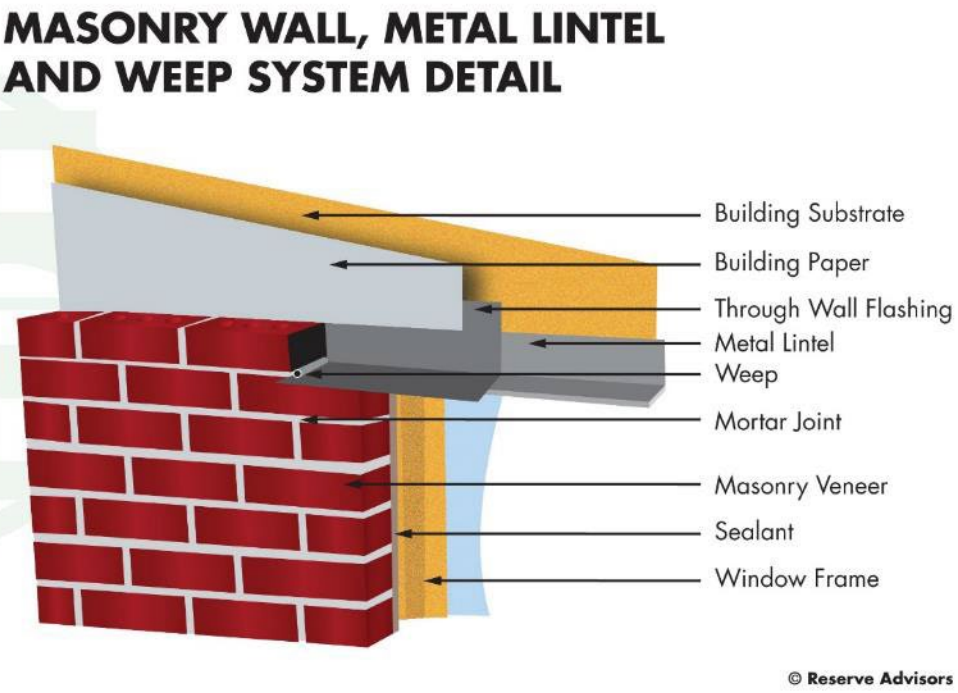
Masonry deterioration (unit 2723 shown)

Useful Life: At the request of the Board, we include an annual allowance for repairs to the masonry to forestall deterioration.

Component Detail Notes: Common types of masonry deterioration include efflorescence, spalling, joint deterioration and cracking. The primary cause of efflorescence, cracks and face spall is water infiltration; therefore, prevention of water infiltration is the principal concern for the maintenance of masonry applications.

Repointing is a process of raking and cutting out defective mortar to a depth of not less than ½ inch nor more than ¾ inch and replacing it with new mortar. Face grouting is the process of placing mortar over top of the existing mortar. We advise against face grouting because the existing, often deteriorated mortar does not provide a solid base for the new mortar. New mortar spalls at face grouted areas will likely occur. One purpose of a mortar joint is to protect the masonry by relieving stresses within the wall caused by expansion, contraction, moisture migration and settlement. Repointed mortar joints are more effective if the mortar is softer and more permeable than the masonry units, and no harder or less permeable than the existing mortar. The masonry contractor should address these issues within the proposed scope of work.

The following diagram details a typical masonry façade system and may not reflect the actual configuration at the Association:



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 is based on information provided by the Association. We recommend the following activities during the masonry repair events:

- Complete inspection of the masonry
- Repointing of the masonry as needed
- Replacement of a limited amount of the masonry (The exact amount of area in need of replacement will be discretionary based on the actual future conditions and the desired appearance.)
- Replacement of sealants as needed

Walls, Siding, Vinyl

Line Item: 1.860

Quantity: Approximately 168,000 square feet of clapboard, double 4" vinyl siding comprises the exterior walls

History: Original with isolated replacements evident

Condition: Fair overall with warps, bulges, loose sections and damage evident. We anticipate the desire for full replacement of the vinyl siding due to increasing difficulty in color matching partial replacements as further repairs are made in the future.

Vinyl siding overview

Organic growth

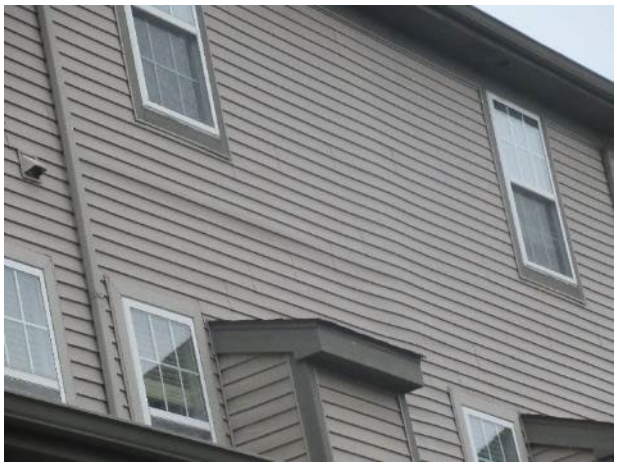
Loose siding (unit 2830 shown)

Loose siding (unit 2866 shown)

Loose siding (unit 2812 shown)

Loose siding (unit 3053 shown)

Mis-matched siding



Siding bulge (unit 2922 shown)

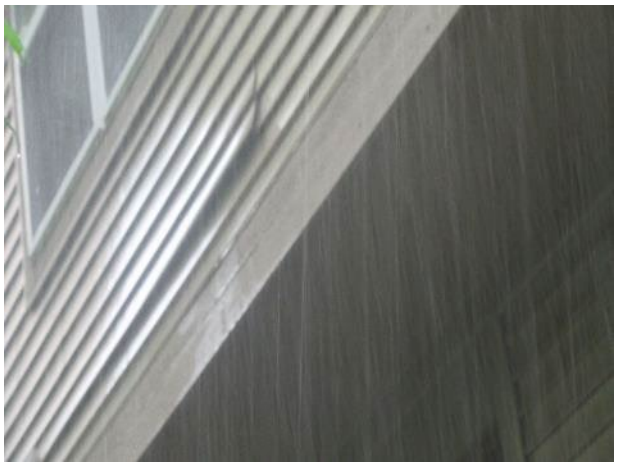
Loose siding (unit 2950 shown)

Warped siding (unit 2950 shown)

Loose siding (unit 2798 shown)

Loose siding (unit 2982 shown)

Siding bulge (unit 3008 shown)



Loose siding (unit 3020 shown)

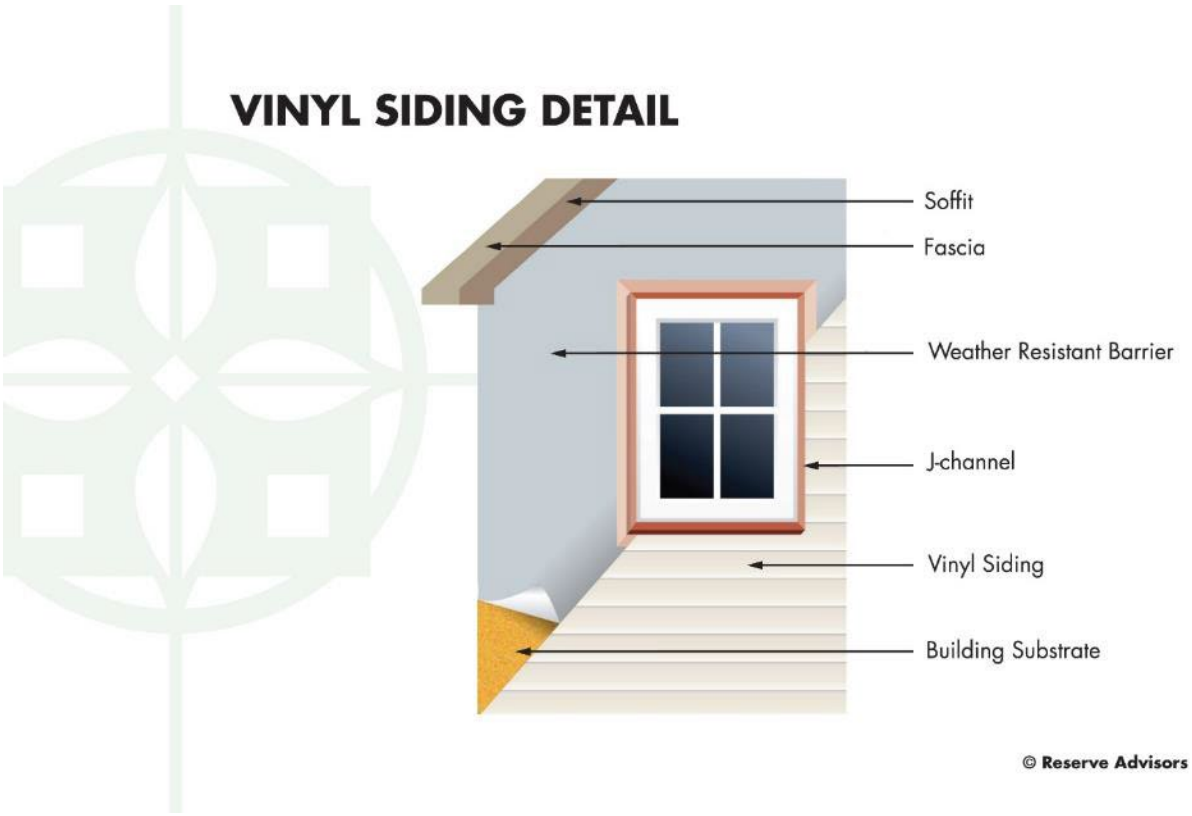
Siding warp (unit 2837 shown)

Useful Life: 35- to 40-years

Component Detail Notes: The siding at Barclay Park consists of the following:

- Clapboard, double 4"
- J-channel trim does not exist
- Water-vapor permeable building paper protects the buildings

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



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.

Properly installed vinyl siding utilizes a vinyl J-channel which encompasses windows, doors and inside corners. The J-channel masks the thermal expansion and contraction of vinyl siding at these locations. Sealant would typically fail at this location due to the excessive movement of the vinyl siding. However, the siding utilizes sealants rather than J-channels. The Association should fund replacement of these sealants through the operating budget. Future replacement of the vinyl siding should include the use of J-channels.

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.

Walls, Trim, Paint Finishes and Replacement

Line Items: 1.905 and 1.906

Quantity: Approximately 86,000 linear feet of wood eaves, rakes, soffits, window and door trim, and balcony trim

History: The Association has obtained bids for near term paint finish applications and plans to conduct replacements of the trim with composite to reduce maintenance costs.

Condition: Fair to poor overall with frequent rot and deterioration evident.

Paint finish deterioration

Trim deterioration

Trim deterioration

Trim deterioration

Trim deterioration

Trim deterioration

Trim rot

Trim rot

Trim rot

Trim rot (unit 2890 shown)

Paint finish deterioration

Trim deterioration (clubhouse shown)

Trim and soffit deterioration

Trim rot

Useful Life: Up to 40 years with the benefit of timely paint finish applications every four- to six-years

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

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

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. Our cost for paint finish applications is based on information provided by the Association and assumes the following per event:

- Paint finish applications
- Replacement of sealants as needed

We include replacement of 4,300 square feet, or up to five percent (5%), of the trim per replacement event. The exact amount of material in need of replacement will depend on the actual future conditions and desired appearance. We recommend replacement

wherever holes, cracks and deterioration impair the ability of the material to prevent water infiltration.

Property Site Elements

Asphalt Pavement, Repaving

Line Items: 4.020 through 4.047

Quantity: Approximately 24,260 square yards of asphalt pavement comprise the streets at Barclay Park. Approximately 5,300 square yards at Barclay Way and 18,960 at the access drives and parking areas. The Association replaced approximately 330 square yards of pavement at the entrance to the community with concrete during the 2023 repaving event. This quantity is now included with ***Line Item 4.140***.

History: The Association repaved approximately 3,570 square yards of the pavement at the beginning at the entrance to the community, going south past the clubhouse and ending before the first residential parking area in addition to the repaving behind building five and six in 2023 for a total cost of $405,304. This equates to $113.55 per square yard. We opine this historical cost appears to be high based on the installation and tie in of a new catch basin at the access drive behind buildings five and six.

Subsequent to our inspection, Management informs us of planned repairs. Based on our conversations with Management, we defer repaving of the remaining pavement in anticipation of more significant repairs in 2025 through 2027. We opine continued deferral will increase the long term overall costs of the pavement.

Condition: The recently repaved areas are good overall. The remaining original pavement is fair to poor overall with frequent cracks, settlement, patches, standing water, potholes and previous repairs evident.

Pavement deterioration

Pavement deterioration

Upheaval near catch basin

Alligator cracks

Pavement deterioration

Pavement deterioration

Pavement overview (2023 replacement)

Pavement overview (2023 replacement)

Pavement overview (2023 replacement)

Pavement overview (2023 replacement)

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 Barclay Park:

The manner of repaving is either a mill and overlay or total replacement. A mill and overlay is a method of repaving where cracked, worn and failed pavement is mechanically removed or milled until sound pavement is found. A new layer of asphalt is overlaid atop the remaining base course of pavement. Total replacement includes the removal of all existing asphalt down to the base course of aggregate and native soil followed by the application of two or more new lifts of asphalt. We recommend mill and overlayment on

asphalt pavement that exhibits normal deterioration and wear. We recommend total replacement of asphalt pavement that exhibits severe deterioration, inadequate drainage, pavement that has been overlaid multiple times in the past or where the configuration makes overlayment not possible. Based on the apparent visual condition and configuration of the asphalt pavement, we recommend the total replacement method for initial repaving and subsequent repaving of the access drives and parking areas followed by the mill and overlay method for subsequent repaving of Barclay Way at Barclay Park.

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.

Boardwalk

Line Item: 4.061

Quantity: 2,200 square feet of wood boardwalk

History: The Association plans to replace the boardwalk in 2025 for a total cost of approximately $115,000.

Condition: Poor overall with frequent deflection, rot and deterioration evident.

Boardwalk overview

Deck board deflection

Deck board deflection

Deck board deterioration

Deck board rot

Railing lean

Useful Life: 15- to 25- years with proper maintenance as needed. Proper maintenance should include the following activities funded through the operating budget:

- Annual inspections to identify and correct any unsafe conditions
- Securing of loose fasteners and replacement of deteriorated fasteners
- Replacement of deteriorated wood components
- Power washing with an algaecide and application of a 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. Our cost for replacement is based on information provided by the Association.

Catch Basins

Line Item: 4.100

Quantity: 40 catch basins[2]

History: Original; the Association installed a new catch basin during the 2023 repaving event new catch basin.

Condition: Fair overall with settlement evident.

Catch basin with minor settlement

Debris accumulation near catch basin and negative drainage

Catch basin settlement

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.

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

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

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

Concrete Curbs and Gutters

Line Item: 4.110

Quantity: Approximately 4,100 linear feet

History and Condition: Fair overall with periodic cracks, settlement, spalled concrete, heaves, damage and previous repairs evident. The Association previously replaced sections of concrete curbs and gutters during the 2023 repaving event totaling approximately $100,000.

Concrete curb and gutter

Concrete spalls

Concrete spalls

Concrete spalls

Concrete spalls

Concrete spalls

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

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

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

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We estimate that up to 1,350 linear feet of curbs and gutters, or thirty-three percent (32.9%) of the total, will require replacement during the next 30 years.

Concrete Patios

Line Item: 4.130

Quantity: 118 total comprising a total of approximately 9,440 square feet.

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

Patio cracks (unit 2804 shown)

Patio cracks

Patio cracks

Patio cracks

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

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

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

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We recommend the Association plan for replacement of up to 30 patios, or approximately twenty-five percent (25.4%) of the total, during the next 30 years.

Concrete Sidewalks, Entrance Flatwork and Garage Aprons

Line Item: 4.140

Quantity: Approximately 38,700 square feet

History and Condition: Fair overall with frequent cracks, settlement, spalled concrete, trip hazards and previous repairs evident. The Association has conducted replacements as needed. In 2023, the Association installed approximately 3,000 square feet of concrete flatwork at the entrance to the community.

Sidewalk cracks

Sidewalk spalls

Sidewalk cracks

Entrance apron

Sidewalk cracks

Sidewalk cracks

Garage apron cracks

Garage apron cracks

Replaced garage apron

Sidewalk settlement

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 15,500 square feet of concrete sidewalks, or forty percent (40.1%) of the total, will require replacement during the next 30 years.

Concrete Stairs, Porches and Landings

Line Item: 4.160

Quantity: Approximately 16,300 square feet

History and Condition: Fair overall with periodic cracks, settlement, spalled concrete, trip hazards and previous repairs evident. The Association has conducted repairs as needed,

Stoop spall (clubhouse shown)

Stoop cracks (clubhouse shown)

Concrete cracks

Concrete stairs

Concrete stairs

Stair spalls

Stair cracks

Stair spalls

Landing spall

Stair spalls

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 8,200 stairs, or approximately fifty percent (50.3%) of the total, will require replacement during the next 30 years.

Irrigation System

Line Item: 4.420

Quantity: 115 zones located at the common areas with 14 controllers

History: Original; The Association has a history of isolated repairs

Condition: Satisfactory operational condition and the Board does not report any deficiencies

Useful Life: Up to and sometimes beyond 40 years

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

- Electronic controls (timer)
- Impact rotors

- Network of supply pipes
- Pop-up heads
- Valves

Barclay Park should anticipate interim and partial replacements of the system network supply pipes and other components as normal maintenance to maximize the useful life of the irrigation system. The Association should fund these ongoing seasonal repairs through the operating budget.

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

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

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

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

Light Poles and Fixtures

Line Item: 4.560

Quantity: 70 fluted metal poles with LED light fixtures

History: Original; the Association has historically replaced the light fixtures with LED fixtures as needed and conducts paint finish applications of the poles. The Association also reports historical issues with the electrical.

Condition: Fair overall with leaning poles evident.

Light pole lean

Light pole damage

Light pole lean

Useful Life: Up to 35 years contingent upon interim repairs, fixture replacements and paint finish applications funded through the operating budget

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

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

Priority/Criticality: Per Board discretion

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

Mailbox Stations

Line Item: 4.600

Quantity: 19 stations

History: Varied ages. The Association has conducted isolated replacements of the mailbox stations as needed.

Condition: Fair overall with rust and finish deterioration evident.

Mailbox stations

Mailbox station finish deterioration and fastener rust

Mailbox stations

Useful Life: Up to 25 years

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

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

Priority/Criticality: Per Board discretion

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

Pavers, Masonry

Line Item: 4.620

Quantity: Approximately 1,200 square feet at the sidewalks

History: Original

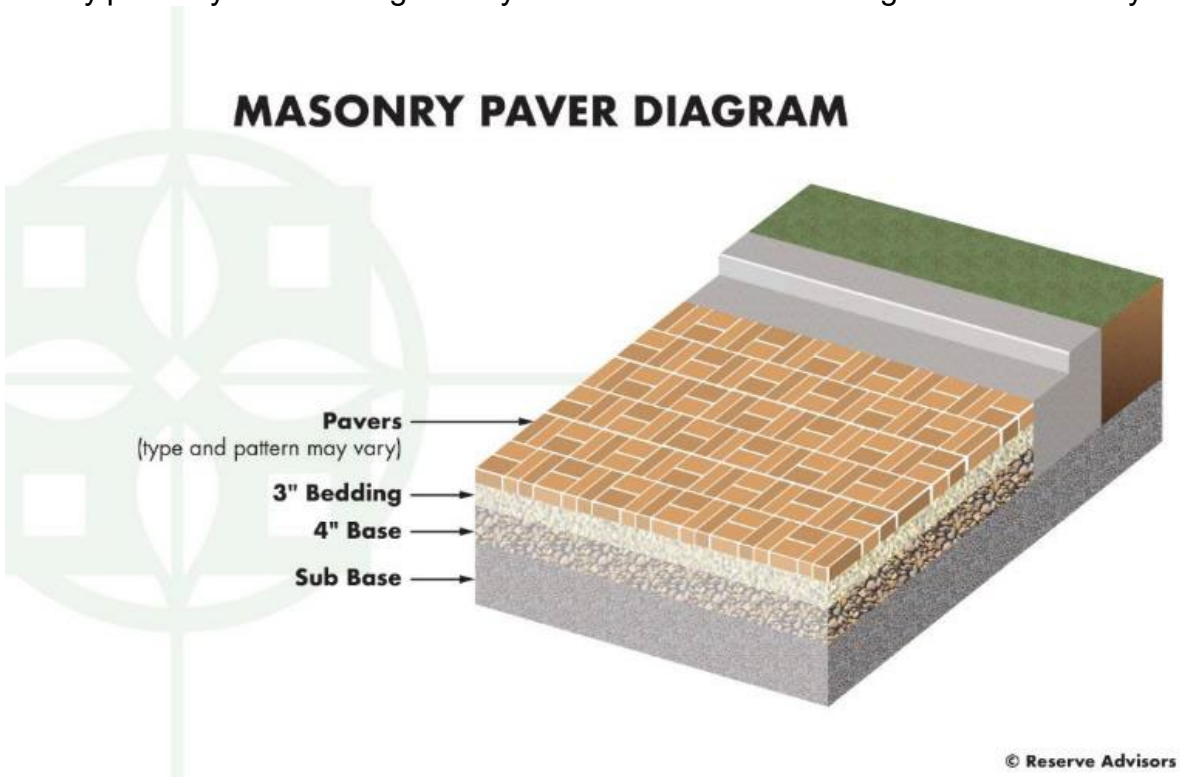
Condition: Fair overall with periodic settlement, spalled masonry and previous repairs evident.

Masonry pavers overview

Paver settlement

Useful Life: Up to 25 years for pavers with pedestrian traffic

Component Detail Notes: The following diagram depicts the typical components of a masonry paver system although it may not reflect the actual configuration at Barclay Park:



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

- Annually:
  - Inspect and repair settlement, trip hazards and paver spalls at heavy traffic areas
  - Re-set and/or reseal damaged pavers as necessary
  - Periodically clean and remove overgrown vegetation 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 suggest the Association conduct interim resetting and replacement of minor areas of pavers as normal maintenance, funded from the operating budget.

Pergola, Wood

Line Item: 4.630

Quantity: One each

History: Original

Condition: Fair to poor overall with frequent weathered wood, isolated displacement and damage evident.

Pergola

Pergola weathered wood

Pergola damage and displacement

Useful Life: 15- to 25-years with periodic maintenance

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

- Annually:
  - Inspect for wood deterioration, and loose or missing fasteners
- Every three years:
  - Power wash with algaecide and application of sealer/stain

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We recommend the Association budget for paint applications and repairs through the operating budget.

Playground Equipment

Line Item: 4.660

Quantity: Playground equipment includes the following elements:

- Playsets
- Synthetic surface

History: The play surface was replaced in 2018. The age of the equipment was unavailable to us at the time of the inspection.

Condition: Good to fair overall with finish deterioration and rust evident.

Playground equipment

Equipment finish deterioration

Fastener rust

Spring riders

Useful Life: 15- to 20-years

Component Detail Notes: Safety is the major purpose for maintaining playground equipment. We recommend an annual inspection of the playground equipment to identify and repair as normal maintenance loose connections and fasteners or damaged elements. We suggest the Association learn more about the specific requirements of playground equipment at PlaygroundSafety.org. We recommend the use of a specialist for the design or replacement of the playground equipment environment.

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

- Annually:
  - Inspect and repair loose connections and fasteners or damaged elements
  - Inspect for safety hazards and adequate coverage of ground surface cover

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 include an allowance in the unit cost for replacement of the safety surface.

Ponds, Sediment Removal

Line Items: 4.710 and 4.711

Quantity: Two storm water retention ponds are located near the clubhouse and at the center of the property. The clubhouse pond comprises multiple compartments.

The center pond comprises 1,400 square yards of surface area. The clubhouse ponds include 240 square yards of liners and 360 square yards of surface area that does not include a liner.

History: The Association installed a liner in a portion of the ponds near the clubhouse in 2012. We are informed that there are no issues with the ponds or liners at this time. The Association conducts algae treatments.

Condition: Good to fair visual condition. We note vegetative accumulation at the center pond. We also note evidence of soil movement at the shores/banks. The Association should maintain the shores/banks as normal maintenance with funds through the operating budget.

Center pond overview

Clubhouse pond overview

Clubhouse pond overview

Useful Life: Based on the visual condition, construction, adjacent deciduous trees and visibly apparent erosion, we recommend the Association anticipate the need to remove pond sediment up to every 30 years and up to 20 years for the liner replacement.

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

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

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

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

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. For reserve budgeting purposes, we estimate the need to remove an average depth of one yard from the full surface area. However, the actual volume of material to remove may vary dependent upon an invasive analysis at the time of removal. A visual inspection of a body of water cannot reveal the amount of accumulated silt. This is especially true on larger bodies of water. It is therefore inaccurate to assume an entire body of water will require sediment removal. It is more

cost effective to spot remove in areas of intense silt accumulation as noted through bathymetric surveys. The amount or depth of silt is determined through prodding into the silt until a relatively solid base is found or through bathymetric surveys. A bathymetric survey establishes a base of data about the depth of the body of water over many locations against which the data of future surveys is compared. These invasive procedures are beyond the scope of a Reserve Study and require multiple visits to the site. We recommend Barclay Park contract with a local engineer for periodic bathymetric surveys. Future updates of the Reserve Study can incorporate future anticipated expenditures based on the results of the bathymetric surveys.

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

Railings, Aluminum

Line Item: 4.731

Quantity: 3,210 linear feet of prefinished aluminum railings at the stairs

History: Installed in 2007 to 2011

Condition: Good overall with isolated finish deterioration evident

Railing overview

Railing overview

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 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.

Retaining Walls, Masonry

Line Item: 4.745

Quantity: Approximately 600 square feet of masonry walls and planters

History: Installed in approximately 2015

Condition: Good to fair overall with isolated efflorescence, settlement and spalls evident.

Masonry retaining walls overview

Wall efflorescence

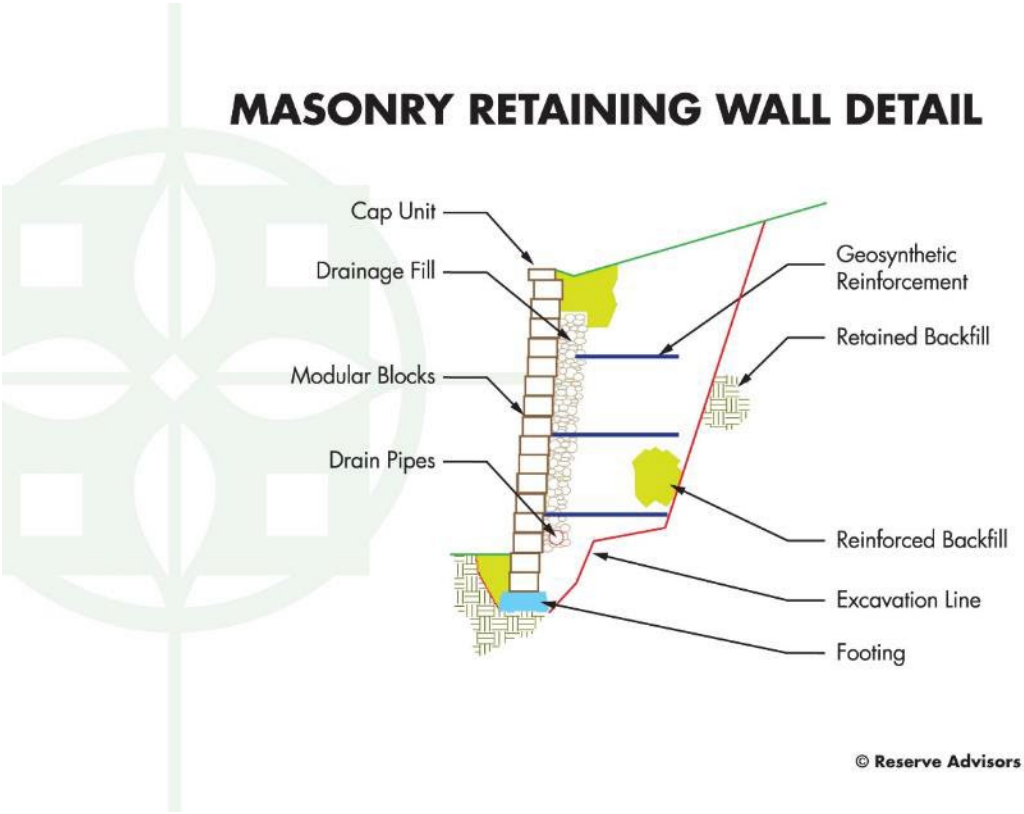
Wall block settlement

Wall block spall

Useful Life: 25- 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 Barclay Park:



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 Court, Tennis, Fence

Line Item: 4.840

Quantity: 330 linear feet

History: Original

Condition: Fair to poor overall with finish deterioration, damage and warped webbing evident.

Chain link fence

Fence finish deterioration and warped webbing

Fence warped webbing

New locks and fence post damage

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 Court, Tennis

Line Items: 4.830 and 4.860

Quantity: 700 square yards of asphalt comprising one tennis court

History:

- Color Coat: The Association plans on applying a color coat and conducting repairs in 2024.
- Surface: Original

Condition: Poor overall with cracks, settlement, poor drainage, standards damage and color coat fade evident.

Tennis court overview

Tennis court overview

Surface cracks

Color coat fade

Surface cracks

Surface cracks

Court settlement and cracks

Surface cracks

Useful Life: Up to 25 years for replacement of the surface with the benefit of color coat applications and repairs every four- to six-years

Preventative Maintenance 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. 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.

Clubhouse Elements

Clubhouse overview

Air Handling and Condensing Units, Split System

Line Item: 5.070

Quantity: One *Goodman* split system

History: The condensing unit was replaced in 2012. The furnace is reported original.

Condition: Reported satisfactory without operational deficiencies

Split system condensing unit

Useful Life: 15- to 20-years

Component Detail Notes: A split system air conditioner consists of an outside condensing unit, an interior evaporator coil, refrigerant lines and an interior gas-fired furnace. The condensing unit has a cooling capacity of five-tons. The split system uses R-22 refrigerant. This type of refrigerant is no longer in production and costs of replacement of the coolant will likely continue to rise. Updates to this reserve study will

continue to monitor the rate of repairs and possible need for acceleration of the replacement.

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

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

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

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. The condensing unit may require replacement prior to replacement of the related interior forced air unit. For purposes of this Reserve Study, we assume coordination of replacement of the interior forced air unit, evaporator coil, refrigerant lines and exterior condensing unit.

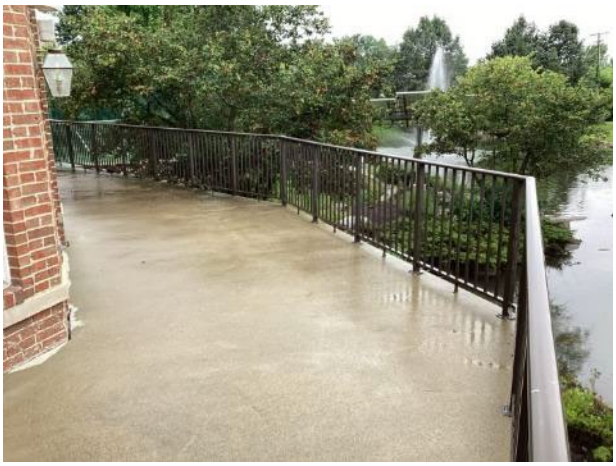
Balcony, Concrete

Line Item: 5.103

Quantity: The clubhouse includes 280 square feet of concrete balcony at the rear elevation.

History: Replaced in approximately 2012

Condition: Good overall



Balcony overview

Balcony overview

Useful Life: 25- to 35- years

Component Detail Notes: Due to the non-invasive nature of our inspection, we are unable to determine the exact composition of the clubhouse balcony. Based on our visual inspection, experience with similar construction and knowledge of replacement/capital repair projects of this type, we surmise the clubhouse balcony comprises the following elements:

- Concrete topping
- Perimeter flashing
- Underlying waterproof membrane atop the structure
- Elevated structural concrete

A concrete topping protects the subsurface structure from the infiltration of storm water. We surmise a waterproof membrane separates and protects the structure from the migration of storm water through surface cracks in the concrete topping. Over time, the development of surface cracks is a normal occurrence in the topping, allowing storm water to come in contact with and wear the waterproof membrane. As the membrane ages and deteriorates, water infiltration through the structure and leaks into the space beneath will become more frequent and widespread. Deterioration of the concrete structure beneath the membrane is also probable due to membrane leaks and normal aging of the concrete.

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

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

Interior Renovations

Line Items: 5.500 and 5.510

Quantity: The clubhouse interior components include:

- Carpet, tile and wood laminate floor coverings
- Vinyl wall coverings
- Paint finishes on the walls and ceilings
- Plumbing fixtures
- Light fixtures including exit and emergency lights
- Kitchen cabinets and countertops
- Furnishings including sofas, tables, chairs and bureaus
- Various appliances including a stove, refrigerator and microwave

History: The Association last partially renovated the clubhouse in approximately 2017 to 2018. Renovations include replacement of the wood laminate flooring and paint finishes. The lighting and décor is approximately five years of age, and tile and wallpaper are original.

Condition: Good to fair, with partially dated finishes, stained and discolored carpet, damaged and soiled wallcoverings, isolated cracked tiles and general furniture wear and tear evident.

Clubhouse interior

Clubhouse kitchen

Clubhouse interior

Clubhouse interior

Exercise room overview

Wall covering damage

Tile damage

Clubhouse rest room

Paint damage

Useful Life: Complete renovation every 20- to 25-years and partial renovation every 8- to 12-years

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. The complete renovation should include replacement of all components listed above and the partial renovations should include the following:

- Application of paint finishes to all surfaces
- Replacement of the carpet
- Replacement of up to fifty percent (50%) of the furnishings

Security System

Line Item: 5.720

Quantity: Barclay Park utilizes the following security system components:

- Automated proximity reader system (1 access points)
- Cameras (12)
- Multiplexer (1)
- Recorder (1)

History: Upgraded in 2014.

Condition: Reported satisfactory without operational deficiencies

Security system camera

Useful Life: 10- to 15-years

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

- Monthly:
  - Check cameras for proper focus, fields of view are unobstructed and camera and lenses are clean and dust-free
  - Check recording equipment for proper operation

- Verify monitors are free from distortion with correct brightness and contrast
- Annually:
  - Check exposed wiring and cables for wear, proper connections and signal transmission
  - Check power connections, and if applicable, functionality of battery power supply systems

Priority/Criticality: Per Board discretion

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

Solar Photovoltaic System

Line Item: 5.750

Quantity: One solar panel system

History: Installed in approximately 2013. The Association informs us that the inverter was replaced in 2023.

Condition: Reported satisfactory

Solar photovoltaic system

Solar photovoltaic system

Solar photovoltaic system

Useful Life: 20- to 25- years

Component Detail Notes: Photovoltaic (PV) systems may last longer but typically decrease in efficiency beyond 25 years. PV solar systems will typically see a decrease to approximately ninety percent (90%) of the original power output by an age of 15 years and approximately eighty percent (80%) by 25 years. The Association should conduct annual inspections of the panels to check for corrosion, and broken wiring at the electrical and mechanical connections. When the solar array decreases in power output, the Association should consider cleaning of the panels by a licensed professional funded through the operating budget.

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

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

Windows and Doors

Line Item: 5.800

Quantity: Approximately 400 square feet

History: Original; The rear entry door at the clubhouse needs replaced.

Condition: Fair to poor overall with frame finish deterioration evident.

Clubhouse windows and doors

Finish deterioration

Finish deterioration

Fastener rust

Rear door in need of replacement

Door trim rot

Useful Life: Up to 40 years

Component Detail Notes: Construction of the windows and doors at the clubhouse includes the following:

- Aluminum frames
- Dual pane glass
- Double hung windows with screens
- Hinged doors

Priority/Criticality: Not recommended to defer

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

Reserve Study Update

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

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

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

5. METHODOLOGY

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

Barclay Park can fund capital repairs and replacements in any combination of the following:

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

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

This Reserve Study is in compliance with and exceeds the National standards[1] set forth by the Association of Professional Reserve Analysts (APRA) fulfilling the requirements of a "Level II Reserve Study Update." These standards require a Reserve Component to have a "predictable remaining Useful Life." Estimating Remaining Useful Lives and Reserve Expenditures beyond 30 years is often indeterminate. Long-Lived Property Elements are necessarily excluded from this analysis. We considered the following factors in our analysis:

- The Cash Flow Method to compute, project and illustrate the 30-year Reserve Funding Plan
- Local[2] costs of material, equipment and labor
- Current and future costs of replacement for the Reserve Components
- Costs of demolition as part of the cost of replacement
- Local economic conditions and a historical perspective to arrive at our estimate of long-term future inflation for construction costs in Ann Arbor, Michigan at an annual inflation rate[3]. Isolated or regional markets of

[1] Identified in the APRA "Standards - Terms and Definitions" and the CAI "Terms and Definitions".
[2] See Credentials for additional information on our use of published sources of cost data.
[3] Derived from Marshall & Swift, historical costs and the Bureau of Labor Statistics.

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

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

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

6. CREDENTIALS

HISTORY AND DEPTH OF SERVICE

Founded in 1991, Reserve Advisors is the leading provider of reserve studies, insurance appraisals, developer turnover transition studies, expert witness services, and other engineering consulting services. Clients include community associations, resort properties, hotels, clubs, non-profit organizations, apartment building owners, religious and educational institutions, and office/commercial building owners in 48 states, Canada and throughout the world.

The **architectural engineering consulting firm** was formed to take a leadership role in helping fiduciaries, boards, and property managers manage their property like a business with a long-range master plan known as a Reserve Study.

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

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

TOTAL STAFF INVOLVEMENT

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

OUR GOAL

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

VAST EXPERIENCE WITH A VARIETY OF BUILDINGS

Reserve Advisors has conducted reserve studies for a multitude of different communities and building types. We've analyzed thousands of buildings, from as small as a 3,500-square foot day care center to a 2,600,000-square foot 98-story highrise. We also routinely inspect buildings with various types of mechanical systems such as simple electric heat, to complex systems with air handlers, chillers, boilers, elevators, and life safety and security systems.

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

OLD TO NEW

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

MATTHEW D. NEIKE, RS
Responsible Advisor

CURRENT CLIENT SERVICES

Matthew D. Neike, a mechanical engineer, is an Advisor for Reserve Advisors, LLC. Mr. Neike is responsible for the inspection and analysis of the condition of clients' property, and recommending engineering solutions to prolong the lives of the components. He also forecasts capital expenditures for the repair and/or replacement of the property components and prepares technical reports on assignments. He is responsible for conducting Life Cycle Cost Analysis and Capital Replacement Forecast services and the preparation of Reserve Study Reports for apartments, high rises, condominiums, townhomes, and homeowners associations.

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

Gay and Sixth Condominium Association - Built from 2015 to 2020 this association comprises 67 units in seven unique buildings located in the heart of downtown Columbus, Ohio. The community is a mix of modern units with metal siding and rooftop terraces as well as traditional brownstones, row homes and garden units. The buildings include asphalt shingle and EDPM roofs atop units with EIFS, painted brick and a variety of balcony systems.

Pirate's Cove at Indian Lake Condominium Association, Inc. – This townhome style development consists of 92 units in 17 buildings and is located on Indian Lake in Russells Point, Ohio. The property has lake direct lake access via a canal type marina with individual boat docks for each unit. The community also includes three lift stations, two pools, a large shelter building/pool house and 15 well pumps.

White Eagle Club Property Owners Association – A homeowners' association with 1,100 single family homes surrounding a golf course in Naperville, Illinois. This property contains a large pool, water slide, clubhouse, eight tennis courts, and several fences around the property perimeter.

Bridge Point Condominium Association – 274 units in 25 three story buildings situated atop a hill in northwestern Cincinnati, Ohio. This association was built from 2006 to 2017 with the building exteriors comprising masonry, plywood and vinyl siding.

Fox Run 1 Condominium Association – This property was constructed in approximately 1973 and contains 36 unique units in six buildings as well as a pool. Each unit is completely unique with a variety of elevations, painted and unpainted brick, vinyl siding, and mansard asphalt shingle roofs.

Central Park Condominium Association – This community comprises 100 units in 50 buildings in Carol Stream, Illinois. The association also maintains a clubhouse, pool, detention and retention pond.

PRIOR RELEVANT EXPERIENCE

Before joining Reserve Advisors, LLC, Mr. Neike was a Project Engineer for a general contractor specializing in water and wastewater treatment plants. He was part of the project management team responsible for facilitating and managing the construction of large-scale, multi-year, wastewater treatment plant renovations and improvements. Those projects involved the planning, purchasing and execution of industrial controls, electrical systems, piping/plumbing systems and extremely large concrete structures.

EDUCATION

Wright State University - B.S. Mechanical Engineering

PROFESSIONAL AFFILIATIONS

Reserve Specialist (RS) - Community Associations Institute

JUSTIN B. KLEIN, RS
Great Lakes Quality Assurance Engineer

CURRENT CLIENT SERVICES

Justin B. Klein, a Senior Engineer, is an Advisor for Reserve Advisors, LLC. Mr. Klein is responsible for the inspection and analysis of the condition of clients' property, and recommending engineering solutions to prolong the lives of the components. He also forecasts capital expenditures for the repair and/or replacement of the property components and prepares technical reports on assignments. He is responsible for conducting Life Cycle Cost Analysis and Capital Replacement Forecast services and the preparation of Reserve Study and Transition Study Reports for apartments, high rises, condominiums, townhomes, and homeowners associations.

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

Springfield Golf and Country Club – This private club, established in 1960, is located in Springfield, Virginia. Home to an 18-hole golf course, multiple practice putting greens, a driving range, outdoor pool facility, a fitness center and studio, a golf simulator, four indoor tennis courts, and six outdoor tennis courts including two clay courts, members of this Club can enjoy an extensive array of amenities.

Glenmore Community Association – Located in Keswick, Virginia, this master community association features 980 single family homes and counting. The community maintains a private equestrian center located on a 61-acre parcel of land. The equestrian center is equipped with two outdoor riding rings and 13 fenced paddocks in addition to the 27 stalls at the Main Barn. The Association also maintains over 10 miles of roads, three earthen dams, eight ponds, a dog park, and playground.

California House – Built in 1900 and converted to condominiums in 1978, this six story building is located in the historic Kalorama neighborhood in Washington D.C. Sharing its footprint with a sister building, the Association's 27 residents can enjoy the decorative cornice, ornate marble tiled lobby and welcoming courtyard.

Villages of Five Points – Conveniently nestled east of Route 1 in Lewes, Delaware, this master association of over 580 units comprising condos, townhouses and single-family homes is a short drive to the shores of the Atlantic Ocean. The Association maintains a clubhouse, two pool houses and pools, eight tennis courts and over 1.5 miles of pavement walking paths.

Windsor Park Residences – Located within the Windsor Club in Vero Beach, Florida, this condominium Association features 12 residences within five connected three-story buildings with a private reflecting pool centerpiece at the courtyard. Owners can take advantage of direct access elevators and garages for their vehicles and golf carts.

PRIOR RELEVANT EXPERIENCE

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

EDUCATION

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

PROFESSIONAL AFFILIATIONS

Reserve Specialist (RS) – Community Association Institute
Engineer in Training (E.I.T) – State of Virginia

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 Barclay Park 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) Barclay Park responsibility; 2) limited Useful Life expectancies; 3) predictable Remaining Useful Life expectancies; and 4) a replacement cost above a minimum threshold.

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

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

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

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

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

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

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

8. PROFESSIONAL SERVICE CONDITIONS

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

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

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

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

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

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

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

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

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

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

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