

RESERVE STUDY

Charlesgate Village Association



Amherst, New York
October 15, 2021



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Charlesgate Village Association
Amherst, New York

Dear Board of Directors of Charlesgate Village Association:

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Reserve Study* of Charlesgate Village Association in Amherst, New York and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, October 15, 2021.

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 Charlesgate Village Association plan for a successful future.

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

Respectfully submitted on November 30, 2021 by

Reserve Advisors, LLC

Visual Inspection and Report by: Matthew P. Ksionzyk, RS¹, PRA²
Review by: Alan M. Ebert, RS, PRA, Director of Quality Assurance



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

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



Long-term thinking. Everyday commitment.



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1. RESERVE STUDY EXECUTIVE SUMMARY

Client: Charlesgate Village Association (Charlesgate Village)

Location: Amherst, New York

Reference: 94532

Property Basics: Charlesgate Village Association is a townhome style development which consists of 188 units in 32 buildings. The community was built from 1971 to 1973.

Reserve Components Identified: 21 Reserve Components.

Inspection Date: October 15, 2021. We conducted previous inspections in 1995, 2009, 2013, and 2017.

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 2038 due to replacement of the vinyl siding. In addition, the **Reserve Funding Plan** recommends 2051 year end accumulated reserves of approximately \$2,779,000. We judge this amount of accumulated reserves in 2051 necessary to fund the likely subsequent replacement of the asphalt shingle roofs after 2051. Future replacement costs beyond the next 30 years for the subsequent replacement of the asphalt shingle roofs are likely to more than double the current cost of subsequent replacement. These future needs, although beyond the limit of the Cash Flow Analysis of this Reserve Study, are reflected in the amount of accumulated 2051 year end reserves.

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

- Current and future local costs of replacement
- 2.0% anticipated annual rate of return on invested reserves
- 3.0% future Inflation Rate for estimating Future Replacement Costs

Sources for Local Costs of Replacement: Our proprietary database, historical costs and published sources, i.e., R.S. Means, Incorporated.

Unaudited Cash Status of Reserve Fund:

- \$634,898 as of August 31, 2021
- 2021¹ budgeted Reserve Contributions of \$304,480

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:

- Partial asphalt repaving at the streets, parking areas, driveways, walkways and walking paths.

¹ The Fiscal Year (FY 2021) for Charlesgate Village began May 1, 2021 and ends April 30, 2022. For brevity, we refer to the Fiscal Year by its beginning year, i.e. Fiscal Year 2021-22 is FY 2021 or simply 2021.



- Partial replacement of the wood privacy and refuse area fences.
- An inspection and capital repair project at the main line subsurface domestic water sanitary sewer pipes.

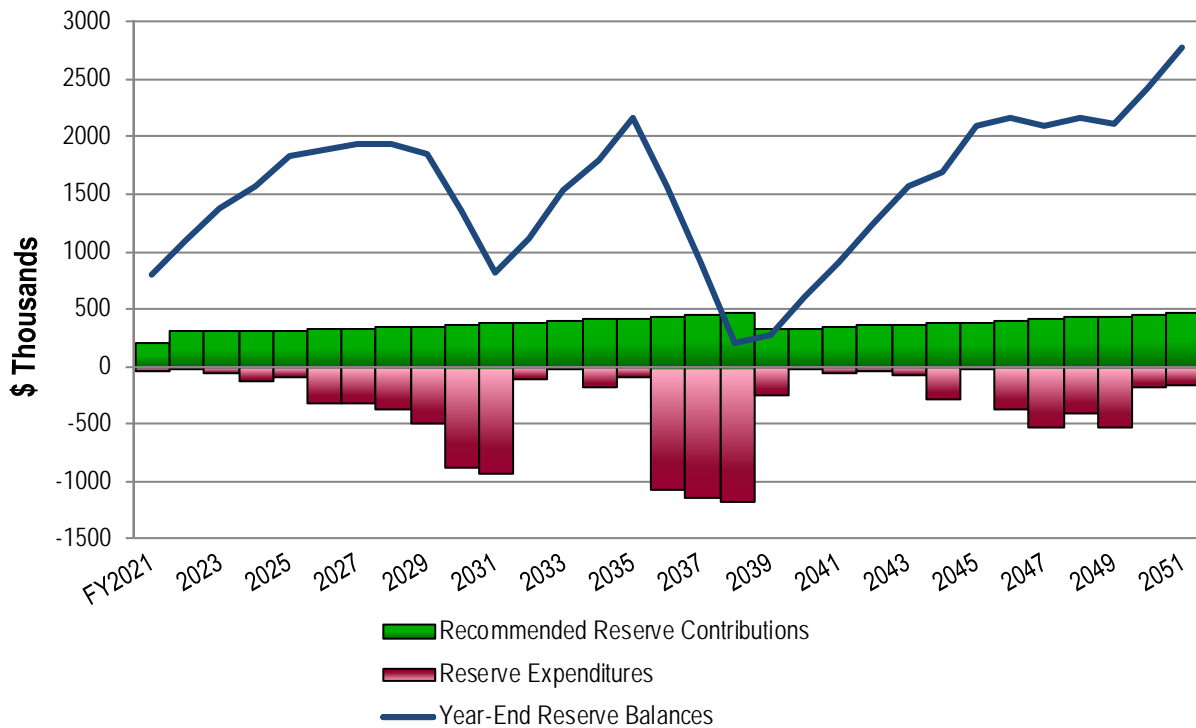
Recommended Reserve Funding: We recommend the following in order to achieve a stable and equitable Funding Plan:

- Stable contributions of \$305,000 from 2022 through 2024
- Inflationary increases from 2025 through 2038
- Decrease to \$325,000 by 2039 due to fully funding for replacement of the vinyl siding
- Inflationary increases from 2040 through 2051, the limit of this study's Cash Flow Analysis
- 2022 Reserve Contribution of \$304,500 is equivalent to an average monthly contribution of \$134.97 per homeowner.
- Our revised findings reflect both external market and internal property changes. The result is an overall decrease in the recommended Reserve Funding Plan since our last Reserve Study on October 26, 2017. The overall decrease relates primarily to the removal of significant near term subsurface sanitary sewer pipe replacements.



Charlesgate Village Recommended Reserve Funding Table and Graph

Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)
2022	304,500	1,104,208	2032	385,700	1,122,123	2042	355,100	1,238,481
2023	304,500	1,372,086	2033	397,300	1,533,051	2043	365,800	1,561,820
2024	304,500	1,574,767	2034	409,200	1,799,196	2044	376,800	1,692,806
2025	313,600	1,838,363	2035	421,500	2,172,853	2045	388,100	2,100,412
2026	323,000	1,884,260	2036	434,100	1,567,645	2046	399,700	2,165,548
2027	332,700	1,930,993	2037	447,100	903,297	2047	411,700	2,094,113
2028	342,700	1,944,702	2038	460,500	198,100	2048	424,100	2,155,991
2029	353,000	1,846,098	2039	325,000	276,468	2049	436,800	2,110,035
2030	363,600	1,360,649	2040	334,800	604,419	2050	449,900	2,429,430
2031	374,500	825,634	2041	344,800	910,250	2051	463,400	2,779,029





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

Charlesgate Village Association

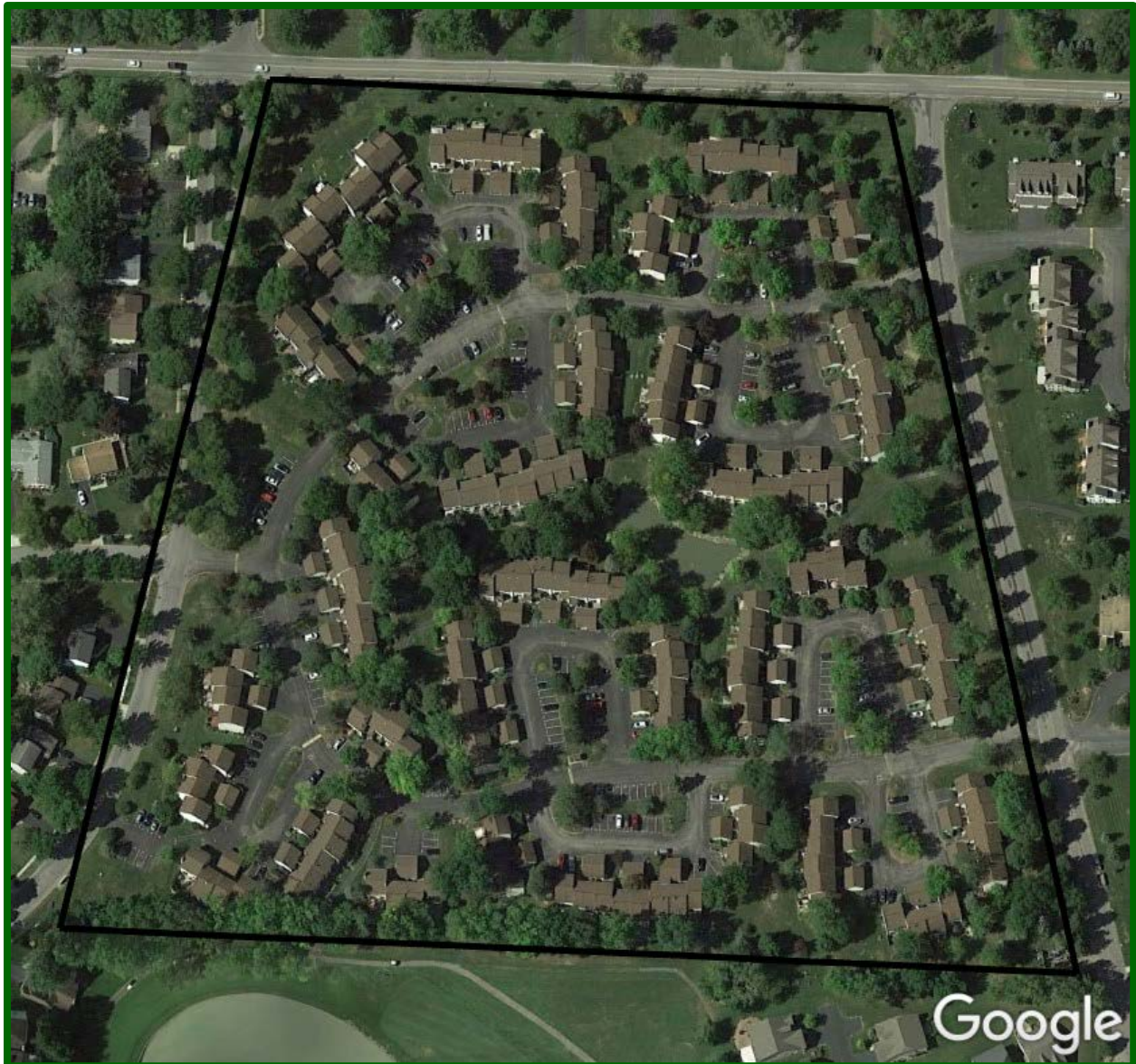
Amherst, New York

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, October 15, 2021. We conducted previous inspections in 1995, 2009, 2013, and 2017.

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

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

IDENTIFICATION OF PROPERTY



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

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

- Reserve Components

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

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

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

Long-Lived Property Elements may not have predictable Remaining Useful Lives or their replacement may occur beyond the 30-year scope of the study. The operating budget should fund infrequent repairs. Funding untimely or unexpected replacements from reserves will necessitate increases to Reserve Contributions. Periodic updates of this Reserve Study will help determine the merits of adjusting the Reserve Funding Plan. We identify the following Long-Lived Property Elements as excluded from the 30-year Reserve Expenditures at this time.

- Electrical Systems, Common
- Pipes, Subsurface Utilities, Stormwater
- Stormwater Management System, Inlet/Outlet Structures, Concrete

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

- General Maintenance to the Common Elements
- Expenditures less than \$7,000 (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)
- Catch Basins, Landscape
- Fences, Wood, Stain Finishes
- Landscape, Maintenance
- Light Fixtures, Exteriors
- Paint Finishes, Touch Up
- Pond, Aerator



Pond aerator overview

- Pond, Shoreline, Erosion Control (per Management and the Board)
- Signage, Community Identification
- Signage, Traffic Identification
- Other Repairs normally funded through the Operating Budget

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

- Awnings and Canopies



Typical canopies

- Decks
- Doors, Garage
- Doors, Hinged
- Doors, Sliding Glass and French

- Electrical Systems, Within Units (includes circuit protection panels, wiring and exterior outlets)
- Fences, Wood, Privacy, Parallel to Unit Rear Elevations



Example of wood privacy fences parallel to unit rear elevations

- Foundations
- Generators, Backup



Typical backup generator

- Handrails, Stoops
- Heating, Ventilating and Air Conditioning (HVAC) Units
- Interiors
- Mailboxes (note the Association is responsible for renovation of the mailbox shelters)
- Patios
- Pipes, Within Units
- Pipes, Subsurface Utilities, Domestic Water and Sanitary Sewer, Lateral Lines

- Privacy Walls, Masonry (note shared between neighboring units)



Typical masonry privacy wall

- Stoops, Front Entrances



Typical front entrance stoop

- Structural Frames
- Vent Covers
- Windows
- Window Wells

3. RESERVE EXPENDITURES and FUNDING PLAN

The tables following this introduction present:

Reserve Expenditures

- Line item numbers
- Total quantities
- Quantities replaced per phase (in a single year)
- Reserve component inventory
- Estimated first year of event (i.e., replacement, application, etc.)
- Life analysis showing
 - useful life
 - remaining useful life
- 2021 local cost of replacement
 - Per unit
 - Per phase
 - Replacement of total quantity
- Percentage of future expenditures anticipated during the next 30 years
- Schedule of estimated future costs for each reserve component including inflation

Reserve Funding Plan

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

Five-Year Outlook

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

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

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

RESERVE EXPENDITURES

**Charlesgate Village
Association**
Amherst, New York

Explanatory Notes:

- 1) **3.0%** is the estimated Inflation Rate for estimating Future Replacement Costs.
- 2) FY2021 is Fiscal Year beginning May 1, 2021 and ending April 30, 2022.

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis Years		Costs, \$		Percentage of Future Expenditures	RUL = 0 FY2021	1 2022	2 2023	3 2024	4 2025	5 2026	6 2027	7 2028	8 2029	9 2030	10 2031	11 2032	12 2033	13 2034	14 2035	15 2036	
						Useful	Remaining	Unit (2021)	Per Phase (2021)																		Total (2021)
Exterior Building Elements																											
1.240	10,480	10,480	Linear Feet	Gutters and Downspouts, Aluminum, Phase 1	2030	15 to 25	9	13.50	141,480	141,480	1.8%															184,599	
1.241	9,620	9,620	Linear Feet	Gutters and Downspouts, Aluminum, Phase 2	2031	15 to 25	10	13.50	129,870	129,870	1.7%																174,534
1.280	954	954	Squares	Roofs, Asphalt Shingles, Phase 1	2030	15 to 25	9	550.00	524,700	524,700	6.6%																684,614
1.282	876	876	Squares	Roofs, Asphalt Shingles, Phase 2	2031	15 to 25	10	550.00	481,800	481,800	6.3%																647,499
1.855	188	63	Each	Walls, Siding, Vinyl, Paint Finishes and Capital Repairs, Phased (2021 is budgeted)	2021	8 to 10	6 to 8	1,050.00	65,804	197,400	2.7%	40,000					78,573	80,930	83,358								
1.860	246,500	82,167	Square Feet	Walls, Siding, Vinyl, Replacement, Phased (incl. soffit and fascia)	2036	to 40	15 to 17	8.30	681,983	2,045,950	31.8%																1,062,508
1.905	1	1	Allowance	Walls, Trim, Paint Finishes and Partial Replacements	2024	4 to 6	3	41,000.00	41,000	41,000	3.9%				44,802				51,938					60,210			
Property Site Elements																											
4.022	22,200	22,200	Square Yards	Asphalt Pavement, Patch	2022	ongoing	1	0.40	8,880	8,880	3.0%		9,146	9,421	9,703	9,995				11,586	11,934	12,292	12,661	13,041	13,432	13,835	
4.020	22,200	22,200	Square Yards	Asphalt Pavement, Crack Repair, Seal Coat and Striping	2023	3 to 5	2	1.25	27,750	27,750	2.7%			29,440								37,294					41,974
4.040	20,700	5,175	Square Yards	Asphalt Pavement, Mill and Overlay, Streets, Parking Areas, Driveways, and Walkways, Phased	2046	15 to 20	25 to 28	21.50	111,263	445,050	9.4%																
4.045	20,700	5,175	Square Yards	Asphalt Pavement, Total Replacement, Streets, Parking Areas, Driveways, and Walkways, Phased	2026	15 to 20	5 to 8	35.00	181,125	724,500	8.5%						209,974	216,273	222,761	229,444							
4.080	1,500	1,500	Square Yards	Asphalt Pavement, Total Replacement, Walking Paths	2026	15 to 20	5	41.00	61,500	61,500	1.9%						71,295										
4.100	24	6	Each	Catch Basins, Inspections and Capital Repairs, Phased	2026	15 to 20	5 to 8	1,200.00	7,200	28,800	0.9%						8,347	8,597	8,855	9,121							
4.190	1	1	Allowance	Drainage Remediation	2022	to 5	1	17,000.00	17,000	17,000	1.5%		17,510					20,299									23,532
4.285	1,880	627	Linear Feet	Fences, Wood, Privacy, Perpendicular to Unit Rear Elevations, Phased	2025	15 to 25	4 to 10	49.00	30,707	92,120	2.4%																41,267
4.286	64	21	Each	Fences, Wood, Refuse Areas, Phased	2025	15 to 25	4 to 10	650.00	13,865	41,600	1.1%						15,605		17,052								18,633
4.500	1	1	Allowance	Landscape, Emerald Ash Borer Treatments	2023	to 3	2	21,000.00	21,000	21,000	3.3%			22,279			24,345			26,602				29,069			31,764
4.560	37	19	Each	Light Poles and Fixtures, Phased	2047	20 to 30	26 to 27	2,300.00	42,550	85,100	1.8%																
4.600	5	5	Each	Mailbox Shelters, Renovation	2025	to 25	4	4,200.00	21,000	21,000	0.7%					23,636											
4.650	1	1	Allowance	Pipes, Subsurface Utilities, Domestic Water and Sanitary Sewer, Main Lines, Inspection and Capital Repairs	2024	4 to 6	3	70,000.00	70,000	70,000	6.6%				76,491					88,674							102,797
4.730	630	630	Square Yards	Pond, Sediment Removal	2032	to 20	11	50.00	31,500	31,500	1.2%																43,603
Anticipated Expenditures, By Year (\$10,329,501 over 30 years)											40,000	26,656	61,140	130,996	83,797	313,961	323,742	367,364	489,137	880,799	931,161	108,496	12,661	176,048	87,170	1,076,343	

RESERVE EXPENDITURES

**Charlesgate Village
Association**
Amherst, New York

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis		Costs, \$			Percentage of Future Expenditures	16 2037	17 2038	18 2039	19 2040	20 2041	21 2042	22 2043	23 2044	24 2045	25 2046	26 2047	27 2048	28 2049	29 2050	30 2051	
						Useful	Remaining	Unit (2021)	Per Phase (2021)	Total (2021)																	
Exterior Building Elements																											
1.240	10,480	10,480	Linear Feet	Gutters and Downspouts, Aluminum, Phase 1	2030	15 to 25	9	13.50	141,480	141,480	1.8%																
1.241	9,620	9,620	Linear Feet	Gutters and Downspouts, Aluminum, Phase 2	2031	15 to 25	10	13.50	129,870	129,870	1.7%																
1.280	954	954	Squares	Roofs, Asphalt Shingles, Phase 1	2030	15 to 25	9	550.00	524,700	524,700	6.6%																
1.282	876	876	Squares	Roofs, Asphalt Shingles, Phase 2	2031	15 to 25	10	550.00	481,800	481,800	6.3%																
1.855	188	63	Each	Walls, Siding, Vinyl, Paint Finishes and Capital Repairs, Phased (2021 is budgeted)	2021	8 to 10	6 to 8	1,050.00	65,804	197,400	2.7%																
1.860	246,500	82,167	Square Feet	Walls, Siding, Vinyl, Replacement, Phased (incl. soffit and fascia)	2036	to 40	15 to 17	8.30	681,983	2,045,950	31.8%	1,094,383	1,127,215														
1.905	1	1	Allowance	Walls, Trim, Paint Finishes and Partial Replacements	2024	4 to 6	3	41,000.00	41,000	41,000	3.9%			69,800				80,917						93,805			
Property Site Elements																											
4.022	22,200	22,200	Square Yards	Asphalt Pavement, Patch	2022	ongoing	1	0.40	8,880	8,880	3.0%	14,250	14,677	15,118	15,571	16,038	16,519	17,015	17,525	18,051					20,926	21,554	
4.020	22,200	22,200	Square Yards	Asphalt Pavement, Crack Repair, Seal Coat and Striping	2023	3 to 5	2	1.25	27,750	27,750	2.7%			47,243				53,172									67,357
4.040	20,700	5,175	Square Yards	Asphalt Pavement, Mill and Overlay, Streets, Parking Areas, Driveways, and Walkways, Phased	2046	15 to 20	25 to 28	21.50	111,263	445,050	9.4%									232,959	239,948	247,146	254,561				
4.045	20,700	5,175	Square Yards	Asphalt Pavement, Total Replacement, Streets, Parking Areas, Driveways, and Walkways, Phased	2026	15 to 20	5 to 8	35.00	181,125	724,500	8.5%																
4.080	1,500	1,500	Square Yards	Asphalt Pavement, Total Replacement, Walking Paths	2026	15 to 20	5	41.00	61,500	61,500	1.9%										128,767						
4.100	24	6	Each	Catch Basins, Inspections and Capital Repairs, Phased	2026	15 to 20	5 to 8	1,200.00	7,200	28,800	0.9%									15,075	15,527	15,993	16,473				
4.190	1	1	Allowance	Drainage Remediation	2022	to 5	1	17,000.00	17,000	17,000	1.5%	27,280					31,625						36,662				
4.285	1,880	627	Linear Feet	Fences, Wood, Privacy, Perpendicular to Unit Rear Elevations, Phased	2025	15 to 25	4 to 10	49.00	30,707	92,120	2.4%													66,222		72,363	
4.286	64	21	Each	Fences, Wood, Refuse Areas, Phased	2025	15 to 25	4 to 10	650.00	13,865	41,600	1.1%													29,900		32,673	
4.500	1	1	Allowance	Landscape, Emerald Ash Borer Treatments	2023	to 3	2	21,000.00	21,000	21,000	3.3%		34,710			37,928		41,445			45,288				49,488		
4.560	37	19	Each	Light Poles and Fixtures, Phased	2047	20 to 30	26 to 27	2,300.00	42,550	85,100	1.8%													91,763	94,516		
4.600	5	5	Each	Mailbox Shelters, Renovation	2025	to 25	4	4,200.00	21,000	21,000	0.7%														46,647		
4.650	1	1	Allowance	Pipes, Subsurface Utilities, Domestic Water and Sanitary Sewer, Main Lines, Inspection and Capital Repairs	2024	4 to 6	3	70,000.00	70,000	70,000	6.6%			119,170				138,151							160,155		
4.730	630	630	Square Yards	Pond, Sediment Removal	2032	to 20	11	50.00	31,500	31,500	1.2%															76,459	
Anticipated Expenditures, By Year (\$10,329,501 over 30 years)												1,135,913	1,176,602	251,331	15,571	53,966	48,144	70,187	278,038	18,051	376,801	525,310	404,302	524,994	175,450	165,370	

RESERVE FUNDING PLAN

CASH FLOW ANALYSIS
Charlesgate Village
Association

		Individual Reserve Budgets & Cash Flows for the Next 30 Years																
		FY2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	
Reserves at Beginning of Year		(Note 1)	634,898	807,437	1,104,208	1,372,086	1,574,767	1,838,363	1,884,260	1,930,993	1,944,702	1,846,098	1,360,649	825,634	1,122,123	1,533,051	1,799,196	2,172,853
Total Recommended Reserve Contributions		(Note 2)	202,987	304,500	304,500	304,500	313,600	323,000	332,700	342,700	353,000	363,600	374,500	385,700	397,300	409,200	421,500	434,100
Estimated Interest Earned, During Year		(Note 3)	9,552	18,927	24,518	29,177	33,793	36,858	37,775	38,373	37,533	31,750	21,646	19,285	26,289	32,993	39,327	37,035
Anticipated Expenditures, By Year			(40,000)	(26,656)	(61,140)	(130,996)	(83,797)	(313,961)	(323,742)	(367,364)	(489,137)	(880,799)	(931,161)	(108,496)	(12,661)	(176,048)	(87,170)	(1,076,343)
Anticipated Reserves at Year End			<u>\$807,437</u>	<u>\$1,104,208</u>	<u>\$1,372,086</u>	<u>\$1,574,767</u>	<u>\$1,838,363</u>	<u>\$1,884,260</u>	<u>\$1,930,993</u>	<u>\$1,944,702</u>	<u>\$1,846,098</u>	<u>\$1,360,649</u>	<u>\$825,634</u>	<u>\$1,122,123</u>	<u>\$1,533,051</u>	<u>\$1,799,196</u>	<u>\$2,172,853</u>	<u>\$1,567,645</u>

(continued)

		Individual Reserve Budgets & Cash Flows for the Next 30 Years, Continued															
		2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	
Reserves at Beginning of Year			1,567,645	903,297	198,100	276,468	604,419	910,250	1,238,481	1,561,820	1,692,806	2,100,412	2,165,548	2,094,113	2,155,991	2,110,035	2,429,430
Total Recommended Reserve Contributions			447,100	460,500	325,000	334,800	344,800	355,100	365,800	376,800	388,100	399,700	411,700	424,100	436,800	449,900	463,400
Estimated Interest Earned, During Year			24,465	10,905	4,699	8,722	14,997	21,275	27,726	32,224	37,557	42,237	42,175	42,080	42,238	44,945	51,569
Anticipated Expenditures, By Year			(1,135,913)	(1,176,602)	(251,331)	(15,571)	(53,966)	(48,144)	(70,187)	(278,038)	(18,051)	(376,801)	(525,310)	(404,302)	(524,994)	(175,450)	(165,370)
Anticipated Reserves at Year End			<u>\$903,297</u>	<u>\$198,100</u>	<u>\$276,468</u>	<u>\$604,419</u>	<u>\$910,250</u>	<u>\$1,238,481</u>	<u>\$1,561,820</u>	<u>\$1,692,806</u>	<u>\$2,100,412</u>	<u>\$2,165,548</u>	<u>\$2,094,113</u>	<u>\$2,155,991</u>	<u>\$2,110,035</u>	<u>\$2,429,430</u>	<u>\$2,779,029</u>

(NOTE 5)

(NOTE 4)

Explanatory Notes:

- 1) Year 2021 starting reserves are as of August 31, 2021; FY2021 starts May 1, 2021 and ends April 30, 2022.
- 2) Reserve Contributions for 2021 are the remaining budgeted 8 months; 2022 is the first year of recommended contributions.
- 3) 2.0% is the estimated annual rate of return on invested reserves; 2021 is a partial year of interest earned.
- 4) Accumulated year 2051 ending reserves consider the need to fund for subsequent replacement of the asphalt shingle roofs shortly after 2051, and the age, size, overall condition and complexity of the property.
- 5) Threshold Funding Year (reserve balance at critical point).

FIVE-YEAR OUTLOOK

**Charlesgate Village
Association**
Amherst, New York

Line Item	Reserve Component Inventory	RUL = 0 FY2021	1 2022	2 2023	3 2024	4 2025	5 2026
<u>Exterior Building Elements</u>							
1.855	Walls, Siding, Vinyl, Paint Finishes and Capital Repairs, Phased (2021 is budgeted)	40,000					
1.905	Walls, Trim, Paint Finishes and Partial Replacements				44,802		
<u>Property Site Elements</u>							
4.022	Asphalt Pavement, Patch		9,146	9,421	9,703	9,995	
4.020	Asphalt Pavement, Crack Repair, Seal Coat and Striping			29,440			
4.045	Asphalt Pavement, Total Replacement, Streets, Parking Areas, Driveways, and Walkways, Phased						209,974
4.080	Asphalt Pavement, Total Replacement, Walking Paths						71,295
4.100	Catch Basins, Inspections and Capital Repairs, Phased						8,347
4.190	Drainage Remediation		17,510				
4.285	Fences, Wood, Privacy, Perpendicular to Unit Rear Elevations, Phased						34,561
4.286	Fences, Wood, Refuse Areas, Phased						15,605
4.500	Landscape, Emerald Ash Borer Treatments			22,279			24,345
4.600	Mailbox Shelters, Renovation						23,636
4.650	Pipes, Subsurface Utilities, Domestic Water and Sanitary Sewer, Main Lines, Inspection and Capital Repairs				76,491		
Anticipated Expenditures, By Year (\$10,329,501 over 30 years)		40,000	26,656	61,140	130,996	83,797	313,961

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



Typical front elevation of buildings



Typical side elevation of buildings



Alternate side elevation of buildings



Alternate rear elevation of buildings

Gutters and Downspouts, Aluminum

Line Items: 1.240 and 1.242

Quantity and History: Approximately 20,100 linear feet of aluminum five-inch gutters and two-inch by three-inch downspouts are located at the residential and detached garage buildings. The following table depicts the phases, address locations, quantities and ages of the gutters and downspouts throughout the community:

Phase	Addresses	Quantity (Linear Feet)	Age
1	101-108, 151-156, 201-208, 251-254, 351-356, 401-406, 501-508, 701-708, 801-804, 901-908, 1001-1008, 1051-1056, 1101-1106, 1151-1154, 1401-1408	10,480	Replaced in 2006
2	51-54, 301-306, 451-456, 551-559, 601-604, 651-655, 751-754, 851-854, 951-954, 1201-1208, 1251-1254, 1301-1304, 1351-1358, 1451-1454, 1551-1556, 1651-1654, 1751-1756	9,620	Replaced in 2007
Total:		20,100	

Condition: Good to fair overall condition with natural debris buildup and deterioration evident



Aluminum gutter and downspout overview



Aluminum gutter and downspout overview



Natural debris buildup and deterioration in gutter of Unit 804



Natural debris buildup and deterioration in gutter of Unit 208



Natural debris buildup and deterioration in gutter of Unit 207

Useful Life: 15- 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.

Downspouts that discharge directly onto roofs cause premature deterioration of the roofs due to the high concentration of storm water. We recommend either routing these downspouts directly to the ground, connecting the downspouts to the gutters of the lower roof or distributing the storm water discharge over a large area.

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. Our cost estimate includes allowances to replace with aluminum six-inch gutters and three-inch by four-inch downspouts.

Roofs, Asphalt Shingles

Line Items: 1.280 and 1.282

Quantity and History: Approximately 1,830 *squares*¹ of asphalt shingle roofs are located atop the residential and detached garage buildings. The following table depicts the phases, address locations, quantities and ages of the asphalt shingle roof throughout the community:

Phase	Addresses	Quantity (Squares)	Age
1	101-108, 151-156, 201-208, 251-254, 351-356, 401-406, 501-508, 701-708, 801-804, 901-908, 1001-1008, 1051-1056, 1101-1106, 1151-1154, 1401-1408	954	Replaced in 2006
2	51-54, 301-306, 451-456, 551-559, 601-604, 651-655, 751-754, 851-854, 951-954, 1201-1208, 1251-1254, 1301-1304, 1351-1358, 1451-1454, 1551-1556, 1651-1654, 1751-1756	876	Replaced in 2007
Total:		1,830	

Condition: Fair overall condition with shingle lift, organic growth, stains, organic growth, sheathing deflection, overhanging and encroaching tree branches, natural debris buildup and deterioration evident from our visual inspection from the ground. Management and the Board report a limited history of minor leaks, particularly at chimney chase flashings. Furthermore, the Association recently removed organic growth at the roofs.

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



Asphalt shingle roof overview



Example of rubber seal with metal base boot flashing at waste pipe penetration of asphalt shingle roof



Overhanging and encroaching tree branches, natural debris buildup and deterioration at asphalt shingle roof of Unit 1103



Shingle lift and deterioration at asphalt shingle roof of Unit 1007



Overhanging and encroaching tree branches, natural debris buildup and deterioration at asphalt shingle roof of Unit 406



Overhanging and encroaching tree branches, natural debris buildup and deterioration at asphalt shingle roof of Unit 208



Shingle lift and deterioration at asphalt shingle roof of Unit 203



Shingle lift and deterioration at asphalt shingle roof of Unit 301



Shingle lift and deterioration at asphalt shingle roof of Unit 356



Shingle lift, stains and deterioration at asphalt shingle roof of Unit 551



Shingle lift and deterioration at asphalt shingle roof of Unit 554



Shingle lift, organic growth and deterioration at asphalt shingle roof of Unit 654



Overhanging and encroaching tree branches, and deterioration at asphalt shingle roof of Unit 603



Organic growth and deterioration at asphalt shingle roof of Unit 752



Shingle lift and deterioration at asphalt shingle roof of Unit 754



Sheathing deflection and deterioration at asphalt shingle roof of Unit 1353



Shingle lift and deterioration at asphalt shingle roof of Unit 1755



Overhanging and encroaching tree branches, and deterioration at asphalt shingle roof of Unit 1556



Shingle lift and deterioration at asphalt shingle roof of Unit 502



Shingle lift and deterioration at asphalt shingle roof of Unit 907

Useful Life: 15- to 25-years

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

- Laminate shingles
- Boston style ridge caps
- Rubber seal with metal base boot flashing at waste pipes
- Soffit, gable, and ridge vents
- Metal drip edge

Insulation and ventilation are two major components of a sloped roof system. Together, proper insulation and ventilation help to control attic moisture and maintain an energy efficient building. Both insulation and ventilation prevent moisture buildup which can cause wood rot, mold and mildew growth, warp sheathing, deteriorate shingles, and eventually damage building interiors. Sufficient insulation helps to minimize the quantity of moisture that enters the attic spaces and adequate ventilation helps to remove any

moisture that enters the attic spaces. These two roof system components also help to reduce the amount of energy that is required to heat and cool a building. Proper attic insulation minimizes heat gain and heat loss between the residential living spaces and attic spaces. This reduces energy consumption year-round. Proper attic ventilation removes excessive heat from attic spaces that can radiate into residential living spaces and cause air conditioners to work harder. Properly installed attic insulation and ventilation work together to maximize the useful life of sloped roof systems.

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

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

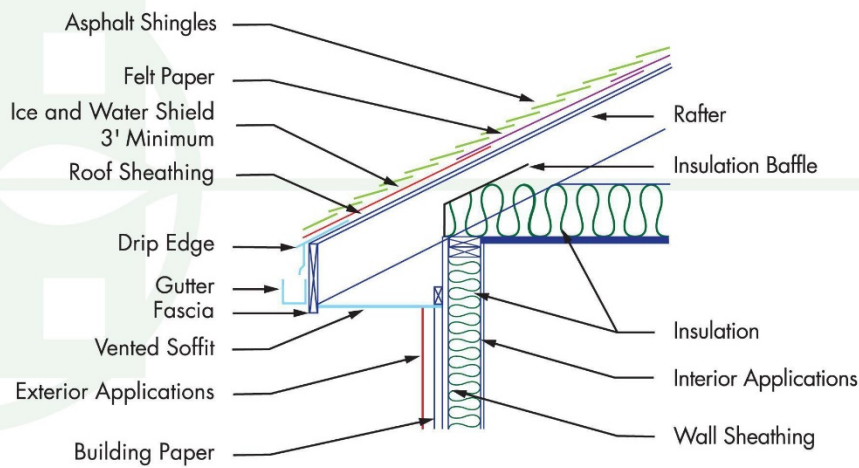
Certain characteristics of condition govern the times of replacement. Replacement of an asphalt shingle roof becomes necessary when there are multiple or recurring leaks and when the shingles begin to cup, curl and lift. These conditions are indications that the asphalt shingle roof is near the end of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

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

to fail in the near future. A comparison of the costs of remedy to the total replacement cost will assist in judging the merits of the warranties.

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

ROOF SCHEMATIC



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

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

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

- Annually:



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

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

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

Walls, Siding, Vinyl

Line Item: 1.860

Quantity: Approximately 246,500 square feet of vinyl siding are located at the exterior walls of the 188 units and detached garages (note this quantity includes the soffit and fascia).

History: Unknown age; however the siding likely dates to the early-1990's. Management and the Board inform us that the Association applied a paint finish to the exterior surfaces of the vinyl siding from 2019 to 2021 (note the Association budgeted to expend \$40,000 in fiscal year 2021/2022 to paint the vinyl siding at five remaining buildings). Reserve Advisors does not recommend paint finish applications to vinyl siding. However, since the Association recently completed this project, we include paint finish applications at the direction of Management and the Board (note after replacement, we do not advise subsequent paint finish applications to the vinyl siding).

Condition: Fair overall condition with warping, bulging, loose siding, gaps, organic stains, damage, vegetation overgrowth, encroaching tree branches and deterioration evident



Example of J-channel at interface of vinyl siding/window



Organic stains and deterioration at vinyl siding of Unit 101



Loose siding and deterioration at vinyl siding of Unit 251



Encroaching tree branches and deterioration at vinyl siding of Unit 354



Encroaching tree branches and deterioration at vinyl siding of Unit 1254



Bulging and deterioration at vinyl siding of Unit 1454



Damage and deterioration at fascia cladding of Unit 1756



Loose J-channel and deterioration at vinyl siding of Unit 1451



Previous partial siding replacement, warping and deterioration at vinyl siding of Unit 1452



Loose siding and deterioration at vinyl siding of Unit 1304



Organic stains and deterioration at vinyl siding of Unit 853



Vegetation overgrowth and deterioration at vinyl siding of Unit 208



Gap and deterioration at vinyl siding of Unit 851



Organic stains and deterioration at vinyl siding of Unit 851

Useful Life: Up to 40 years for replacement and 8- to 10-years for paint finish applications and capital repairs

Component Detail Notes: The siding at Charlesgate Village consists of the following:

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

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

VINYL SIDING DETAIL



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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 rooflines.

Consideration of appearance and development of issues largely governs the decision to replace, in whole or partially, prior to the end of its useful life. Maintenance and partial replacements of the siding may extend the useful life. Normal deterioration mainly relates to discoloration of the exterior finish from exposure to sunlight, weathering and air pollutants. Loosening of the fasteners also contributes to the possible need for premature replacement.

Vinyl siding is susceptible expansion and contraction due to seasonal fluctuations in temperature and daily sunlight exposure. For this reason, conventional paint does not adhere well to vinyl siding surfaces and, in some instances, may even cause it to warp. Therefore, the Association should choose paint designed to expand and contract with the vinyl siding, thus minimizing paint blistering, peeling, chipping and flaking. Paint for vinyl siding should contain latex urethane and acrylic resins.

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 recent paint finish application and 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. Our cost estimate includes an allowance to partially replace underlying plywood sheathing as needed.

Walls, Trim, Paint Finishes

Line Item: 1.905

Quantity: The Association maintains limited wood trim at the windows and doors of the 188 units and detached garage buildings.



History: The Association last painted the trim in 2019 for approximately \$38,000.

Condition: Good to fair overall condition with localized areas of minor fading, wood rot and deterioration evident

Useful Life: 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. We assume the following activities per event:

- Paint finish applications
- Replacement of a limited amount of trim as needed (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, Patch, Crack Repair, Seal Coat and Striping

Line Items: 4.020 and 4.022

Quantity: Approximately 22,200 square yards of asphalt pavement are located at the streets, parking areas, driveways, walkways (between driveways and front entrance stoops) and walking paths.

History: The Association last performed a crack repair, seal coat and striping project in 2020 for approximately \$26,000. In addition, the Association annually performs patch repairs for approximately \$9,000, plus inflation.

Condition: Fair overall condition

Useful Life: Three- to five-years

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

Priority/Criticality: Per Board discretion

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

Asphalt Pavement, Repaving

Line Items: 4.040 and 4.045

Quantity: Approximately 20,700 square yards of asphalt pavement are located at the streets, parking areas, driveways and walkways (between driveways and front entrance stoops).

History: Management and the Board apprise us that the asphalt pavement dates to the mid-1990's.

Condition: Fair overall condition with lateral, longitudinal, alligator, spider and edge cracks, rutting, standing water, previous crack and patch repairs, vehicle fluid stains, minor settlement and deterioration evident



Asphalt pavement overview (typical street and parking area)



Asphalt pavement overview (typical driveway)



Asphalt pavement overview (typical walkway between front entrance and driveway)



Lateral and longitudinal cracks, previous crack and patch repairs, standing water and deterioration at asphalt pavement near Unit 1102



Lateral and longitudinal cracks, previous crack and patch repairs, standing water and deterioration at asphalt pavement near Unit 303



Lateral and longitudinal cracks, previous crack and patch repairs, standing water and deterioration at asphalt pavement near Unit 103



Spider and alligator cracks, and deterioration at asphalt pavement near Unit 151



Longitudinal cracks, previous crack and patch repairs, standing water and deterioration at asphalt pavement near Unit 452



Spider and alligator cracks, and deterioration at asphalt pavement near Unit 353



Minor settlement and deterioration at interface of asphalt pavement/garage threshold near Unit 455



Lateral and longitudinal cracks, previous crack and patch repairs, standing water and deterioration at asphalt pavement near Unit 557



Vehicle fluid stains and deterioration at asphalt pavement near Unit 704



Lateral and longitudinal cracks, previous crack and patch repairs, standing water and deterioration at asphalt pavement near Unit 754



Spider, longitudinal and alligator cracks, and deterioration at asphalt pavement near Unit 851



Spider cracks, rutting, standing water and deterioration at asphalt pavement near Unit 1153



Spider cracks, standing water and deterioration at asphalt pavement near Unit 1253



Longitudinal, edge and alligator cracks, standing water and deterioration at asphalt pavement near Unit 1555



Lateral and longitudinal cracks, previous patch repairs and deterioration at asphalt pavement near Unit 1357



Lateral, longitudinal and alligator cracks, previous crack repairs, standing water and deterioration at asphalt pavement near Unit 1452



Longitudinal cracks, previous patch repairs, standing water and deterioration at asphalt pavement near Unit 1302



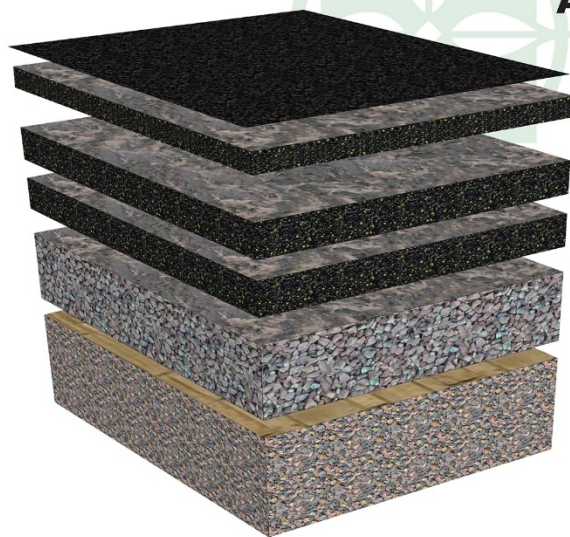
Alligator and edge cracks, and deterioration at asphalt pavement near Unit 1056



Lateral cracks, standing water and deterioration at asphalt pavement near Unit 804

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 Charlesgate Village:



ASPHALT DIAGRAM

Sealcoat or Wearing Surface

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

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

**Compacted Crushed Stone
or Aggregate Base**

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

© Reserve Advisors

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

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 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 milling and overlayment includes area patching of up to thirty percent (30%).

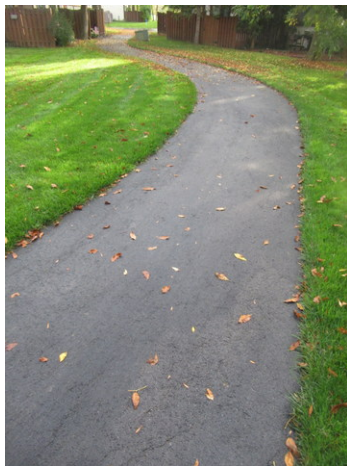
Asphalt Pavement, Repaving, Walking Paths

Line Item: 4.080

Quantity: Approximately 1,500 square yards of asphalt walking paths are located throughout the community.

History: Management and the Board apprise us that the asphalt pavement dates to the mid-1990's.

Condition: Fair overall condition with lateral, longitudinal, alligator, spider and edge cracks, previous patch repairs, organic growth, minor settlement and deterioration evident



Asphalt walking path overview



Lateral cracks, previous patch repair, organic growth, minor settlement and deterioration at asphalt walking path near Unit 1008



Longitudinal, edge and alligator cracks, previous patch repair and deterioration at asphalt walking path near Unit 1007



Previous patch repair at asphalt walking path near Unit 603



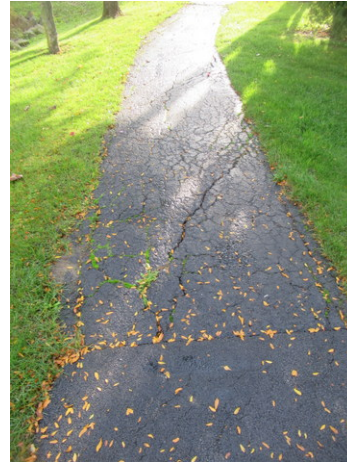
Spider, edge and alligator cracks, previous patch repairs and deterioration at asphalt walking path near Unit 1208



Longitudinal, edge and alligator cracks, organic growth and deterioration at asphalt walking path near Unit 1053



Longitudinal, lateral, edge and alligator cracks, and deterioration at asphalt walking path near Unit 1001



Longitudinal, edge and alligator cracks, organic growth and deterioration at asphalt walking path near Unit 501



Longitudinal, lateral, edge and alligator cracks, and deterioration at asphalt walking path near Unit 1001



Longitudinal, edge and alligator cracks, and deterioration at asphalt walking path near Unit 706

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

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

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

Catch Basins

Line Item: 4.100

Quantity: 24 catch basins² are located within the asphalt pavement.

History: 20 catch basins were repaired from 2013 to 2017.

Condition: Good to fair overall condition with negative drainage flow, minor settlement and deterioration visually apparent



Typical catch basin



Negative drainage flow, minor settlement and deterioration at catch basin near Unit 1652



Negative drainage flow, minor settlement and deterioration at catch basin near Unit 1353

Useful Life: Indeterminately long useful life with inspections and capital repairs 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.

Drainage Remediation

Line Item: 4.190

History: Management and the Board apprise us that the Association has experienced areas of standing water near the buildings.

Useful Life: Indeterminately long useful life with drainage remediation up to every five years

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

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our cost estimate includes allowances to repair, regrade or remediate soil, install French or curtain drains, and reroute downspouts at areas where water is ponding. Updates of this study may consider possible changes in project scope, timing and cost due to future observed conditions and conversations with Management and the Board.

Fences, Wood

Line Items: 4.285 and 4.286

Quantity, History and Condition: The following list describes the types, quantities, locations, histories and conditions of the wood fences throughout the community:

- Privacy: approximately 1,880 linear feet of shadowbox wood privacy fences; located perpendicular to the unit rear elevations; date to 1993; fair overall condition with previous partial replacements, leaning sections and deterioration evident

- Refuse areas: 64 wood picket fences; located at the side elevations of the buildings; date to 2008 and 2009; fair overall condition with leaning sections and deterioration evident



Typical wood privacy fence perpendicular to unit rear elevation



Previous fence post replacement and deterioration at wood privacy fence near Unit 156



Leaning fence section and deterioration at wood privacy fence near Unit 1408



Typical wood refuse area fences located at the side elevation of building



Leaning fence section and deterioration at wood refuse area fences near Unit 251

Useful Life: 15- to 25-years

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

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

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. The Association should anticipate periodic partial replacements due to the non-uniform nature of wood deterioration. Along with these partial replacements, the Association should apply periodic paint applications as needed and fund these activities through the operating budget.

Landscape, Emerald Ash Borer Treatments

Line Item: 4.500

Component Detail Notes: The Association contains a large quantity of ash trees throughout the community. Management and the Board report issues with the emerald ash borer infesting and killing the trees. Charlesgate Village last treated the ash trees in 2020.

Useful Life: At the request of Management and the Board, we include treatment of the ash trees every three years

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our cost if reflects a historical cost provided by Management and the Board.

Light Poles and Fixtures

Line Item: 4.560

Quantity: 37 metal poles with light fixtures are located throughout the community.

History: Date to 2020 and 2021

Condition: Good overall condition with no significant deterioration evident



Typical light pole and fixture

Useful Life: 20- to 30-years

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

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

Priority/Criticality: Per Board discretion

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

Mailbox Shelters

Line Item: 4.600

Quantity: Five mailbox shelters are located throughout the community.

History: Unknown age; however Management and the Board apprise us that the wood siding at the shelters was painted in 2020.

Condition: Fair overall condition with organic growth and deterioration at asphalt shingle roofs, and cracks and deterioration at concrete pads



Typical mailbox shelter



Organic growth and deterioration at asphalt shingle roof of mailbox shelter near Unit 1056



Cracks and deterioration at concrete pad of mailbox shelter near Unit 1454

Useful Life: Up to 25 years with periodic maintenance

Priority/Criticality: Per Board discretion

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

- Replacement of the asphalt shingle roofs
- Replacement of the aluminum gutters and downspouts

- Partial replacement of up to fifty percent (50%) of the wood siding, trim, soffit and fascia
- Capital repairs to the masonry walls as needed
- Partial replacement of up to thirty-three percent (33.3%) of the concrete pads
- Replacement of the package boxes
- Capital repairs to the structural frames as needed

Pipes, Subsurface Utilities, Domestic Water and Sanitary Sewer

Line Item: 4.650

Quantity: The Association is responsible for the main lines subsurface domestic water and sanitary sewer utility pipes throughout the community. Homeowners are responsible for the lateral line subsurface domestic water and sanitary sewer utility pipes.

History and Condition: Reported in satisfactory condition; however the Association conducted extensive annual pipe repairs and replacements from 2013 through 2020. Management and the Board inform us that approximately twenty percent (20%) of the pipes were replaced throughout the community during this time period.

Useful Life: Indeterminately long useful life with inspections and capital repairs every four- to six-years

Component Detail Notes: The Association maintains the main lines subsurface domestic water and sanitary sewer utility pipes throughout the property. The exact amounts and locations of these subsurface utility pipes were not ascertained due to the nature of the underground construction and the non-invasive nature of the inspection.

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

- As-needed:
 - Video inspect waste pipes for breaks and damaged piping
 - Monitor for water and gas leaks through pressure losses and present odors
 - Partially replace damaged section of pipes

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. At this time, we do not anticipate replacement of continuous lengths of main lines subsurface domestic water and sanitary sewer utility pipes. Rather we recommend the Association budget for repairs to isolated occurrences of breached utilities. Although it is likely that the times of replacement and extent of repair costs may vary from the budgetary allowance, Charlesgate Village could budget sufficient reserves for these utility repairs and have the opportunity to adjust its

future reserves up or down to meet any changes to these budgetary estimates. Updates of this Reserve Study would incorporate changes to budgetary costs through a continued historical analysis of the rate of deterioration and actual repairs to budget sufficient reserves.

We anticipate a useful life of up to and sometimes beyond 100 years for the subsurface stormwater utility pipes. Therefore, we do not foresee the need to budget for replacement of these pipes within the 30-year scope of this study. Future updates of this study will revisit the need to include partial replacement of these pipes.

Pond, Sediment Removal

Line Item: 4.730

Quantity: Approximately 630 square yards of water surface area are located at the pond.

Condition: Good to fair overall condition; however, Management and the Board report a recent decline in water color and clarity.



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 20 years.

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

regrading. Regrading includes removal of collapsed and eroded soil, and redefining the shoreline.

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 entire surface area of the pond. However, the actual volume of material to remove may vary dependent upon an invasive analysis at the time of removal. A visual inspection of a body of water cannot reveal the amount of accumulated silt.

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.

Reserve Study Update

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

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



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

5.METHODOLOGY

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

Charlesgate Village can fund capital repairs and replacements in any combination of the following:

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

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

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

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

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.

New York at an annual inflation rate³. Isolated or regional markets of greater construction (development) activity may experience slightly greater rates of inflation for both construction materials and labor.

- The past and current maintenance practices of Charlesgate Village 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.

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



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 P. KSIONZYK, PRA, RS
Responsible Advisor

CURRENT CLIENT SERVICES

Matthew P. Ksionzyk, a Civil engineer, has been an Advisor for Reserve Advisors since 2006. Mr. Ksionzyk is a Senior Engineer responsible for the inspection and analysis of the condition of clients' properties, and recommending engineering solutions to prolong the lives of the components. He also forecasts capital expenditures for the repair and/or replacement of the property components and prepares technical reports on assignments. He is responsible for conducting Life Cycle Cost Analyses, Capital Replacement Forecasting and Reserve Study Report Preparation for condominiums/cooperatives (including midrise and high-rise buildings), townhomes, homeowner associations and commercial/institutional facilities.



Four Seasons Place - Located next to Boston Common, this condominium shares many common elements with the Four Seasons Hotel Boston. Built in 1985, this 16-story high-rise building includes 88 unique units with a brick masonry façade, flat roof systems, a health club and a parking garage.

Saint Mary's Catholic Church - This Jesuit parish is located in Lancaster, Pennsylvania and includes church/sacristy, rectory and school/convent buildings. Established in 1741, the present-day buildings were built from the mid-19th - to early 20th-centuries and comprise brick masonry façades and sloped slate and asphalt shingle roofs.

Azure - This 32-story high-rise was constructed from 2004 to 2007 and is located in Dallas, Texas. The building exterior comprises balconies, flat roofs, glass/metal curtain walls and a panelized stone masonry façade. The development includes plaza decks, a pool, water features and a subterranean parking garage.

Skyline Plaza - Located in northern Virginia, this community includes 957 units in twin 27-story buildings. Constructed from 1972 to 1977, the exteriors comprise balconies, flat roofs and masonry façades. The community includes common social/recreation rooms, a plaza deck, a pool and a parking garage.

Ronald McDonald House Toronto - Established in 1981, this Ronald McDonald House provides a "home away from home" for seriously ill children and their families. The current building was constructed from 2009 to 2011 and includes 81 guest suites. The four-story building comprises a flat roof, fiber cement siding, brick masonry, extensive interior common areas, a school and playground equipment.

Linden - This five-story, mixed-use residential/commercial property is located in Hartford, Connecticut, was constructed from 1892 to 1893, and was converted to a condominium from 1979 to 1981. The development includes a brick and brownstone masonry façade, flat roofs, detached garage buildings, asphalt pavement and an elevated garden.

Guard Hill - This townhome-style development is located in Westchester County, New York and consists of 212 units in 45 buildings. The buildings comprise asphalt shingle roofs, wood balconies and wood siding. This community includes private roads, three ponds, tennis and basketball courts, and a pool.

The Village of Kiln Creek - Located in southeast Virginia, this large-scale master association is responsible for the common elements shared by 31 subsidiary associations that comprise 2,918 residences. The community was built from 1988 to 2001 and consists of a clubhouse, pools, recreation facilities, maintenance facilities, an administrative office, asphalt walking paths, an irrigation system and lakes.

PRIOR RELEVANT EXPERIENCE

Before joining Reserve Advisors, Mr. Ksionzyk attended Clarkson University, in Potsdam, New York, where he specialized in Infrastructure Engineering. After college, he was commissioned as an officer in the U.S. Army and served four years on active duty, including a 13-month deployment to Iraq in 2004 and 2005. In addition, Mr. Ksionzyk served as an Associate Director of Quality Assurance at Reserve Advisors from 2015 to 2016.

EDUCATION

Clarkson University - B.S. Civil Engineering

PROFESSIONAL AFFILIATIONS / DESIGNATIONS

Engineer In Training (E.I.T.) Registration - New York

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

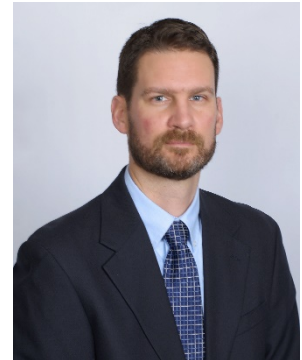
Reserve Specialist (RS) - Community Associations Institute

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

CURRENT CLIENT SERVICES

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

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



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

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

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

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

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

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

PRIOR RELEVANT EXPERIENCE

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

EDUCATION

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

PROFESSIONAL AFFILIATIONS/DESIGNATIONS

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

Reserve Specialist (RS) - Community Associations Institute

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



RESOURCES

Reserve Advisors utilizes numerous resources of national and local data to conduct its Professional Services. A concise list of several of these resources follows:

Association of Construction Inspectors, (ACI) the largest professional organization for those involved in construction inspection and construction project management. ACI is also the leading association providing standards, guidelines, regulations, education, training, and professional recognition in a field that has quickly become important procedure for both residential and commercial construction, found on the web at www.iami.org.

American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., (ASHRAE) the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., devoted to the arts and sciences of heating, ventilation, air conditioning and refrigeration; recognized as the foremost, authoritative, timely and responsive source of technical and educational information, standards and guidelines, found on the web at www.ashrae.org. Reserve Advisors actively participates in its local chapter and holds individual memberships.

Community Associations Institute, (CAI) America's leading advocate for responsible communities noted as the only national organization dedicated to fostering vibrant, responsive, competent community associations. Their mission is to assist community associations in promoting harmony, community, and responsible leadership.

Marshall & Swift / Boeckh, (MS/B) the worldwide provider of building cost data, co-sourcing solutions, and estimating technology for the property and casualty insurance industry found on the web at www.marshallswift.com.

R.S. Means CostWorks, North America's leading supplier of construction cost information. As a member of the Construction Market Data Group, Means provides accurate and up-to-date cost information that helps owners, developers, architects, engineers, contractors and others to carefully and precisely project and control the cost of both new building construction and renovation projects found on the web at www.rsmeans.com.

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

7. DEFINITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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



8. PROFESSIONAL SERVICE CONDITIONS

Our Services - Reserve Advisors, LLC (RA) performs its services as an independent contractor in accordance with our professional practice standards and its compensation is not contingent upon our conclusions. The purpose of our reserve study is to provide a budget planning tool that identifies the current status of the reserve fund, and an opinion recommending an annual funding plan to create reserves for anticipated future replacement expenditures of the property.

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

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

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

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

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

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

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

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