FULL RESERVE STUDY

Victorian
Condominium Association

Cleveland Heights, Ohio
August 23, 2018

RESERVE™ ADVISORS
Long-term thinking. Everyday commitment.

RESERVE ADVISORS
Long-term thinking. Everyday commitment.

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

Victorian Condominium Association
Cleveland Heights, Ohio

Dear Board of Directors of Victorian Condominium Association:

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Full Reserve Study* of Victorian Condominium Association in Cleveland Heights, Ohio and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, August 23, 2018.

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

An ongoing review by the Board and an Update of this Reserve Study are necessary to ensure an equitable funding plan since a Reserve Study is a snapshot in time. We recommend the Board budget for an Update to this Reserve Study in two years. We look forward to continuing to help Victorian Condominium 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 September 27, 2018 by

Reserve Advisors, Inc.

Visual Inspection and Report by: Heather M. Christensen, RS[1]
Review by: Alan M. Ebert, RS, PRA[2], Director of Quality Assurance

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

RESERVE
ADVISORS
Long-term thinking. Everyday commitment.

Table of Contents

1. RESERVE STUDY EXECUTIVE SUMMARY

Client: Victorian Condominium Association (Victorian)
Location: Cleveland Heights, Ohio
Reference: 020416

Property Basics: Victorian Condominium Association is a condominium style development of 50 units in one four-story building. The building was built in 1970.

Reserve Components Identified: 48 Reserve Components.

Inspection Date: August 23, 2018. We conducted the original inspection on August 8, 2002.

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 2030 due to replacement of the roof.

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
- 1.7% 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.

Cash Status of Reserve Fund:

- $292,000 as of August 31, 2018
- 2018 budgeted Reserve Contributions of $84,000

Project Prioritization: We recommend the Association prioritize the following projects in the next five years based on the conditions identified:

- Replacement of the windows and doors
- Coordinated replacement of the interior finishes throughout the hallways to create lasting and favorable impressions
- Replacement of the elevators. The lack of replacement parts will eventually justify complete replacement of the elevator components.
- Garage concrete partial replacements to maintain a safe driving surface

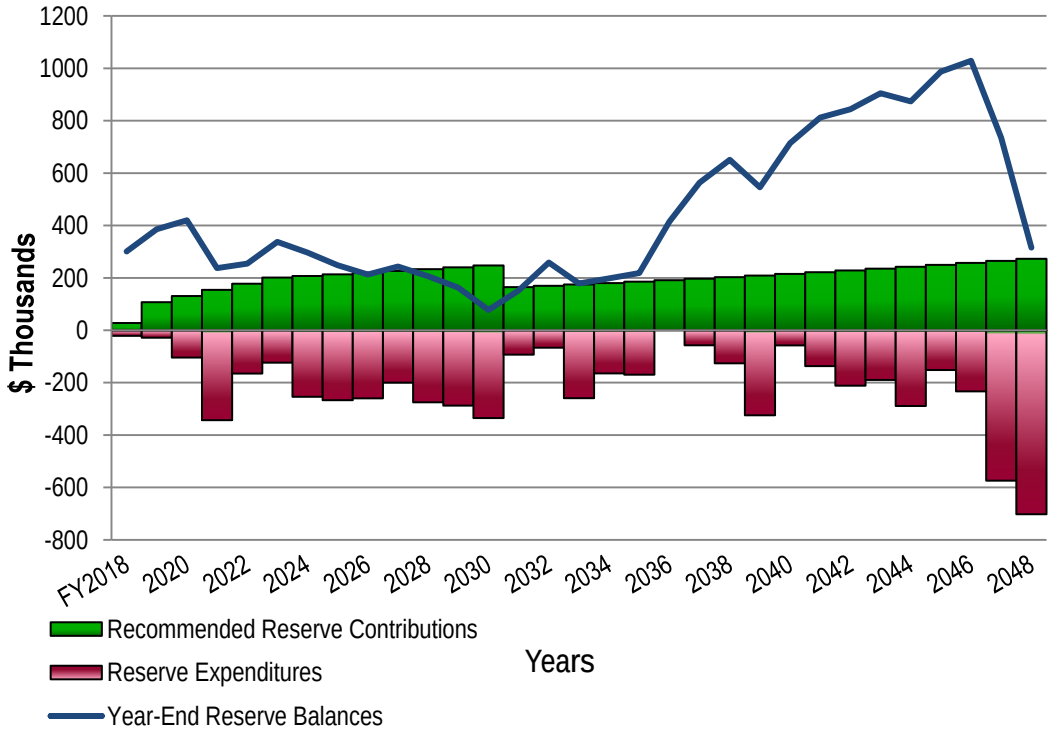
Recommended Reserve Funding: We recommend the following in order to achieve a stable and equitable Funding Plan:

- Phased increases of $23,500 from 2019 through 2023
- Inflationary increases from 2024 through 2030
- Decrease to $165,000 by 2031 due to fully funding for replacement of roof
- Inflationary increases through 2048, the limit of this study's Cash Flow Analysis
- Initial adjustment of $23,500 is equivalent to an increase of $39.17 in the monthly contributions per homeowner.

Victorian

Recommended Reserve Funding Table and Graph

Year	Reserve Contributions ($)	Reserve Balances ($)	Year	Reserve Contributions ($)	Reserve Balances ($)	Year	Reserve Contributions ($)	Reserve Balances ($)
2019	107,500	385,834	2029	240,500	162,559	2039	209,100	545,417
2020	131,000	419,783	2030	247,700	77,456	2040	215,400	713,947
2021	154,500	236,970	2031	165,000	151,634	2041	221,900	812,217
2022	178,000	254,199	2032	170,000	258,874	2042	228,600	843,565
2023	201,500	337,333	2033	175,100	178,751	2043	235,500	904,510
2024	207,500	296,553	2034	180,400	197,996	2044	242,600	873,360
2025	213,700	248,252	2035	185,800	218,044	2045	249,900	987,486
2026	220,100	212,701	2036	191,400	414,778	2046	257,400	1,028,970
2027	226,700	243,600	2037	197,100	563,079	2047	265,100	735,174
2028	233,500	206,228	2038	203,000	650,457	2048	273,100	315,223



2. RESERVE STUDY REPORT

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

Victorian Condominium Association

Cleveland Heights, Ohio

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, August 23, 2018.

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
- **Reserve Component Detail -** Describes the reserve components, includes photographic documentation of the condition of various property elements, describes our recommendations for repairs or replacement, and includes detailed solutions and procedures for replacements for the benefit of current and future board members
- **Methodology -** Lists the national standards, methods and procedures used to develop the Reserve Study
- **Definitions -** Contains definitions of terms used in the Reserve Study, consistent with national standards
- **Professional Service Conditions -** Describes Assumptions and Professional Service Conditions
- **Credentials and Resources**

IDENTIFICATION OF PROPERTY

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

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

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

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

- Victorian 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 reserve funding at this time.

- Electrical Systems, Common
- Foundations
- Structural Frames

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 $6,000 (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)
- Catch Basins
- Exhaust System, Garage, Fans and Louvers
- Landscape
- Ladies' and Men's Rooms, Plumbing Fixtures and Cabinetry
- Life Safety System, Exit Fixtures and Smoke Detectors
- Light Fixtures, Staircases
- Irrigation System
- Paint Finishes, Touch Up
- Pipes, Riser Sections, Building Heating and Cooling
- Pumps Less Than Five-HP (horsepower)
- Valves, Large and Small Diameter (We assume replacement as needed in lieu of an aggregate replacement of all small diameter valves as a single event.)
- 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:

- Electrical Systems (Including Circuit Protection Panels)
- Heating, Ventilating and Air Conditioning (HVAC) Units
- Interiors
- Pipes (Within Units)

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
- 2018 local cost of replacement
  - Per unit
  - Per phase
  - Replacement of total quantity
- Total future costs of replacement anticipated during the next 30 years
- Schedule of estimated future costs for each reserve component including inflation

Reserve Funding Plan

- Reserves at the beginning of each year
- Total recommended reserve contributions
- Estimated interest earned from invested reserves
- Anticipated expenditures by year
- Anticipated reserves at year end
- Predicted reserves based on current funding level

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

Victorian
Condominium Association
Cleveland Heights, Ohio

Explanatory Notes:

1) 3.0% is the estimated future Inflation Rate for estimating Future Replacement Costs.
2) FY2018 is Fiscal Year beginning January 1, 2018 and ending December 31, 2018.

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years Useful	Remaining	Costs, $ Unit (2018)	Per Phase (2018)	Total (2018)	30-Year Total (Inflated)	RUL = 0 FY2018	1 2019	2 2020	3 2021	4 2022	5 2023	6 2024	7 2025	8 2026	9 2027	10 2028	11 2029	12 2030	13 2031	14 2032	15 2033
				Exterior Building Elements																							
1.060	3,750	**3,750**	Square Feet	Balconies, Concrete, Repairs and Waterproof Coating Applications	2027	8 to 12	9	14.75	55,313	55,313	**175,068**										72,170						
1.100	940	**940**	Linear Feet	Balconies, Railings and Screens, Paint Finishes and Capital Repairs	2022	6 to 8	4	23.00	21,620	21,620	**146,261**					24,334											33,683
1.105	940	**940**	Linear Feet	Balconies, Railings and Screens, Replacement	2027	to 50	9	90.00	84,600	84,600	**110,384**										110,384						
1.180	1	**1**	Allowance	Doors, Lobby Entrance, Refinish	2023	to 10	5	5,000.00	5,000	5,000	**24,055**						5,796										7,790
1.500	32,700	**16,350**	Square Feet	Roofs, Modified Bitumen, Main, Phased	2028	15 to 20	10 to 11	12.50	204,375	408,750	**1,535,261**											274,663	282,903				
1.501	2,800	**2,800**	Square Feet	Roofs, Decks	2020	15 to 20	2	14.00	39,200	39,200	**114,511**			41,587													
1.820	37,000	**18,500**	Square Feet	Walls, Masonry, Inspections and Repairs, Phased	2022	8 to 12	4 to 5	2.00	37,000	74,000	**499,129**					41,644	42,893							52,753	54,336		
1.980	12,300	**4,100**	Square Feet	Windows and Doors, Phased	2024	45 to 55	6 to 8	42.00	172,200	516,600	**635,538**							205,616	211,784	218,138							
				Interior Building Elements																							
2.060	12,000	**4,000**	Square Feet	Ceilings, Acoustical Tiles, Grid and Lighting, Hallways, Phased	2033	to 30	15 to 17	5.00	20,000	60,000	**96,310**																31,159
2.100	2	**2**	Each	Elevator Cab Finishes	2033	to 20	15	12,000.00	24,000	24,000	**37,391**																37,391
2.200	1,270	**425**	Square Yards	Floor Coverings, Carpet, Hallways, Phased	2023	8 to 12	5 to 7	53.00	22,525	67,310	**334,955**						26,113	26,896	27,703								35,093
2.300	560	**185**	Square Yards	Floor Coverings, Vinyl Tile, Laundry Rooms and Staircases, Phased	2023	10 to 15	5 to 7	48.00	8,880	26,880	**132,049**						10,294	10,603	10,921								13,835
2.301	1	**1**	Allowance	Guest Suite, Renovation, Complete	2023	12 to 15	5	33,000.00	33,000	33,000	**107,351**						38,256										
2.302	1	**1**	Allowance	Guest Suite, Renovation, Partial	2033	12 to 15	15	11,000.00	11,000	11,000	**17,138**																17,138
2.560	110	**110**	Each	Light Fixtures, Hallways	2022	to 30	4	130.00	14,300	14,300	**45,164**					16,095											
2.600	1	**1**	Allowance	Lobby, Renovation, Complete	2030	to 25	12	40,000.00	40,000	40,000	**57,030**													57,030			
2.605	1	**1**	Allowance	Lobby, Renovation, Partial	2020	10 to 15	2	15,000.00	15,000	15,000	**44,656**			15,914													
2.700	56	**56**	Each	Mailboxes	2030	to 35	12	115.00	6,440	6,440	**9,182**													9,182			
2.820	2	**2**	Each	Paint Finishes, Stairwells (Includes Railings)	2031	15 to 20	13	3,900.00	7,800	7,800	**11,455**														11,455		
2.840	1	**1**	Allowance	Party Room, Renovation, Complete	2021	to 20	3	45,000.00	45,000	45,000	**137,984**				49,173												
2.845	1	**1**	Allowance	Party Room, Renovation, Partial	2031	to 10	13	9,000.00	9,000	9,000	**13,217**														13,217		
2.980	30,000	**10,000**	Square Feet	Wall Coverings, Hallways, Phased	2033	to 20	15 to 17	4.00	40,000	120,000	**192,621**																62,319
				Building Services Elements																							
3.060	2	**2**	Each	Air Handling Units, Rooftop Heating and Cooling Units, Hallways, 7.5-Tons	2022	15 to 20	4	15,000.00	30,000	30,000	**94,749**					33,765											
3.070	2	**2**	Each	Air Handling and Condensing Units, Split Systems, Party Room, 2-Tons	2035	15 to 20	17	5,500.00	11,000	11,000	**18,181**																
3.105	1	**1**	Each	Boiler, Building Heat, 1,250-MBH, Replacement	2022	to 30	4	41,500.00	41,500	41,500	**46,709**					46,709											
3.300	1	**1**	Allowance	Electrical System, Main Panels	2040	to 70+	22	15,000.00	15,000	15,000	**28,742**																
3.320	2	**2**	Each	Elevators, Hydraulic, Pumps and Controls	2021	to 35	3	78,000.00	156,000	156,000	**170,465**				170,465												
3.330	2	**2**	Each	Elevators, Hydraulic, Cylinders	2021	to 45	3	51,000.00	102,000	102,000	**111,458**				111,458												
3.440	1	**1**	Each	Generator, Emergency (Includes Transfer Switch)	2042	25 to 35	24	57,500.00	57,500	57,500	**116,886**																
3.470	1	**1**	Each	Intercom Panel	2019	to 25	1	5,000.00	5,000	5,000	**15,933**		5,150														
3.605	180	**36**	Each	Pipes, Riser Sections, Domestic Water, Waste and Vent, Partial	2044	to 80+	26 to 30+	1,800.00	64,800	324,000	**445,292**																
3.820	2	**1**	Allowance	Security System, Phased	2020	to 15	2 to 15	11,000.00	11,000	22,000	**92,084**			11,670							14,353						
3.860	2	**1**	Each	Water Heaters, Domestic Hot Water, Phased	2030	15 to 20	12 to 14	9,000.00	9,000	18,000	**48,290**													12,832		13,613	

RESERVE EXPENDITURES

Victorian
Condominium Association
Cleveland Heights, Ohio

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years Useful	Remaining	Costs, $ Unit (2018)	Per Phase (2018)	Total (2018)	30-Year Total (Inflated)	16 2034	17 2035	18 2036	19 2037	20 2038	21 2039	22 2040	23 2041	24 2042	25 2043	26 2044	27 2045	28 2046	29 2047	30 2048
				Exterior Building Elements																						
1.060	3,750	**3,750**	Square Feet	Balconies, Concrete, Repairs and Waterproof Coating Applications	2027	8 to 12	9	14.75	55,313	55,313	**175,068**						102,898									
1.100	940	**940**	Linear Feet	Balconies, Railings and Screens, Paint Finishes and Capital Repairs	2022	6 to 8	4	23.00	21,620	21,620	**146,261**						40,220						48,024			
1.105	940	**940**	Linear Feet	Balconies, Railings and Screens, Replacement	2027	to 50	9	90.00	84,600	84,600	**110,384**															
1.180	1	**1**	Allowance	Doors, Lobby Entrance, Refinish	2023	to 10	5	5,000.00	5,000	5,000	**24,055**										10,469					
1.500	32,700	**16,350**	Square Feet	Roofs, Modified Bitumen, Main, Phased	2028	15 to 20	10 to 11	12.50	204,375	408,750	**1,535,261**														481,623	496,072
1.501	2,800	**2,800**	Square Feet	Roofs, Decks	2020	15 to 20	2	14.00	39,200	39,200	**114,511**						72,924									
1.820	37,000	**18,500**	Square Feet	Walls, Masonry, Inspections and Repairs, Phased	2022	8 to 12	4 to 5	2.00	37,000	74,000	**499,129**					66,826	68,831							84,653	87,193	
1.980	12,300	**4,100**	Square Feet	Windows and Doors, Phased	2024	45 to 55	6 to 8	42.00	172,200	516,600	**635,538**															
				Interior Building Elements																						
2.060	12,000	**4,000**	Square Feet	Ceilings, Acoustical Tiles, Grid and Lighting, Hallways, Phased	2033	to 30	15 to 17	5.00	20,000	60,000	**96,310**	32,094	33,057													
2.100	2	**2**	Each	Elevator Cab Finishes	2033	to 20	15	12,000.00	24,000	24,000	**37,391**															
2.200	1,270	**425**	Square Yards	Floor Coverings, Carpet, Hallways, Phased	2023	8 to 12	5 to 7	53.00	22,525	67,310	**334,955**	36,146	37,230								47,162	48,577	50,035			
2.300	560	**185**	Square Yards	Floor Coverings, Vinyl Tile, Laundry Rooms and Staircases, Phased	2023	10 to 15	5 to 7	48.00	8,880	26,880	**132,049**	14,250	14,677								18,593	19,151	19,725			
2.301	1	**1**	Allowance	Guest Suite, Renovation, Complete	2023	12 to 15	5	33,000.00	33,000	33,000	**107,351**										69,095					
2.302	1	**1**	Allowance	Guest Suite, Renovation, Partial	2033	12 to 15	15	11,000.00	11,000	11,000	**17,138**															
2.560	110	**110**	Each	Light Fixtures, Hallways	2022	to 30	4	130.00	14,300	14,300	**45,164**									29,069						
2.600	1	**1**	Allowance	Lobby, Renovation, Complete	2030	to 25	12	40,000.00	40,000	40,000	**57,030**															
2.605	1	**1**	Allowance	Lobby, Renovation, Partial	2020	10 to 15	2	15,000.00	15,000	15,000	**44,656**						28,742									
2.700	56	**56**	Each	Mailboxes	2030	to 35	12	115.00	6,440	6,440	**9,182**															
2.820	2	**2**	Each	Paint Finishes, Stairwells (Includes Railings)	2031	15 to 20	13	3,900.00	7,800	7,800	**11,455**															
2.840	1	**1**	Allowance	Party Room, Renovation, Complete	2021	to 20	3	45,000.00	45,000	45,000	**137,984**								88,811							
2.845	1	**1**	Allowance	Party Room, Renovation, Partial	2031	to 10	13	9,000.00	9,000	9,000	**13,217**															
2.980	30,000	**10,000**	Square Feet	Wall Coverings, Hallways, Phased	2033	to 20	15 to 17	4.00	40,000	120,000	**192,621**	64,188	66,114													
				Building Services Elements																						
3.060	2	**2**	Each	Air Handling Units, Rooftop Heating and Cooling Units, Hallways, 7.5-Tons	2022	15 to 20	4	15,000.00	30,000	30,000	**94,749**									60,984						
3.070	2	**2**	Each	Air Handling and Condensing Units, Split Systems, Party Room, 2-Tons	2035	15 to 20	17	5,500.00	11,000	11,000	**18,181**		18,181													
3.105	1	**1**	Each	Boiler, Building Heat, 1,250-MBH, Replacement	2022	to 30	4	41,500.00	41,500	41,500	**46,709**															
3.300	1	**1**	Allowance	Electrical System, Main Panels	2040	to 70+	22	15,000.00	15,000	15,000	**28,742**						28,742									
3.320	2	**2**	Each	Elevators, Hydraulic, Pumps and Controls	2021	to 35	3	78,000.00	156,000	156,000	**170,465**															
3.330	2	**2**	Each	Elevators, Hydraulic, Cylinders	2021	to 45	3	51,000.00	102,000	102,000	**111,458**															
3.440	1	**1**	Each	Generator, Emergency (Includes Transfer Switch)	2042	25 to 35	24	57,500.00	57,500	57,500	**116,886**									116,886						
3.470	1	**1**	Each	Intercom Panel	2019	to 25	1	5,000.00	5,000	5,000	**15,933**											10,783				
3.605	180	**36**	Each	Pipes, Riser Sections, Domestic Water, Waste and Vent, Partial	2044	to 80+	26 to 30+	1,800.00	64,800	324,000	**445,292**											139,747	148,258	157,287		
3.820	2	**1**	Allowance	Security System, Phased	2020	to 15	2 to 15	11,000.00	11,000	22,000	**92,084**	17,652							21,709							26,700
3.860	2	**1**	Each	Water Heaters, Domestic Hot Water, Phased	2030	15 to 20	12 to 14	9,000.00	9,000	18,000	**48,290**															21,845

RESERVE EXPENDITURES

Victorian
Condominium Association
Cleveland Heights, Ohio

Explanatory Notes:

1) 3.0% is the estimated future Inflation Rate for estimating Future Replacement Costs.
2) FY2018 is Fiscal Year beginning January 1, 2018 and ending December 31, 2018.

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years Useful	Remaining	Costs, $ Unit (2018)	Per Phase (2018)	Total (2018)	30-Year Total (Inflated)	RUL = 0 FY2018	1 2019	2 2020	3 2021	4 2022	5 2023	6 2024	7 2025	8 2026	9 2027	10 2028	11 2029	12 2030	13 2031	14 2032	15 2033
				Property Site Elements																							
4.020	1,580	**1,580**	Square Yards	Asphalt Pavement, Crack Repair, Patch and Seal Coat (2018 is Front)	2019	3 to 5	1	2.00	3,160	3,160	**27,719**		1,280						3,886				4,374				4,923
4.040	630	**630**	Square Yards	Asphalt Pavement, Mill and Overlay, Front	2021	15 to 20	3	12.50	7,875	7,875	**8,605**				8,605												
4.041	950	**950**	Square Yards	Asphalt Pavement, Mill and Overlay, Rear	2019	15 to 20	1	12.50	11,875	11,875	**12,231**		12,231														
4.045	630	**630**	Square Yards	Asphalt Pavement, Total Replacement, Front	2039	15 to 20	21	29.00	18,270	18,270	**33,988**																
4.046	950	**950**	Square Yards	Asphalt Pavement, Total Replacement, Rear	2037	15 to 20	19	29.00	27,550	27,550	**48,309**																
4.110	350	**90**	Linear Feet	Concrete Curbs, Phased	2019	to 65	1 to 3	32.00	2,880	11,200	**16,521**		2,966		3,147												
4.140	2,000	**200**	Square Feet	Concrete Aprons and Sidewalks, Partial	2019	to 65	1 to 30+	10.50	2,100	21,000	**27,680**		6,500			2,364				2,740						3,176	
4.285	260	**260**	Linear Feet	Fences, Wood and Chain-link	2031	15 to 20	13	36.00	9,360	9,360	**13,745**													13,745			
4.560	1	**1**	Allowance	Lighting Upgrades, Bollards and Wall-packs	2018	to 25	0	21,000.00	21,000	21,000	**64,969**	21,000															
4.650	1	**1**	Allowance	Pipes, Subsurface Utilities	2025	to 85+	7	10,000.00	10,000	10,000	**47,615**								12,299								15,580
				Garage Elements																							
7.360	34,400	**3,440**	Square Feet	Concrete, On-grade, Partial	2020	to 90	2 to 30+	9.50	32,680	326,800	**255,000**			34,670						41,398						49,431	
7.400	2	**2**	Each	Doors and Operators	2030	8 to 15	12	6,000.00	12,000	12,000	**43,764**												17,109				
7.500	34,400	**34,400**	Square Feet	Fire Suppression System	2030	to 60	12	3.50	120,400	120,400	**171,662**												171,662				
7.600	40	**40**	Each	Light Fixtures	2030	to 30	12	250.00	10,000	10,000	**14,258**												14,258				
7.900	4	**4**	Each	Unit Heaters	2024	to 30	6	2,200.00	8,800	8,800	**10,508**							10,508									
				Anticipated Expenditures, By Year							**$6,462,073**	21,000	28,127	103,841	342,848	164,911	123,352	253,623	266,593	259,536	199,647	274,663	287,277	334,826	92,753	66,220	258,911

RESERVE EXPENDITURES

Victorian
Condominium Association
Cleveland Heights, Ohio

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years Useful	Remaining	Costs, $ Unit (2018)	Per Phase (2018)	Total (2018)	30-Year Total (Inflated)	16 2034	17 2035	18 2036	19 2037	20 2038	21 2039	22 2040	23 2041	24 2042	25 2043	26 2044	27 2045	28 2046	29 2047	30 2048
				Property Site Elements																						
4.020	1,580	**1,580**	Square Yards	Asphalt Pavement, Crack Repair, Patch and Seal Coat (2018 is Front)	2019	3 to 5	1	2.00	3,160	3,160	**27,719**								6,237				7,019			
4.040	630	**630**	Square Yards	Asphalt Pavement, Mill and Overlay, Front	2021	15 to 20	3	12.50	7,875	7,875	**8,605**															
4.041	950	**950**	Square Yards	Asphalt Pavement, Mill and Overlay, Rear	2019	15 to 20	1	12.50	11,875	11,875	**12,231**															
4.045	630	**630**	Square Yards	Asphalt Pavement, Total Replacement, Front	2039	15 to 20	21	29.00	18,270	18,270	**33,988**						33,988									
4.046	950	**950**	Square Yards	Asphalt Pavement, Total Replacement, Rear	2037	15 to 20	19	29.00	27,550	27,550	**48,309**				48,309											
4.110	350	**90**	Linear Feet	Concrete Curbs, Phased	2019	to 65	1 to 3	32.00	2,880	11,200	**16,521**				5,050		5,358									
4.140	2,000	**200**	Square Feet	Concrete Aprons and Sidewalks, Partial	2019	to 65	1 to 30+	10.50	2,100	21,000	**27,680**				3,682					4,269					4,949	
4.285	260	**260**	Linear Feet	Fences, Wood and Chain-link	2031	15 to 20	13	36.00	9,360	9,360	**13,745**															
4.560	1	**1**	Allowance	Lighting Upgrades, Bollards and Wall-packs	2018	to 25	0	21,000.00	21,000	21,000	**64,969**										43,969					
4.650	1	**1**	Allowance	Pipes, Subsurface Utilities	2025	to 85+	7	10,000.00	10,000	10,000	**47,615**								19,736							
				Garage Elements																						
7.360	34,400	**3,440**	Square Feet	Concrete, On-grade, Partial	2020	to 90	2 to 30+	9.50	32,680	326,800	**255,000**					59,024						70,477				
7.400	2	**2**	Each	Doors and Operators	2030	8 to 15	12	6,000.00	12,000	12,000	**43,764**												26,655			
7.500	34,400	**34,400**	Square Feet	Fire Suppression System	2030	to 60	12	3.50	120,400	120,400	**171,662**															
7.600	40	**40**	Each	Light Fixtures	2030	to 30	12	250.00	10,000	10,000	**14,258**															
7.900	4	**4**	Each	Unit Heaters	2024	to 30	6	2,200.00	8,800	8,800	**10,508**															
				Anticipated Expenditures, By Year							**$6,462,073**	164,330	169,259	0	57,041	125,850	324,219	57,484	136,493	211,208	189,288	288,735	151,458	232,911	573,765	701,904

RESERVE FUNDING PLAN

CASH FLOW ANALYSIS
Victorian
Condominium Association
Cleveland Heights, Ohio

Individual Reserve Budgets & Cash Flows for the Next 30 Years

		FY2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
	Reserves at Beginning of Year (Note 1)	292,000	300,675	385,834	419,783	236,970	254,199	337,333	296,553	248,252	212,701	243,600	206,228	162,559	77,456	151,634	258,874
	Total Recommended Reserve Contributions (Note 2)	**28,000**	**107,500**	**131,000**	**154,500**	**178,000**	**201,500**	**207,500**	**213,700**	**220,100**	**226,700**	**233,500**	**240,500**	**247,700**	**165,000**	**170,000**	**175,100**
Plus	**Estimated Interest Earned, During Year (Note 3)**	1,675	5,786	6,790	5,535	4,140	4,986	5,343	4,592	3,885	3,846	3,791	3,108	2,023	1,931	3,460	3,688
Less	**Anticipated Expenditures, By Year**	(21,000)	(28,127)	(103,841)	(342,848)	(164,911)	(123,352)	(253,623)	(266,593)	(259,536)	(199,647)	(274,663)	(287,277)	(334,826)	(92,753)	(66,220)	(258,911)
	Anticipated Reserves at Year End	$300,675	$385,834	$419,783	$236,970	$254,199	$337,333	$296,553	$248,252	$212,701	$243,600	$206,228	$162,559	$77,456	$151,634	$258,874	$178,751
														(NOTE 5)			

(continued)

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

		2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
	Reserves at Beginning of Year	178,751	197,996	218,044	414,778	563,079	650,457	545,417	713,947	812,217	843,565	904,510	873,360	987,486	1,028,970	735,174
	Total Recommended Reserve Contributions	**180,400**	**185,800**	**191,400**	**197,100**	**203,000**	**209,100**	**215,400**	**221,900**	**228,600**	**235,500**	**242,600**	**249,900**	**257,400**	**265,100**	**273,100**
Plus	**Estimated Interest Earned, During Year**	3,175	3,507	5,334	8,242	10,228	10,079	10,614	12,863	13,956	14,733	14,985	15,684	16,995	14,869	8,853
Less	**Anticipated Expenditures, By Year**	(164,330)	(169,259)	0	(57,041)	(125,850)	(324,219)	(57,484)	(136,493)	(211,208)	(189,288)	(288,735)	(151,458)	(232,911)	(573,765)	(701,904)
	Anticipated Reserves at Year End	$197,996	$218,044	$414,778	$563,079	$650,457	$545,417	$713,947	$812,217	$843,565	$904,510	$873,360	$987,486	$1,028,970	$735,174	$315,223
																(NOTE 4)

Explanatory Notes:

1) Year 2018 starting reserves are as of August 31, 2018; FY2018 starts January 1, 2018 and ends December 31, 2018.
2) Reserve Contributions for 2018 are the remaining budgeted 4 months; 2019 is the first year of recommended contributions.
3) 1.7% is the estimated annual rate of return on invested reserves; 2018 is a partial year of interest earned.
4) Accumulated year 2048 ending reserves consider the need to fund for replacement of the pipes and interior renovations shortly after 2048, and the age, size, overall condition and complexity of the property.
5) Threshold Funding Year (reserve balance at critical point).

4. RESERVE COMPONENT DETAIL

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

Exterior Building Elements

Front (south) elevation overview

Side (west) elevation

Side (east) elevation

Rear (north) elevation overview

Courtyard view

Balconies, Concrete

Line Item: 1.060

Quantity: 50 concrete balconies comprising approximately 3,750 square feet of horizontal surface area.

History: The Association conducted crack repairs and coating applications to the balconies as needed in approximately 2016.

Condition: Good to fair with areas of spalled concrete and minor efflorescence present

Typical balconies

Spalled balcony concrete

Spalled balcony concrete

Efflorescence

Useful Life: Capital repairs including a close-up visual inspection, patching of delaminated concrete, routing and filling of cracked concrete, and waterproof coating applications every 8- to 12-years.

Component Detail Notes: A waterproof coating application minimizes storm water penetration into the concrete and therefore minimizes future concrete deterioration. *Failure to maintain a waterproof coating on the balconies will result in increased concrete repairs and replacements as the balconies age*. Capital repairs may also include replacement of the caulked joint between the balcony and the building, and repair or replacement of the metal railings and railing fastener attachments 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 includes the following activities per event:

- Partial depth replacement of up to one percent (1%) of the concrete topsides, edges and undersides
- Coating applications to the balcony undersides
- Crack repairs as necessary
- Replacement of perimeter sealants as needed
- Application of a waterproof coating (Urethane based elastomeric)
- Replacement of up to eight percent (8%) of the ground level balconies and membranes

Balconies, Railings and Screens

Line Items: 1.100 and 1.105

Quantity: 940 linear feet of privacy panel-style railings at the balconies

History: The railings are original. The Board informs us that the railings and panels were removed and refurbished in 2016, including paint applications.

Conditions: The railings are in good to fair condition and the railing finishes are in good condition. The railings exhibit isolated panel rust.

Railing panels

Minor panel rust

Useful Life: Railings of this type have a useful life of up to 50 years with the benefit of periodic maintenance. Periodic maintenance should include applications of a protective paint finish and partial replacement of deteriorated steel every six- to eight-years.

Component Detail Notes: Preparation of the steel before application of the paint finish is critical to maximize the useful life of the 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.

Doors, Lobby Entrance, Refinish

Line Item: 1.180

Quantity: Two wood doors at the lobby entrance

History: Original, refurbished in 2013

Condition: Good to fair

Lobby entrance

Useful Life: Doors of this type have an indeterminate life. We recommend refurbishment including refinishing and hardware repairs/replacement every 10 years.

Component Detail Notes: Refinishing should include the complete removal of the existing protective finishes, sanding of scratched areas and the replacement of wood as needed followed by the application of a new protective finish. The Association should also consider replacement of the door hardware if 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.

Roofs, Modified Bitumen, Main and Decks

Line Items: 1.500 and 1.501

Quantity: 32,700 square feet of modified bitumen roofing at the main roofs, and 2,800 square feet of EPDM (ethylene propylene diene monomer) roofing at the deck roofs. One deck roof includes a stone ballast.

History: The main roofs were replaced from 2009 to 2010, and the deck roofs were replaced in 1999. At the main roof, the Association removed the built-up roofing and installed a tapered light-weight concrete deck. The Association should conduct inspections of the roofs semiannually and fund these inspections through the operating budget.

Condition: The main roofs are in good overall with isolated loose membrane and ponding water evident. We note debris build-up at the drains. Drains should be inspected regularly and keep clear to avoid severe water ponding, which may result in leaks. The deck roofs are in fair to poor condition, with weathering, loose membrane and ponding. The Board does not report history of leaks.

Modified bitumen overview

Isolated loose membrane

Ponding water and build-up at drain

Roof overview, note ponding water and build-up at drain

Membrane at balcony

Membrane at balcony

Loose membrane and ponding water at balcony

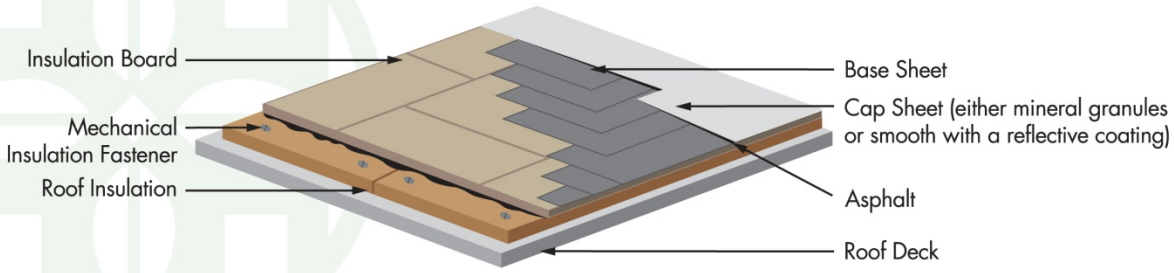
Built-up roof section

Loose membrane at built-up roof section

Useful Life: 15- to 20-years

Component Detail Notes: Modified bitumen roofing systems are composed of factory manufactured sheets of polymer-modified bitumen with polyester and/or fiberglass reinforcements. The bitumen adds a waterproof characteristic to the system and the reinforcements add strength and puncture resistance. These factory assembled roofing systems offer the advantages of a built-up roofing system through a less labor intensive installation. The following detail depicts a typical modified bitumen roof although it may not reflect the actual configuration at Victorian:

MODIFIED BITUMEN ROOF DETAIL



Contractors can install a new modified bitumen roof in one of two ways: *tear-off* or an *overlay*. An overlay is the application of a new roof membrane over an existing roof. This method, although initially more economical, often covers up problems with the deck, flashing and saturated insulation. The tear-off method of replacement includes removal of the existing roofing, flashings and insulation, and installation of a new roofing system.

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

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

Walls, Masonry

Line Item: 1.820

Quantity: Approximately 37,000 square feet of the exterior walls including the brick and stone

History: The Board reports previous repairs at the west and east stairs, we note evident of previous repointing, particularly at parapet walls

Condition: Good to fair with the following evident:

- Previous repairs evident
- Lintels exhibit rust
- Masonry exhibits cracks, particularly adjacent to balconies and at the base of the walls
- Masonry exhibits spalls at stone near balconies
- Mortar loss is evident at lintels and below sills
- Stains are present
- Mortar joints are tooled
- Weeps and flashing at lintels are not visible
- Sealant failure is typical

Previous repairs

Mortar loss at lintel

Previous repairs

Repairs at balcony stone sill

Cracked and spalled masonry below balcony

Masonry stains

Damaged stone masonry and repairs

Masonry cracks and previous repair

Previous masonry repairs

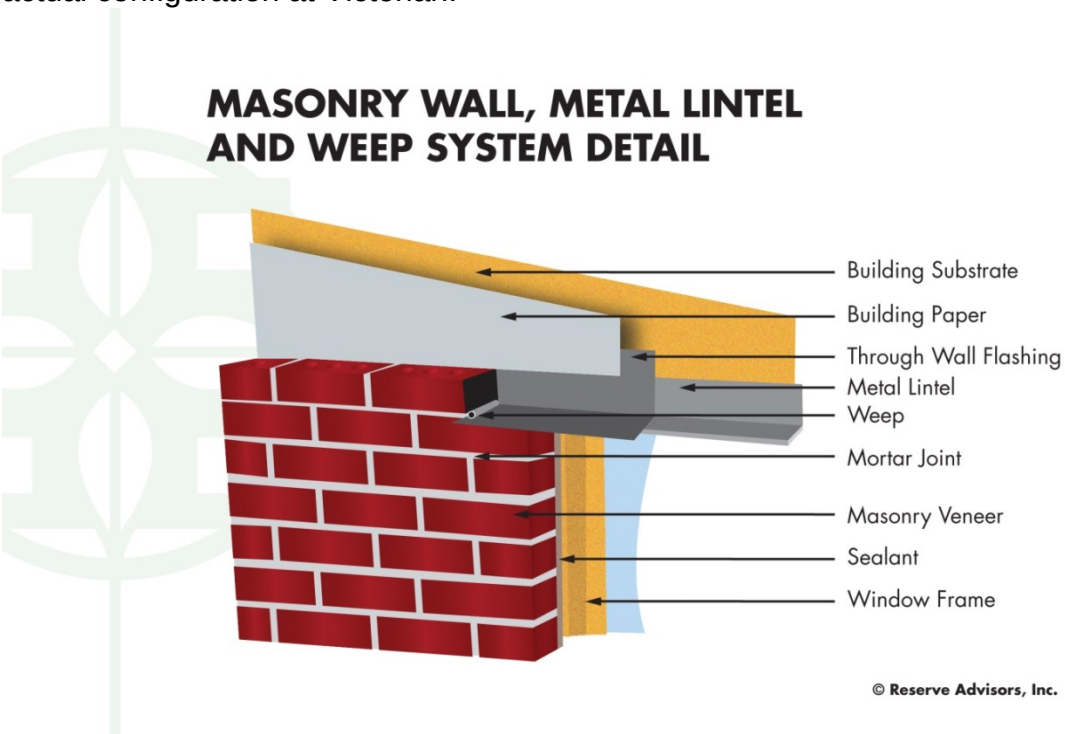
Mortar loss below window sill

Lintel rust

Failed sealants

Useful Life: We advise a complete inspection of the masonry and related masonry repairs 8- to 12-years to forestall deterioration.

Component Detail Notes: We recommend an inspection, repair and replacement of the steel lintels. Lintels are structural supports or beams above windows and doors. Fatigued lintels also allow the direct penetration of storm water into the wall assembly. These inspections should locate areas of rust on the lintels and cracks or other structural damage to the walls around lintels. The contractor should remove any areas of rust, prime and paint these lintels. Paint protects and maximizes the remaining useful life of the lintels and therefore the exterior wall systems. Structural damage can eventually lead to costly replacements of lintels and surrounding wall systems. The following diagram details a typical metal lintel and weep system and may not reflect the actual configuration at Victorian:



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

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. Our cost includes the following activities:

- Complete inspection of the masonry
- Repointing of up to five percent (5%) of the masonry
- Replacement of a limited amount of the masonry
- Replacement/flashing installation at up to one percent (1%) of the metal lintels and stone sills
- Paint applications to the metal lintels (approximately 1,990 linear feet)
- Replacement of up to fifty percent (50%) of the sealants at the window and door perimeters

Windows and Doors

Line Item: 1.980

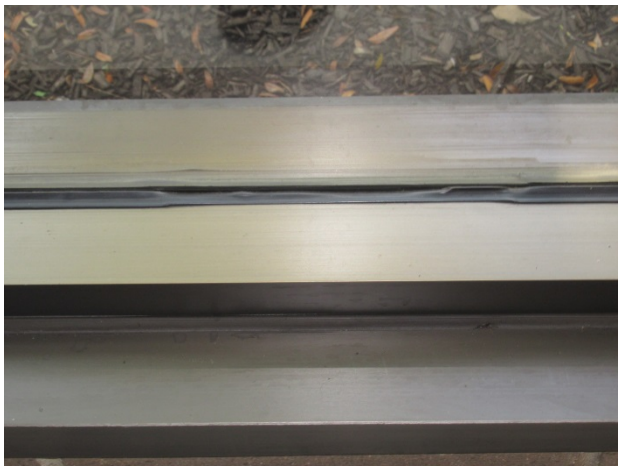
Quantity: 12,300 square feet of windows and patio doors. This quantity includes the metal service doors.

History: Original. The Board informs us that a low-emissivity film was applied to the lobby windows. The Board does not report water infiltration at the windows.

Condition: Fair overall, with frame discoloration at the lobby aluminum frames

Party room windows

Lobby window frame, note discoloration



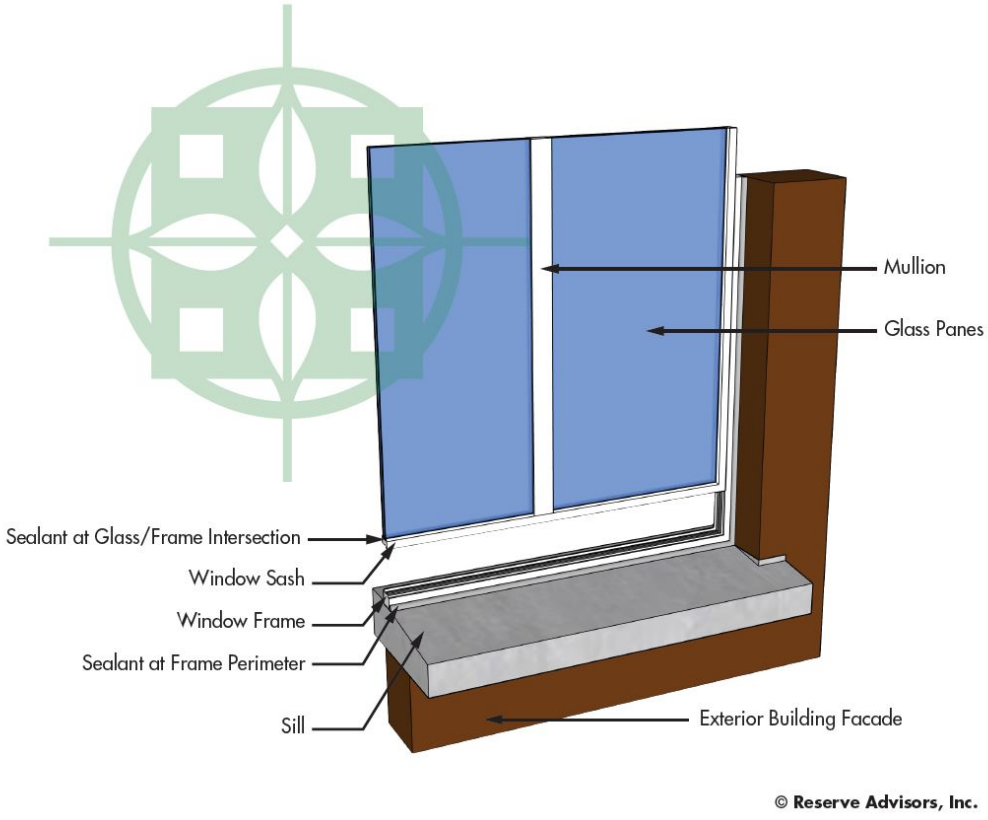
Twisted gasket at lobby window

Useful Life: 45- to 55-years

Component Detail Notes: Construction includes the following:

- Vinyl-clad wood frames and aluminum frames at the lobby
- Dual pane glass
- Fixed and sliding windows with screens
- Hinged metal doors and sliding patio doors

The following schematic depicts the typical components of a window system although it may not reflect the actual configuration at Victorian:



Properly designed window and door assemblies anticipate the penetration of some storm water beyond the gaskets. This infiltrated storm water collects in an internal drainage system and drains, or exits, the frames through weep holes. These weep holes can become clogged with dirt or if a sealant is applied, resulting in trapped storm water. We recommend Victorian periodically verify that weep holes are unobstructed concurrent with facade repairs. However, as window frames, gaskets and sealants deteriorate, leaks into the interior can result. The windows will eventually need replacement or major capital repairs to prevent water infiltration and damage from wind driven rain.

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

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

Interior Building Elements

Ceilings, Acoustical Tiles, Grid and Lighting, Hallways

Line Item: 2.060

Quantity: Approximately 12,000 square feet at hallways and common areas including the billiard's room and library

History: Replaced in approximately 2006 to 2013 in a phased manner

Condition: Fair overall with stained tiles and damaged ceiling tiles evident

Damaged ceiling tiles in billiards room

Stained hallway acoustical ceiling tiles, located near Unit 205

Ceiling tile stain at hallway

Useful Life: Up to 30 years

Priority/Criticality: Per Board discretion

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

Elevator Cab Finishes

Line Item: 2.100

Quantity: Two elevators

History: Approximately 2013 concurrent with other interior renovations

Condition: Good overall

Elevator cab finishes

Elevator cab carpet

Useful Life: Up to 20 years. However, the times of renovations is discretionary and is based in part on the Association's desire to coordinate interior finishes to provide a good "first impression" to guests and prospective buyers.

Component Detail Notes: The elevator cab finishes consist of:

- Carpet floor coverings
- Laminate wall coverings
- Acrylic ceiling finishes

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 funds interim replacement of the carpet floor coverings through the operating budget.

Floor Coverings, Carpet, Hallways

Line Item: 2.200

Quantity: 1,270 square yards at the hallways and common areas including the billiard's room and library (Contractor measurements will vary from the actual floor area due to standard roll lengths, patterns and installation waste.)

History: Replaced in approximately 2013

Condition: Good to fair with limited loose carpet squares and stains or discoloration evident

Hallway overview

Loose carpet square

Hallway carpet stain

Carpet discoloration near lobby

Useful Life: 8- to 12-years

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. The Association should continue to fund vacuuming, spot removal and schedule periodic cleanings through the operating budget to maximize the life of the carpet.

Floor Coverings, Vinyl, Laundry Rooms and Staircases

Line Item: 2.300

Quantity: 560 square yards at the laundry rooms and staircases

History: Replaced in approximately 2013

Condition: Good to fair

Vinyl at staircase

Useful Life: 10- to 15-years

Priority/Criticality: Per Board discretion

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

Guest Suite, Renovations

Line Items: 2.301 and 2.302

History: The Association converted a unit into a guest suite including a living room, kitchen, rest room and bed room. The ages of the finishes vary.

Condition: Good to fair, with a portion of the furnishings and fixtures appearing dated

Guest suite interior

Guest suite kitchenette

Guest suite rest room

Guest suite bedroom

Useful Life: Complete interior renovation every 20 years and partial interior renovations every 10 years

Component Detail Notes: The guest suite comprises approximately 620 square feet of finished area which includes:

- Carpet and tile floor coverings
- Paint finishes on the walls and ceilings
- Plumbing fixtures
- Light fixtures
- Kitchen cabinets and countertops
- Furnishings including sofas, tables, chairs and end tables
- Various appliances including a stove, refrigerator, dishwasher and microwave

Priority/Criticality: Per Board discretion

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

These partial renovations should include the following:

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

Light Fixtures, Hallways

Line Item: 2.560

Quantity: Approximately 110 interior wall and ceiling mounted light fixtures located throughout the hallways

History: Original

Condition: Reported satisfactory

Wall light fixture

Ceiling light fixture

Useful Life: Up to 30 years. The Victorian may desire replacement for aesthetic reasons or to coordinate their replacement with more significant renovations or paint applications.

Priority/Criticality: Per Board discretion

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

Lobby

Line Item: 2.600

History: The lobby furnishings were replaced in approximately 2011.

Condition: Good to fair

Lobby overview

Chandelier

Tile crack

Tile crack

Useful Life: Complete interior renovation every 25 years and partial interior renovations every 10- to 15-years. The lobby provides a first impression for guests and prospective buyers of condominiums. Discretionary redecorating and refurbishing are a common practice in apartment style associations with a single main entrance to provide a good "first impression." Periodic redecorating and refurbishing of the lobby is therefore a prudent practice.

Component Detail Notes: Components comprise the following:

- Carpet and stone tile floor covering (we include honing)
- Wall coverings
- Paint finishes
- Furnishings and art/decorations
- Light fixtures including chandelier replacement and/or refurbishment

Priority/Criticality: Per Board discretion

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

These partial renovations should include the following:

- Application of paint finish to all surfaces
- Replacement of the carpet
- Honing of the tile
- Replacement of the furnishings

Mailboxes

Line Item: 2.700

Quantity: 56 unit mailboxes

History: Unknown

Condition: Reported satisfactory overall

Mailboxes

Useful Life: Up to 35 years

Priority/Criticality: Per Board discretion

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

Paint Finishes, Stairwells

Line Item: 2.820

Quantity: Two each

History: Finishes last applied in approximately 2013

Conditions: Good to fair with isolated wall cracks and repairs evident

Stairwell finishes

Masonry wall and finish crack

Stairwell wall repairs

Useful Life: 15- to 20-years. Due to the minimal traffic through the stairwells, the useful life of the paint finishes is significantly longer than that of the hallway or common area paint finishes.

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. Interim partial or touchup paint applications should be funded as normal maintenance.

Party Room

Line Items: 2.840 and 2.845

History: The majority of the components are original. The Association anticipates replacement of the floor coverings in the near term. The Association built out a pipe access closet in 2017. The Board informs us that the stained tiles were due to pipe issues that have since been remediated.

Condition: Fair to poor condition, with worn finishes and stained ceiling tiles. The kitchen fixtures appear dated.

Party room overview

Party room kitchen

Stained ceiling tiles

Worn tile

Worn tile

Loose wall paper

Useful Life: Complete interior renovation every 20 years and partial interior renovations every 10 years

Component Detail Notes: Components include:

- Vinyl floor coverings
- Vinyl wall coverings
- Acoustical ceiling tile assembly
- Paint finishes
- Light fixtures
- Furnishings
- Cabinetry
- Kitchen appliances

Priority/Criticality: Per Board discretion

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

These partial renovations should include the following:

- Replacement of the vinyl tile
- Replacement of up to fifty percent (50%) of the appliances and furnishings

We recommend the Association fund replacement of the folding tables and chairs through the operating budget.

Wall Coverings, Hallways

Line Item: 2.980

Quantity: Approximately 30,000 square feet at the hallways and common areas including the billiard's room and library (Contractor measurements will vary from the actual area due to standard roll lengths, patterns and installation waste.)

History: Replaced from 2006 to 2013 in a phased manner

Condition: Good to fair with limited peeling and loose wallpaper, and minor scuffs

Scuffed wall coverings at billiards room

Torn wall coverings at second floor

Lifted wall coverings

Scuffed wall coverings

Useful Life: Up to 20 years. Times of replacement for wall coverings is discretionary based upon the need or desire to coordinate the replacement of other adjacent elements, i.e., carpet.

Priority/Criticality: Per Board discretion

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

Building Services Elements

Air Handling Units, Rooftop Heating and Cooling Units

Line Item: 3.060

Quantity: Two *International Comfort Products* rooftop air handling units provide heated or cooled air, depending on the season, to the common area hallways.

History: Replaced from 2002 to 2004, Management and the Board report only minor repairs, including recent fan and burner replacements

Condition: Reported satisfactory without operational deficiencies

West hall rooftop unit

East hall rooftop unit

Useful Life: 15- to 20-years

Component Detail Notes: Typical units in this application contain combinations of the following elements: filters, heating coils, cooling coils and fans. We recommend the Association replace coils, filters and other components prior to complete replacement of the unit from the operating budget as needed.

The units have the following characteristics:

- Gas-fired heating capacity of approximately 200 and 224-MBH (thousand British Thermal Units per hour)
- Cooling capacity of 7.5-tons
- R-22 refrigerant

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.

Air Handling and Condensing Units, Split Systems

Line Item: 3.070

Quantity: Two *Magic-Pak* split systems serve the party room

History: Replaced from 2015 to 2016

Condition: Reported satisfactory without operational deficiencies

Split system furnace

Useful Life: 15- to 20-years

Component Detail Notes: A split system air conditioner consists of an outside condensing unit, an interior evaporator coil, refrigerant lines and an interior gas-fired furnace. Each condensing units have a cooling capacity of two-tons and each interior units have a heating capacity of 24-MBH.

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

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

Boiler, Building Heat

Line Item: 3.105

Quantity: One gas fired *Peerless* boiler of 1,008-MBH (thousand British Thermal Units) capacity generates hot water to heat the lobby and garage.

History: Original

Condition: Reported satisfactory without operational deficiencies

Boiler

Useful Life: Up to 30 years

Component Detail Notes: The boiler has an input capacity of 1,250-MBH (thousand British Thermal Units per hour) for the building heat system. The boiler has an efficiency of eighty-one percent (81%). The lack of replacement parts, increased efficiencies of new units, increased maintenance costs and corrosion of components will eventually justify complete replacement.

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

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. Our estimate of cost includes an allowance for replacement of the controls.

Electrical System

Line Item: 3.300

History: Primarily original to construction.

Condition: Reported satisfactory

Main disconnect

Useful Life: Up to and sometimes beyond 70 years

Component Detail Notes: The system includes:

- Breaker type circuit protection panels for low ampacity circuits
- Copper wires

We give a brief overview of electrical system components in the following sections of this narrative.

Primary Switchgear - The primary switchgear is located where the electric supply comes into the building. Switchgear can include associated controls, regulating, metering and protective devices, and is used for the transmission, distribution and conversion of electric power for use within the building. Switchgear components have a useful life of up to and sometimes beyond 70 years. Replacement is often determined by a desired upgrade of the entire electrical system.

Transformer - A transformer is an electric device with two or more coupled windings used to convert a power supply from one voltage to another voltage. Transformers within a building lower the supplied electrical voltage to a level that can be utilized by the building's equipment and unit owners. Transformers do not utilize mechanical components and therefore have a long useful life. However, the Association should anticipate periodic replacement of a limited quantity of transformers.

Distribution Panel - The distribution panel is an electric switchboard or panel used to control, energize or turn off electricity in total or for individual circuits. The panel also distributes electricity to individual and controllable circuits. One or more distribution panels may exist and further distribute electricity to individual panel boards for each unit. The distribution panel is enclosed in a box and contains circuit breakers, fuses and switches. Distribution panels have a useful life of up to and sometimes beyond 70 years.

Circuit Protection - Once electricity is distributed throughout the building and is at a usable voltage level, the electricity is divided into circuits. Each circuit requires circuit protection. Circuit protection is necessary to prevent injury and fires, and minimize damage to electrical components and disturbances to the electrical system. Abnormalities in the circuit can include overloads, short circuits and surges. Circuit protection devices are commonly referred to as circuit breakers and fuses. For the protection of the circuits in the units and common areas, we recommend the use of only circuit breakers as they are safer than fuses. However, the use of fuses is common for equipment like emergency systems and individual items of equipment. Fuses with a low capacity rating can easily be replaced with fuses of a higher rating resulting in an unprotected, overloaded and unsafe circuit. The circuit protection panels have a useful life of up to and sometimes beyond 70 years.

Conductors - Conductors are the electrical wires that convey electricity to the units, light fixtures, receptacles and appliances. Conductors in typical high and low capacity circuits are copper, as is reported the case at Victorian. Copper conductors have an indefinite useful life.

Conductor Insulation and Conduit - Conductor insulation provides protection against the transfer of electricity. Conductor insulation can eventually become brittle and damaged from rodents or heat from many years of service. Conductor conduit is a pipe or tube used to enclose insulated electric wires to protect them from damage. Steel conductor conduit, although galvanized, will eventually rust if used in damp conditions. The useful life of conductor insulation and conduit is indeterminate.

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

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We recommend the Association budget to replace the main switchgear, distribution and circuit protection panels. Updates of this Reserve Study will consider possible changes in the scope and times of component replacements based on the conditions, including the need for replacement of the wires.

We recommend the Association conduct thermoscans of the distribution panels and circuit protection panels, and inspections of the transformers for any indications of arcing, burning or overheating on a regular basis, funded through the operating budget. Verification of the integrity of all connection points minimizes the potential for arcing and fires.

Elevators, Hydraulic

Line Items: 3.320 and 3.330

Quantity: Two *Dover* hydraulic passenger elevators

History: Components are mostly original. Management and the Board report replacement of the stops. and partial relay replacements and repairs. The Association maintains a maintenance contract with *ThyssenKrupp Elevators.*

Condition: Reported satisfactory and service interruptions are reportedly infrequent. The pump is reported in satisfactory condition.

Pump housing

Useful Life: Pumps and controls have a useful life of up to 35 years. Cylinders have a useful life of up to 45 years.

Component Detail Notes: Major components in a hydraulic elevator system include the pump, controls, cylinder, fluid reservoir and a valve between the cylinder and reservoir. Once activated by the elevator controls, the pump forces hydraulic fluid from the reservoir into the cylinder. The piston within the cylinder rises lifting the elevator cab. The elevator cab lowers at a controlled rate when the controls open the valve.

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 anticipate the following hydraulic elevator system components will require replacement:

- Cab control panels
- Door operators
- Hallway panels/buttons
- Microprocessor based controllers
- Pumps (Power Unit) (20-HP)

These costs may vary based on the desired scope of the actual replacements, changes in technology and requirements of local codes or ordinances at the actual times of replacements. However, we judge our estimated costs sufficient to budget appropriate reserves at this time. The Association should require the contractor to verify that elevator component replacements include all of the necessary features for the latest in elevator code compliance.

Generator, Emergency

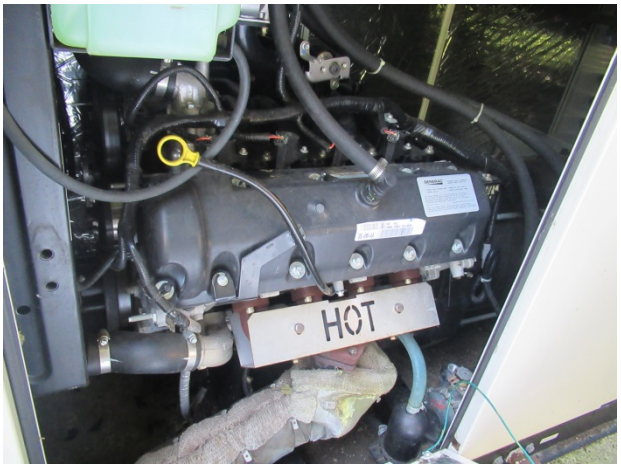
Line Item: 3.440

Quantity: One natural gas generator

History: Dates to 2012

Condition: Reported satisfactory without operational deficiencies

Generator



Generator

Useful Life: 25- to 35-years

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

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. Our cost is based on information provided by the Association and includes replacement of the transfer switch.

Intercom Panel

Line Item: 3.470

Quantity: One each

History: Replaced in 1996

Condition: Reported unsatisfactory, the Association anticipates replacement in 2018

Intercom panel

Useful Life: Up to 25 years

Priority/Criticality: Per Board discretion

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

Pipes

Line Items: 3.600 and 3.605

Quantity: We estimate that there are approximately 180 domestic water, waste and vent pipes. The building heating pipes for the boiler serve the lobby and garage. We estimate that each unit shares domestic water plumbing pipes for both the kitchen and bathroom with the adjacent unit.

History and Condition:

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

Location of pipe repair at part room 'build-out'

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

- Building heating
- Domestic cold water
- Domestic hot water supply and return
- Vent plumbing fixtures
- Sanitary waste disposal

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

Building Heating - The building heating system at Victorian utilizes a two-pipe system. The cast iron pipes have a useful life of up to and sometimes beyond 80 years.

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

In the event that numerous pinhole leaks develop or occur throughout the system of pipes, Victorian should also consider "in-place" pipe restoration technology. This process includes drying, sandblasting away interior pipe occlusions and applying an epoxy lining to the interior surfaces of the pipes. Future updates of

this study will consider the possibility of the pipe restoration process in lieu of pipe replacement at Victorian. Restoration technology can extend the useful life of a pipe system thus avoiding a system pipe replacement.

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

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

Pipes, Remaining – We anticipate a useful life of up to and sometimes beyond 100 years for the gas supply lines and other remaining interior 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.

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

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. Our cost assumes replacement of all pipes located within each wall opening, associated branch piping, fittings and minimal interior finishes. However, the cost does not include temporary housing for affected residents, pipes within the units or significant interior finishes.

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

We recommend the Association budget the following expenditures:

- Building heating – Based on their limited quantity, we recommend the Association fund replacements to the building heating pipes through the operating budget as necessary.
- Domestic water, waste and vent - We include expenditures to replace 36 riser sections beginning by 2044 followed by an increasing rate of replacement as the pipes age. Our estimate provides funds to replace approximately sixty percent (60%) of the pipes during the next 30 years.

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

Although it is likely that the times of replacement and extent of repair costs may vary from the budgetary allowance, Victorian could budget sufficient reserves for the beginning of these pipe replacements and have the opportunity to adjust its future reserves up or down to meet any changes to these budgetary estimates. Updates of

this Reserve Study would incorporate changes to budgetary costs through a continued historical analysis of the rate of deterioration and actual pipe replacements to budget sufficient reserves.

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

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

Security System

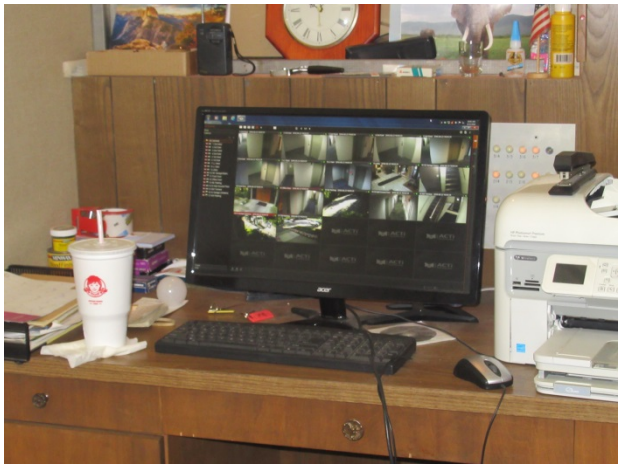
Line Item: 3.820

Quantity: Victorian utilizes the following security system components:

- Cameras (12)
- Multiplexer (1)
- Recorder (1)
- Keyless access points

History: Upgraded in 2013

Condition: Reported satisfactory



Security system display

Security camera

Useful Life: Up to 15 years

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. The Association should anticipate replacement of up to fifty percent (50%) of the security system components per event.

Water Heaters, Domestic Hot Water

Line Item: 3.860

Quantity: Two domestic hot water heaters

History: Replaced from 2012 to 2015

Condition: Reported satisfactory

Storage tanks

Useful Life: 15- to 20-years

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

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

Property Site Elements

Asphalt Pavement, Crack Repair, Patch and Seal Coat

Line Item: 4.020

Quantity: Approximately 1,580 square yards

History: The Association plans to mill and overlay the rear pavement in 2019, and crack fill and repair the front pavement.

Condition: Poor overall

Useful Life: Three- to five-years

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

Priority/Criticality: Per Board discretion

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

Asphalt Pavement, Repaving

Line Items: 4.040 through 4.046

Quantity: Asphalt pavement comprises 630 square yards in the front of the development and 950 square yards in the rear of the development.

History: Last repaved in 1992. The Association plans to mill and overlay the rear pavement in 2019, and crack fill and repair the front pavement.

Condition: Fair to poor with cracks, pavement deterioration and potholes evident

Front parking area pavement

Front pavement cracks and settlement

Front pavement cracks

Rear parking area pavement

Rear pavement potholes and deterioration

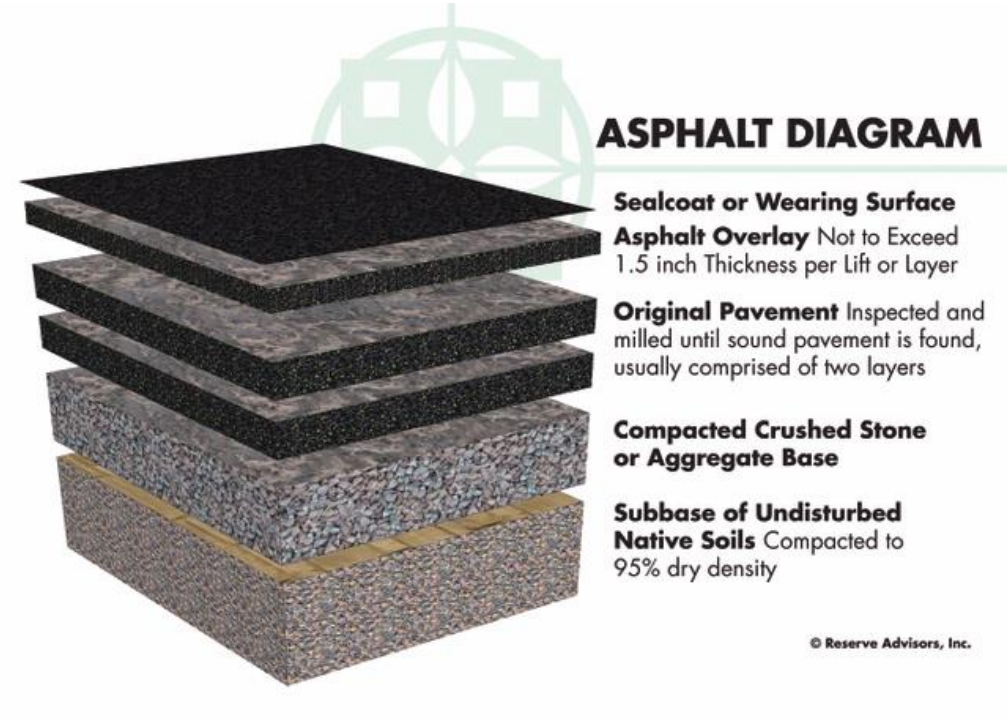
Rear pavement and curb deterioration

Rear pavement potholes, cracks and deterioration

Rear pavement alligator cracks

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 Victorian:



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

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 milling and overlayment of the pavement include an allowance for total replacement of up to twenty percent (20%) of the pavement. Our estimate of cost of the mill and overlay is based on cost information provided by Management.

Concrete Curbs

Line Item: 4.110

Quantity: 350 linear feet

Condition: Fair with cracks evident

Curb cracks

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

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We include replacement of all of the curbs during the next 30 years.

Concrete Aprons and Sidewalks

Line Item: 4.140

Quantity: Concrete driveway aprons comprise approximately 780 square feet, and sidewalks comprise 1,220 square feet throughout the community.

History: The Association plans to spend approximately $6,500 in 2019 to replace the concrete flatwork at the garage threshold, the font driveway apron and partial replacements to the rear apron.

Condition: Good to fair, with spalls, cracks and areas of settlement present.

Entrance concrete

Concrete spall

Entrance concrete step deterioration

Rear courtyard crack

Front apron

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

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We estimate that up to 1,400 square feet of concrete sidewalks, or fifty percent (50%) of the total, will require replacement during the next 30 years.

Fences, Wood and Chain-link

Line Item: 4.285

Quantity: 200 linear feet of wood fences and 60 linear feet of chain-link fence

History: The wood fence was replaced in approximately 2011, and the chain-link fence is older.

Condition: The wood fence is in good overall condition, we note leaning sections of the chain-link fence.

Wood fence

Damaged section of chain-link fence

Useful Life: 15- to 20-years

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. 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. We recommend the Association fund interim repairs/replacements to the chain-link fence through the operating budget as necessary.

Lighting Upgrades

Line Item: 4.560

Quantity: The Association uses various light posts and fixtures, bollards and exterior wall-packs to illuminate the community.

History: Mostly original, the Association plans to replace exterior lighting in the near term. The poles and fixtures are approximately three years of age and will not be replaced.

Condition: Fair to poor, the fixtures appear dated and finish deterioration and discoloration is present.

Exterior light fixture, note finish deterioration

Exterior light fixture, note finish deterioration

Bollard in poor condition

Newer light pole and fixture

Useful Life: Up to 25 years

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We recommend the Association fund replacements of the poles through the operating budget.

Pipes, Subsurface Utilities

Line Item: 4.650

Condition: Reported satisfactory

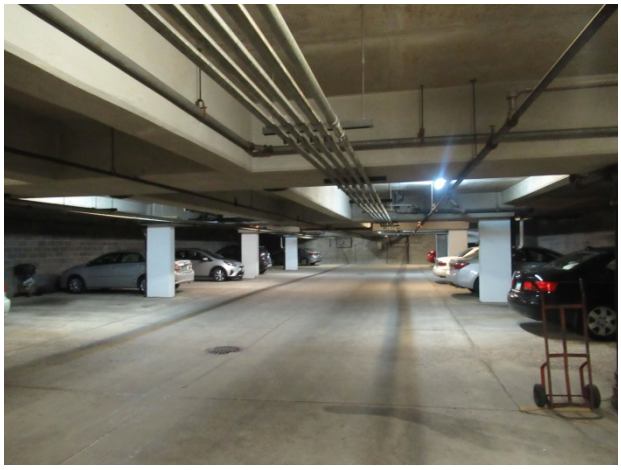
Useful Life: Up to and likely beyond 85 years

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

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 subsurface 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, Victorian 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.

Garage Elements



Garage overview

Concrete, On-grade

Line Item: 7.360

Quantity: 34,400 square feet of on-grade concrete

Condition: Fair with significant areas of concrete present, and limited concrete column spall

Spalled on-grade concrete

Spalled on-grade concrete

Spalled concrete column

Useful Life: Up to 90 years

Priority/Criticality: Per Board discretion

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

- Complete inspection of the floor
- Selective cut out and replacement of up to ten percent (10%), or 3,440 square feet, of the on-grade concrete
- Concrete column repairs as needed
- Crack repairs as needed

Fire Suppression System

Line Item: 7.500

Quantity: 34,400 square feet of garage area

History: Original

Condition: Reported satisfactory

Useful Life: Up to 60 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.

Light Fixtures

Line Item: 7.600

Quantity: Approximately 40 light fixtures with T-8 fluorescent lamps

History: Age unknown

Condition: Reported satisfactory

Garage light fixture

Useful Life: Up to 30 years

Priority/Criticality: Per Board discretion

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

Unit Heaters

Line Item: 7.900

Quantity: Four unit heaters

History: Original

Condition: Reported satisfactory

Unit heater

Useful Life: Up to 30 years

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

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

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 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.

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

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

[1] Identified in the APRA "Standards - Terms and Definitions" and the CAI "Terms and Definitions".
[2] See Credentials for additional information on our use of published sources of cost data.

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

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

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

6. CREDENTIALS

HISTORY AND DEPTH OF SERVICE

Founded in 1991, Reserve Advisors, Inc. 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 principals are founders of Community Associations Institute's (CAI) Reserve Committee that developed national standards for reserve study providers. One of our principals is a Past President of the Association of Professional Reserve Analysts (APRA). Our vast experience with a variety of building types and ages, on-site examination and historical analyses are keys to determining accurate remaining useful life estimates of building components.

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

TOTAL STAFF INVOLVEMENT

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

OUR GOAL

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

VAST EXPERIENCE WITH A VARIETY OF BUILDINGS

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

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

OLD TO NEW

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

QUALIFICATIONS
THEODORE J. SALGADO
Principal Owner

CURRENT CLIENT SERVICES

Theodore J. Salgado is a co-founder of Reserve Advisors, Inc., which is dedicated to serving community associations, city and country clubs, religious organizations, educational facilities, and public and private entities throughout the United States. He is responsible for the production, management, review, and quality assurance of all reserve studies, property inspection services and consulting services for a nationwide portfolio of more than 6,000 clients. Under his direction, the firm conducts reserve study services for community associations, apartment complexes, churches, hotels, resorts, office towers and vintage architecturally ornate buildings.

PRIOR RELEVANT EXPERIENCE

Before founding Reserve Advisors, Inc. with John P. Poehlmann in 1991, Mr. Salgado, a professional engineer registered in the State of Wisconsin, served clients for over 15 years through American Appraisal Associates, the world's largest full service valuation firm. Mr. Salgado conducted facilities analyses of hospitals, steel mills and various other large manufacturing and petrochemical facilities and casinos.

He has served clients throughout the United States and in foreign countries, and frequently acted as project manager on complex valuation, and federal and state tax planning assignments. His valuation studies led to negotiated settlements on property tax disputes between municipalities and property owners.

Mr. Salgado has authored articles on the topic of reserve studies and facilities maintenance. He also co-authored *Reserves*, an educational videotape produced by Reserve Advisors on the subject of Reserve Studies and maintaining appropriate reserves. Mr. Salgado has also written in-house computer applications manuals and taught techniques relating to valuation studies.

EXPERT WITNESS

Mr. Salgado has testified successfully before the Butler County Board of Tax Revisions in Ohio. His depositions in pretrial discovery proceedings relating to reserve studies of Crestview Estates Condominium Association in Wauconda, Illinois, Rivers Point Row Property Owners Association, Inc. in Charleston, South Carolina and the North Shore Club Associations in South Bend, Indiana have successfully assisted the parties in arriving at out of court settlements.

EDUCATION - Milwaukee School of Engineering - B.S. Architectural Engineering

PROFESSIONAL AFFILIATIONS/DESIGNATIONS

American Association of Cost Engineers - Past President, Wisconsin Section
Association of Construction Inspectors - Certified Construction Inspector
Association of Professional Reserve Analysts - Past President & Professional Reserve Analyst (PRA)
Community Associations Institute - Member and Volunteer Leader of multiple chapters
Concordia Seminary, St. Louis - Member, National Steering Committee
Milwaukee School of Engineering - Member, Corporation Board
Professional Engineer, Wisconsin (1982) and North Carolina (2014)

Ted continually maintains his professional skills through American Society of Civil Engineers, ASHRAE, Association of Construction Inspectors, and continuing education to maintain his professional engineer licenses.

JOHN P. POEHLMANN, RS
Principal

John P. Poehlmann is a co-founder of Reserve Advisors, Inc. He is responsible for the finance, accounting, marketing, and overall administration of Reserve Advisors, Inc. He also regularly participates in internal Quality Control Team Reviews of Reserve Study reports.

Mr. Poehlmann directs corporate marketing, including business development, advertising, press releases, conference and trade show exhibiting, and electronic marketing campaigns. He frequently speaks throughout the country at seminars and workshops on the benefits of future planning and budgeting for capital repairs and replacements of building components and other assets.

PRIOR RELEVANT EXPERIENCE

Mr. Poehlmann served on the national Board of Trustees of Community Associations Institute. An international organization, Community Associations Institute (CAI) is a nonprofit 501(c)(3) trade association created in 1973 to provide education and resources to America's 335,000 residential condominium, cooperative and homeowner associations and related professionals and service providers.

He is a founding member of the Institute's Reserve Committee. The Reserve Committee developed national standards and the Reserve Specialist (RS) Designation Program for Reserve Study providers. Mr. Poehlmann has authored numerous articles on the topic of Reserve Studies, including Reserve Studies for the First Time Buyer, Minimizing Board Liability, Sound Association Planning Parallels Business Concepts, and Why Have a Professional Reserve Study. He is also a contributing author in Condo/HOA Primer, a book published for the purpose of sharing a wide background of industry knowledge to help boards in making informed decisions about their communities.

INDUSTRY SERVICE AWARDS

CAI Wisconsin Chapter Award
CAI National Rising Star Award
CAI Michigan Chapter Award

EDUCATION

University of Wisconsin-Milwaukee - Master of Science Management
University of Wisconsin - Bachelor of Business Administration

PROFESSIONAL AFFILIATIONS

Community Associations Institute (CAI) - Founding member of Reserve Committee; former member of National Board of Trustees; Reserve Specialist (RS) designation; Member of multiple chapters

Association of Condominium, Townhouse, & Homeowners Associations (ACTHA) – member

HEATHER M. CHRISTENSEN, RS
Responsible Advisor

CURRENT CLIENT SERVICES

Heather M. Christensen, a Structural Engineer, is an Advisor for Reserve Advisors. Ms. Christensen is responsible for the inspection and analysis of the condition of clients' properties, and recommending engineering solutions to prolong the lives of the components. She also forecasts capital expenditures for the repair and/or replacement of the property components and prepares technical reports on assignments. She is responsible for conducting Life Cycle Cost Analysis and Capital Replacement Forecast services on townhomes, homeowner associations, planned unit developments and recreational associations. Ms. Christensen frequently serves as the Quality Assurance Review Coordinator for all types of developments.

The following is a partial list of clients served by Heather Christensen demonstrating her breadth of experiential knowledge of community associations in construction and related buildings systems.

Lawrence Square Townhomes Association A townhome association in Chicago, Illinois with 30 units in four buildings, this development displays uniqueness with shaped EIFS, vinyl siding, masonry walls and flat roofs. These buildings are connected with two bridges at the second stories, overlooking individual garages and private asphalt parking and streets.

3110 Wisconsin Condominium Association This high rise condominium located in downtown Washington, DC comprises 30 units in a nine-story building. The two-story units comprise concrete balconies, and the unit owners share a common lobby, elevators, hallways, parking garage and parking lot.

Ronald McDonald House Charity of San Diego Located in San Diego, California, the Charity provides 47 guest rooms to families. Built atop a seven story parking garage, the exteriors comprise masonry, stucco and a thermoplastic polyolefin roof with solar panels. The development includes a landscaped courtyard plaza located with the building footprint.

Pembroke North Homeowners Association Located in Wayne, Pennsylvania, this development contains 54 units in three LEED buildings. The building exteriors comprise flat membrane roofs, masonry siding and elevated garden plazas. The development contains a parking structure, asphalt pavement, finished interior lobbies and hallways, and a geothermal system.

The Valdosta-Lowndes County Conference Center and Tourism Authority This institutional development located in Valdosta, Georgia comprises metal awnings, metal and modified bitumen roofs, brick veneer and metal siding. The interiors included conference rooms and partitions, and the property includes a patio, pond and parking areas.

St. Philip the Apostle Catholic Church This church in Lancaster, Pennsylvania comprises five buildings, including classrooms, offices, a gym, a lobby and a rectory from 1849. The exteriors include masonry and EIFS wall systems, and asphalt, EPDM and slate roofs.

PRIOR RELEVANT EXPERIENCE

Before joining Reserve Advisors, Ms. Christensen attended the Milwaukee School of Engineering in Milwaukee, Wisconsin where she attained her Master of Science degree in Structural Engineering and her Bachelor of Science degree in Architectural Engineering. She also worked for Computerized Structural Design, Inc. where she worked on structural design projects for steel structures. Heather's previous involvement with Engineers Without Borders includes the design and construction of bridges in Guatemala.

EDUCATION

Milwaukee School of Engineering - M.S. Structural Engineering
Milwaukee School of Engineering - B.S. Architectural Engineering

PROFESSIONAL AFFILIATIONS

Engineer In Training (E.I.T.) Registration - Wisconsin
Reserve Specialist (RS) - Community Associations Institute
American Society of Civil Engineers - Associate Member

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
Reserve Specialist (RS) **-** Community Associations Institute
Professional Reserve Analyst (PRA) **-** Association of Professional Reserve Analysts

RESOURCES

Reserve Advisors, Inc. 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. Several advisors and a Principal of Reserve Advisors, Inc. hold Senior Memberships with ACI.

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, Inc. 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, Inc., 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 FILL IN ABOVE (OR OVERWRITE) 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) FILL IN ABOVE (OR OVERWRITE) 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, Inc. (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.