

RESERVE STUDY

Valley West Homeowners Association



Bozeman, Montana

June 6, 2022



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Valley West Homeowners Association
Bozeman, Montana

Dear Board of Directors of Valley West Homeowners Association:

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Reserve Study* of Valley West Homeowners Association in Bozeman, Montana and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, June 6, 2022.

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

An ongoing review by the Board and an Update of this Reserve Study are necessary to ensure an equitable funding plan since a Reserve Study is a snapshot in time. We recommend the Board budget for an Update to this Reserve Study in two- to three-years. We look forward to continuing to help Valley West Homeowners 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 June 22, 2022 by

Reserve Advisors, LLC

Visual Inspection and Report by: Tanner A. Oldenburger, RS¹, Vice President of Engineering

Review by: Alan M. Ebert, RS, PRA², Director of Quality Assurance



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

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



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1. RESERVE STUDY EXECUTIVE SUMMARY

Client: Valley West Homeowners Association (Valley West)

Location: Bozeman, Montana

Reference: 131534

Property Basics: Valley West Homeowners Association is a style development which consists of 625 units. The buildings were built from 2001 to 2017.

Reserve Components Identified: 14 HOA Reserve Components and 17 Bozeman City Parks Reserve Components.

Inspection Date: June 6, 2022. We conducted previous inspections in 2013 and 2017.

Funding Goal: The Funding Goal of this Reserve Study is to maintain reserves above an adequate, not excessive threshold during one or more years of significant expenditures. Our recommended Funding Plan recognizes this threshold funding year in 2049 due to subsequent repaving events at the Valley West Alleys.

Our recommended Bozeman City Parks Funding Plan recognizes these threshold funding years in 2026 due to pond erosion control measures and by 2044 due to phased replacement of the irrigation system.

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

- Current and future local costs of replacement
- 0.7% anticipated annual rate of return on invested reserves
- 3.5% 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.

Project Prioritization: We note anticipated Reserve Expenditures for the next 30 years in the **Reserve Expenditures** tables and include a **Five-Year Outlook** table following the **Reserve Funding Plan** in Section 3. We recommend the Association prioritize the following projects in the next five years based on the conditions identified:

- Partial replacement at the concrete aprons and common areas sidewalks
- Patching repairs at the asphalt pavement alleys to defer the need for complete repaving

HOA

Unaudited Cash Status of Reserve Fund:

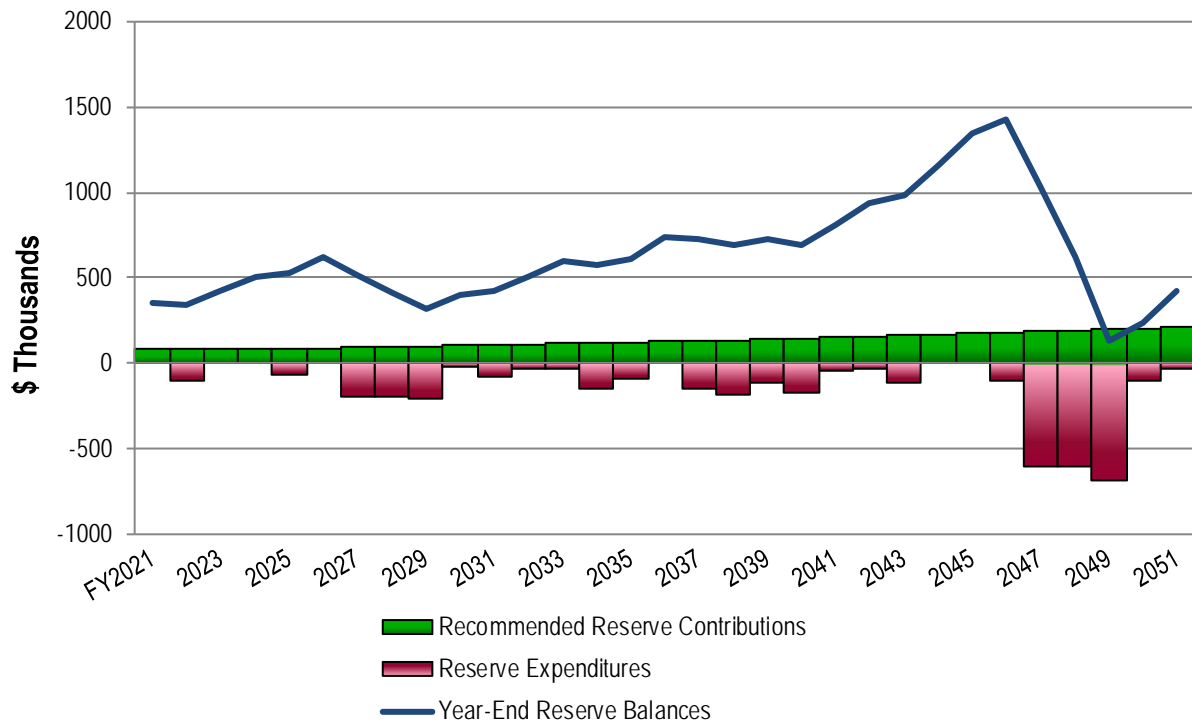
- \$266,239 as of April 30, 2022
- 2022 budgeted Reserve Contributions of \$90,000 (Being contributed at the end of the fiscal year per Management and the Board)
- A potential deficit in reserves might occur by 2029 based upon proposed 2022 annual reserve contribution of \$30,000 and the identified Reserve Expenditures.

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

- Adopt a reserve contribution of \$78,500 in 2022
- Inflationary increases through 2051, the limit of this study's Cash Flow Analysis
- 2022 Reserve Contribution of \$78,500 is equivalent to an average quarterly contribution of \$31.40 per homeowner.

Recommended Reserve Funding Table and Graph

Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)
2022	78,500	336,381	2032	110,500	508,023	2042	155,900	934,647
2023	81,200	420,220	2033	114,400	594,991	2043	161,400	984,688
2024	84,000	507,456	2034	118,400	570,028	2044	167,000	1,159,165
2025	86,900	526,062	2035	122,500	610,498	2045	172,800	1,340,684
2026	89,900	619,959	2036	126,800	742,015	2046	178,800	1,426,511
2027	93,000	516,566	2037	131,200	729,794	2047	185,100	1,018,459
2028	96,300	415,280	2038	135,800	687,827	2048	191,600	617,225
2029	99,700	315,491	2039	140,600	720,875	2049	198,300	132,822
2030	103,200	396,232	2040	145,500	695,685	2050	205,200	233,537
2031	106,800	427,780	2041	150,600	810,349	2051	212,400	421,388



Bozeman City Parks

Unaudited Cash Status of Reserve Fund: At the request of Management and the Board, we include costs associated with the city maintained park areas:

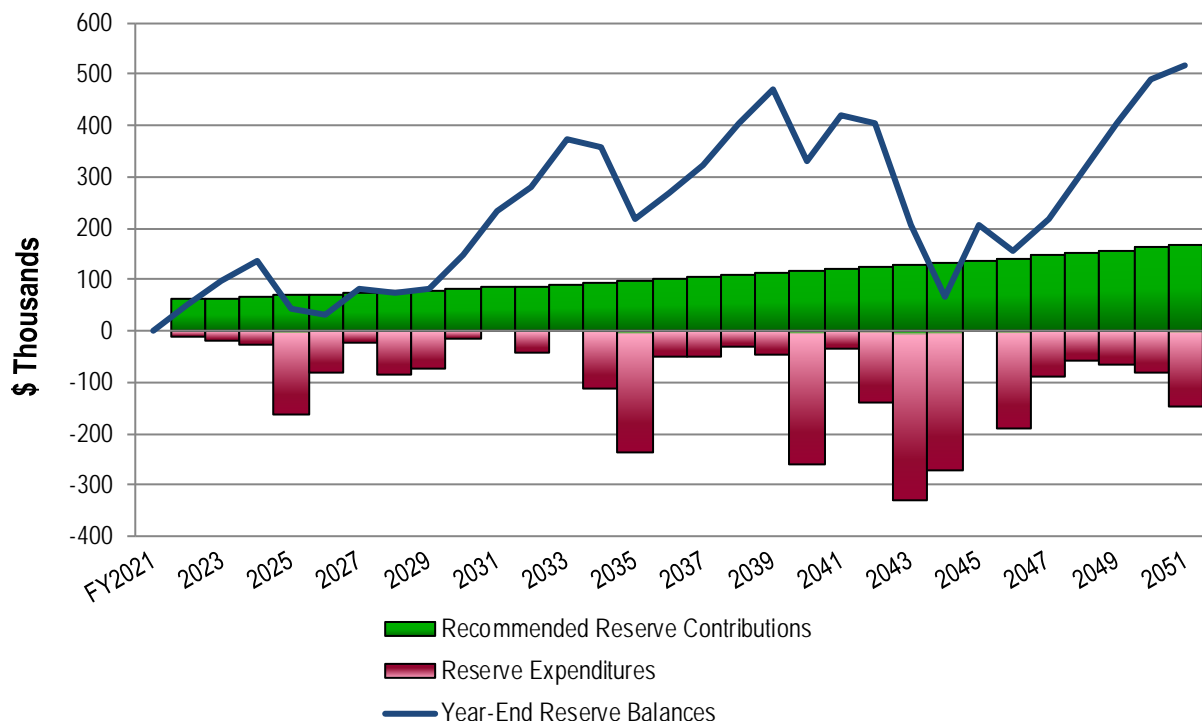
- \$0 as of April 30, 2022
- No reserves budgeted for 2021

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

- Adopt a reserve contribution of \$62,000 in 2022
- Inflationary increases through 2051, the limit of this study's Cash Flow Analysis
- 2022 Reserve Contribution of \$62,000 is equivalent to an average quarterly contribution of \$24.80 per homeowner.

Recommended Reserve Funding Table and Graph

Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)
2022	62,000	49,235	2032	87,600	280,077	2042	123,600	404,694
2023	64,200	95,730	2033	90,700	373,055	2043	127,900	205,403
2024	66,400	135,217	2034	93,900	356,707	2044	132,400	67,182
2025	68,700	41,585	2035	97,200	217,964	2045	137,000	205,132
2026	71,100	30,893	2036	100,600	269,165	2046	141,800	156,533
2027	73,600	81,899	2037	104,100	324,025	2047	146,800	217,316
2028	76,200	74,675	2038	107,700	403,754	2048	151,900	311,187
2029	78,900	82,357	2039	111,500	471,871	2049	157,200	405,382
2030	81,700	147,824	2040	115,400	331,303	2050	162,700	491,209
2031	84,600	233,755	2041	119,400	419,496	2051	168,400	516,947





2.RESERVE STUDY REPORT

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

Valley West Homeowners Association

Bozeman, Montana

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, June 6, 2022. We conducted previous inspections in 2013 and 2017.

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

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

IDENTIFICATION OF PROPERTY

Valley West:



The Lakes:



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

Our process of identification helps assure that future boards and the management team understand whether reserves, the operating budget or Homeowners fund certain replacements and assists in preparation of the annual budget. We derive these



segregated classes of property from our review of the information provided by the Association and through conversations with Management and the Board. These classes of property include:

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

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

- Valley West responsibility
- Limited useful life expectancies
- Predictable remaining useful life expectancies
- Replacement cost above a minimum threshold

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

- Concrete Stamped Crosswalks, Lakes at Valley West (Installed from 2015-2020 with a useful life of up to 40 years)
- Electrical Systems, Common
- Foundations, Pedestrian Bridges and Pavilions (Maintained by Bozeman City Parks)
- Irrigation System, Lakes at Valley West (Installed from 2015-2020 with a useful life of up to 40 years)
- Railings, Frames and Supports, Steel, Pedestrian Bridges and Pavilions (Maintained by Bozeman City Parks)
- Stormwater Infrastructure, Control Structures, Culverts, and Subsurface Piping



Concrete culvert at Maynard Ditch



Storm water pipe at retention basin



Control structure at Lakes ponds



Storm water culvert and rip rap

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 \$5,000 (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)
- Detention Basins, Valley West (With the benefit on ongoing maintenance and clearing events through the operating budget)
- Irrigation Systems, Subpanel Controllers and System Maintenance, Common Areas
- Landscape, Maintenance

- Signage, Monuments, Lakes as Valley West, Renovations (Management and the Board inform us of possible addition of common signage. Future updates will consider the addition of common elements)
- Stormwater Systems, Ongoing Maintenance, Inspections, and Interim Repairs
- Volleyball Court
- Other Repairs normally funded through the Operating Budget



Volleyball court



Detention basin at Valley West

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:

- Homes and Lots
- Driveways

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

- Light Poles and Fixtures (Montana Power Company)
- Sidewalks Adjacent to Streets (City of Bozeman)
- Street System (City of Bozeman)
- Subsurface Utilities (City of Bozeman)

Certain items have been designated as the responsibility of others to repair or replace. However, at the request of Management and the Board, we include the park elements on a separate cost center as capital expenses relating to park areas are at the discretion of the Board. Property Maintained by Bozeman City Parks relates to:

- Bridges, Shade Structures, and Pavilions
- Irrigation Systems
- Landscaping
- Playgrounds
- Ponds, East Lake Pond and Valley West Pond

- Site Furniture
- Stream, Maynard Ditch

The following figures were provided by the Board. The green areas depicting the landscape and pond areas maintained by Bozeman City Parks and the yellow areas the areas maintained by the Association:

The Lakes



Valley West



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
- 2022 local cost of replacement
 - Per unit
 - Per phase
 - Replacement of total quantity
- Percentage of future expenditures anticipated during the next 30 years
- Schedule of estimated future costs for each reserve component including inflation

Reserve Funding Plan

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

Five-Year Outlook

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

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

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

RESERVE EXPENDITURES

Valley West
Homeowners Association
Bozeman, Montana

Explanatory Notes:
1) 3.5% is the estimated Inflation Rate for estimating Future Replacement Costs.
2) FY2021 is Fiscal Year beginning July 1, 2021 and ending June 30, 2022.

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years		Costs, \$			Percentage of Future Expenditures	RUL = 0 FY2021	1 2022	2 2023	3 2024	4 2025	5 2026	6 2027	7 2028	8 2029	9 2030	10 2031	11 2032	12 2033	13 2034	14 2035	15 2036
						Useful	Remaining	Unit (2021)	Per Phase (2021)	Total (2021)																	
Valley West Elements																											
4.020	18,300	18,300	Square Yards	Asphalt Pavement, Alleys, Crack Repair and Patch	2022	3 to 5	1	1.00	18,300	18,300	5.7%	18,940							24,941						28,620		
4.040	18,300	6,100	Square Yards	Asphalt Pavement, Alleys, Mill and Overlay, Phased (Incl. Catch Basin Repairs)	2027	15 to 20	6 to 8	19.00	115,900	347,700	10.8%							142,471	147,457	152,618							
4.045	18,300	6,100	Square Yards	Asphalt Pavement, Alleys, Total Replacement, Partial (Incl. Catch Basin Repairs)	2047	15 to 20	26 to 28	36.00	219,600	658,800	40.5%																
4.138	6,900	765	Square Feet	Concrete Aprons, Alleys, Phased (2022 Increased in Scope)	2022	to 40	1 to 1	22.00	16,830	151,800	6.8%	34,838			19,313		20,689	21,413	22,162								
4.140	25,600	1,280	Square Feet	Concrete Sidewalks, Common Areas, Partial (2023 Reduced in Scope)	2022	to 65	1 to 30+	12.50	16,000	320,000	6.5%	8,280			18,361			20,357			22,570				25,024		
4.142	4,300	1,435	Square Feet	Concrete Stamped Crosswalks, Phased	2032	to 35	11 to 17	16.00	22,960	68,800	2.7%											33,521				37,165	
4.600	54	9	Each	Mailbox Stations, Phased	2025	to 25	4 to 14	2,300.00	20,700	124,200	5.5%				23,754		25,446		27,258		29,199			31,279		33,507	
4.700	1	1	Allowance	Ponds, Water Quality Improvements	2022	N/A	1	30,000.00	30,000	30,000	0.7%	30,000															
The Lakes at Valley West Elements																											
5.020	9,560	9,560	Square Yards	Asphalt Pavement, Alleys, Crack Repair and Patch	2027	3 to 5	6	1.00	9,560	9,560	2.7%							11,752				13,485				15,475	
5.040	9,560	3,187	Square Yards	Asphalt Pavement, Alleys, Mill and Overlay, Phased	2037	15 to 20	16 to 18	19.00	60,547	181,640	7.9%																
5.140	36,600	730	Square Feet	Concrete Sidewalks and Ribbon Curbs, Partial	2022	to 65	1 to 30+	12.50	9,125	457,500	3.8%	9,444			10,471			11,610			12,872				14,271		
5.560	38	38	Each	Light Poles and Fixtures, Six-Foot	2040	to 25	19	1,300.00	49,400	49,400	2.3%																
5.600	18	9	Each	Mailbox Stations, Phased	2041	to 25	20 to 22	2,300.00	20,700	41,400	2.1%																
5.730	2,050	820	Linear Feet	Pond, West Lake, Erosion Control and Sediment Removal, Partial	2034	15 to 20	13 to 30+	62.00	50,840	127,100	1.9%														79,512		
Anticipated Expenditures, By Year (\$4,115,121 over 30 years)												0	101,502	0	0	71,899	0	200,358	200,836	202,038	24,941	78,126	33,521	31,279	147,427	86,147	0

RESERVE EXPENDITURES

Valley West Homeowners Association Bozeman, Montana																										
Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years		Costs, \$			Percentage of Future Expenditures	16 2037	17 2038	18 2039	19 2040	20 2041	21 2042	22 2043	23 2044	24 2045	25 2046	26 2047	27 2048	28 2049	29 2050	30 2051
						Useful	Remaining	Unit (2021)	Per Phase (2021)	Total (2021)																
Valley West Elements																										
4.020	18,300	18,300	Square Yards	Asphalt Pavement, Alleys, Crack Repair and Patch	2022	3 to 5	1	1.00	18,300	18,300	5.7%		32,843			37,688			43,247					49,627		
4.040	18,300	6,100	Square Yards	Asphalt Pavement, Alleys, Mill and Overlay, Phased (Incl. Catch Basin Repairs)	2027	15 to 20	6 to 8	19.00	115,900	347,700	10.8%															
4.045	18,300	6,100	Square Yards	Asphalt Pavement, Alleys, Total Replacement, Partial (Incl. Catch Basin Repairs)	2047	15 to 20	26 to 28	36.00	219,600	658,800	40.5%										537,132	555,932	575,390			
4.138	6,900	765	Square Feet	Concrete Aprons, Alleys, Phased (2022 Increased in Scope)	2022	to 40	1 to 1	22.00	16,830	151,800	6.8%				32,356						41,166	42,607	44,098			
4.140	25,600	1,280	Square Feet	Concrete Sidewalks, Common Areas, Partial (2023 Reduced in Scope)	2022	to 65	1 to 30+	12.50	16,000	320,000	6.5%	27,744			30,760		34,104			37,812			41,923			
4.142	4,300	1,435	Square Feet	Concrete Stamped Crosswalks, Phased	2032	to 35	11 to 17	16.00	22,960	68,800	2.7%		41,206													
4.600	54	9	Each	Mailbox Stations, Phased	2025	to 25	4 to 14	2,300.00	20,700	124,200	5.5%													56,136		
4.700	1	1	Allowance	Ponds, Water Quality Improvements	2022	N/A	1	30,000.00	30,000	30,000	0.7%															
The Lakes at Valley West Elements																										
5.020	9,560	9,560	Square Yards	Asphalt Pavement, Alleys, Crack Repair and Patch	2027	3 to 5	6	1.00	9,560	9,560	2.7%						20,377				23,383				26,833	
5.040	9,560	3,187	Square Yards	Asphalt Pavement, Alleys, Mill and Overlay, Phased	2037	15 to 20	16 to 18	19.00	60,547	181,640	7.9%	104,987	108,662	112,465												
5.140	36,600	730	Square Feet	Concrete Sidewalks and Ribbon Curbs, Partial	2022	to 65	1 to 30+	12.50	9,125	457,500	3.8%	15,823			17,543		19,450			21,565			23,909			
5.560	38	38	Each	Light Poles and Fixtures, Six-Foot	2040	to 25	19	1,300.00	49,400	49,400	2.3%				94,972											
5.600	18	9	Each	Mailbox Stations, Phased	2041	to 25	20 to 22	2,300.00	20,700	41,400	2.1%				41,189		44,122									
5.730	2,050	820	Linear Feet	Pond, West Lake, Erosion Control and Sediment Removal, Partial	2034	15 to 20	13 to 30+	62.00	50,840	127,100	1.9%															
Anticipated Expenditures, By Year (\$4,115,121 over 30 years)												148,554	182,711	112,465	175,631	41,189	37,688	118,053	0	0	102,624	601,681	598,539	685,320	105,763	26,833

RESERVE FUNDING PLAN

CASH FLOW ANALYSIS		Individual Reserve Budgets & Cash Flows for the Next 30 Years															
Valley West																	
Homeowners Association																	
Bozeman, Montana		FY2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Reserves at Beginning of Year	(Note 1)	266,239	356,965	336,381	420,220	507,456	526,062	619,959	516,566	415,280	315,491	396,232	427,780	508,023	594,991	570,028	610,498
Total Recommended Reserve Contributions	(Note 2)	90,000	78,500	81,200	84,000	86,900	89,900	93,000	96,300	99,700	103,200	106,800	110,500	114,400	118,400	122,500	126,800
Estimated Interest Earned, During Year	(Note 3)	726	2,418	2,639	3,236	3,605	3,997	3,964	3,250	2,549	2,482	2,874	3,264	3,847	4,063	4,117	4,717
Anticipated Expenditures, By Year		0	(101,502)	0	0	(71,899)	0	(200,358)	(200,836)	(202,038)	(24,941)	(78,126)	(33,521)	(31,279)	(147,427)	(86,147)	0
Anticipated Reserves at Year End		<u>\$356,965</u>	<u>\$336,381</u>	<u>\$420,220</u>	<u>\$507,456</u>	<u>\$526,062</u>	<u>\$619,959</u>	<u>\$516,566</u>	<u>\$415,280</u>	<u>\$315,491</u>	<u>\$396,232</u>	<u>\$427,780</u>	<u>\$508,023</u>	<u>\$594,991</u>	<u>\$570,028</u>	<u>\$610,498</u>	<u>\$742,015</u>
Predicted Reserves based on 2022 funding level of:	\$30,000	356,965	287,711	319,830	352,174	312,594	344,887	176,348	6,149	(166,448)	(162,536)						

(continued)		Individual Reserve Budgets & Cash Flows for the Next 30 Years, Continued															
		2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	
Reserves at Beginning of Year		742,015	729,794	687,827	720,875	695,685	810,349	934,647	984,688	1,159,165	1,340,684	1,426,511	1,018,459	617,225	132,822	233,537	
Total Recommended Reserve Contributions		131,200	135,800	140,600	145,500	150,600	155,900	161,400	167,000	172,800	178,800	185,100	191,600	198,300	205,200	212,400	
Estimated Interest Earned, During Year		5,133	4,944	4,913	4,941	5,253	6,086	6,694	7,477	8,719	9,651	8,528	5,705	2,616	1,278	2,284	
Anticipated Expenditures, By Year		(148,554)	(182,711)	(112,465)	(175,631)	(41,189)	(37,688)	(118,053)	0	0	(102,624)	(601,681)	(598,539)	(685,320)	(105,763)	(26,833)	
Anticipated Reserves at Year End		<u>\$729,794</u>	<u>\$687,827</u>	<u>\$720,875</u>	<u>\$695,685</u>	<u>\$810,349</u>	<u>\$934,647</u>	<u>\$984,688</u>	<u>\$1,159,165</u>	<u>\$1,340,684</u>	<u>\$1,426,511</u>	<u>\$1,018,459</u>	<u>\$617,225</u>	<u>\$132,822</u>	<u>\$233,537</u>	<u>\$421,388</u>	
														(NOTE 5)		(NOTE 4)	

Explanatory Notes:

- 1) Year 2021 starting reserves are as of April 30, 2022; FY2021 starts July 1, 2021 and ends June 30, 2022.
- 2) Reserve Contributions for 2021 are budgeted; 2022 is the first year of recommended contributions.
- 3) 0.7% is the estimated annual rate of return on invested reserves; 2021 is a partial year of interest earned.
- 4) Accumulated year 2051 ending reserves consider the age, size, overall condition and complexity of the property.
- 5) Threshold Funding Year (reserve balance at critical point).

FIVE-YEAR OUTLOOK**Valley West
Homeowners Association
Bozeman, Montana**

Line Item	Reserve Component Inventory	RUL = 0 FY2021	1 2022	2 2023	3 2024	4 2025	5 2026
<u>Valley West Elements</u>							
4.020	Asphalt Pavement, Alleys, Crack Repair and Patch		18,940				
4.138	Concrete Aprons, Alleys, Phased (2022 Increased in Scope)		34,838			19,313	
4.140	Concrete Sidewalks, Common Areas, Partial (2023 Reduced in Scope)		8,280			18,361	
4.600	Mailbox Stations, Phased					23,754	
4.700	Ponds, Water Quality Improvements		30,000				
<u>The Lakes at Valley West Elements</u>							
5.140	Concrete Sidewalks and Ribbon Curbs, Partial		9,444			10,471	
Anticipated Expenditures, By Year (\$4,115,121 over 30 years)		0	101,502	0	0	71,899	0

Bozeman City Parks Elements
RESERVE EXPENDITURES

Years 2021 to 2036

Valley West Homeowners Association Bozeman, Montana											Explanatory Notes: 1) 3.5% is the estimated Inflation Rate for estimating Future Replacement Costs. 2) FY2021 is Fiscal Year beginning July 1, 2021 and ending June 30, 2022.																	
Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years		Costs, \$			Percentage of Future Expenditures	RUL = 0 FY2021	1 2022	2 2023	3 2024	4 2025	5 2026	6 2027	7 2028	8 2029	9 2030	10 2031	11 2032	12 2033	13 2034	14 2035	15 2036	
						Useful	Remaining	Unit (2021)	Per Phase (2021)	Total (2021)																		
Valley West Elements																												
4.060	850	850 Square Feet	Bridge Decks, Composite, Replacement	2027	20 to 25	6		22.00	18,700	18,700	2.5%							22,987										
4.085	1	1 Allowance	Bridges and Pavilions, Sealer Applications and Repairs	2023	to 3	2		12,000.00	12,000	12,000	7.8%		12,855				14,252		15,802		17,520					19,424		
4.086	2,690	2,690 Square Feet	Bridges and Pavilions, Roofs, Steel	2037	to 30	16		11.00	29,590	29,590	1.9%																	
4.410	2	1 Allowance	Irrigation System, Controls and Pumps, Phased	2022	to 15	1 to 8		12,500.00	12,500	25,000	4.0%	12,937						16,460								20,942		
4.420	98	25 Zones	Irrigation System, Phased	2040	to 40+	19 to 25		2,800.00	68,600	274,400	21.4%																	
4.500	1	1 Allowance	Landscape, Partial Replacements and Gravel Replenishment	2024	to 5	3		25,000.00	25,000	25,000	9.7%			27,718				32,920							39,099			
4.660	1	1 Allowance	Playground Equipment	2025	15 to 20	4		97,000.00	97,000	97,000	11.6%					111,310												
4.730	2,100	840 Linear Feet	Ponds, Erosion Control and Sediment Removal, Partial	2026	15 to 20	5 to 30+		62.00	52,080	130,200	7.6%						61,855											
4.820	1	1 Allowance	Site Amenities and Furniture	2025	15 to 20	4		45,000.00	45,000	45,000	5.4%				51,639													
4.830	1	1 Allowance	Stream, Control Structure	2036	to 35	15		18,000.00	18,000	18,000	1.1%																30,156	
4.835	6,000	600 Linear Feet	Stream, Erosion Control, Partial	2028	10 to 15	7 to 30+		110.00	66,000	660,000	7.7%							83,970										
The Lakes at Valley West Elements																												
5.510	2	1 Each	Irrigation System, Controls and Pumps	2030	to 15	9 to 11		12,500.00	12,500	25,000	3.4%									17,036		18,250						
5.600	1	1 Allowance	Pavilions, Sealer Applications and Repairs	2023	to 3	2		5,000.00	5,000	5,000	3.3%		5,356				5,938		6,584		7,300					8,093		
5.610	2,150	2,150 Square Feet	Pavilions, Roofs, Steel	2048	to 30	27		11.00	23,650	23,650	2.2%																	
5.660	1	1 Allowance	Playground Equipment	2035	15 to 20	14		110,000.00	110,000	110,000	6.5%															178,056		
5.730	1,900	760 Linear Feet	Ponds, East Lake, Erosion Control and Sediment Removal, Partial	2034	15 to 20	13 to 30+		62.00	47,120	117,800	2.7%													73,694				
5.800	1	1 Allowance	Site Furniture	2035	15 to 20	14		20,000.00	20,000	20,000	1.2%															32,374		
Anticipated Expenditures, By Year (\$2,738,080 over 30 years)												0	12,937	18,211	27,718	162,949	82,045	22,987	83,970	71,766	17,036	0	43,070	0	112,793	237,947	51,098	

Bozeman City Parks Elements

RESERVE EXPENDITURES

Years 2037 to 2051

Valley West Homeowners Association Bozeman, Montana				Estimated 1st Year of Event	Life Analysis, Years		Costs, \$			Percentage of Future Expenditures	16 2037	17 2038	18 2039	19 2040	20 2041	21 2042	22 2043	23 2044	24 2045	25 2046	26 2047	27 2048	28 2049	29 2050	30 2051		
Line Item	Total Quantity	Per Phase Quantity	Units		Reserve Component Inventory	Useful	Remaining	Unit (2021)	Per Phase (2021)																	Total (2021)	
Valley West Elements																											
4.060	850	850	Square Feet	Bridge Decks, Composite, Replacement	2027	20 to 25	6	22.00	18,700	18,700	2.5%															45,739	
4.085	1	1	Allowance	Bridges and Pavilions, Sealer Applications and Repairs	2023	to 3	2	12,000.00	12,000	12,000	7.8%		21,536		23,877			26,473			29,352				32,543		
4.086	2,690	2,690	Square Feet	Bridges and Pavilions, Roofs, Steel	2037	to 30	16	11.00	29,590	29,590	1.9%	51,309															
4.410	2	1	Allowance	Irrigation System, Controls and Pumps, Phased	2022	to 15	1 to 8	12,500.00	12,500	25,000	4.0%						26,644								33,898		
4.420	98	25	Zones	Irrigation System, Phased	2040	to 40+	19 to 25	2,800.00	68,600	274,400	21.4%				131,884		141,277		151,339		162,119						
4.500	1	1	Allowance	Landscape, Partial Replacements and Gravel Replenishment	2024	to 5	3	25,000.00	25,000	25,000	9.7%			46,437				55,153					65,504				
4.660	1	1	Allowance	Playground Equipment	2025	15 to 20	4	97,000.00	97,000	97,000	11.6%						206,757										
4.730	2,100	840	Linear Feet	Ponds, Erosion Control and Sediment Removal, Partial	2026	15 to 20	5 to 30+	62.00	52,080	130,200	7.6%														146,178		
4.820	1	1	Allowance	Site Amenities and Furniture	2025	15 to 20	4	45,000.00	45,000	45,000	5.4%						95,918										
4.830	1	1	Allowance	Stream, Control Structure	2036	to 35	15	18,000.00	18,000	18,000	1.1%																
4.835	6,000	600	Linear Feet	Stream, Erosion Control, Partial	2028	10 to 15	7 to 30+	110.00	66,000	660,000	7.7%				126,885												
The Lakes at Valley West Elements																											
5.510	2	1	Each	Irrigation System, Controls and Pumps	2030	to 15	9 to 11	12,500.00	12,500	25,000	3.4%							27,576		29,541							
5.600	1	1	Allowance	Pavilions, Sealer Applications and Repairs	2023	to 3	2	5,000.00	5,000	5,000	3.3%		8,973		9,949			11,031			12,230			13,559			
5.610	2,150	2,150	Square Feet	Pavilions, Roofs, Steel	2048	to 30	27	11.00	23,650	23,650	2.2%											59,872					
5.660	1	1	Allowance	Playground Equipment	2035	15 to 20	14	110,000.00	110,000	110,000	6.5%																
5.730	1,900	760	Linear Feet	Ponds, East Lake, Erosion Control and Sediment Removal, Partial	2034	15 to 20	13 to 30+	62.00	47,120	117,800	2.7%																
5.800	1	1	Allowance	Site Furniture	2035	15 to 20	14	20,000.00	20,000	20,000	1.2%																
Anticipated Expenditures, By Year (\$2,738,080 over 30 years)											51,309	30,509	46,437	258,769	33,826	141,277	329,319	271,572	0	191,660	87,321	59,872	65,504	80,000	146,178		

RESERVE FUNDING PLAN

Bozeman City Parks Elements

CASH FLOW ANALYSIS

Valley West

Homeowners Association

Bozeman, Montana

		Individual Reserve Budgets & Cash Flows for the Next 30 Years															
		FY2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Reserves at Beginning of Year	(Note 1)	N/A	0	49,235	95,730	135,217	41,585	30,893	81,899	74,675	82,357	147,824	233,755	280,077	373,055	356,707	217,964
Total Recommended Reserve Contributions	(Note 2)	N/A	62,000	64,200	66,400	68,700	71,100	73,600	76,200	78,900	81,700	84,600	87,600	90,700	93,900	97,200	100,600
Estimated Interest Earned, During Year	(Note 3)	N/A	172	506	805	617	253	393	546	548	803	1,331	1,792	2,278	2,545	2,004	1,699
Anticipated Expenditures, By Year		N/A	(12,937)	(18,211)	(27,718)	(162,949)	(82,045)	(22,987)	(83,970)	(71,766)	(17,036)	0	(43,070)	0	(112,793)	(237,947)	(51,098)
Anticipated Reserves at Year End		N/A	\$49,235	\$95,730	\$135,217	\$41,585	\$30,893	\$81,899	\$74,675	\$82,357	\$147,824	\$233,755	\$280,077	\$373,055	\$356,707	\$217,964	\$269,165
							(NOTE 5)										

(continued)

		Individual Reserve Budgets & Cash Flows for the Next 30 Years, Continued														
		2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051
Reserves at Beginning of Year		269,165	324,025	403,754	471,871	331,303	419,496	404,694	205,403	67,182	205,132	156,533	217,316	311,187	405,382	491,209
Total Recommended Reserve Contributions		104,100	107,700	111,500	115,400	119,400	123,600	127,900	132,400	137,000	141,800	146,800	151,900	157,200	162,700	168,400
Estimated Interest Earned, During Year		2,069	2,538	3,054	2,801	2,619	2,875	2,128	951	950	1,261	1,304	1,843	2,499	3,127	3,516
Anticipated Expenditures, By Year		(51,309)	(30,509)	(46,437)	(258,769)	(33,826)	(141,277)	(329,319)	(271,572)	0	(191,660)	(87,321)	(59,872)	(65,504)	(80,000)	(146,178)
Anticipated Reserves at Year End		\$324,025	\$403,754	\$471,871	\$331,303	\$419,496	\$404,694	\$205,403	\$67,182	\$205,132	\$156,533	\$217,316	\$311,187	\$405,382	\$491,209	\$516,947
									(NOTE 5)							(NOTE 4)

Explanatory Notes:

- 1) Year 2021 starting reserves are as of April 30, 2022; FY2021 starts July 1, 2021 and ends June 30, 2022.
- 2) 2022 is the first year of recommended contributions.
- 3) 0.7% is the estimated annual rate of return on invested reserves; 2021 is a partial year of interest earned.
- 4) Accumulated year 2051 ending reserves consider the age, size, overall condition and complexity of the property.
- 5) Threshold Funding Years (reserve balance at critical point).

Bozeman City Parks Elements FIVE-YEAR OUTLOOK

Valley West Homeowners Association Bozeman, Montana

Line Item	Reserve Component Inventory	RUL = 0 FY2021	1 2022	2 2023	3 2024	4 2025	5 2026
<u>Valley West Elements</u>							
4.085	Bridges and Pavilions, Sealer Applications and Repairs			12,855			14,252
4.410	Irrigation System, Controls and Pumps, Phased		12,937				
4.500	Landscape, Partial Replacements and Gravel Replenishment				27,718		
4.660	Playground Equipment					111,310	
4.730	Ponds, Erosion Control and Sediment Removal, Partial						61,855
4.820	Site Amenities and Furniture					51,639	
<u>The Lakes at Valley West Elements</u>							
5.600	Pavilions, Sealer Applications and Repairs			5,356			5,938
Anticipated Expenditures, By Year (\$2,738,080 over 30 years)		0	12,937	18,211	27,718	162,949	82,045

4. RESERVE COMPONENT DETAIL

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

Valley West Elements

Asphalt Pavement, Repaving

Line Items: 4.020, 4.040, and 4.045

Quantity: Approximately 18,300 square yards at the private alleys throughout Valley West. The following figure depicts the locations of the alleys throughout the community:



History: The alley pavement is original to construction of Valley West from 2001 through 2006. The Association has conducted isolated patch repairs to date with no recent pavement repairs reported. Management and the Board inform us the Association is

considering a seal coat application in the near term. We recommend the Association conducts patch repairs in lieu of seal coat applications, we opine this treatment does not significantly extend the life of the pavement.

Condition: Good to fair overall based on the age of the pavement and frequency of traffic. We note areas of settlement, centerline drainage deterioration, cracks and ravels.



Asphalt pavement alley overview



Pavement settlement and ravels



Pavement deterioration near apron



Pavement settlement



Onset of pothole formation



Pavement settlement near manhole cover



Centerline drainage at alley



Pavement cracks



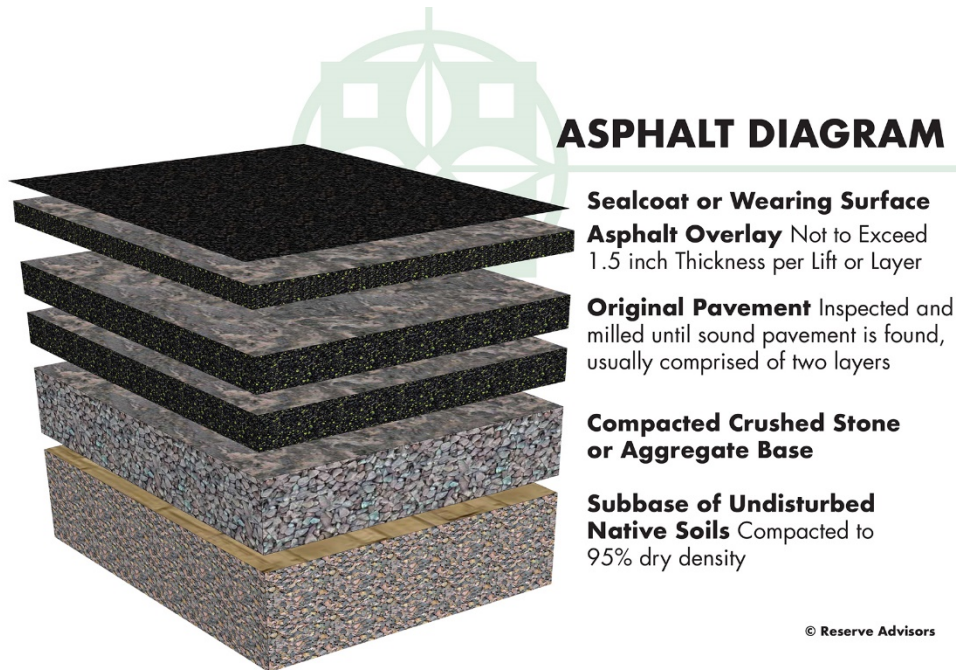
Poor drainage due to pavement settlement near catch basin



Pavement settlement and deterioration near apron

Useful Life: 15- to 20-years with the benefit of crack repair and patch events every three- to five-years

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 Valley West:



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 Valley West.

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

- Annually:
 - Inspect for settlement, large cracks and trip hazards, and ensure proper drainage
 - Repair areas which could cause vehicular damage such as potholes

- As needed:
 - Perform crack repairs and patching

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

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

Concrete Aprons

Line Item: 4.108

Quantity: Approximately 6,900 square feet at the alley entrances (This quantity includes the public sidewalk, which we anticipate requiring replacement in coordination with replacement of the aprons)

Condition: Fair to poor overall with frequent cracks and spalls noted throughout the community. We recommend near term partial replacements are conducted, and the Association plans to conduct partial replacements in coordination with repaving events at the alleys. We also include an increased anticipated scope for near term repairs.



Cracks at apron



Cracks and spalls at apron



Large settlement cracks at apron



Cracks and spalls at apron



Cracks and spalls at apron



Cracks at apron

Useful Life: Up to 40 years although interim deterioration of areas is common

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

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

Priority/Criticality: Per Board discretion

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

Concrete Sidewalks

Line Item: 4.140

Quantity: Approximately 25,600 square feet at the pocket parks. This quantity includes the mailbox pads and excludes the concrete pads at the pavilions which are maintained by Bozeman City Parks.

Condition: Good to fair overall isolated areas of settlement, cracks, and trip hazards noted.



Previous sidewalk repair



Sidewalk settlement at mailbox station pad at Cascade Street



Sidewalk trip hazard



Sidewalk overview at pocket park

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

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

- Annually:
 - Inspect and repair major cracks, spalls and trip hazards
 - Mark with orange safety paint prior to replacement or repair

- Repair or perform concrete leveling in areas in immediate need of repair or possible safety hazard

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We estimate that up to 12,800 square feet of concrete sidewalks, or fifty percent (50%) of the total, will require replacement during the next 30 years. Based on the observed current condition, we reduce the expected amount of partial repairs in the near term. We recommend the Association coordinates this work with repairs at the concrete aprons.

Concrete Stamped Crosswalks

Line Item: 4.142

Quantity: Approximately 4,300 square feet at the community streets and alleys

Condition: Good to fair overall with cracks and spalls evident



Sidewalk cracks



Sidewalk spalls



Stamped and colored sidewalk at alley

Useful Life: Up to 35 years for complete replacement

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We include for complete replacement of these areas due to aesthetic concerns and to maintain a consistent look throughout the community.

Mailbox Stations

Line Item: 4.600

Quantity: Approximately 54 stations located throughout Valley West

History: Installed from 2001 through 2006

Condition: Fair overall



Mailbox stations



Mailbox station finish deterioration



Useful Life: Up to 25 years

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

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

Priority/Criticality: Per Board discretion

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

Ponds, Water Quality Improvements

Line Item: 4.700

Component Detail Notes: Based on information provided by the Board, we include an allowance of \$30,000 in 2022 for water quality improvement events at the ponds at Valley West. This work is planned to include shoreline cleaning, aeration installation, and chemical treatments. We recommend future events are funded through the operating budget. We include for capital expenses at the ponds on the **Bozeman City Parks Elements** cost center.

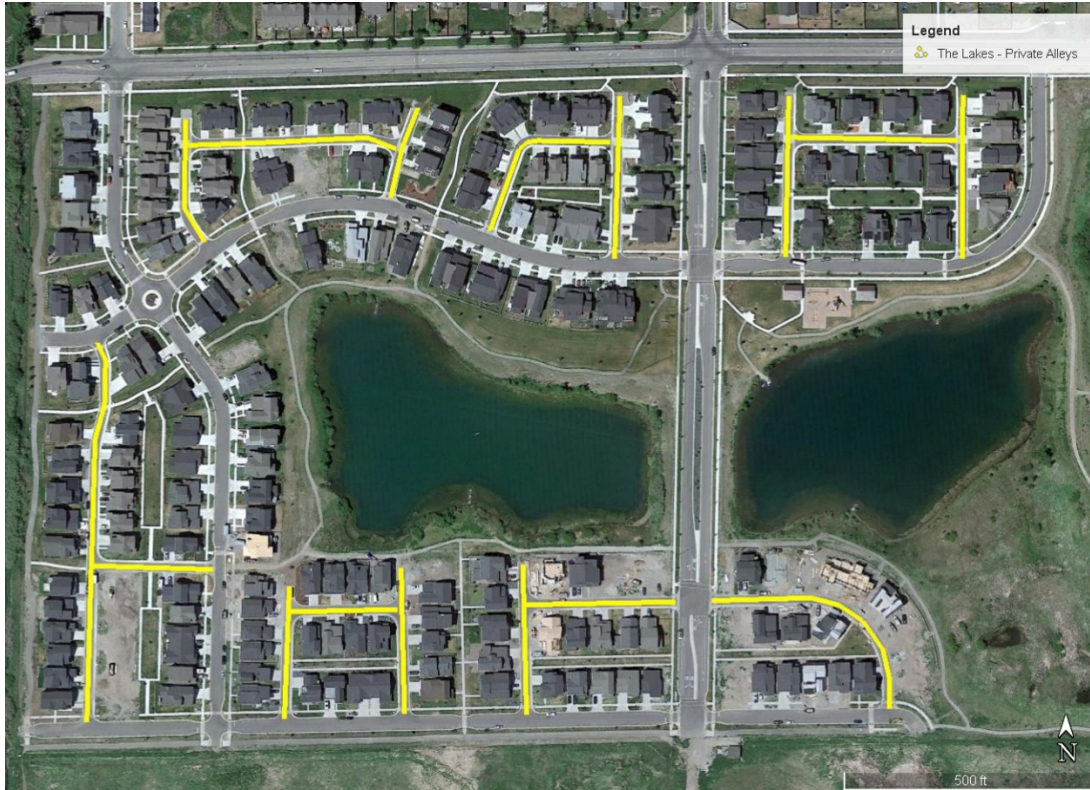
Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.

The Lakes Elements

Asphalt Pavement, Repaving

Line Items: 5.020, 5.040, 5.140

Quantity: Approximately 9,560 square yards at the private alleys throughout Valley West. The following figure depicts the locations of the alleys throughout the community:



History: The alley pavement is original to construction of The Lakes from 2015 to approximately 2020.

Condition: Good overall with areas of observed poor drainage following a rain event



Areas of poor drainage at Deft Way



Deft Way pavement overview



Vermeer Lane pavement overview



Pavement settlement near apron



Arnhem Way pavement overview



Areas of poor drainage at Herstal Way intersection



Herstal Way pavement overview



Leiden Lane pavement overview



Debour Lane pavement overview



Vahl Way pavement overview

Useful Life: 15- to 20-years with the benefit of crack repair and patch events every three-to five-years

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

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

Concrete Sidewalks and Ribbon Curbs

Line Item: 4.140

Quantity: Approximately 36,600 square feet at the sidewalks and ribbon curbs along the private alleys and the sidewalks at the private pocket parks.

Condition: Good to fair overall with areas of premature cracking and settlement



Sidewalk cracks at Arnhem Way



Curb cracks and spalls at Deft Way



Cracks and spalls at sidewalk at Leiden Lane



Ribbon curb



Sidewalks overview at pocket park



Stamped concrete apron at alley (Long lived)

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 7,300 square feet of concrete sidewalks, or twenty percent (20%) of the total, will require replacement during the next 30 years.

Light Poles and Fixtures

Line Item: 4.560

Quantity: Approximately 38 poles with light fixtures at the private alleys

History: Original

Condition: Good overall



Light pole and fixture

Useful Life: Up to 25 years

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

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

Priority/Criticality: Per Board discretion

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

Mailbox Stations

Line Item: 4.600

Quantity: 18 stations

History: Original

Condition: Good overall



Mailbox stations

Useful Life: Up to 25 years

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

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

Priority/Criticality: Per Board discretion

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

Pond, West Lake, Sediment Removal and Erosion Control

Line Item: 5.730

Quantity: Approximately 23,500 square yards of water surface area and approximately 2,050 linear feet at the West Lake

History: No reports of erosion control or sediment removal events to date



West Lake pond overview



West Lake pond overview

Useful Life: Shorelines are subject to fluctuations in water levels, increased plant growth and migrating storm and ground water resulting in the need for erosion control measures up to every 15- to 20-years.

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

The steep shoreline embankments are likely to exacerbate soil movement and erosion. The use and maintenance of landscape, natural vegetation and/or stone rip rap along the pond shoreline will help maintain an attractive appearance and prevent soil erosion.

Shoreline plantings are referred to as buffer zones. Buffer zones provide the following advantages:

- Control insects naturally
- Create an aesthetically pleasing shoreline
- Enhance water infiltration and storage
- Filter nutrients and pollutants
- Increase fish and wildlife habitat
- Reduce lawn maintenance
- Stabilize shoreline and reduce erosion
- Trap sediments

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

- Annually:

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

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

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We recommend the Association plan to install a combination of plantings and rip rap around the pond along 760 linear feet, or approximately forty percent (40%), of the shoreline per event.

For reserve budgeting purposes, we also estimate the need to remove an average depth of one yard from less than one percent of the surface area, primarily near storm water structures. However, the actual volume of material to remove may vary dependent upon an invasive analysis at the time of removal. A visual inspection of a body of water cannot reveal the amount of accumulated silt. This is especially true on larger bodies of water. It is therefore inaccurate to assume an entire body of water will require sediment removal. It is more cost effective to spot remove in areas of intense silt accumulation as noted through bathymetric surveys. The amount or depth of silt is determined through prodding into the silt until a relatively solid base is found or through bathymetric surveys. A bathymetric survey establishes a base of data about the depth of the body of water over many locations against which the data of future surveys is compared. These invasive procedures are beyond the scope of a Reserve Study and require multiple visits to the site. We recommend Valley West contract with a local engineer for periodic bathymetric surveys. Future updates of the Reserve Study can incorporate future anticipated expenditures based on the results of the bathymetric surveys.

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

Bozeman City Park Elements

Valley West Elements

Bridges and Pavilions

Line Items: 4.060, 4.085, and 4.086

Quantity: The park at Valley West includes three wood frame pedestrian bridges with approximately 850 square feet of composite decks and four pavilion structures. The

structures comprise a total of approximately 4,300 linear feet of wood frames, and approximately 2,690 square feet of steel roofing

History: The structures and roofs are original, with the bridges and pavilion wood portions sealed from 2016 to 2017

Condition: Good overall with no significant visible deterioration evident



Corrugated steel roofing at pavilion



Pavilions overview



North bridge overview



Bridge steel support and wood support joist



Corrugated steel roof



Center bridge overview



Steel and wood structure at bridge



Composite decking at bridge



South bridge

Useful Life: Replacement of the composite decks every 20- to 25-years, application of sealant with partial repairs every three years, and replacement of the steel roofs at 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.

Irrigation System, Replacement

Line Items: 4.410 and 4.420

Quantity: Two controllers with pumps, and approximately 98 total zones at the park areas

History and Condition: The system is primarily original. The Board informs us of a possible need for near term upgrades at the sub-panels and main control panel. Updates of this Reserve Study will consider possible changes in the scope and times of component replacements.



Irrigation pump and controller at Valley West

Useful Life: Up to and beyond 40 years with replacement of the pumps and controllers every 15 years

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

- Controllers
- Electronic controls (timer)
- Impact rotors
- Network of supply pipes
- Pumps
- Pop-up heads
- Valves

The irrigation system will require interim and partial replacements of the system network supply pipes and other components as normal maintenance to maximize the useful life of the irrigation system.

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

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

Priority/Criticality: Per Board discretion

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

Landscape

Line Item: 4.500

Component Detail Notes: The public park at Valley West contains a large quantity of trees, shrubbery and other landscape elements. The park also contains approximately 32,900 square feet of gravel walking paths that are located near the pond and creek. Replacement of these elements is an ongoing need. Large amounts of landscape may need replacement due to disease, drought or other forces of nature. If the cost of removal and replacement is substantial, funding from reserves is logical. The Association may also desire to periodically update the appearance of the community through major improvements to the landscape.

Useful Life: We include a landscape allowance for partial replacements every five years.

Priority/Criticality: Per Board discretion

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

Playground Equipment

Line Item: 4.660

History: Original

Condition: Good to fair overall



Playground equipment



Playground equipment



Finish deterioration and minor fastener rust

Useful Life: 15- to 20-years

Component Detail Notes: Safety is the major purpose for maintaining playground equipment. We recommend an annual inspection of the playground equipment to identify and repair as normal maintenance loose connections and fasteners or damaged elements. We recommend the use of a specialist for the design or replacement of the playground equipment environment.

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

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

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We include an allowance in the unit cost for replacement of the safety surface and border.

Ponds, Erosion Control and Sediment Removal

Line Items: 4.710 and 4.730

Quantity: Approximately 2,100 linear feet of natural vegetation and 17,000 square yards of surface area at the East Lake

History: Previous history of algae blooms and muskrat burrowing. The Association plans to conduct water quality improvements in 2022 funded via reserves. We include for this expense on the main HOA **Reserve Funding Plan** and recommend future events are funded through the operating budget.



Valley West pond overview



Pond shoreline



Shoreline erosion at east embankment



Shoreline plantings



Sediment accumulation

Useful Life: Shorelines are subject to fluctuations in water levels, increased plant growth and migrating storm and ground water resulting in the need for erosion control measures up to every 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. We recommend the Association plan to install a combination of plantings and rip rap around the ponds along 840 linear feet, or approximately forty percent (40%), of the shoreline with limited allowances for minor sediment removal. For reserve budgeting purposes, we also estimate the need to remove an average depth of one yard from less than one percent of the surface area, primarily near storm water structures. Updates of this Reserve Study will consider possible changes in the scope and times of component replacements.

Site Amenities and Furniture

Line Item: 4.820

Quantity:

- Benches
- Bike racks
- Pet waste stations
- Picnic tables
- Trash receptacles
- Walking path markers
- Grills

History: Varied ages, with the majority of the site furniture likely being original

Condition: Fair overall



Walking path marker



Site furniture



Site furniture



Site furniture

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.

Stream, Erosion Control

Line Items: 4.830 and 4.835

Quantity: Approximately 6,000 linear feet of natural vegetation shorelines at the stream (Maynard Ditch) that passes through the community

History: The Association conducted approximately \$100,000 in stream erosion control measures from 2018 through 2020. This work included shoreline stabilization work at 12 locations primarily at the stream switchbacks.

Condition: Good to fair overall with areas of minor shoreline erosion noted



Stream overview (Maynard Ditch)



Previous shoreline stabilization repair



Minor erosion near bridge



Sluice gate control structure



Shoreline at switchback



Areas of minor shoreline erosion near bridge

Useful Life: Based on the history of capital repairs at the stream, we recommend the Association budgets for erosion control measures every 10- to 15-years with replacement of the sluice gate control structure at 35 years.

Component Detail Notes: The steep shoreline embankments are likely to exacerbate soil movement and erosion. The use and maintenance of landscape, natural vegetation and/or stone rip rap along the stream shoreline will help maintain an attractive appearance and prevent soil erosion.

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

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We recommend the Association plan to install a soil geogrid system and/or rip rap at up to 600 linear feet, or ten percent (10%) of the shorelines with each event. The estimate of cost is based on historical information provided by Management and the Board.

The Lakes Elements

Irrigation System, Replacement

Line Items: 4.410 and 4.420

Quantity: Two controllers with pumps at The Lakes irrigation system

History and Condition: The system is primarily original.



Irrigation pump and controls at The Lakes

Useful Life: Up to and beyond 40 years with replacement. Therefore, we consider the irrigation system at The Lakes to be long lived. We recommend replacement of the pumps and controllers every 15 years

Priority/Criticality: Per Board discretion

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

Pavilions

Line Items: 5.600 and 5.610

Quantity: The public park at The Lakes includes two wood and steel frame pavilions with approximately 2,150 square feet of steel roofing

History: The pavilions were constructed in approximately 2018

Condition: Good overall with no significant visible deterioration evident



Corrugated metal roofing



Steel and wood framing



Playground shade structure

Useful Life: Application of sealant with partial repairs every three years, and replacement of the steel roofs at 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.

Playground Equipment

Line Item: 4.660

History: Original

Condition: Good overall



Playground equipment



Playground equipment

Useful Life: 15- to 20-years

Component Detail Notes: Safety is the major purpose for maintaining playground equipment. We recommend an annual inspection of the playground equipment to identify and repair as normal maintenance loose connections and fasteners or damaged elements. We recommend the use of a specialist for the design or replacement of the playground equipment environment.

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

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

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We include an allowance in the unit cost for replacement of the safety surface and border.

Pond, East Lake, Erosion Control and Sediment Removal

Line Item: 5.730

Quantity: Approximately 1,900 linear feet of natural vegetation and 23,500 square yards of surface area at the East Lake

History: No reports of erosion control or sediment removal events to date



East Lake shoreline



East Lakes pond overview

Useful Life: Shorelines are subject to fluctuations in water levels, increased plant growth and migrating storm and ground water resulting in the need for erosion control measures up to every 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. We recommend the Association plan to install a combination of plantings and rip rap around the ponds along 760 linear feet, or approximately forty percent (40%), of the shoreline with limited allowances for minor sediment removal. For reserve budgeting purposes, we also estimate the need to remove an average depth of one yard from less than one percent of the surface area, primarily near storm water structures. Updates of this Reserve Study will consider possible changes in the scope and times of component replacements.

Site Amenities and Furniture

Line Item: 4.820

Quantity:

- Benches
- Pet waste stations
- Picnic tables
- Trash receptacles

History: Original

Condition: Good overall



Site furniture



Site furniture

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.

Reserve Study Update

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

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

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

5.METHODOLOGY

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

Valley West 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 quarterly reserve assessments annually adjusted upward for inflation to increase reserves to fund the expected major future expenditures
4. Special assessments

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

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

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

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.

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

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

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

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

6. CREDENTIALS

HISTORY AND DEPTH OF SERVICE

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

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

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

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

TOTAL STAFF INVOLVEMENT

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

OUR GOAL

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

VAST EXPERIENCE WITH A VARIETY OF BUILDINGS

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

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

OLD TO NEW

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

TANNER A. OLDENBURGER, PE, RS
Vice President of Engineering

CURRENT CLIENT SERVICES

Tanner A. Oldenburger, a Professional Civil Engineer, is an Advisor for Reserve Advisors. Mr. Oldenburger is responsible for the inspection and analysis of the condition of clients' properties, and recommending engineering solutions to prolong the lives of the components. He also forecasts capital expenditures for the repair and/or replacement of the property components and prepares technical reports on assignments. He is responsible for conducting Life Cycle Cost Analyses and Capital Replacement Forecast services and the preparation of Reserve Study Reports for condominiums, townhomes and homeowner associations.



The following is a partial list of over 750 clients served by Tanner Oldenburger demonstrating his breadth of experiential knowledge of community associations in construction, remediation procedures and related buildings systems.

North Star Lofts Owner's Association - Located in the historic Mill District in Minneapolis, Minnesota, this distinctive building contains 37 loft-style condominiums in an eight-story building. The building was originally a blanket factory in the 1920's and was converted to residential units in the late 1990's. The building exterior comprises masonry walls, rooftop decks and a historically preserved tower and sign.

MacLaren Hill Condominium Association - This development contains a combination of three apartment-style buildings and eight townhome style buildings located in St. Paul, Minnesota. This Association maintains a shared ownership agreement between the two building types that include all the property site and garage elements.

Portland Tower Association - This 17-story high-rise in downtown Minneapolis, Minnesota includes rooftop deck, curtain wall exterior and parking garage. The building also utilizes a high-efficiency central HVAC system with 22 variable frequency drives.

Bearpath Homeowners Association - Located in Eden Prairie, Minnesota, this exclusive community comprises four cost centers for the single family homes, golf villas, fairway villas and townhomes.. The Association maintains the villa and townhome exterior building elements as well as a gate house and approximately four miles of private streets.

Cochran Park Condominium Association - Located in St. Paul, Minnesota, these two distinguished condominium buildings were constructed in 1914. The Association maintains garage structures, the stucco exteriors and clay tile mansard roof, as well as the common electrical and piping systems throughout the buildings.

PRIOR RELEVANT EXPERIENCE

Before joining Reserve Advisors, Mr. Oldenburger attended Montana State University in Bozeman, Montana where he attained his Bachelor of Science degree in Civil Engineering and his Masters of Science degree in Civil Engineering with a focus on Structural Engineering. His relevant employment history includes working for the structural design team at Compass Consulting Engineers. He was responsible for the design and analysis of custom residential and commercial projects throughout the Northwest.

EDUCATION

Montana State University - B.S. Civil Engineering
Montana State University - M.S. Civil Engineering

PROFESSIONAL AFFILIATIONS/DESIGNATIONS

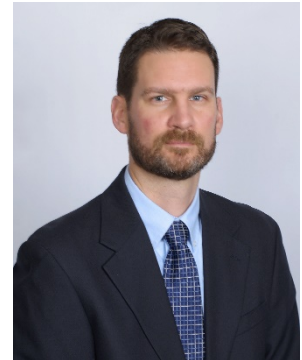
Professional Engineering License (PE) – Minnesota
Reserve Specialist (RS) - Community Associations Institute

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

CURRENT CLIENT SERVICES

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

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



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

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

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

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

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

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

PRIOR RELEVANT EXPERIENCE

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

EDUCATION

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

PROFESSIONAL AFFILIATIONS/DESIGNATIONS

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

Reserve Specialist (RS) - Community Associations Institute

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

RESOURCES

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

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

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

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

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

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

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

7. DEFINITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

8. PROFESSIONAL SERVICE CONDITIONS

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

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

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

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

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

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

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

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

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