

# Millward Estates Condominium Association

September 17, 2024 • Lewisburg, PA

FULL RESERVE STUDY



Millward Estates Condominium Association  
Lewisburg, Pennsylvania

Dear Board of Directors of Millward Estates Condominium Association:

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Full Reserve Study* of Millward Estates Condominium Association in Lewisburg, Pennsylvania and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, September 17, 2024.

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

An ongoing review by the Board and an Update of this Reserve Study are necessary to ensure an equitable funding plan since a Reserve Study is a snapshot in time. We recommend the Board budget for an Update to this Reserve Study in two- to three-years. We look forward to continuing to help Millward Estates Condominium Association plan for a successful future.

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

Respectfully submitted on October 14, 2024 by

*Reserve Advisors, LLC*

Visual Inspection and Report by: Jonny P. Sileo  
Review by: Jon R. Walker, RS<sup>1</sup>, Regional Engineering Manager  
Alan M. Ebert, RS, PRA<sup>2</sup>, 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:** Millward Estates Condominium Association (Millward Estates)

**Location:** Lewisburg, Pennsylvania

**Reference:** 241832

**Property Basics:** Millward Estates Condominium Association is an apartment style development which consists of 28 units in seven two-story buildings. The buildings were built in 1987.

**Reserve Components Identified:** 14 Reserve Components.

**Inspection Date:** September 17, 2024.

**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 2048 due to the sediment removal of the pond.

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

- Current and future local costs of replacement
- 2.7% anticipated annual rate of return on invested reserves
- 3.0% future Inflation Rate for estimating Future Replacement Costs

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

**Unaudited Cash Status of Reserve Fund:**

- \$43,164 as of June 30, 2024
- 2024 budgeted Reserve Contributions of \$19,992

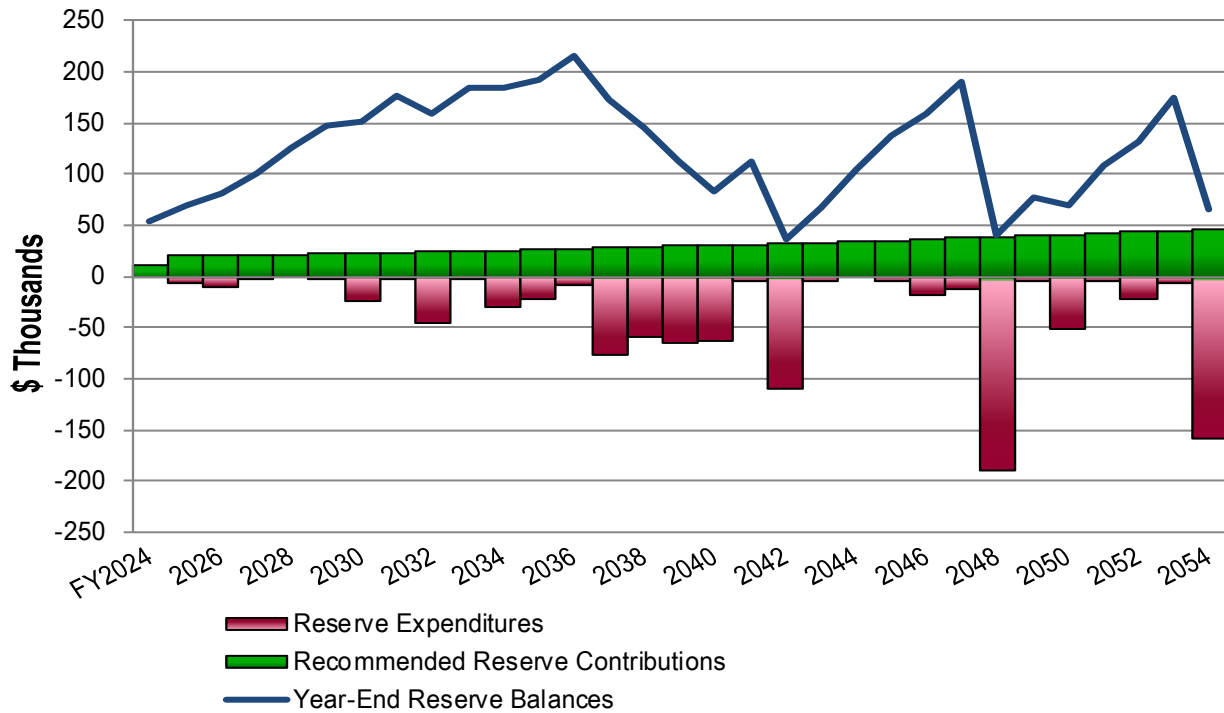
**Recommended Reserve Funding:** We recommend the following in order to achieve a stable and equitable Cash Flow Methodology Funding Plan:

- Increase Reserve Contributions to \$20,000 in 2025
- Stable contributions of \$20,000 in 2026
- Inflationary increases thereafter through 2054, the limit of this study's Cash Flow Analysis
- Initial adjustment in Reserve Contributions of \$8 represents an average monthly increase of \$0.02 per owner and about a less than one percent (0.0%) adjustment in the 2024 total Operating Budget of \$77,616.



# Millward Estates Recommended Reserve Funding Table and Graph

Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)
2025	20,000	68,658	2035	26,100	192,327	2045	35,100	137,180
2026	20,000	80,643	2036	26,900	215,246	2046	36,200	159,260
2027	20,600	100,930	2037	27,700	172,090	2047	37,300	189,362
2028	21,200	125,141	2038	28,500	145,125	2048	38,400	40,761
2029	21,800	147,677	2039	29,400	112,582	2049	39,600	76,691
2030	22,500	150,954	2040	30,300	82,150	2050	40,800	68,803
2031	23,200	175,427	2041	31,200	111,801	2051	42,000	107,600
2032	23,900	158,295	2042	32,100	37,047	2052	43,300	131,665
2033	24,600	184,195	2043	33,100	67,152	2053	44,600	174,451
2034	25,300	184,116	2044	34,100	103,525	2054	45,900	65,939





## 2. RESERVE STUDY REPORT

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

**Millward Estates Condominium Association**

**Lewisburg, Pennsylvania**

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, September 17, 2024.

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

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

## IDENTIFICATION OF PROPERTY



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

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

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

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

- Millward Estates responsibility
- Limited useful life expectancies
- Predictable remaining useful life expectancies
- Replacement cost above a minimum threshold

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



## **Excluded Components**

for  
**Millward Estates**  
**Condominium Association**  
Lewisburg, Pennsylvania

### **Operating Budget Components**

Repairs normally funded through the Operating Budget and Expenditures less than \$2,500 (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)

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

- Bridges, Wood
- Landscape, General Maintenance
- Paint Finishes, Touch Up
- Trellises, Wood

### **Long-Lived Components**

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

### **Owners Responsibility Components**

Certain items have been designated as the responsibility of the Owners to repair or replace at their cost, including items billed back.

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

### **Others Responsibility Components**

Certain items have been designated as the responsibility of Others to repair or replace.

- Asphalt Pavement Street System, Including Catch Basins<sup>1</sup>

<sup>1</sup> Union County

### 3. RESERVE EXPENDITURES and FUNDING PLAN

The tables following this introduction present:

#### Reserve Expenditures

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

#### Reserve Funding Plan

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

Millward Estates  
Condominium Association  
Lewisburg, Pennsylvania

Explanatory Notes:

- 1) 3.0% is the estimated Inflation Rate for estimating Future Replacement Costs.  
2) FY2024 is Fiscal Year beginning January 1, 2024 and ending December 31, 2024.

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years		Costs, \$			Percentage of Future Expenditures	RUL = 0 FY2024	1 2025	2 2026	3 2027	4 2028	5 2029	6 2030	7 2031	8 2032	9 2033	10 2034	11 2035	12 2036	13 2037	14 2038	15 2039
						Useful	Remaining	Unit (2024)	Per Phase (2024)	Total (2024)																	
4.020	4,100	4,100	Square Yards	Asphalt Pavement, Driveways, Crack Repair, Patch, and Seal Coat	2026	3 to 5	2	2.30	9,430	9,430	11.0%			10,004			11,260				12,673						
4.045	4,100	1,025	Square Yards	Asphalt Pavement, Driveways, Total Replacement, Phased	2037	15 to 20	13 to 16	38.50	39,463	157,850	23.9%													57,952	59,691	61,481	
4.140	1,800	270	Square Feet	Concrete Sidewalks, Partial	2034	to 65	10 to 30+	11.50	3,105	20,700	1.2%											4,173					
4.351	1	1	Allowance	Dam, Inspections and Capital Repairs	2034	15 to 20	10	10,000.00	10,000	10,000	3.7%											13,439					
4.352	2,700	2,700	Sqaure Feet	Garden Walls (Incl. Vinyl Siding)	2032	to 25	8	12.00	32,400	32,400	11.8%								41,043								
4.360	1	1	Each	Gazebo	2042	to 25	18	44,500.00	44,500	44,500	7.5%																
4.500	1	1	Allowance	Landscape, Partial Replacements	2025	to 2	1	2,500.00	2,500	2,500	6.0%		2,575		2,732		2,898		3,075		3,262		3,461		3,671		3,895
4.560	28	28	Each	Light Fixtures, Garden Walls	2032	to 25	8	125.00	3,500	3,500	0.4%								4,434								
4.600	14	14	Each	Mailboxes	2047	to 25	23	250.00	3,500	3,500	0.7%																
4.650	1	1	Allowance	Pipes, Subsurface Utilities, Partial Replacements	2030	to 85+	6	10,000.00	10,000	10,000	5.3%							11,941									
4.700	2	2	Each	Pond, Aerators	2037	10 to 15	13	4,900.00	9,800	9,800	3.6%													14,392			
4.710	1,760	265	Linear Feet	Pond, Erosion Control, Partial	2035	to 15	11	53.00	14,045	93,280	4.9%											19,442					
4.730	11,000	2,750	Square Yards	Pond, Sediment Removal, Partial (Near-Term is Planned)	2025	to 30	1	34.00	93,500	374,000	19.2%		4,208														
4.800	1	1	Allowance	Signage, Entrance Monument (Incl. Street and Traffic Management)	2036	15 to 20	12	6,600.00	6,600	6,600	0.9%												9,410				
Anticipated Expenditures, By Year (\$1,013,757 over 30 years)												0	6,783	10,004	2,732	0	2,898	23,200	3,075	45,477	3,262	30,285	22,902	9,410	76,015	59,691	65,376

RESERVE EXPENDITURES

Millward Estates Condominium Association Lewisburg, Pennsylvania				Estimated 1st Year of Event	Life Analysis, Years		Costs, \$			Percentage of Future Expenditures	16 2040	17 2041	18 2042	19 2043	20 2044	21 2045	22 2046	23 2047	24 2048	25 2049	26 2050	27 2051	28 2052	29 2053	30 2054	
Line Item	Total Quantity	Per Phase Quantity	Units		Reserve Component Inventory	Useful	Remaining	Unit (2024)	Per Phase (2024)																	Total (2024)
4.020	4,100	4,100	Square Yards	Asphalt Pavement, Driveways, Crack Repair, Patch, and Seal Coat	2026	3 to 5	2	2.30	9,430	9,430	11.0%			16,054			18,069				20,337					22,889
4.045	4,100	1,025	Square Yards	Asphalt Pavement, Driveways, Total Replacement, Phased	2037	15 to 20	13 to 16	38.50	39,463	157,850	23.9%	63,326														
4.140	1,800	270	Square Feet	Concrete Sidewalks, Partial	2034	to 65	10 to 30+	11.50	3,105	20,700	1.2%															7,537
4.351	1	1	Allowance	Dam, Inspections and Capital Repairs	2034	15 to 20	10	10,000.00	10,000	10,000	3.7%															24,273
4.352	2,700	2,700	Sqaure Feet	Garden Walls (Incl. Vinyl Siding)	2032	to 25	8	12.00	32,400	32,400	11.8%															78,643
4.360	1	1	Each	Gazebo	2042	to 25	18	44,500.00	44,500	44,500	7.5%			75,758												
4.500	1	1	Allowance	Landscape, Partial Replacements	2025	to 2	1	2,500.00	2,500	2,500	6.0%		4,132		4,384		4,651		4,934		5,234		5,553		5,891	
4.560	28	28	Each	Light Fixtures, Garden Walls	2032	to 25	8	125.00	3,500	3,500	0.4%															
4.600	14	14	Each	Mailboxes	2047	to 25	23	250.00	3,500	3,500	0.7%							6,908								
4.650	1	1	Allowance	Pipes, Subsurface Utilities, Partial Replacements	2030	to 85+	6	10,000.00	10,000	10,000	5.3%			17,024												24,273
4.700	2	2	Each	Pond, Aerators	2037	10 to 15	13	4,900.00	9,800	9,800	3.6%												22,422			
4.710	1,760	265	Linear Feet	Pond, Erosion Control, Partial	2035	to 15	11	53.00	14,045	93,280	4.9%										30,289					
4.730	11,000	2,750	Square Yards	Pond, Sediment Removal, Partial (Near-Term is Planned)	2025	to 30	1	34.00	93,500	374,000	19.2%								190,066							
4.800	1	1	Allowance	Signage, Entrance Monument (Incl. Street and Traffic Management)	2036	15 to 20	12	6,600.00	6,600	6,600	0.9%															
Anticipated Expenditures, By Year (\$1,013,757 over 30 years)												63,326	4,132	108,837	4,384	0	4,651	18,069	11,842	190,066	5,234	50,626	5,553	22,422	5,891	157,614

RESERVE FUNDING PLAN

CASH FLOW ANALYSIS		Individual Reserve Budgets & Cash Flows for the Next 30 Years															
Millward Estates																	
Condominium Association																	
Lewisburg, Pennsylvania		FY2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Reserves at Beginning of Year	(Note 1)	43,164	53,810	68,658	80,643	100,930	125,141	147,677	150,954	175,427	158,295	184,195	184,116	192,327	215,246	172,090	145,125
Total Recommended Reserve Contributions	(Note 2)	9,996	20,000	20,000	20,600	21,200	21,800	22,500	23,200	23,900	24,600	25,300	26,100	26,900	27,700	28,500	29,400
Estimated Interest Earned, During Year	(Note 3)	650	1,631	1,989	2,419	3,011	3,634	3,978	4,347	4,445	4,562	4,906	5,014	5,429	5,159	4,225	3,433
Anticipated Expenditures, By Year		0	(6,783)	(10,004)	(2,732)	0	(2,898)	(23,200)	(3,075)	(45,477)	(3,262)	(30,285)	(22,902)	(9,410)	(76,015)	(59,691)	(65,376)
Anticipated Reserves at Year End		<u>\$53,810</u>	<u>\$68,658</u>	<u>\$80,643</u>	<u>\$100,930</u>	<u>\$125,141</u>	<u>\$147,677</u>	<u>\$150,954</u>	<u>\$175,427</u>	<u>\$158,295</u>	<u>\$184,195</u>	<u>\$184,116</u>	<u>\$192,327</u>	<u>\$215,246</u>	<u>\$172,090</u>	<u>\$145,125</u>	<u>\$112,582</u>

(continued)	Individual Reserve Budgets & Cash Flows for the Next 30 Years, Continued															
	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	
Reserves at Beginning of Year	112,582	82,150	111,801	37,047	67,152	103,525	137,180	159,260	189,362	40,761	76,691	68,803	107,600	131,665	174,451	
Total Recommended Reserve Contributions	30,300	31,200	32,100	33,100	34,100	35,100	36,200	37,300	38,400	39,600	40,800	42,000	43,300	44,600	45,900	
Estimated Interest Earned, During Year	2,594	2,583	1,983	1,388	2,273	3,206	3,949	4,644	3,065	1,564	1,938	2,350	3,187	4,078	3,202	
Anticipated Expenditures, By Year	(63,326)	(4,132)	(108,837)	(4,384)	0	(4,651)	(18,069)	(11,842)	(190,066)	(5,234)	(50,626)	(5,553)	(22,422)	(5,891)	(157,614)	
Anticipated Reserves at Year End	<u>\$82,150</u>	<u>\$111,801</u>	<u>\$37,047</u>	<u>\$67,152</u>	<u>\$103,525</u>	<u>\$137,180</u>	<u>\$159,260</u>	<u>\$189,362</u>	<u>\$40,761</u>	<u>\$76,691</u>	<u>\$68,803</u>	<u>\$107,600</u>	<u>\$131,665</u>	<u>\$174,451</u>	<u>\$65,939</u>	
									(NOTE 5)						(NOTE 4)	

Explanatory Notes:

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



**FIVE-YEAR OUTLOOK**

**Millward Estates  
Condominium Association**  
Lewisburg, Pennsylvania

Line Item	Reserve Component Inventory	RUL = 0 FY2024	1 2025	2 2026	3 2027	4 2028	5 2029
4.020	Asphalt Pavement, Driveways, Crack Repair, Patch, and Seal Coat			10,004			
4.500	Landscape, Partial Replacements		2,575		2,732		2,898
4.730	Pond, Sediment Removal, Partial (Near-Term is Planned)		4,208				
Anticipated Expenditures, By Year (\$1,013,757 over 30 years)		0	6,783	10,004	2,732	0	2,898

## 4. RESERVE COMPONENT DETAIL

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

### **Asphalt Pavement, Driveways, Crack Repair, Patch, and Seal Coat**

---

**Line Item:** 4.020

**Quantity:** Approximately 4,100 square yards of asphalt pavement driveways

**History:** The driveways at Buildings 300 and 500 were replaced in 2017, Buildings 100 and 900 were replaced in 2019, Building 700 was replaced in 2020 and Buildings 200 and 400 were replaced in 2021.

**Condition:** Good to fair overall with isolated cracking and previous repairs evident

**Useful Life:** Three- to five-years

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

**Priority/Criticality:** Per Board discretion

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

### **Asphalt Pavement, Driveways, Repaving**

---

**Line Item:** 4.045

**Quantity:** Approximately 4,100 square yards of asphalt pavement driveway

**History:** The driveways at Buildings 300 and 500 were replaced in 2017, Buildings 100 and 900 were replaced in 2019, Building 700 was replaced in 2020 and Buildings 200 and 400 were replaced in 2021.

**Condition:** Good to fair overall with isolated cracking and previous repairs evident



**Driveway overview**



**Driveway overview**



**Driveway overview**



**Previous repairs**



**Pavement cracks**



**Pavement cracks**



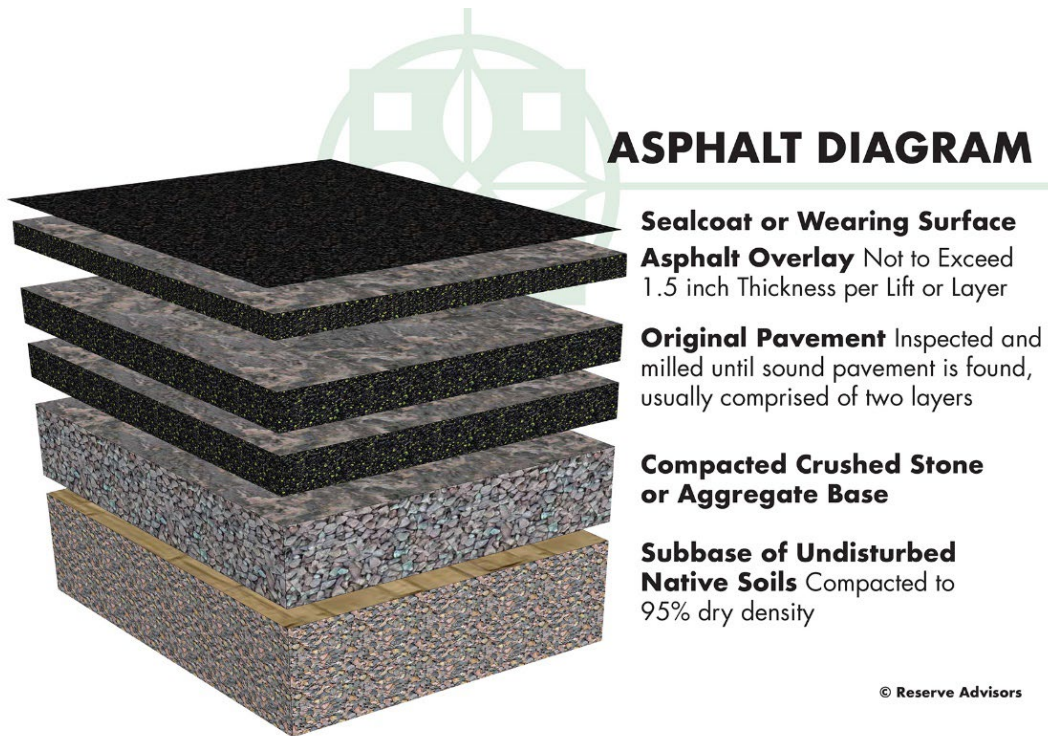


**Pavement cracks and previous repairs**

**Useful Life:** 15- to 20-years with the benefit of timely crack repairs and patching

**Component Detail Notes:** The initial installation of asphalt uses at least two lifts, or two separate applications of asphalt, over the base course. The first lift is the binder course. The second lift is the wearing course. The wearing course comprises a finer aggregate for a smoother more watertight finish.

The following diagram depicts the typical components although it may not reflect the actual configuration at Millward Estates:



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

**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.

## Concrete Sidewalks

---

**Line Item:** 4.140

**Quantity:** Approximately 1,800 square feet of concrete sidewalks at the building entrances

**History:** The concrete sidewalks at Buildings 300 and 500 were replaced in 2017, Buildings 100 and 900 were replaced in 2019, Building 700 was replaced in 2020 and Buildings 200 and 400 were replaced in 2021.

**Condition:** Good to fair overall





**Concrete sidewalk overview**



**Concrete sidewalk overview**

**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 540 square feet of concrete sidewalks, or thirty percent (30%) of the total, will require replacement during the next 30 years.

## **Dam, Inspections and Capital Repairs**

---

**Line Item:** 4.351

**Quantity:** The Association maintains a level one dam located at the pond underneath the gazebo.

**History:** Original. The Association informs us the Department of Environmental Protection inspects the dam every five years.

**Condition:** Reported in good overall condition. The Association informs us that the dam is regularly maintained to standards.



**Dam overview**

**Useful Life:** Inspections and capital repairs 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. Our cost estimate includes for an inspection of the dam, capital repairs to ensure the dam is maintained to industry standards and any potential removal and repairs of the wood deck in order to access to the dam structure.

## Garden Walls

---

**Line Item:** 4.352

**Quantity:** Approximately 2,700 square feet of garden walls throughout the community. This quantity includes the vinyl siding at the garden walls.

**History:** Unknown exact age. The Board informs us the vinyl siding was installed from 2009 to 2012.

**Condition:** Good to fair overall with stains evident



**Garden wall overview**



**Garden wall overview**





**Garden wall overview**



**Stains**

**Useful Life:** Up to 25 years

**Priority/Criticality:** Per Board discretion

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

## Gazebo

---

**Line Item:** 4.360

**Quantity:** One gazebo with an asphalt shingle roof and wood deck

**History:** The roof was replaced in 2019, and the deck was replaced in 2023

**Condition:** Good to fair overall with isolated paint finish deterioration



**Gazebo overview**



**Gazebo overview**



**Wood deck overview**



**Wood deck overview**



**Gazebo roof structure overview**



**Paint finish deterioration**

**Useful Life:** Up to 25 years with periodic maintenance

**Priority/Criticality:** Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We recommend the Association budget for paint applications and repairs through the operating budget. Our cost estimate includes for replacement of the gazebo structure, asphalt shingle roof, wood deck and wood frame.



## Landscape

---

**Line Item:** 4.500

**Component Detail Notes:** The Association contains a large quantity of trees, shrubbery and other landscape elements. Replacement of these elements is an ongoing need. Many associations budget for these replacements as normal maintenance. Other associations fund ongoing replacements from reserves. 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:** At the request of Management and the Board, we include a landscape allowance for partial replacements every two years.

**Priority/Criticality:** Per Board discretion

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

## Light Fixtures

---

**Line Item:** 4.560

**Quantity:** Approximately 28 light fixtures affixed to the garden walls

**History:** Unknown exact age

**Condition:** Good to fair overall



Light fixture overview



Light fixture overview

**Useful Life:** Up to 25 years



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

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

**Priority/Criticality:** Per Board discretion

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

## Mailboxes

---

**Line Item:** 4.600

**Quantity:** 28 mailboxes with 14 posts

**History:** Replaced in 2022

**Condition:** Good overall



Mailboxes



Mailboxes

**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.

## **Pipes, Subsurface Utilities**

---

**Line Item:** 4.650

**Quantity:** The Association maintains the subsurface utilities including the water supply lines throughout the community.

**History:** Original

**Condition:** Reported satisfactory

**Useful Life:** Up to and likely beyond 85 years

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

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

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

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

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. At this time we do not anticipate replacement of continuous lengths of subsurface utility pipes. Rather we recommend the Association budget for repairs to isolated occurrences of breached utilities. Although it is likely that the times of replacement and extent of repair costs may vary from the budgetary allowance, Millward Estates could budget sufficient reserves for these utility repairs and have the opportunity to adjust its future reserves up or down to meet any changes to these budgetary estimates. Updates of this Reserve Study would incorporate changes to budgetary costs through a continued historical analysis of the rate of deterioration and actual repairs to budget sufficient reserves.

## **Pond, Aerators**

---

**Line Item:** 4.700

**Quantity:** Two aerator

**History:** Replaced in 2022

**Condition:** Reported satisfactory



**Pond aerator**

**Useful Life:** 10- to 15-years

**Component Detail Notes:** The use of small pumps, motors and aerators circulates pond water and increases the amount of entrained oxygen in the water, increasing water quality and reducing algae growths.

**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.

## **Pond, Sediment Removal and Erosion Control**

---

**Line Items:** 4.710 and 4.730

**Quantity:** Approximately 11,000 square yards of water surface area and approximately 1,760 linear feet of shorelines

**History:** Conducted sediment removal in 2018. The Board informs us that the dredged sediment was disposed of on the property in 2018. The Association plans to remove the dredged sediment from the property in 2025.

**Condition:** Good to fair overall with algae growth evident





**Pond overview**



**Shoreline overview**



**Shoreline overview**



**Algae growth**

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

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 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 pipelines. 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. Our near-term cost estimate is based on information received from the Board. We recommend the Association plan to install a combination of plantings and rip rap around the pond along 265 linear feet, or approximately fifteen percent (15%), of the shoreline per event.

For reserve budgeting purposes, we estimate the need to remove an average depth of one yard from approximately twenty-five percent (25%) of the surface area. However, the actual volume of material to remove may vary dependent upon an invasive analysis at the time of removal. A visual inspection of a body of water cannot reveal the amount of accumulated silt. This is especially true on larger bodies of water. It is therefore inaccurate to assume an entire body of water will require sediment removal. It is more cost effective to spot remove in areas of intense silt accumulation as noted through bathymetric surveys. The amount or depth of silt is determined through prodding into the silt until a relatively solid base is found or through bathymetric surveys. A bathymetric survey establishes a base of data about the depth of the body of water over many locations against which the data of future surveys is compared. These invasive procedures are beyond the scope of a Reserve Study and require multiple visits to the site. We recommend Millward Estates 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.

## Signage, Entrance Monument

**Line Item:** 4.800

**Quantity:** The Association maintains the entrance monument located at the front of the community. In addition, The Association maintains eight signs located throughout the community.

**History:** Varying ages. The Board informs us the entrance sign was painted in 2023.

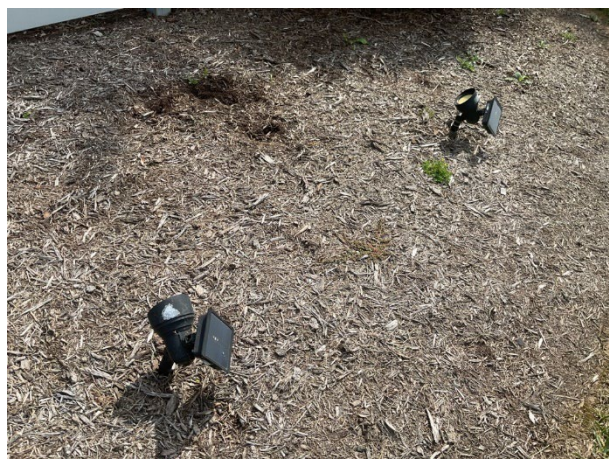
**Condition:** Good to fair overall



Entrance monument overview



Signage



Sign lighting



Property signage



**Useful Life:** 15- to 20-years

**Component Detail Notes:** Community signage contributes to the overall aesthetic appearance of the property to owners and potential buyers. Renovation or replacement of community signs is often predicated upon the desire to "update" the perceived identity of the community rather than for utilitarian concerns. Therefore, the specific times for replacement or renovation are discretionary.

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

- Annually:
  - Inspect and repair damage, vandalism and loose components
  - Verify lighting is working properly
  - Touch-up paint finish applications if applicable

**Priority/Criticality:** Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our cost estimate includes for replacement of the entrance monument, sign lighting and the eight signs throughout the community.

## 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.

## 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.

Millward Estates 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 annual reserve assessments annually adjusted upward for inflation to increase reserves to fund the expected major future expenditures
4. Special assessments

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

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

- The Cash Flow Method to compute, project and illustrate the 30-year Reserve Funding Plan
- Local<sup>2</sup> 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 Lewisburg, Pennsylvania at an annual inflation rate<sup>3</sup>. Isolated or regional markets of

<sup>1</sup> Identified in the APRA "Standards - Terms and Definitions" and the CAI "Terms and Definitions".

<sup>2</sup> See Credentials for additional information on our use of published sources of cost data.

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



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

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

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

## 6. CREDENTIALS

### HISTORY AND DEPTH OF SERVICE

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

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

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

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

### TOTAL STAFF INVOLVEMENT

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

### OUR GOAL

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

### VAST EXPERIENCE WITH A VARIETY OF BUILDINGS

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

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

### OLD TO NEW

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



**JONNY P. SILEO**  
**Engineer, Northeast Region**  
**Responsible Advisor**

**CURRENT CLIENT SERVICES**

Jonny Sileo, an Associate Mechanical Engineer, is an Advisor for Reserve Advisors. Mr. Sileo 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, planned unit developments and homeowner associations.



The following is a partial list of clients served by Jonny Sileo demonstrating the breadth of experiential knowledge of community associations in construction and related systems.

**Silver Maple Farm Inc. –** Located in Middletown, Delaware, this community consists of 299 single family homes. Silver Maple features an extensive clubhouse, pool, various sport courts and over 8,300 square yards of walking paths for the residents to use.

**Hickory Hills Condominium Association –** Located in Bel Air, Maryland, Hickory Hills is comprised of 400 units at 23 buildings constructed in the 1970s. The Association maintains the masonry exteriors, sloped asphalt shingle roofs, pool, composite balconies, asphalt pavement, and entrance lobbies.

**Hart's Landing Homeowners Association –** Located in Lewes, Delaware, this community boasts a dock and pier for residents of the 143 single family homes to enjoy. Amenities include a pool, pool house, pavilion, tennis court, and asphalt pavement walking paths.

**Seaheaven –** Located in Ocean City, Maryland, this four-story midrise building built in 1986 is located less than two blocks from the ocean. This community features an elevator, concrete breezeways, asphalt pavement parking areas, as well as concrete balconies that overlook the water.

**The Parke at Ocean Pines –** Located in Berlin, Maryland, The Parke at Ocean Pines comprises of 503 single family homes and features over twenty ponds, a Clubhouse with an indoor pool and fitness center, in addition to a dock and pier for their residents to enjoy.

**Club Ocean Villas II Condominium –** Located in Ocean City, Maryland, this community is comprised of 276 condos throughout 25 buildings. Some of the amenities at Club Ocean Villas include a boardwalk, finger piers, pool, tennis courts and racquetball court.

**PRIOR RELEVANT EXPERIENCE**

Before joining Reserve Advisors, LLC, Mr. Sileo attended Temple University in Philadelphia, Pennsylvania where he attained his Bachelor of Science degree in Mechanical Engineering. His rigorous coursework focused on using problem solving to understand mechanical systems and principles.

**EDUCATION**

Temple University – B.S. Mechanical Engineering



**JON R. WALKER, RS**  
**Regional Engineering Manager, Northeast Region**  
**Responsible Advisor**

**CURRENT CLIENT SERVICES**

Jon R. Walker, an Engineer, is an Advisor and Northeast Regional Engineering Manager for Reserve Advisors. Mr. Walker 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, planned unit developments and homeowner associations.



The following is a partial list of clients served by Jon Walker demonstrating the breadth of experiential knowledge of community associations in construction and related systems.

**Jefferson Chase Condominium** is a four-building condominium-style community located in Frederick Maryland that features construction elements that date back to 1955. Jefferson Chase utilizes a variety of unique amenities including a fitness center, outdoor picnic and grilling area, and playground. The community also features a wide-ranging collection of exterior building elements including modified bitumen and EPDM flat roofs, concrete balconies, and masonry.

**The Ponds at Chesterbrook** are located in the Northwest suburbs of Philadelphia, Pennsylvania. The community is home to 48 units across 15 buildings that range in styles from condominiums and townhomes to lofts and single family homes. Constructed in 1983, The Ponds contain a variety of stone masonry chimneys in addition to two ponds.

**Parker House** – Located in downtown Washington, D.C., this well-known six-story midrise dates back to 1928. Converted to condominiums in 1978, Parker House now services 55 units and lay in the heart of the Wakefield neighborhood. The mid-rise features a unique blend of masonry and limestone exteriors and decorative terrazzo interior lobby floor coverings.

**Quaker Hill Condominium** – Built in 1991, Quaker Hill is located within the Taylor Run neighborhood in Alexandria, Virginia. The large midrise contains various unique elements including elevated and on-grade breezeways, hydraulic elevators, balconies, terraces, and large concrete retaining walls.

**King James Landing** is a waterfront community built in 1987 and located in Annapolis, Maryland. Residents enjoy a marina that backs up to Back Creek Harbor, a service waterway to the Chesapeake Bay. King James Landing represents a wide range of exterior styles and time periods within the attached-home style community. Features of King James Landing include a gate entry system, retaining walls, wood decks, bulkheads, and docks.

**PRIOR RELEVANT EXPERIENCE**

Before joining Reserve Advisors, Mr. Walker attended Virginia Tech University in Blacksburg, Virginia where he attained his Bachelor of Science degree in Aerospace Engineering. His studies largely focused on application of the principles of science and mathematics to develop cost-effective solutions to technical problems.

**EDUCATION**

Virginia Tech University – B.S. Aerospace Engineering

**PROFESSIONAL AFFILIATIONS**

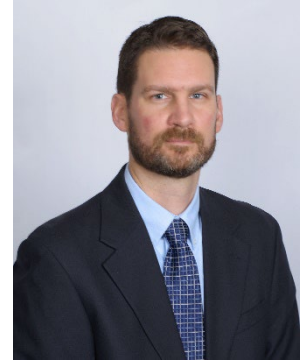
*Reserve Specialist (RS) – Community Association Institute*

**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](http://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](http://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](http://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](http://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 Millward Estates 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) Millward Estates responsibility; 2) limited Useful Life expectancies; 3) predictable Remaining Useful Life expectancies; and 4) a replacement cost above a minimum threshold.

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

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

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

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

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

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

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

## 8. PROFESSIONAL SERVICE CONDITIONS

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

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

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

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

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



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

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

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

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

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

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