RESERVE STUDY

Meadow Grove Association

Ann Arbor, Michigan

June 14, 2022

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Corporate Office
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Meadow Grove Association
Ann Arbor, Michigan

Dear Board of Directors of Meadow Grove Association:

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Reserve Study* of Meadow Grove Association in Ann Arbor, Michigan and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, June 14, 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 Meadow Grove 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 July 13, 2022 by

Reserve Advisors, LLC

Visual Inspection and Report by: Jaison T. Thomas, RS[1]
Review by: Nicole L. Lowery, RS, PRA[2], Associate 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: Meadow Grove Association (Meadow Grove)
Location: Ann Arbor, Michigan
Reference: 98599

Property Basics: Meadow Grove Association is a townhome style development which consists of 81 units in 21 buildings. The community was built from 1995 to 2002.

Reserve Components Identified: 23 Reserve Components.

Inspection Date: June 14, 2022. We conducted previous inspections in 1999, 2004, 2008, 2011 and 2018.

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 these threshold funding years in 2027 due to partial replacement of the roofs and installation of building wrap and flashing at the buildings, and in 2042 due to repaving of the asphalt pavement.

In addition, the Reserve Funding Plan recommends 2052 year end accumulated reserves of approximately $848,200. We judge this amount of accumulated reserves in 2052 necessary to fund the likely replacement of the asphalt pavement after 2052. Future replacement costs beyond the next 30 years for the replacement of the asphalt pavement are likely to more than double the current cost of replacement. These future needs, although beyond the limit of the Cash Flow Analysis of this Reserve Study, are reflected in the amount of accumulated 2052 year end reserves.

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

- Current and future local costs of replacement
- 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.

Unaudited Cash Status of Reserve Fund:

- $400,000 as of April 30, 2022
- 2022 budgeted Reserve Contributions of $150,000

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:

- Installation of building wrap and flashing at the buildings as proposed by the Board
- Repaving of the asphalt pavement due to evidence of significant deterioration
- Replacement of a portion of the roofs due to age
- Replacement of the timber retaining walls due to evidence of wood deterioration and rot

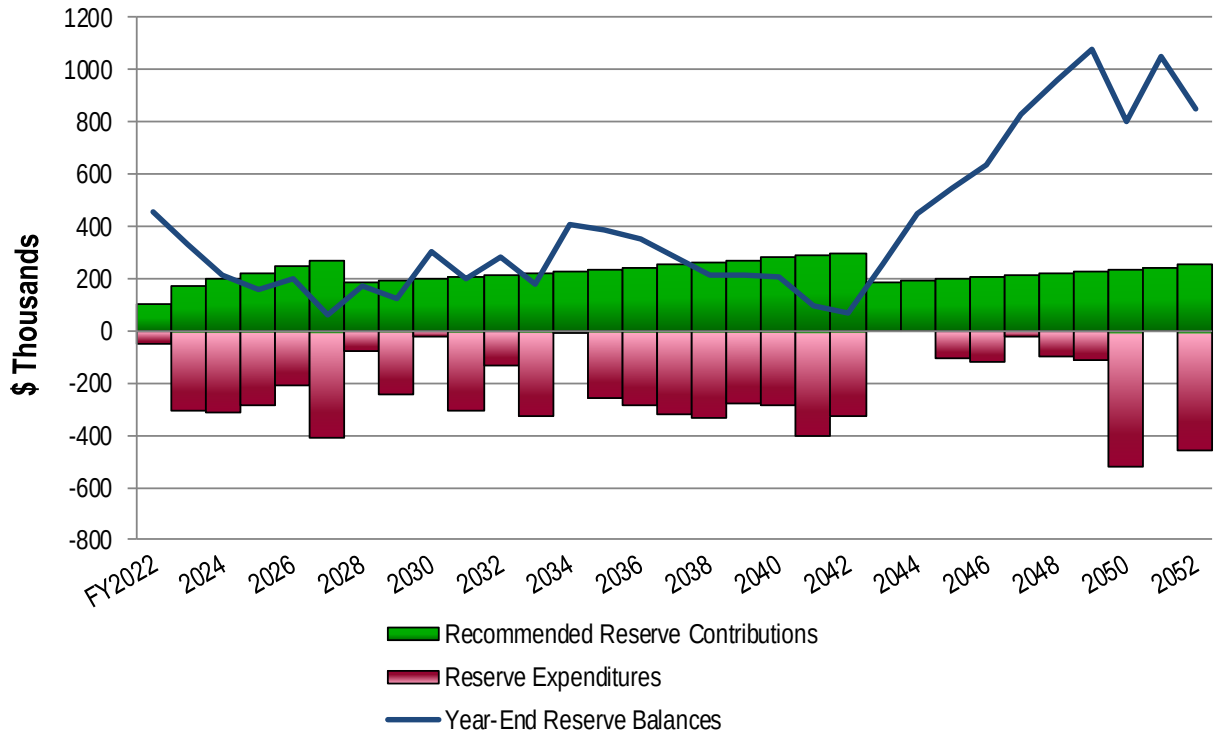
Recommended Reserve Funding: We recommend the following in order to achieve a stable and equitable Funding Plan:

- Phased increases of $24,400 from 2023 through 2027
- Decrease to $185,100 by 2028 due to fully funding for installation of building wrap and flashing at the buildings and replacement of a portion of the roofs
- Inflationary increases from 2028 through 2042
- Decrease to $185,000 by 2043 due to fully funding for repaving of the asphalt pavement
- Inflationary increases through 2052, the limit of this study's Cash Flow Analysis
- Initial adjustment of $24,400 is equivalent to an increase of $25.10 in the monthly contributions per homeowner.

Our revised findings reflect both external market and internal property changes. The result is an overall increase in the recommended Reserve Funding Plan since our last Reserve Study on August 22, 2018. The overall increase relates primarily to addition of expenditures for installation of building wraps and flashing at the buildings, and the unanticipated increase in inflation rate and cost of labor and materials.

Meadow Grove
Recommended Reserve Funding Table and Graph

Year	Reserve Contributions ($)	Reserve Balances ($)	Year	Reserve Contributions ($)	Reserve Balances ($)	Year	Reserve Contributions ($)	Reserve Balances ($)
2023	174,400	327,678	2033	219,800	181,583	2043	185,000	252,499
2024	198,800	214,136	2034	227,500	404,145	2044	191,500	446,437
2025	223,200	155,553	2035	235,500	385,912	2045	198,200	542,867
2026	247,600	197,140	2036	243,700	349,969	2046	205,100	634,711
2027	272,000	60,764	2037	252,200	284,902	2047	212,300	830,854
2028	185,100	172,035	2038	261,000	213,632	2048	219,700	960,186
2029	191,600	120,658	2039	270,100	210,401	2049	227,400	1,079,971
2030	198,300	301,012	2040	279,600	207,029	2050	235,400	799,753
2031	205,200	201,244	2041	289,400	93,877	2051	243,600	1,049,804
2032	212,400	285,624	2042	299,500	66,387	2052	252,100	848,210



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

Meadow Grove Association

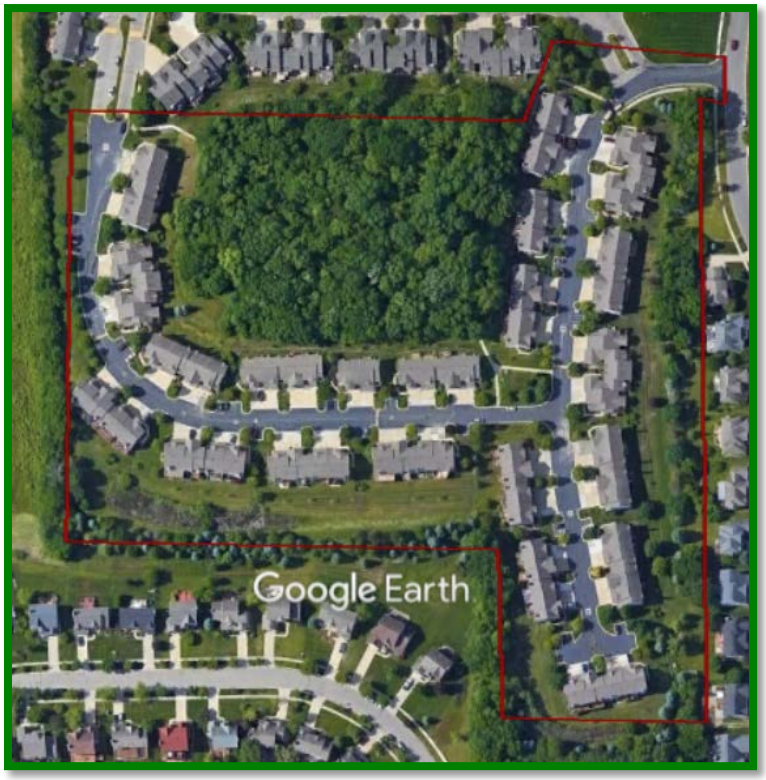
Ann Arbor, Michigan

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, June 14, 2022. We conducted previous inspections in 1999, 2004, 2008 and 2011.

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

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

IDENTIFICATION OF PROPERTY



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

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

- Meadow Grove responsibility
- Limited useful life expectancies
- Predictable remaining useful life expectancies
- Replacement cost above a minimum threshold

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

- Electrical Systems, Common
- Foundations
- Pipes, Subsurface Utilities
- Retaining Wall, Stone, 3625 Meadow Grow
- Structural Frames

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

- General Maintenance to the Common Elements
- Expenditures less than $4,000 (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)
- Benches
- Detention Basins, Maintenance
- Irrigation System, Controls and Maintenance
- Landscape Maintenance
- Masonry Foundation Repairs
- Paint Finishes and Caulk
- Signage, Monument and Informational
- Stairs, Wood, Utility Rooms
- Other Repairs normally funded through the Operating Budget

Staircase to utility room

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:

- Balconies/Patios
- Electrical Systems (Including Circuit Protection Panels)
- Garage Doors and Openers
- Heating, Ventilating and Air Conditioning (HVAC) Units
- Interiors
- Pipes (Within Units)
- Skylights
- Sump Pumps
- Trim, Replacement (The Board informs us the Association is responsible for paint application to the trim but replacement is the responsibility of the homeowner)
- Windows and Doors

3. RESERVE EXPENDITURES and FUNDING PLAN

The tables following this introduction present:

Reserve Expenditures

- Line item numbers
- Total quantities
- Quantities replaced per phase (in a single year)
- Reserve component inventory
- Estimated first year of event (i.e., replacement, application, etc.)
- Life analysis showing
  - useful life
  - remaining useful life
- 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

Five-Year Outlook

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

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

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

Years 2022 to 2037

RESERVE EXPENDITURES

Meadow Grove
Association
Ann Arbor, Michigan

Explanatory Notes:

1) 3.5% is the estimated Inflation Rate for estimating Future Replacement Costs.

2) FY2022 is Fiscal Year beginning December 1, 2021 and ending December 31, 2022.

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years Useful	Life Analysis, Years Remaining	Costs, $ Unit (2022)	Costs, $ Per Phase (2022)	Costs, $ Total (2022)	Percentage of Future Expenditures	RUL = 0 FY2022	1 2023	2 2024	3 2025	4 2026	5 2027	6 2028	7 2029	8 2030	9 2031	10 2032	11 2033	12 2034	13 2035	14 2036	15 2037
				Exterior Building Elements																							
1.140	81	20	Each	Chimney Caps, Metal, Phased	2036	to 25	14 to 17	500.00	10,125	40,500	1.0%															16,389	16,963
1.180	21	4	Each	Doors, Metal, Utility Rooms, Phased	2028	to 35	6 to 14	1,100.00	4,620	23,100	0.5%							5,679		6,084		6,517		6,981		7,478	
1.240	14,000	2,800	Linear Feet	Gutters and Downspouts, Aluminum, Phased	2027	15 to 25	5 to 13	10.00	28,000	140,000	5.2%						33,255		35,624		38,161		40,879		43,791		
1.260	290	290	Each	Light Fixtures	2046	to 25	24	120.00	34,800	34,800	1.2%																
1.280	1,360	272	Squares	Roofs, Asphalt Shingles, Phased	2027	15 to 25	5 to 13	500.00	136,000	680,000	25.3%						161,525		173,030		185,354		198,556		212,698		
1.920	21	4	Buildings	Walls, Vinyl Siding, Flashing and Building Wrap Installation, Phased (Near-Term Only) (2022 Minor Portions)	2022	to 40	0 to 4	43,000.00	180,600	903,000	15.3%	6,750	186,921	193,463	200,234	207,243	214,496										
1.921	143,000	28,600	Square Feet	Walls, Vinyl Siding, Phased (Includes Soffit and Fascia) (Excl. Building Wrap Replacement)	2036	to 40	14 to 18	5.00	143,000	715,000	18.8%															231,473	239,575
				Property Site Elements																							
4.020	8,300	8,300	Square Yards	Asphalt Pavement, Crack Repair, Patch and Seal Coat	2028	3 to 5	6	2.00	16,600	16,600	2.3%							20,406			23,416				26,870	
4.040	8,300	4,150	Square Yards	Asphalt Pavement, Mill and Overlay, Phased	2023	15 to 20	1 to 2	23.00	95,450	190,900	3.0%		98,791	102,248													
4.045	8,300	4,150	Square Yards	Asphalt Pavement, Total Replacement, Phased	2041	15 to 20	19 to 20	35.50	147,325	294,650	8.7%																
4.100	16	8	Each	Catch Basins, Inspections and Capital Repairs, Phased (Incl. Landscape Catch Basins)	2023	15 to 20	1 to 2	950.00	7,600	15,200	0.7%		7,866	8,141													
4.110	5,100	255	Linear Feet	Concrete Curbs and Gutters, Partial	2023	to 65	1 to 30+	38.00	9,690	193,800	1.5%		10,029	10,380							13,669					
4.120	40,600	1,740	Square Feet	Concrete Driveways, Partial	2025	to 65	3 to 30+	13.50	23,490	548,100	4.3%				26,044				29,886				34,295				39,354
4.130	35,600	890	Square Feet	Concrete Garage Floors, Partial	2037	to 65+	15 to 30+	11.00	9,790	391,600	1.2%																16,402
4.140	9,100	390	Square Feet	Concrete Sidewalks, Partial	2025	to 65	3 to 30+	11.00	4,290	100,100	0.8%				4,757				5,458				6,264				7,187
4.170	81	5	Each	Concrete Stoops, Partial (Includes Shoring)	2025	to 65	3 to 30+	1,550.00	7,750	125,550	0.8%				8,593								11,315				
4.420	33	17	Zones	Irrigation System, Phased	2031	to 40	9 to 10	3,700.00	61,050	122,100	2.6%										83,205	86,117					
4.500	1	1	Allowance	Landscape, Partial Replacements	2028	to 10	6	39,500.00	39,500	39,500	3.2%							48,556									
4.560	13	13	Each	Light Poles and Fixtures	2033	to 25	11	1,800.00	23,400	23,400	0.5%												34,163				
4.600	81	41	Units	Mailbox Stations, Phased (Near-Term Remaining)	2025	to 25	3 to 8	250.00	10,125	20,250	1.0%				11,226					13,333							
4.700	2	1	Allowance	Ponds, Drainage Area Renovations (2022 is Planned)	2022	20 to 25	0 to 3	9,000.00	9,000	18,000	1.0%	9,000			9,978												
4.760	120	120	Square Feet	Retaining Walls, Timber, Near-Term (Replace with Masonry)	2022	15 to 20	0	59.00	7,080	7,080	0.1%	7,080															
4.761	340	340	Square Feet	Retaining Walls, Timber, Remaining (Replace with Masonry)	2025	15 to 20	3	59.00	20,060	20,060	0.3%				22,241												
		1	Allowance	2022 Reserve Expenditures	2022	N/A	0	25,000	25,000	25,000	0.4%	25,000															
				Anticipated Expenditures, By Year ($6,592,470 over 30 years)								47,830	303,607	314,232	283,072	207,243	409,276	74,641	243,998	19,417	306,720	129,719	325,471	6,981	256,489	282,210	319,481

RESERVE EXPENDITURES

Meadow Grove Association
Ann Arbor, Michigan

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years Useful	Life Analysis, Years Remaining	Costs, $ Unit (2022)	Costs, $ Per Phase (2022)	Costs, $ Total (2022)	Percentage of Future Expenditures	16 2038	17 2039	18 2040	19 2041	20 2042	21 2043	22 2044	23 2045	24 2046	25 2047	26 2048	27 2049	28 2050	29 2051	30 2052
				Exterior Building Elements																						
1.140	81	20	Each	Chimney Caps, Metal, Phased	2036	to 25	14 to 17	500.00	10,125	40,500	1.0%	17,557	18,171											73,365		78,590
1.180	21	4	Each	Doors, Metal, Utility Rooms, Phased	2028	to 35	6 to 14	1,100.00	4,620	23,100	0.5%									79,460						
1.240	14,000	2,800	Linear Feet	Gutters and Downspouts, Aluminum, Phased	2027	15 to 25	5 to 13	10.00	28,000	140,000	5.2%													356,343		381,724
1.260	290	290	Each	Light Fixtures	2046	to 25	24	120.00	34,800	34,800	1.2%															
1.280	1,360	272	Squares	Roofs, Asphalt Shingles, Phased	2027	15 to 25	5 to 13	500.00	136,000	680,000	25.3%															
1.920	21	4	Buildings	Walls, Vinyl Siding, Flashing and Building Wrap Installation, Phased (Near-Term Only) (2022 Minor Portions)	2022	to 40	0 to 4	43,000.00	180,600	903,000	15.3%															
1.921	143,000	28,600	Square Feet	Walls, Vinyl Siding, Phased (Includes Soffit and Fascia) (Excl. Building Wrap Replacement)	2036	to 40	14 to 18	5.00	143,000	715,000	18.8%	247,960	256,639	265,621												
				Property Site Elements																						
4.020	8,300	8,300	Square Yards	Asphalt Pavement, Crack Repair, Patch and Seal Coat	2028	3 to 5	6	2.00	16,600	16,600	2.3%									37,903			43,495		
4.040	8,300	4,150	Square Yards	Asphalt Pavement, Mill and Overlay, Phased	2023	15 to 20	1 to 2	23.00	95,450	190,900	3.0%															
4.045	8,300	4,150	Square Yards	Asphalt Pavement, Total Replacement, Phased	2041	15 to 20	19 to 20	35.50	147,325	294,650	8.7%				283,233	293,146										
4.100	16	8	Each	Catch Basins, Inspections and Capital Repairs, Phased (Incl. Landscape Catch Basins)	2023	15 to 20	1 to 2	950.00	7,600	15,200	0.7%				14,611	15,122										
4.110	5,100	255	Linear Feet	Concrete Curbs and Gutters, Partial	2023	to 65	1 to 30+	38.00	9,690	193,800	1.5%				18,629	19,281								25,390		
4.120	40,600	1,740	Square Feet	Concrete Driveways, Partial	2025	to 65	3 to 30+	13.50	23,490	548,100	4.3%				45,160				51,822			59,467				
4.130	35,600	890	Square Feet	Concrete Garage Floors, Partial	2037	to 65+	15 to 30+	11.00	9,790	391,600	1.2%				18,822				21,598			24,784				
4.140	9,100	390	Square Feet	Concrete Sidewalks, Partial	2025	to 65	3 to 30+	11.00	4,290	100,100	0.8%				8,248				9,464			10,861				
4.170	81	5	Each	Concrete Stoops, Partial (Includes Shoring)	2025	to 65	3 to 30+	1,550.00	7,750	125,550	0.8%				14,900							19,620				
4.420	33	17	Zones	Irrigation System, Phased	2031	to 40	9 to 10	3,700.00	61,050	122,100	2.6%															
4.500	1	1	Allowance	Landscape, Partial Replacements	2028	to 10	6	39,500.00	39,500	39,500	3.2%	68,492										96,615				
4.560	13	13	Each	Light Poles and Fixtures	2033	to 25	11	1,800.00	23,400	23,400	0.5%															
4.600	81	41	Units	Mailbox Stations, Phased (Near-Term Remaining)	2025	to 25	3 to 8	250.00	10,125	20,250	1.0%			18,807					22,337							
4.700	2	1	Allowance	Ponds, Drainage Area Renovations (2022 is Planned)	2022	20 to 25	0 to 3	9,000.00	9,000	18,000	1.0%										21,269			23,582		
4.760	120	120	Square Feet	Retaining Walls, Timber, Near-Term (Replace with Masonry)	2022	15 to 20	0	59.00	7,080	7,080	0.1%															
4.761	340	340	Square Feet	Retaining Walls, Timber, Remaining (Replace with Masonry)	2025	15 to 20	3	59.00	20,060	20,060	0.3%															
		1	Allowance	2022 Reserve Expenditures	2022	N/A	0	25,000	25,000	25,000	0.4%															
				Anticipated Expenditures, By Year ($6,592,470 over 30 years)								334,009	274,810	284,428	403,601	327,549	0	0	105,221	117,363	21,269	96,615	114,731	522,175	0	460,314

RESERVE FUNDING PLAN

CASH FLOW ANALYSIS
Meadow Grove Association
Ann Arbor, Michigan

Individual Reserve Budgets & Cash Flows for the Next 30 Years

		FY2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Reserves at Beginning of Year	*(Note 1)*	400,000	454,158	327,678	214,136	155,553	197,140	60,764	172,035	120,658	301,012	201,244	285,624	181,583	404,145	385,912	349,969
Total Recommended Reserve Contributions	*(Note 2)*	100,000	174,400	198,800	223,200	247,600	272,000	185,100	191,600	198,300	205,200	212,400	219,800	227,500	235,500	243,700	252,200
Estimated Interest Earned, During Year	*(Note 3)*	1,988	2,727	1,890	1,289	1,230	900	812	1,021	1,471	1,752	1,698	1,630	2,043	2,756	2,567	2,214
Anticipated Expenditures, By Year		(47,830)	(303,607)	(314,232)	(283,072)	(207,243)	(409,276)	(74,641)	(243,998)	(19,417)	(306,720)	(129,719)	(325,471)	(6,981)	(256,489)	(282,210)	(319,481)
Anticipated Reserves at Year End		$454,158	$327,678	$214,136	$155,553	$197,140	$60,764 *(NOTE 5)*	$172,035	$120,658	$301,012	$201,244	$285,624	$181,583	$404,145	$385,912	$349,969	$284,902

(continued)

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

	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052
Reserves at Beginning of Year	284,902	213,632	210,401	207,029	93,877	66,387	252,499	446,437	542,867	634,711	830,854	960,186	1,079,971	799,753	1,049,804
Total Recommended Reserve Contributions	261,000	270,100	279,600	289,400	299,500	185,000	191,500	198,200	205,100	212,300	219,700	227,400	235,400	243,600	252,100
Estimated Interest Earned, During Year	1,739	1,479	1,456	1,049	559	1,112	2,438	3,450	4,107	5,112	6,247	7,116	6,556	6,451	6,620
Anticipated Expenditures, By Year	(334,009)	(274,810)	(284,428)	(403,601)	(327,549)	0	0	(105,221)	(117,363)	(21,269)	(96,615)	(114,731)	(522,175)	0	(460,314)
Anticipated Reserves at Year End	$213,632	$210,401	$207,029	$93,877	$66,387 *(NOTE 5)*	$252,499	$446,437	$542,867	$634,711	$830,854	$960,186	$1,079,971	$799,753	$1,049,804	$848,210 *(NOTE 4)*

Explanatory Notes:

1) Year 2022 starting reserves are as of April 30, 2022; FY2022 starts December 1, 2021 and ends December 31, 2022.

2) Reserve Contributions for 2022 are the remaining budgeted 8 0s; 2023 is the first year of recommended contributions.

3) 0.7% is the estimated annual rate of return on invested reserves; 2022 is a partial year of interest earned.

4) Accumulated year 2052 ending reserves consider the need to fund for susbequent repaving of the asphalt pavement shortly after 2052, and the age, size, overall condition and complexity of the property.

5) Threshold Funding Years (reserve balance at critical point).

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

FIVE-YEAR OUTLOOK

Meadow Grove Association
Ann Arbor, Michigan

Line Item	Reserve Component Inventory	RUL = 0 FY2022	1 2023	2 2024	3 2025	4 2026	5 2027
	Exterior Building Elements						
1.240	Gutters and Downspouts, Aluminum, Phased						33,255
1.280	Roofs, Asphalt Shingles, Phased						161,525
1.920	Walls, Vinyl Siding, Flashing and Building Wrap Installation, Phased (Near-Term Only) (2022 Minor Portions)	6,750	186,921	193,463	200,234	207,243	214,496
	Property Site Elements						
4.040	Asphalt Pavement, Mill and Overlay, Phased		98,791	102,248			
4.100	Catch Basins, Inspections and Capital Repairs, Phased (Incl. Landscape Catch Basins)		7,866	8,141			
4.110	Concrete Curbs and Gutters, Partial		10,029	10,380			
4.120	Concrete Driveways, Partial				26,044		
4.140	Concrete Sidewalks, Partial				4,757		
4.170	Concrete Stoops, Partial (Includes Shoring)				8,593		
4.600	Mailbox Stations, Phased (Near-Term Remaining)				11,226		
4.700	Ponds, Drainage Area Renovations (2022 is Planned)	9,000			9,978		
4.760	Retaining Walls, Timber, Near-Term (Replace with Masonry)	7,080					
4.761	Retaining Walls, Timber, Remaining (Replace with Masonry)				22,241		
	2022 Reserve Expenditures	25,000					
	Anticipated Expenditures, By Year ($6,592,470 over 30 years)	47,830	303,607	314,232	283,072	207,243	409,276

4. RESERVE COMPONENT DETAIL

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

Exterior Building Elements

Front elevation

Rear elevation

Side elevation

Chimney Caps, Metal

Line Item: 1.140

Quantity: 81 chimney caps

History: Replaced in 2011

Condition: Good to fair overall with rust evident.

Chimney cap

Rust at chimney cap

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:
  - Clean flues
  - With roof inspection, inspect for wildlife damage, corrosion, sealant deterioration and water infiltration

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 depict replacement in a phased manner.

Doors, Metal, Utility Rooms

Line Item: 1.180

Quantity: 21 metal doors

History: Original

Condition: Good to fair overall. We note deterioration at frame.

Utility door

Frame deterioration

Useful Life: Up to 35 years

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

- Annually:
  - Inspect and repair any damage, base corrosion or alignment issues
  - Replace deteriorated hardware and loose weather stripping
  - Periodic touch-up paint finish applications as needed

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

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We depict replacement in a phased manner.

Gutters and Downspouts

Line Item: 1.240

Quantity: Approximately 14,000 linear feet of aluminum five-inch seamless gutters and two-inch by three-inch downspouts

History: Replaced between 2004 and 2012 in conjunction with the roofs

Condition: Good overall with no significant deterioration evident.

Aluminum gutters and downspouts

Aluminum gutters and downspouts

Useful Life: 15- to 20-years

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

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

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

- Semi-annually:
  - Clean out debris and leaves that collect in the gutters
  - Repair and refasten any loose gutter fasteners
  - Repair and seal any leaking seams or end caps
  - Verify downspouts discharge away from foundations

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

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We depict replacement in a phased manner.

Light Fixtures

Line Item: 1.260

Quantity: Approximately 290 exterior metal light fixtures accent the balconies, garages and the front and rear entries.

History: Replaced in 2022.

Condition: Good overall with no significant deterioration evident.

Exterior light 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:
    - 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.

Roofs, Asphalt Shingles

Line Item: 1.280

Quantity: Approximately 1,360 *squares*[1]

History: Replaced between 2004 and 2012

Condition: Good to fair overall with curled shingles, organic growth and isolated sheathing deflection evident from our visual inspection from the ground. The Board reports a limited history of leaks.

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

Roof overview

Drip edge

Sheathing deflection

Valley detail

Shingle curl and organic growth

Shingle curl

Valley detail

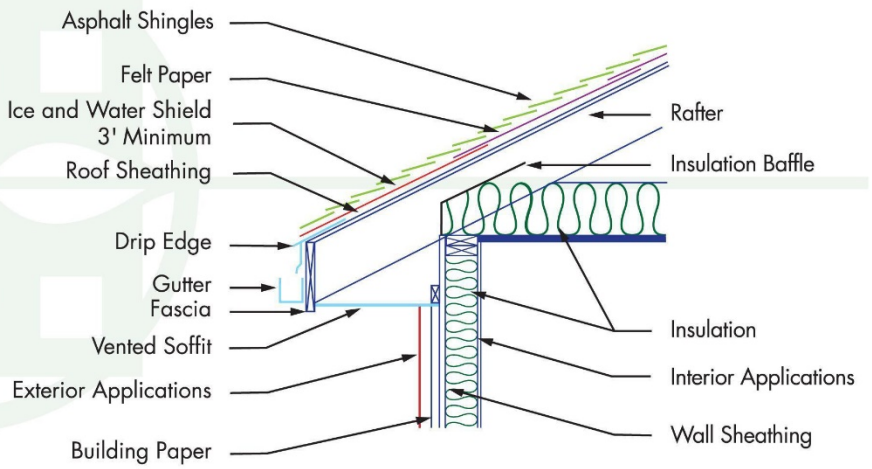
Useful Life: 15- to 20-years

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

- Laminate architectural shingles
- Boston style ridge caps
- Lead boot flashing at waste pipes
- Soffit, gable and ridge vents
- Metal drip edge
- Enclosed half weaved valleys

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

ROOF SCHEMATIC



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

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

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

- Annually:
    - Record any areas of water infiltration, flashing deterioration, damage or loose shingles
    - Implement repairs as needed if issues are reoccurring
    - Trim tree branches that are near or in contact with roof
- As-needed:

- Ensure proper ventilation and verify vents are clear of debris and not blocked from attic insulation

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

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We depict replacement in a phased manner.

Walls, Siding, Vinyl

Line Items: 1.920 and 1.921

Quantity: Approximately 141,300 of the exterior walls (including soffits and fascia)

History: Original

Condition: The siding is reported in good overall condition. We note isolated siding damage, deflection and discoloration. The Board informs us of water leaks due to the lack of building wrap and flashing at the windows and doors. The Association has installed building wraps and flashing, and conducted repairs as needed to a minor portion of the building over the years. The Association installed building wrap and flashing at a portion of two units in 2022, and the remaining buildings in the near-term while re-using the original siding for approximately $43,000 per building. Based on discussion with the Board, we depict this project beginning by 2023 and concluding by 2027. For the purpose of this Reserve Study, we conservatively include installation of the building wrap and flashing at all units during this five-year project.

Our cost for replacement of the vinyl siding beginning by 2038 and concluding by 2042 excludes replacement of the building wrap. Future Reserve Study updates will consider the need to adjust the scope and timing based on conditions identified then.

Vinyl siding overview

Vinyl siding overview

Siding deflection

Discoloration

Siding damage

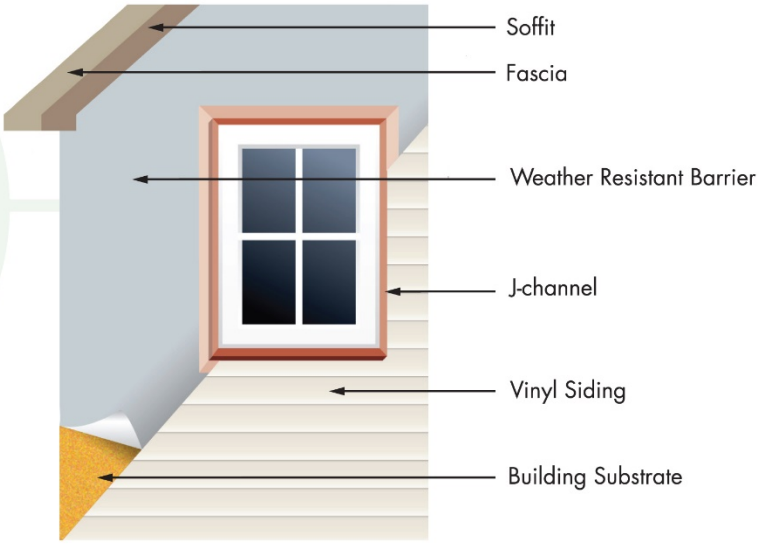
Useful Life: Up to 40 years

Component Detail Notes: The siding at Meadow Grove consists of the following:

- Clapboard double four-inch profile
- J-channel trim at window and door perimeters, and other penetration
- Water-vapor permeable building paper does not exist which may result in water infiltration and drafts of air

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

VINYL SIDING DETAIL



The Association should install new vinyl siding as recommended by the *Vinyl Institute, Inc*. The vinyl siding should be installed over a continuous weather resistant barrier and properly integrated flashing around all penetrations. Fasteners used should include aluminum, galvanized steel or other corrosion-resistant fasteners. Siding panels should overlap by approximately one inch. Joints should be staggered so that no two courses are aligned vertically, unless separated by at least three courses. The siding should not be caulked where the siding meets trim accessories, such as J-channel, or at overlap joints. J-channel should be installed a minimum of ½ inch off of roof lines.

The lack of water-vapor permeable building paper underneath the siding can result in premature loosening of the siding fasteners from water damage to the substrate sheathing. Therefore, the Association should anticipate a decreased useful life due to the lack of water proofing beneath the siding.

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

- Annually:
    - Inspect and repair loose siding, warping or damage from wind driven objects or lawn care equipment
    - Periodically clean siding as necessary at areas of organic growth. A non-abrasive household cleaner or manufacturer specified vinyl siding cleaner will remove more intense stains. We do not recommend pressure cleaning at vinyl siding due to the siding's brittle nature.

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

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

Property Site Elements

Asphalt Pavement, Crack Repair, Patch and Seal Coat

Line Item: 4.020

Quantity: Approximately 8,300 square yards

History: The Association has conducted seal coat application and repairs over the years

Condition: Fair to poor overall

Useful Life: Three- to five-years

Component Detail Notes: Proposals should include mechanically routing and filling all cracks with hot emulsion. Repairs should also include patching at areas exhibiting settlement, potholes, or excessive cracking. 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. These activities minimize the damaging effects of vehicle fluids, maintain a uniform and positive appearance, and maximize the useful life of the pavement.

Priority/Criticality: Per Board discretion

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

Asphalt Pavement, Repaving

Line Items: 4.040 and 4.045

Quantity: Approximately 8,300 square yards

History: The Association conducted a total replacement in 2007 and 2008

Condition: Fair to poor overall with systemic cracks, patches, standing water, alligator cracks and previous repairs evident. We note a higher frequency of pavement deterioration along Bent Trail Drive.

Asphalt pavement street overview

Pavement cracks along Bent Trail Drive

Pavement cracks along Meadow Grove Trail

Alligator cracks along Meadow Grove Trail

Previous repairs and alligator cracks along Meadow Grove Trail

Alligator cracks along Meadow Grove Trail

Alligator cracks along Meadow Grove Trail

Pavement cracks along Bent Trail Drive

Edge deterioration and pooling of water at Bent Trail Drive

Alligator cracks and pavement deterioration along Bent Trail Drive

Previously patched section

Pavement cracks and previous repairs

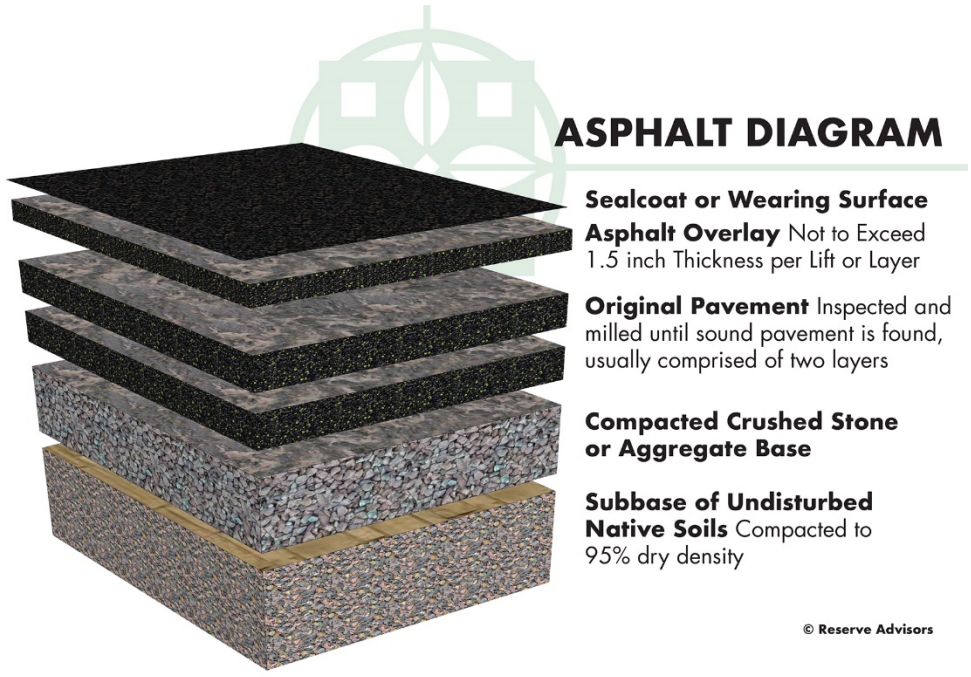
Alligator cracks along failed repairs along Bent Trail Drive

Pavement deterioration and failed repairs along Bent Trail Drive

Alligator cracks along previously patched section along Bent Trail Drive

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 Meadow Grove:



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 the Association.

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 for milling and overlayment includes area patching of up to thirty percent (30%) of the pavement. Our cost also includes replacement of the speed bumps.

Catch Basins

Line Item: 4.100

Quantity: 16 catch basins[2]. This quantity also includes the catch basins at the landscaped areas.

History: Original

Condition: Good to fair overall with collar damage evident.

Catch basin along landscape- note collar damage

Catch basin

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

Catch basin collar damage

Useful Life: The useful life of catch basins is up to 65 years. However, achieving this useful life usually requires interim capital repairs or partial replacements every 15- to 20-years.

Component Detail Notes: Erosion causes settlement around the collar of catch basins. Left unrepaired, the entire catch basin will shift and need replacement.

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

- Annually:
    - Inspect and repair any settlement and collar cracks
    - Ensure proper drainage and inlets are free of debris
    - If property drainage is not adequate in heavy rainfall events, typically bi-annual cleaning of the catch basins is recommended

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

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

Concrete Curbs and Gutters

Line Item: 4.110

Quantity: Approximately 5,100 linear feet

Condition: Fair overall with cracks, settlement and damage evident.

Concrete damage

Curb settlement

Concrete cracks

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

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

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

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We estimate that up to 1,530 linear feet of curbs and gutters, or thirty percent (30%) of the total, will require replacement during the next 30 years.

Concrete Driveways

Line Item: 4.120

Quantity: Approximately 40,600 square feet

Condition: Good to fair overall with cracks and previous repairs evident.

Concrete driveways

Previous repairs

Driveway cracks

Previous repairs

Driveway cracks

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

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

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

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We estimate that up to 12,200 square feet of concrete driveways, or thirty percent (30%) of the total, will require replacement during the next 30 years.

Concrete Garage Floors

Line Item: 4.130

Quantity: Approximately 35,600 square feet

Condition: Due to the enclosed nature of the garages, we could not inspect the garage floors.

Useful Life: 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. Beginning by 2040, we recommend the Association plan for replacement of up to 3,560 square feet, or approximately ten percent (10%) of the total, during the next 30 years. The Association should anticipate isolated repairs before 2038 to be funded through the operating budget.

Concrete Sidewalks

Line Item: 4.140

Quantity: Approximately 9,100 square feet

Condition: Good to fair overall. We note concrete damage and sealant deterioration between sidewalk and stoop.

Concrete sidewalk

Concrete damage

Concrete damage

Concrete damage

Sealant deterioration between sidewalk and stoop

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 2,720 square feet of concrete sidewalks, or thirty percent (30%) of the total, will require replacement during the next 30 years. We recommend the Association fund sealant repairs and application as needed through the operating budget.

Concrete Stoops

Line Item: 4.170

Quantity: 81 stoops

Condition: Good to fair overall with cracks and spalled concrete evident.

Concrete stoop

Stoop cracks

Concrete spalling

Stoop cracks

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

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

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

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We recommend the Association plan for replacement of up to 20 stoops, or approximately twenty-five percent (25%) of the total, during the next 30 years.

Irrigation System, Replacement

Line Item: 4.420

Quantity: 33 zones

History: Original

Condition: Reported satisfactory with isolated issues with valves and heads

Useful Life: Up to 40 years

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

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

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

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

- Semi-annually:
    - Conduct seasonal repairs which 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: 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 depict replacement in a phased manner.

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 the Board, we include a landscape allowance for partial replacements every 10 years.

Priority/Criticality: Per Board discretion

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

Light Poles and Fixtures

Line Item: 4.560

Quantity: 13 poles with light fixtures

History: The fixtures were replaced in 2011. The poles are original.

Condition: Good to fair overall with isolated fixture damage evident. We recommend the Association fund repairs through the operating budget.

Light pole and fixture - note fixture damage

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: 81 mailboxes at 21 stations

History: A portion of the mailbox stations have been replaced over the years

Condition: Good to fair overall with isolated post lean evident

Mailbox stations

Mailbox stations

Mailbox lean

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. We recommend the Association fund repairs through the operating budget.

Ponds, Drainage Area Renovations

Line Item: 4.700

Quantity: Two detention ponds

History: Original

Condition: Reported fair overall at the southwest detention pond and good overall at the southeast detention pond

Drainage structure surrounded by stones and vegetation

Useful Life: Up to every 20- to 25-years based on discussion with the Board

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

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. The estimate of cost is based on information provided by the Board and includes pumping out the water from the detention pond, excavating clogged areas, vegetation removal and stone replacement.

Retaining Walls, Timber

Line Item: 4.760 and 4.761

Quantity: Approximately 460 square feet

History: Exact age unknown. The Association plans to replace the retaining walls at 3551 Bent Trail Drive and 3533 Bent Trail Drive in 2022 with masonry retaining walls. The estimate of cost is based on information provided by the Board.

Condition: Fair overall with wood rot evident. We also note weathering of wood and damage.

Timber retaining wall

Weathering of wood

Weathering of wood

Timber retaining wall

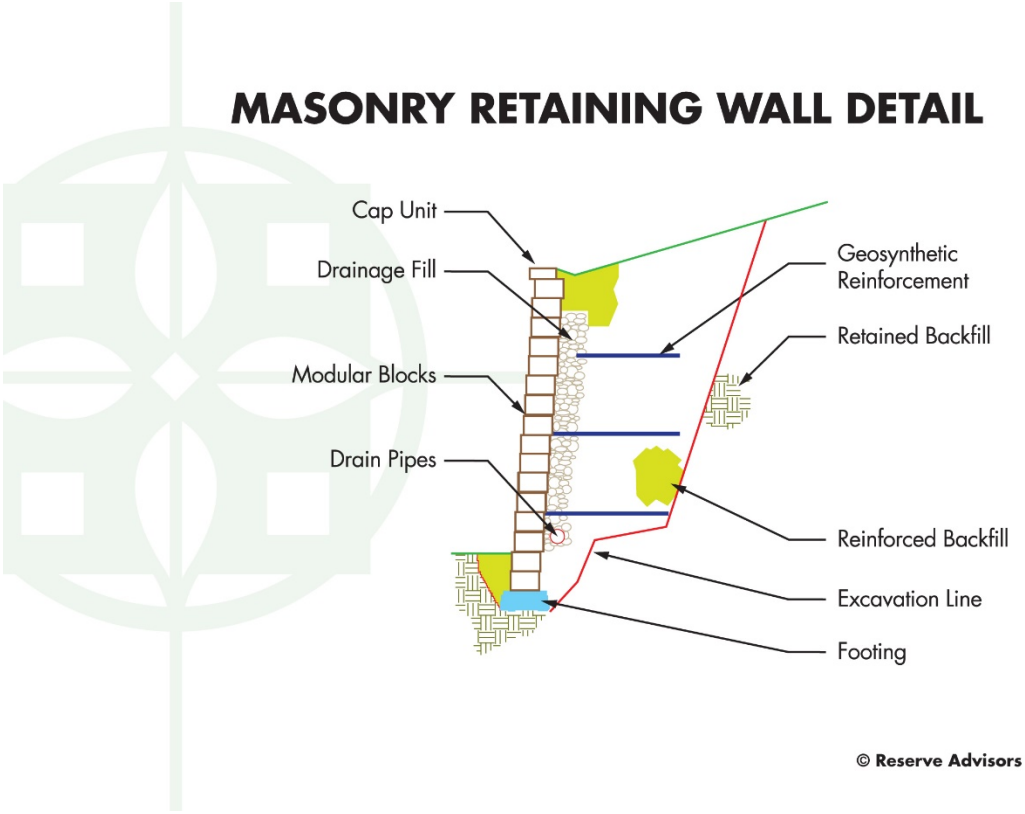
Wood damage

Wall wood rot

Useful Life: 15- to 20-years for timber retaining walls

Component Detail Notes: We advise the Association replace with a modular, interlocking dry-set masonry retaining wall system. The cost of dry-set masonry retaining

walls is similar to the cost of timber walls. However, dry-set masonry retaining walls offer a longer useful life of up to 35 years and lower total maintenance costs. The following schematic depicts the typical components of a retaining wall system although it may not reflect the actual configuration at Meadow Grove:



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

- Annually:
  - Inspect and repair leaning sections or damaged areas
  - Inspect and repair erosion at the wall base and backside

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

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

2022 Reserve Expenditures

Line Item: Last

Component Detail Notes: Meadow Grove will expend $25,000 in reserve expenditures in 2022. These expenditures relate to the following:

- $20,000: Concrete repairs
- $5,000: Miscellaneous reserve expenses

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.

Meadow Grove can fund capital repairs and replacements in any combination of the following:

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

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

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

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

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

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

- The past and current maintenance practices of Meadow Grove 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.

JAISON T. THOMAS
Responsible Advisor

CURRENT CLIENT SERVICES

Jaison T. Thomas, a Mechanical Engineer, is an advisor for Reserve Advisors. Mr. Thomas 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 apartments, condominiums, townhomes and homeowner associations.

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

Foresters Pond Condominiums - This condominium association in Houston, Texas containing 118 units in 14 buildings was constructed in the early 1960's. The exteriors of the condominiums comprise of a combination of masonry walls and wood siding construction, asphalt shingle roofs, wood framed balconies with concrete thinset toppings and staircases. The community includes a clubhouse, pool, asphalt parking areas, carports, and perimeter walls.

Seven Meadow's Community Association, Inc. - This single family home community contains over 2,000 residential homes and is located in Katy, Texas. Features of this community include two pools, two pool houses, a combination of panelized concrete and masonry perimeter walls, two tennis courts, ponds, playgrounds and a clubhouse including conference rooms, a fitness room and a theater room.

Easton Park Townhomes Owners Association, Inc. - A townhome community in Charlotte, North Carolina containing 33 units in 11 buildings. The townhomes comprise of a combination of brick walls and fiber cement siding. Features of this property include retention ponds, lift station, asphalt streets, street pavers, masonry perimeter walls and masonry retaining walls.

Villages of Northpointe Community Association, Inc. - Located in Tomball, Texas, Villages of Northpointe comprises 919 single family homes. The community includes a main amenity center with a clubhouse, pool, playground equipment and outdoor exercise stations. Throughout the site, the Association maintains numerous fences, perimeter walls, and landscaped and irrigated areas. The community also includes a gated section which utilizes a separate expenditures and funding plan.

Skyecroft Homeowners Association, Inc. - This single family home community contains 208 residential homes and is located in Waxhaw, North Carolina. The community includes a pool, tennis courts, playground equipment, large quantities of asphalt streets and a clubhouse including a meeting room, library and a bar room. The community also includes an extensive drainage system which utilizes 22 ponds throughout the community.

PRIOR RELEVANT EXPERIENCE

Before joining Reserve Advisors, Mr. Thomas completed the bachelors program in Mechanical Engineering from the University of Houston. Following his studies, he worked as a field engineer in refineries and also as a design engineer where he designed heat tracing circuits for piping in refineries and power plants.

EDUCATION

University of Houston - B.S. Mechanical Engineering

PROFESSIONAL AFFILIATIONS

Engineer in Training (E.I.T.) - State of Texas
Reserve Specialist (RS) – Community Associations Institute

NICOLE L. LOWERY, PRA, RS
Associate Director of Quality Assurance

CURRENT CLIENT SERVICES

Nicole L. Lowery, a Civil Engineer, is an Associate Director of Quality Assurance for Reserve Advisors. Ms. Lowery is responsible for the management, review and quality assurance of reserve studies. In this role, she assumes the responsibility of stringent report review analysis to assure report accuracy and the best solution for Reserve Advisors' clients.

Ms. Lowery has been involved with hundreds of Reserve Study assignments. The following is a partial list of clients served by Nicole Lowery demonstrating her breadth of experiential knowledge of community associations in construction and related buildings systems.

Amelia Surf & Racquet Club This oceanfront condominium community comprises 156 units in three mid rise buildings. This Fernandina Beach, Florida development contains amenities such as clay tennis courts, two pools and boardwalks.

Ten Museum Park This boutique, luxury 50-story high rise building in downtown Miami, Florida consists of 200 condominium units. The amenities comprise six pools including resistance and plunge pools, a full-service spa and a state-of-the-art fitness center. The property also contains a multi-level parking garage.

3 Chisolm Street Homeowners Association This historic Charleston, South Carolina community was constructed in 1929 and 1960 and comprises brick and stucco construction with asphalt shingle and modified bitumen roofs. The unique buildings were originally the Murray Vocational School. The buildings were transformed in 2002 to 27 high-end condominiums. The property includes a courtyard and covered parking garage.

Lakes of Pine Run Condominium Association This condominium community comprises 112 units in 41 buildings of stucco construction with asphalt shingle roofs. Located in Ormond Beach, Florida, it has a domestic water treatment plant and wastewater treatment plant for the residents of the property.

Rivertowne on the Wando Homeowners Association This exclusive river front community is located on the Wando River in Mount Pleasant, South Carolina. This unique Association includes several private docks along the Wando River, a pool and tennis courts for use by its residents.

Biltmore Estates Homeowners Association This private gated community is located in Miramar, Florida, just northwest of Miami, Florida and consists of 128 single family homes. The lake front property maintains a pool, a pool house and private streets.

Bellavista at Miromar Lakes Condominium Association Located in the residential waterfront resort community of Miromar Lakes Beach & Golf Club in Fort Myers, Florida, this property comprises 60 units in 15 buildings. Amenities include a clubhouse and a pool.

PRIOR RELEVANT EXPERIENCE

Before joining Reserve Advisors, Ms. Lowery was a project manager with Kipcon in New Brunswick, New Jersey and the Washington, D.C. Metro area for eight years, where she was responsible for preparing reserve studies and transition studies for community associations. Ms. Lowery successfully completed the bachelors program in Civil Engineering from West Virginia University in Morgantown, West Virginia.

EDUCATION

West Virginia University - B.S. Civil Engineering

PROFESSIONAL AFFILIATIONS / DESIGNATIONS

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

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 Meadow Grove 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) Meadow Grove 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.