

# Conservatory Metropolitan District

Aurora, CO • September 9, 2022

FULL RESERVE STUDY





Conservatory Metropolitan District  
Aurora, Colorado

Dear Board of Directors of Conservatory Metropolitan District:

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Full Reserve Study* of Conservatory Metropolitan District in Aurora, Colorado and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, September 9, 2022.

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 Conservatory Metropolitan District 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 11, 2022 by

*Reserve Advisors, LLC*

Visual Inspection and Report by: Nicholas M. Johanning, RS<sup>1</sup>

Review by: Alan M. Ebert, RS, PRA<sup>2</sup>, Director of Quality Assurance



<sup>1</sup> 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.

<sup>2</sup> 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:** Conservatory Metropolitan District (Conservatory Metropolitan District)

**Location:** Aurora, Colorado

**Reference:** 190476

**Property Basics:** Conservatory Metropolitan District is a planned unit development which is responsible for the common elements shared by 1,405 single family homes. The community was built from 2004 to 2018.

**Reserve Components Identified:** 10 Reserve Components.

**Inspection Date:** September 9, 2022.

**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 2040 due to replacement of the metal fences and again in 2052 due to total replacement of the irrigation system.

**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
- 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:**

- \$571,148 as of June 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:

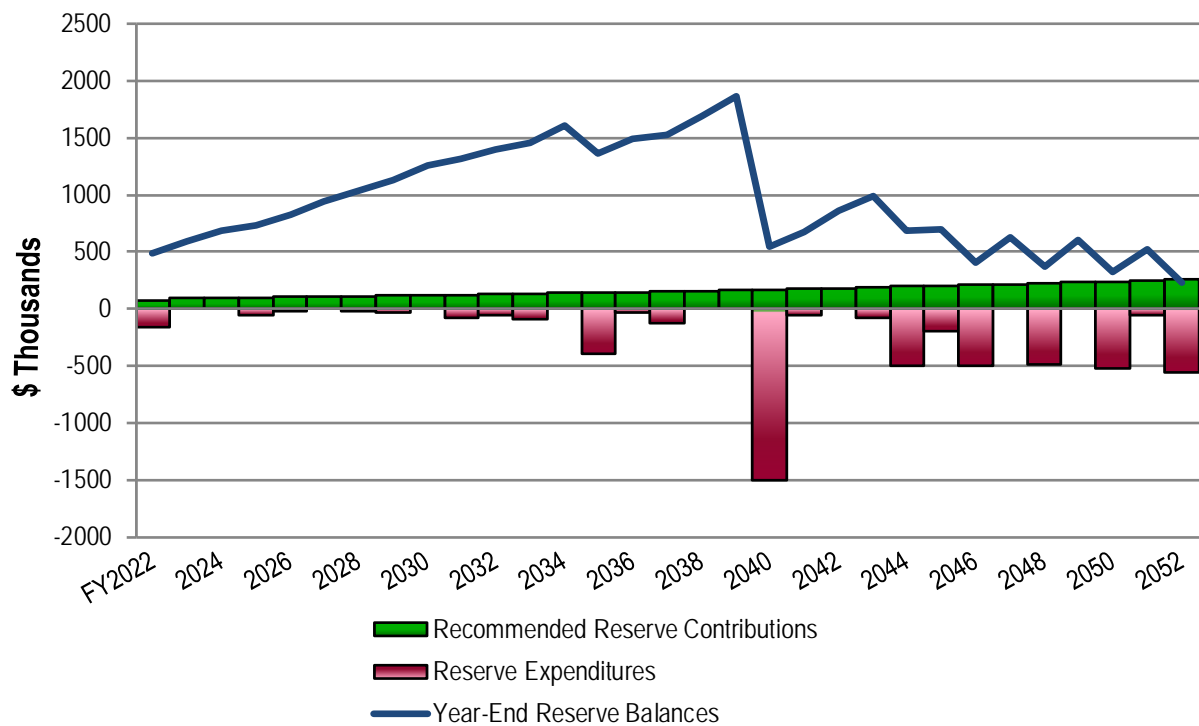
- Replacement of the irrigation system pumps to minimize the potential for service interruptions
- Ongoing renovations of the entrance monuments and perimeter walls to maintain the overall aesthetic of the community and minimize ongoing repair costs

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

- Reduced reserve budget of \$95,000 in 2023
- Inflationary increases through 2052, the limit of this study's Cash Flow Analysis
- 2023 Reserve Contribution of \$95,000 is equivalent to an average monthly contribution of \$5.63 per homeowner.

**Conservatory Metropolitan District**  
Recommended Reserve Funding Table and Graph

Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)
2023	95,000	586,746	2033	133,900	1,452,465	2043	189,100	983,667
2024	98,300	689,497	2034	138,600	1,601,717	2044	195,700	684,707
2025	101,700	735,187	2035	143,500	1,358,767	2045	202,500	691,250
2026	105,300	822,972	2036	148,500	1,484,811	2046	209,600	405,081
2027	109,000	938,114	2037	153,700	1,521,671	2047	216,900	625,576
2028	112,800	1,033,205	2038	159,100	1,691,980	2048	224,500	367,282
2029	116,700	1,124,351	2039	164,700	1,869,100	2049	232,400	603,066
2030	120,800	1,253,444	2040	170,500	543,448	2050	240,500	325,916
2031	125,000	1,311,066	2041	176,500	674,210	2051	248,900	523,541
2032	129,400	1,399,137	2042	182,700	862,269	2052	257,600	225,763



## 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

**Conservatory Metropolitan District**

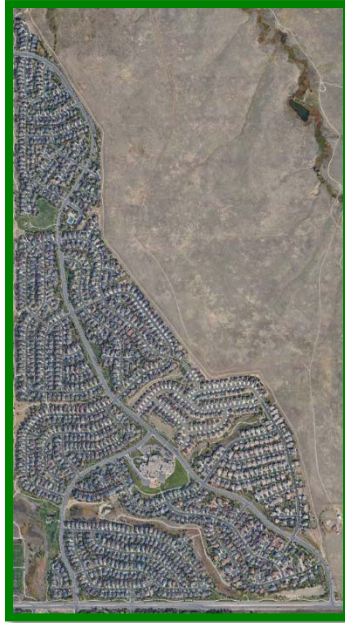
**Aurora, Colorado**

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, September 9, 2022.

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

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

## IDENTIFICATION OF PROPERTY



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

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

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

- Conservatory Metropolitan District 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

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 \$10,000 (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)
- Concrete Flatwork
- Dog Waste Stations
- Irrigation System, Maintenance
- Landscape
- Paint Finishes, Touch Up
- Pavilions, Interim Paint Finishes and Masonry Repairs
- Ponds, Detention Basins, Sediment Removal (Excluding Near Term Project)
- Site Furniture
- Other Repairs normally funded through the Operating Budget



**Dog waste station**



**Site furniture**



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

- Homes and Lots

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

- Clubhouse, Pool and Associated Elements (Conservatory Home Owners Association)
- Concrete Sidewalks and Walking Paths (City of Aurora)
- Light Poles and Fixtures (Utility Company)
- Mailbox Stations (United States Postal Service)
- Parks, Blue Grama Grass, Switchgrass and Willow Bend (City of Aurora)
- Street Systems (City of Aurora)

### 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***.

RESERVE EXPENDITURES

Conservatory Metropolitan  
District  
Aurora, Colorado

Explanatory Notes:

- 1) 3.5% is the estimated Inflation Rate for estimating Future Replacement Costs.  
2) FY2022 is Fiscal Year beginning January 1, 2022 and ending December 31, 2022.

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years		Costs, \$			Percentage of Future Expenditures	RUL = 0 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	
						Useful	Remaining	Unit (2022)	Per Phase (2022)	Total (2022)																		
Property Site Elements																												
4.200	16,200	16,200	Linear Feet	Fences, Metal	2040	to 25	18	50.00	810,000	810,000	27.2%																	
4.400	9	3	Each	Irrigation System, Controls, Phased	2031	to 15	9 to 11	12,000.00	36,000	108,000	6.9%									49,064	50,782	52,559						
4.410	5	5	Each	Irrigation System, Pumps	2025	to 20	3	11,000.00	55,000	55,000	3.3%				60,979													
4.420	497	99	Zones	Irrigation System, Replacement, Phased	2044	to 40+	22 to 30	2,000.00	198,800	994,000	44.2%																	
4.600	26	7	Each	Mailbox Stations, Pavilions, Phased	2029	to 25	7 to 19	4,000.00	26,000	104,000	3.0%							33,079				37,959				43,559		
4.630	1	1	Each	Pavilion, Renovation	2028	to 25	6	20,000.00	20,000	20,000	0.4%						24,585											
4.660	1	1	Allowance	Playground Equipment	2037	15 to 20	15	50,000.00	50,000	50,000	1.5%															83,767		
4.730	1	1	Allowance	Pond, Sediment Removal, Detention Basin Pond 6	2022	N/A	0	160,000.00	160,000	160,000	2.9%	160,000																
4.745	4,300	4,300	Square Feet	Retaining Walls, Masonry	2035	to 35	13	59.00	253,700	253,700	7.2%												396,776					
4.800	3	1	Allowance	Signage, Entrance Monuments, Renovation, Phased (Incl. Perimeter Walls)	2026	15 to 20	4 to 14	20,000.00	20,000	60,000	3.3%					22,950				27,258					32,374			
Anticipated Expenditures, By Year (\$5,524,586 over 30 years)												160,000	0	0	60,979	22,950	0	24,585	33,079	0	76,322	50,782	90,518	0	396,776	32,374	127,326	



RESERVE EXPENDITURES

Conservatory Metropolitan District Aurora, Colorado				Estimated 1st Year of Event	Life Analysis, Years		Costs, \$			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	
Line Item	Total Quantity	Per Phase Quantity	Units		Reserve Component Inventory	Unit (2022)	Per Phase (2022)	Total (2022)																		
Property Site Elements																										
4.200	16,200	16,200	Linear Feet	Fences, Metal	2040	to 25	18	50.00	810,000	810,000	27.2%			1,504,566												
4.400	9	3	Each	Irrigation System, Controls, Phased	2031	to 15	9 to 11	12,000.00	36,000	108,000	6.9%					74,140	76,734	79,420								
4.410	5	5	Each	Irrigation System, Pumps	2025	to 20	3	11,000.00	55,000	55,000	3.3%							121,336								
4.420	497	99	Zones	Irrigation System, Replacement, Phased	2044	to 40+	22 to 30	2,000.00	198,800	994,000	44.2%						423,745		453,926		486,257		520,890		557,991	
4.600	26	7	Each	Mailbox Stations, Pavilions, Phased	2029	to 25	7 to 19	4,000.00	26,000	104,000	3.0%			49,985												
4.630	1	1	Each	Pavilion, Renovation	2028	to 25	6	20,000.00	20,000	20,000	0.4%															
4.660	1	1	Allowance	Playground Equipment	2037	15 to 20	15	50,000.00	50,000	50,000	1.5%															
4.730	1	1	Allowance	Pond, Sediment Removal, Detention Basin Pond 6	2022	N/A	0	160,000.00	160,000	160,000	2.9%															
4.745	4,300	4,300	Square Feet	Retaining Walls, Masonry	2035	to 35	13	59.00	253,700	253,700	7.2%															
4.800	3	1	Allowance	Signage, Entrance Monuments, Renovation, Phased (Incl. Perimeter Walls)	2026	15 to 20	4 to 14	20,000.00	20,000	60,000	3.3%								45,667					54,238		
Anticipated Expenditures, By Year (\$5,524,586 over 30 years)												0	0	1,504,566	49,985	0	74,140	500,479	200,756	499,593	0	486,257	0	520,890	54,238	557,991

RESERVE FUNDING PLAN

CASH FLOW ANALYSIS Conservatory Metropolitan District		Individual Reserve Budgets & Cash Flows for the Next 30 Years															
Aurora, Colorado		FY2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Reserves at Beginning of Year	(Note 1)	571,148	487,998	586,746	689,497	735,187	822,972	938,114	1,033,205	1,124,351	1,253,444	1,311,066	1,399,137	1,452,465	1,601,717	1,358,767	1,484,811
Total Recommended Reserve Contributions	(Note 2)	75,000	95,000	98,300	101,700	105,300	109,000	112,800	116,700	120,800	125,000	129,400	133,900	138,600	143,500	148,500	153,700
Estimated Interest Earned, During Year	(Note 3)	1,850	3,748	4,451	4,969	5,435	6,142	6,876	7,525	8,293	8,944	9,453	9,946	10,652	10,326	9,918	10,486
Anticipated Expenditures, By Year		(160,000)	0	0	(60,979)	(22,950)	0	(24,585)	(33,079)	0	(76,322)	(50,782)	(90,518)	0	(396,776)	(32,374)	(127,326)
Anticipated Reserves at Year End		<u>\$487,998</u>	<u>\$586,746</u>	<u>\$689,497</u>	<u>\$735,187</u>	<u>\$822,972</u>	<u>\$938,114</u>	<u>\$1,033,205</u>	<u>\$1,124,351</u>	<u>\$1,253,444</u>	<u>\$1,311,066</u>	<u>\$1,399,137</u>	<u>\$1,452,465</u>	<u>\$1,601,717</u>	<u>\$1,358,767</u>	<u>\$1,484,811</u>	<u>\$1,521,671</u>

(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	1,521,671	1,691,980	1,869,100	543,448	674,210	862,269	983,667	684,707	691,250	405,081	625,576	367,282	603,066	325,916	523,541
Total Recommended Reserve Contributions	159,100	164,700	170,500	176,500	182,700	189,100	195,700	202,500	209,600	216,900	224,500	232,400	240,500	248,900	257,600
Estimated Interest Earned, During Year	11,209	12,420	8,414	4,247	5,359	6,438	5,819	4,799	3,824	3,595	3,463	3,384	3,240	2,963	2,613
Anticipated Expenditures, By Year	0	0	(1,504,566)	(49,985)	0	(74,140)	(500,479)	(200,756)	(499,593)	0	(486,257)	0	(520,890)	(54,238)	(557,991)
Anticipated Reserves at Year End	<u>\$1,691,980</u>	<u>\$1,869,100</u>	<u>\$543,448</u>	<u>\$674,210</u>	<u>\$862,269</u>	<u>\$983,667</u>	<u>\$684,707</u>	<u>\$691,250</u>	<u>\$405,081</u>	<u>\$625,576</u>	<u>\$367,282</u>	<u>\$603,066</u>	<u>\$325,916</u>	<u>\$523,541</u>	<u>\$225,763</u>
			(NOTE 5)												(NOTES 4&5)

Explanatory Notes:

- 1) Year 2022 starting reserves are as of June 30, 2022; FY2022 starts January 1, 2022 and ends December 31, 2022.
- 2) Reserve Contributions for 2022 are the remaining budgeted 6 months; 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 age, size, overall condition and complexity of the property.
- 5) Threshold Funding Years (reserve balance at critical point).

**FIVE-YEAR OUTLOOK**

**Conservatory Metropolitan  
District**  
Aurora, Colorado

Line Item	Reserve Component Inventory	RUL = 0 FY2022	1 2023	2 2024	3 2025	4 2026	5 2027
<u>Property Site Elements</u>							
4.410	Irrigation System, Pumps				60,979		
4.730	Pond, Sediment Removal, Detention Basin Pond 6	160,000					
4.800	Signage, Entrance Monuments, Renovation, Phased (Incl. Perimeter Walls)					22,950	
<hr/>							
Anticipated Expenditures, By Year (\$5,524,586 over 30 years)		160,000	0	0	60,979	22,950	0

## 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.*

### Property Site Elements

#### Fences, Metal

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**Line Item:** 4.200

**Quantity:** 16,200 linear feet at the rear and side elevations primarily along Conservatory Parkway and Jericho Way

**History:** Replaced in 2017.

**Condition:** Good overall



Perimeter metal fence



Perimeter metal fence

**Useful Life:** Up to 25 years (The useful life of the finish is indeterminate. Future updates of this Reserve Study will again consider the need to refinish the railings based on condition.)





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

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

**Priority/Criticality:** Per Board discretion

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

## **Irrigation System, Controllers**

---

**Line Item:** 4.400

**Quantity:** Nine each

**History:** Replaced from 2016 to 2018

**Condition:** Reported satisfactory without operational deficiencies

**Useful Life:** Up to 15 years

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

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

## **Irrigation System, Pumps**

---

**Line Item:** 4.410

**Quantity:** Five each

**History:** Original

**Condition:** Reported satisfactory without operational deficiencies

**Useful Life:** Up 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 estimate of cost includes an allowance for replacement of the variable frequency drives.

## **Irrigation System, Replacement**

---

**Line Item:** 4.420

**Quantity:** 497 zones

**History:** Original

**Condition:** Satisfactory operational condition and Management and the Board do not report any deficiencies

**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

Conservatory Metropolitan District 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.

## **Mailbox Stations, Pavilions**

---

**Line Item:** 4.600

**Quantity:** 26 pavilions at the mailbox stations

**History:** Original

**Condition:** Good overall



**Mailbox station pavilion**



**Mailbox station pavilion**

**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.

## Pavilion, Renovation

---

**Line Item:** 4.630

**Quantity:** One each comprising an asphalt shingle roof, and stucco and stone masonry finishes

**History:** Original; Repaired in 2020 due to animal damage

**Condition:** Good overall with minor shingle lift evident



**Pavilion**



**Shingle lift**

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

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

- Annually:
  - Inspect for wood deterioration, and loose or missing fasteners
- Every three years:
  - Power wash with algaecide and application of sealer/stain

**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 interim paint applications and repairs through the operating budget.

## Playground Equipment

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**Line Item:** 4.660

**Quantity:** One playground located near Lisbon Way

**History:** Installed around 2017

**Condition:** Good overall





**Playground equipment**

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

**Component Detail Notes:** Safety is the major purpose for maintaining playground equipment. We recommend an annual inspection of the playground equipment to identify and repair as normal maintenance loose connections and fasteners or damaged elements. We suggest the Association learn more about the specific requirements of playground equipment at [PlaygroundSafety.org](http://PlaygroundSafety.org). We recommend the use of a specialist for the design or replacement of the playground equipment environment.

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

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

**Priority/Criticality:** 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**

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**Line Item:** 4.730

**Quantity, History and Condition:** Conservatory Metropolitan District maintains seven detention basin ponds throughout the community and plans to complete a major sediment removal project at detention basin pond 6 and 7 in 2022 or 2023. The Association plans to fund the sediment removal project at detention basin 6 through reserves and at detention basin pond 7 through the operating budget, and Management and the Board

inform us the Association will fund future sediment removal projects through the operating budget as needed.

**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 years.

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

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

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

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

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

## Retaining Walls, Masonry

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**Line Item:** 4.745

**Quantity:** Approximately 4,300 square feet

**History:** Original with repairs reported in 2019 due to settlement and drainage issues

**Condition:** Good to fair overall with periodic wall settlement and erosion at the wall backside evident



**Masonry retaining walls**



**Wall settlement**



**Wall settlement**



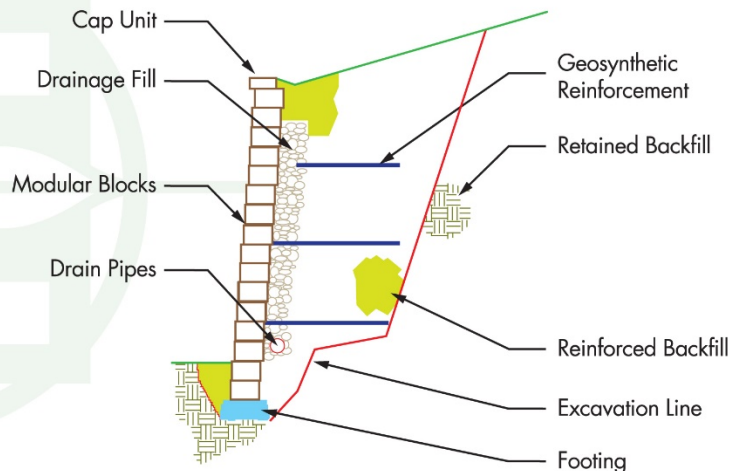
**Erosion at wall backside**

**Useful Life:** Up to 35 years

**Component Detail Notes:** Properly constructed interlocking masonry retaining walls utilize geosynthetic reinforcement and a drainage system to stabilize the wall and prevent

the buildup of hydrostatic pressure behind the wall. Water stains may indicate inadequate drainage or blocked drainage from behind the walls. The following schematic depicts the typical components of a retaining wall system although it may not reflect the actual configuration at Conservatory Metropolitan District:

## MASONRY RETAINING WALL DETAIL



© Reserve Advisors

**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
  - Water stains which may indicate possible blocked drainage should be investigated further
  - 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.



## Signage, Entrance Monuments

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**Line Item:** 4.800

**Quantity:** The property maintains 13 entrance monuments, approximately 4,000 linear feet of stone masonry perimeter walls along Hampden Avenue and various stone masonry pillars located between the metal fences.

**History:** Original

**Condition:** Good overall



Entrance monument



Entrance monument



Masonry stone perimeter wall



Masonry pillar located between the metal perimeter fences





**Missing masonry stone**



**Missing masonry stone at the masonry perimeter wall**



**Missing masonry stone at the masonry perimeter wall**



**Masonry stone damage**



**Masonry stone cracks and loose stones**



**Masonry stone cracks**

***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 for renovation includes repairs to the masonry and replacement of the remaining components listed above.

## 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.

Conservatory Metropolitan District 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<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 Aurora, Colorado at an annual inflation rate<sup>3</sup>. Isolated or regional markets of

<sup>1</sup> Identified in the APRA "Standards - 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 Conservatory Metropolitan District 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.

**NICHOLAS M. JOHANNING, E.I.T., RS**  
**Responsible Advisor**

**CURRENT CLIENT SERVICES**

Nicholas M. Johanning, a Civil Engineer, is an Advisor for Reserve Advisors. Mr. Johanning 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 Analysis and Capital Replacement Forecast services on townhomes, homeowners associations, planned unit developments and recreational associations.



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

**Ranch at Roaring Fork Homeowners Association, Inc.** Situated in Carbondale, Colorado, this community features 162 single family homes and 60 units in 14 condominium buildings. The Association features a golf course, water treatment facility and asphalt pavement streets.

**Hampden Terrace Homeowners Association** Built in 2002, this community of 50 units in seven buildings is located in Aurora, CO. These uniquely shaped buildings feature masonry veneer walls, balconies, patios and asphalt shingle roofs. The property includes concrete access streets and sidewalks, masonry retaining walls and an inviting entrance monument.

**Lorian at Prospect Creek Owners Association, Inc.** Located in picturesque Mountain Village, Colorado, this condominium style development of 20 units features an outdoor pool, concrete plaza deck and two common underground garages.

**The Town Homes at Coal Creek Homeowners Association** This townhome style development of 112 units in 29 buildings and is located in Louisville, Colorado. Exterior features of the buildings include stucco wall finishes and asphalt shingle roofs and the site contains a pool, concrete flatwork and asphalt pavement streets.

**Cornerstone Lake Condominium Association, Inc.** This townhome style development of 122 units in 16 buildings is located in Farmington, Minnesota. Exterior features of the buildings include vinyl siding, brick masonry and asphalt shingle roofs. The site consists of a pond, asphalt pavement, concrete flatwork, vinyl fences and an irrigation system.

**Blue Water Keyes Horizontal Property Regime** Built in 2006, this 14-story mid-rise in Myrtle Beach, South Carolina includes stucco exterior finishes, a modified bitumen roof, indoor and outdoor poles, and concrete breezeways and balconies. The building also utilizes two elevators, and various pool mechanical equipment, including a dehumidifier.

**PRIOR RELEVANT EXPERIENCE**

Before joining Reserve Advisors, Mr. Johanning attended the University of Toledo in Toledo, Ohio where he attained his Bachelor of Science degree in Civil Engineering. During his time at the University of Toledo, Mr. Johanning helped his senior design group develop a water reduction plan for the buildings on the University of Toledo's campus. This project included designs for improving fixture efficiencies within selected buildings and estimations of water reduction and financial savings. Mr. Johanning also interned for The Douglas Company and R.A. Plumbing and Heating as an estimating engineer.

**EDUCATION**

University of Toledo - B.S. Civil Engineering

**PROFESSIONAL AFFILIATIONS / DESIGNATIONS**

*Engineer In Training (E.I.T.) Registration*

*Reserve Specialist (RS) - Community Associations Institute*

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

**CURRENT CLIENT SERVICES**

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

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



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

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

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

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

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

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

**PRIOR RELEVANT EXPERIENCE**

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

**EDUCATION**

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

**PROFESSIONAL AFFILIATIONS/DESIGNATIONS**

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

*Reserve Specialist (RS)* - Community Associations Institute

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

## RESOURCES

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

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