

# Waterview Estates Owners Association, Inc.

October 18, 2024 • Richmond, TX

RESERVE STUDY



Waterview Estates Owners Association, Inc.  
Richmond, Texas

Dear Board of Directors of Waterview Estates Owners Association, Inc.:

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Reserve Study* of Waterview Estates Owners Association, Inc. in Richmond, Texas and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, October 18, 2024.

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 Waterview Estates Owners Association, Inc. 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 November 8, 2024 by

*Reserve Advisors, LLC*

Visual Inspection and Report by: Jaison T. Thomas, RS<sup>1</sup>

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



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

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



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## 1. RESERVE STUDY EXECUTIVE SUMMARY

**Client:** Waterview Estates Owners Association, Inc. (Waterview Estates)

**Location:** Richmond, Texas

**Reference:** 151249

**Property Basics:** Waterview Estates Owners Association, Inc. is a homeowners association which is responsible for the common elements shared by 1,172 single family homes. The community was built from 2003 to 2016.

**Reserve Components Identified:** 50 Reserve Components.

**Inspection Date:** October 18, 2024. We conducted previous inspections in 2016, 2017 and 2020.

**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 the replacement of the tennis courts and in 2045 due to the replacement of the pool plaster finish and 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
- 2.7% anticipated annual rate of return on invested reserves
- 3.3% 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:**

- \$597,443 as of September 30, 2024
- 2024 budgeted Reserve Contributions of \$88,200

**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:

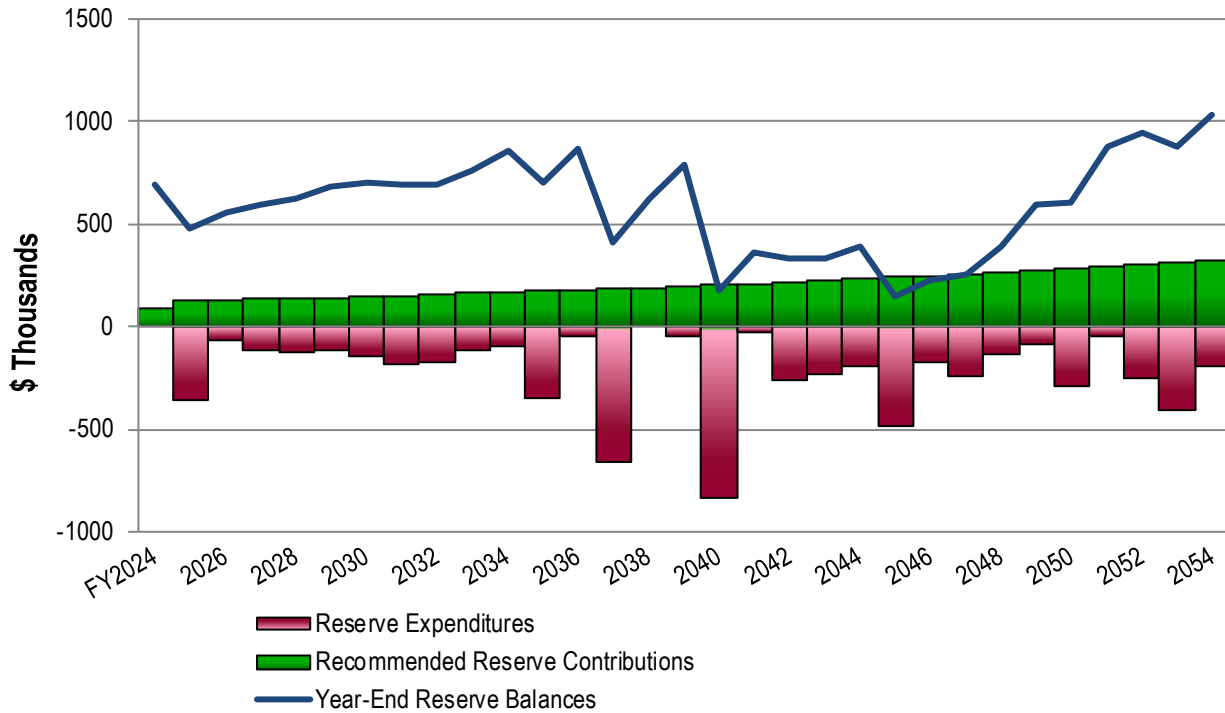
- Repairs to the wood fences as proposed
- Color coat application to the tennis courts
- Coating application and repairs to the pool deck as proposed
- Replacement of the pool plaster finish

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

- Increase Reserve Contributions to \$125,900 in 2025
- Inflationary increases thereafter through 2054, the limit of this study's Cash Flow Analysis

### Waterview Estates Recommended Reserve Funding Table and Graph

Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)
2025	125,900	475,800	2035	174,200	706,715	2045	240,800	148,743
2026	130,100	554,964	2036	179,900	866,228	2046	248,700	230,912
2027	134,400	592,545	2037	185,800	415,279	2047	256,900	252,216
2028	138,800	628,042	2038	191,900	620,982	2048	265,400	392,807
2029	143,400	679,108	2039	198,200	793,265	2049	274,200	599,388
2030	148,100	703,752	2040	204,700	174,503	2050	283,200	605,860
2031	153,000	688,783	2041	211,500	366,817	2051	292,500	872,642
2032	158,000	696,943	2042	218,500	331,448	2052	302,200	945,394
2033	163,200	761,979	2043	225,700	337,005	2053	312,200	880,503
2034	168,600	862,002	2044	233,100	388,339	2054	322,500	1,035,176





## 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

**Waterview Estates Owners Association, Inc.**

**Richmond, Texas**

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, October 18, 2024. We conducted previous inspections in 2016, 2017 and 2020.

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

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



## IDENTIFICATION OF PROPERTY



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

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

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

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

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

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

## **Excluded Components**

for  
**Waterview Estates**  
**Owners Association, Inc.**  
Richmond, Texas

### **Operating Budget Components**

Repairs normally funded through the Operating Budget and Expenditures less than \$6,000 (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)

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

- Clubhouse, Interim Paint Finish Touchups and Appliances and Furnishing Replacements

- Fences, Columns, Masonry, Inspections and Repairs

- Irrigation System, Controls and Maintenance

- Landscape

- Life Safety System, Control Panel, Clubhouse

- Office Equipment

- Paint Finishes, Touch Up

- Parking Areas, Joint Sealants

- Ponds, Maintenance

- Signage, Informational

- Site Furniture

- Splash Pad, Coating and Repairs

- Sports Equipment

- Tennis Courts, Wind Screens

- Water Heater, Clubhouse

- Water Slide, Maintenance

### **Long-Lived Components**

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

**Useful Life**

**Estimated Cost**

- Doors, Interior, Clubhouse

Indeterminate

N/A

- Electrical Systems, Common

to 75

N/A

- Foundations, Clubhouse and Pool Mechanical Equipment Building

Indeterminate

N/A

- Pipes, Interior Building, Domestic Water and Sanitary Waste, Clubhouse

to 80+

N/A

- Pipes, Subsurface Utilities, Laterals

to 85+

N/A

- Pool Structure and Deck

to 60+

N/A

- Structural Frames, Clubhouse and Pool Mechanical Equipment Building

Indeterminate

N/A

**Excluded Components**

for  
Waterview Estates  
Owners Association, Inc.  
Richmond, Texas

Owners Responsibility Components
Certain items have been designated as the responsibility of the Owners to repair or replace at their cost, including items billed back.
• Homes and Lots
• Sidewalks at Lots

Others Responsibility Components
Certain items have been designated as the responsibility of Others to repair or replace.
• Light Poles and Fixtures, Streets <sup>1</sup>
• Sidewalks, Adjacent to West Belfort Street <sup>2</sup>
• Street Systems <sup>2</sup>
<sup>1</sup> Center Point Energy
<sup>2</sup> Fort Bend County

### 3. RESERVE EXPENDITURES and FUNDING PLAN

The tables following this introduction present:

#### Reserve Expenditures

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

#### Reserve Funding Plan

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

#### 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

Waterview Estates  
Owners Association, Inc.  
Richmond, Texas

Explanatory Notes:

- 1) 3.3% is the estimated Inflation Rate for estimating Future Replacement Costs.  
2) FY2024 is Fiscal Year beginning January 1, 2024 and ending December 31, 2024.

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years		Costs, \$			Percentage of Future Expenditures	RUL = 0 FY2024	1 2025	2 2026	3 2027	4 2028	5 2029	6 2030	7 2031	8 2032	9 2033	10 2034	11 2035	12 2036	13 2037	14 2038	15 2039
						Useful	Remaining	Unit (2024)	Per Phase (2024)	Total (2024)																	
Property Site Elements																											
4.120	35,600	2,140	Square Feet	Concrete Parking Area, Partial	2030	to 65	6 to 30+	13.00	27,820	462,800	3.7%							33,803							39,761		
4.140	53,500	2,010	Square Feet	Concrete Sidewalks, Common Areas and Waterview Estates Trail, Partial	2035	to 65	11 to 30+	11.00	22,110	588,500	2.6%														31,600		
4.220	700	700	Linear Feet	Fences, Chain Link, Baseball Diamond (Incl. Backstop)	2032	to 25	8	40.00	28,000	28,000	0.6%									36,305							
4.221	350	350	Linear Feet	Fences, Chain Link, Juniper Berry Drive and Baldwin Elm Street	2032	to 25	8	18.00	6,300	6,300	0.1%									8,169							
4.240	880	880	Linear Feet	Fences, Steel, West Belfort Street, Paint Finishes and Repairs	2026	6 to 8	2	12.50	11,000	11,000	1.2%			11,738							14,733						
4.245	880	880	Linear Feet	Fences, Steel, West Belfort Street, Replacement	2040	to 35	16	85.00	74,800	74,800	2.0%																
4.280	7,800	7,800	Linear Feet	Fences, Wood, Paint Finishes and Repairs (2025 Major Repairs)	2025	4 to 6	1	6.50	50,700	50,700	9.0%		188,230							63,637							
4.285	7,350	7,350	Linear Feet	Fences, Wood, Replacement, Common Areas	2037	15 to 20	13	42.00	308,700	308,700	7.4%														470,805		
4.287	450	450	Linear Feet	Fence, Wood, Replacement, Splash Pad Area and Buckeye Pass	2031	15 to 20	7	42.00	18,900	18,900	1.1%									23,723							
4.420	175	35	Zones	Irrigation System, Phased	2042	to 40+	18 to 22	1,600.00	56,000	280,000	8.4%																
4.560	4	4	Each	Light Poles and Fixtures, Amenity Center	2040	to 25	16	3,500.00	14,000	14,000	0.4%																
4.600	4	1	Each	Mailbox Stations, Phased	2028	to 25	4 to 10	44,000.00	44,000	176,000	5.2%					50,102		53,463		57,050		60,877					
4.660	1	1	Allowance	Playground Equipment, Amenity Area	2027	15 to 20	3	9,500.00	9,500	9,500	0.5%				10,472												
4.661	1	1	Allowance	Playground Equipment, Jay Thrush Drive	2032	15 to 20	8	45,000.00	45,000	45,000	2.7%									58,347							
4.662	1	1	Allowance	Playground Equipment, North Pocket Parks	2028	15 to 20	4	46,000.00	46,000	46,000	2.4%					52,379											
4.663	1	1	Allowance	Playground Equipment, Quil Rush Drive	2035	15 to 20	11	49,000.00	49,000	49,000	1.1%													70,033			
4.664	1	1	Allowance	Playground Equipment, Splash Pad	2027	15 to 20	3	37,000.00	37,000	37,000	1.9%				40,785												
4.700	2	2	Each	Ponds, Aerator	2028	10 to 15	4	7,500.00	15,000	15,000	0.7%					17,080											
4.800	2	1	Allowance	Signage, Property Identification, Renovations, Phased	2029	15 to 20	5 to 13	10,500.00	10,500	21,000	0.8%						12,351							16,014			
4.830	12,960	12,960	Square Feet	Tennis Courts, Color Coat	2025	4 to 6	1	1.40	18,144	18,144	2.3%		18,743					22,046						25,932			
4.840	480	480	Linear Feet	Tennis Courts, Fence	2040	to 30	16	40.00	19,200	19,200	0.5%																
4.850	9	9	Each	Tennis Courts, Light Poles and Fixtures	2040	to 35	16	4,000.00	36,000	36,000	0.9%																
4.860	12,960	12,960	Square Feet	Tennis Courts, Surface Replacement	2040	to 40	16	13.50	174,960	174,960	4.6%																
Clubhouse and Pavilion Elements																											
5.200	170	170	Square Feet	Doors, Exterior (Incl. Pool Mechanical Building)	2040	8 to 10	16	60.00	10,200	10,200	0.3%																
5.310	1	1	Allowance	Exterior Renovations, Paint Finishes and Repairs (Incl. Pool Mechanical Building)	2029	8 to 10	5	11,000.00	11,000	11,000	0.9%						12,939								17,902		
5.450	1	1	Allowance	HVAC Equipment, Split System	2039	12 to 18	15	10,500.00	10,500	10,500	0.7%															17,088	
5.500	1	1	Allowance	Interior, Renovation, Complete	2040	to 20	16	80,000.00	80,000	80,000	2.1%																
5.510	1	1	Each	Interior, Renovation, Partial	2030	to 10	6	16,000.00	16,000	16,000	0.9%							19,441									
5.600	40	40	Squares	Roofs, Metal, Clubhouse and Pool Mechanical Building	2031	to 30	7	1,200.00	48,000	48,000	0.9%								60,248								
5.601	8	8	Squares	Roof, Metal, Pavilion, Splash Pad	2045	to 30	21	1,200.00	9,600	9,600	0.3%																
5.602	7	7	Squares	Roof, Metal, Pavilion, Waterview Meadow Drive	2049	to 30	25	1,200.00	8,400	8,400	0.3%																
5.700	1	1	Allowance	Security System	2026	to 10	2	28,000.00	28,000	28,000	2.0%			29,878										41,339			
5.750	2,980	2,980	Square Feet	Walls, Fiber Cement Siding, Replacement	2053	to 50	29	12.00	35,760	35,760	1.4%																
5.800	180	180	Square Feet	Windows	2054	to 35	30	65.00	11,700	11,700	0.5%																

RESERVE EXPENDITURES

Waterview Estates Owners Association, Inc. Richmond, Texas					Estimated 1st Year of Event	Life Analysis, Years		Costs, \$			Percentage of Future Expenditures	16 2040	17 2041	18 2042	19 2043	20 2044	21 2045	22 2046	23 2047	24 2048	25 2049	26 2050	27 2051	28 2052	29 2053	30 2054
Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory		Useful	Remaining	Unit (2024)	Per Phase (2024)	Total (2024)																
Property Site Elements																										
4.120	35,600	2,140	Square Feet	Concrete Parking Area, Partial	2030	to 65	6 to 30+	13.00	27,820	462,800	3.7%	46,769					55,013					64,709				
4.140	53,500	2,010	Square Feet	Concrete Sidewalks, Common Areas and Waterview Estates Trail, Partial	2035	to 65	11 to 30+	11.00	22,110	588,500	2.6%	37,170					43,722					51,428				
4.220	700	700	Linear Feet	Fences, Chain Link, Baseball Diamond (Incl. Backstop)	2032	to 25	8	40.00	28,000	28,000	0.6%															
4.221	350	350	Linear Feet	Fences, Chain Link, Juniper Berry Drive and Baldwin Elm Street	2032	to 25	8	18.00	6,300	6,300	0.1%															
4.240	880	880	Linear Feet	Fences, Steel, West Belfort Street, Paint Finishes and Repairs	2026	6 to 8	2	12.50	11,000	11,000	1.2%							23,211							29,134	
4.245	880	880	Linear Feet	Fences, Steel, West Belfort Street, Replacement	2040	to 35	16	85.00	74,800	74,800	2.0%	125,750														
4.280	7,800	7,800	Linear Feet	Fences, Wood, Paint Finishes and Repairs (2025 Major Repairs)	2025	4 to 6	1	6.50	50,700	50,700	9.0%			90,952				106,983					125,839			
4.285	7,350	7,350	Linear Feet	Fences, Wood, Replacement, Common Areas	2037	15 to 20	13	42.00	308,700	308,700	7.4%															
4.287	450	450	Linear Feet	Fence, Wood, Replacement, Splash Pad Area and Buckeye Pass	2031	15 to 20	7	42.00	18,900	18,900	1.1%											45,412				
4.420	175	35	Zones	Irrigation System, Phased	2042	to 40+	18 to 22	1,600.00	56,000	280,000	8.4%			100,460	103,775	107,200	110,738	114,392								
4.560	4	4	Each	Light Poles and Fixtures, Amenity Center	2040	to 25	16	3,500.00	14,000	14,000	0.4%	23,536														
4.600	4	1	Each	Mailbox Stations, Phased	2028	to 25	4 to 10	44,000.00	44,000	176,000	5.2%													112,814		
4.660	1	1	Allowance	Playground Equipment, Amenity Area	2027	15 to 20	3	9,500.00	9,500	9,500	0.5%							20,046								
4.661	1	1	Allowance	Playground Equipment, Jay Thrush Drive	2032	15 to 20	8	45,000.00	45,000	45,000	2.7%												111,692			
4.662	1	1	Allowance	Playground Equipment, North Pocket Parks	2028	15 to 20	4	46,000.00	46,000	46,000	2.4%								100,269							
4.663	1	1	Allowance	Playground Equipment, Quil Rush Drive	2035	15 to 20	11	49,000.00	49,000	49,000	1.1%															
4.664	1	1	Allowance	Playground Equipment, Splash Pad	2027	15 to 20	3	37,000.00	37,000	37,000	1.9%							78,074								
4.700	2	2	Each	Ponds, Aerator	2028	10 to 15	4	7,500.00	15,000	15,000	0.7%				27,797											
4.800	2	1	Allowance	Signage, Property Identification, Renovations, Phased	2029	15 to 20	5 to 13	10,500.00	10,500	21,000	0.8%								23,643							
4.830	12,960	12,960	Square Feet	Tennis Courts, Color Coat	2025	4 to 6	1	1.40	18,144	18,144	2.3%						35,879					42,203				
4.840	480	480	Linear Feet	Tennis Courts, Fence	2040	to 30	16	40.00	19,200	19,200	0.5%	32,278														
4.850	9	9	Each	Tennis Courts, Light Poles and Fixtures	2040	to 35	16	4,000.00	36,000	36,000	0.9%	60,521														
4.860	12,960	12,960	Square Feet	Tennis Courts, Surface Replacement	2040	to 40	16	13.50	174,960	174,960	4.6%	294,133														
Clubhouse and Pavilion Elements																										
5.200	170	170	Square Feet	Doors, Exterior (Incl. Pool Mechanical Building)	2040	8 to 10	16	60.00	10,200	10,200	0.3%	17,148														
5.310	1	1	Allowance	Exterior Renovations, Paint Finishes and Repairs (Incl. Pool Mechanical Building)	2029	8 to 10	5	11,000.00	11,000	11,000	0.9%								24,769							
5.450	1	1	Allowance	HVAC Equipment, Split System	2039	12 to 18	15	10,500.00	10,500	10,500	0.7%														27,810	
5.500	1	1	Allowance	Interior, Renovation, Complete	2040	to 20	16	80,000.00	80,000	80,000	2.1%	134,492														
5.510	1	1	Each	Interior, Renovation, Partial	2030	to 10	6	16,000.00	16,000	16,000	0.9%											37,216				
5.600	40	40	Squares	Roofs, Metal, Clubhouse and Pool Mechanical Building	2031	to 30	7	1,200.00	48,000	48,000	0.9%															
5.601	8	8	Squares	Roof, Metal, Pavilion, Splash Pad	2045	to 30	21	1,200.00	9,600	9,600	0.3%						18,984									
5.602	7	7	Squares	Roof, Metal, Pavilion, Waterview Meadow Drive	2049	to 30	25	1,200.00	8,400	8,400	0.3%									18,914						
5.700	1	1	Allowance	Security System	2026	to 10	2	28,000.00	28,000	28,000	2.0%						57,196									
5.750	2,980	2,980	Square Feet	Walls, Fiber Cement Siding, Replacement	2053	to 50	29	12.00	35,760	35,760	1.4%													91,687		
5.800	180	180	Square Feet	Windows	2054	to 35	30	65.00	11,700	11,700	0.5%														30,988	

RESERVE EXPENDITURES

Waterview Estates  
Owners Association, Inc.  
Richmond, Texas

Explanatory Notes:

- 1) 3.3% is the estimated Inflation Rate for estimating Future Replacement Costs.  
2) FY2024 is Fiscal Year beginning January 1, 2024 and ending December 31, 2024.

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years		Costs, \$			Percentage of Future Expenditures	RUL = 0 FY2024	1 2025	2 2026	3 2027	4 2028	5 2029	6 2030	7 2031	8 2032	9 2033	10 2034	11 2035	12 2036	13 2037	14 2038	15 2039	
						Useful	Remaining	Unit (2024)	Per Phase (2024)	Total (2024)																		
Pool and Splash Pad Elements																												
6.200	7,300	7,300	Square Feet	Concrete Deck, Inspections, Coating Application and Repairs, Pool	2025	8 to 12	1	5.00	36,500	36,500	2.5%	37,705											52,167					
6.400	520	520	Linear Feet	Fence, Aluminum, Pool	2029	to 25	5	65.00	33,800	33,800	2.0%						39,757											
6.401	620	620	Linear Feet	Fence, Aluminum, Splash Pad	2025	to 25	1	50.00	31,000	31,000	1.6%	32,023																
6.500	1	1	Allowance	Furniture	2031	to 12	7	31,000.00	31,000	31,000	1.5%								38,910									
6.600	2	1	Allowance	Mechanical Equipment, Phased	2027	to 15	3 to 10	15,200.00	15,200	30,400	1.5%			16,755								21,030						
6.800	5,700	5,700	Square Feet	Pool Finish, Plaster	2025	8 to 12	1	13.40	76,380	76,380	5.3%	78,901											109,165					
6.801	400	400	Linear Feet	Pool Finish, Tile	2035	15 to 25	11	38.00	15,200	15,200	0.3%											21,724						
6.870	2,400	2,400	Square Feet	Shade Structures, Canvas Replacements, Pool Area and Jay Thrush Playground	2026	8 to 10	2	9.00	21,600	21,600	1.0%		23,049															
6.871	1,200	1,200	Square Feet	Shade Structures, Canvas Replacements, Splash Pad Playground	2030	8 to 10	6	9.00	10,800	10,800	0.6%						13,123											
6.872	2,400	2,400	Square Feet	Shade Structures, Total Replacement, Pool Area and Jay Thrush Playground	2033	15 to 20	9	32.00	76,800	76,800	4.7%									102,864								
6.873	1,200	1,200	Square Feet	Shade Structures, Total Replacements, Splash Pad Playground	2040	15 to 20	16	32.00	38,400	38,400	1.0%																	
6.960	1	1	Allowance	Water Features, Pool Area, Refinishing and Repairs	2032	to 5	8	6,500.00	6,500	6,500	0.8%								8,428					9,913				
6.961	1	1	Allowance	Water Features, Pool Area, Replacement	2027	to 15	3	40,000.00	40,000	40,000	1.8%			44,092														
6.962	1	1	Allowance	Water Features, Splash Pad, Refinishing and Repairs	2034	to 5	10	6,000.00	6,000	6,000	0.9%											8,301				9,765		
6.963	1	1	Allowance	Water Features, Splash Pad, Replacement	2029	to 15	5	38,000.00	38,000	38,000	1.8%						44,698											
6.981	1	1	Each	Water Slide, Replacement	2037	15 to 20	13	103,000.00	103,000	103,000	2.5%														157,087			
Anticipated Expenditures, By Year (\$6,404,885 over 30 years)												0	355,601	64,666	112,104	119,561	109,745	141,877	186,518	168,297	117,597	90,209	350,383	41,339	653,819	0	44,755	

RESERVE EXPENDITURES

Waterview Estates Owners Association, Inc. Richmond, Texas				Estimated 1st Year of Event	Life Analysis, Years		Costs, \$			Percentage of Future Expenditures	16 2040	17 2041	18 2042	19 2043	20 2044	21 2045	22 2046	23 2047	24 2048	25 2049	26 2050	27 2051	28 2052	29 2053	30 2054						
Line Item	Total Quantity	Per Phase Quantity	Units		Useful	Remaining	Unit (2024)	Per Phase (2024)	Total (2024)																						
Reserve Component Inventory																															
Pool and Splash Pad Elements																															
6.200	7,300	7,300	Square Feet	Concrete Deck, Inspections, Coating Application and Repairs, Pool	2025	8 to 12	1	5.00	36,500	36,500	2.5%											72,177									
6.400	520	520	Linear Feet	Fence, Aluminum, Pool	2029	to 25	5	65.00	33,800	33,800	2.0%																89,521				
6.401	620	620	Linear Feet	Fence, Aluminum, Splash Pad	2025	to 25	1	50.00	31,000	31,000	1.6%																72,106				
6.500	1	1	Allowance	Furniture	2031	to 12	7	31,000.00	31,000	31,000	1.5%											57,447									
6.600	2	1	Allowance	Mechanical Equipment, Phased	2027	to 15	3 to 10	15,200.00	15,200	30,400	1.5%	26,397												33,132							
6.800	5,700	5,700	Square Feet	Pool Finish, Plaster	2025	8 to 12	1	13.40	76,380	76,380	5.3%																151,038				
6.801	400	400	Linear Feet	Pool Finish, Tile	2035	15 to 25	11	38.00	15,200	15,200	0.3%																				
6.870	2,400	2,400	Square Feet	Shade Structures, Canvas Replacements, Pool Area and Jay Thrush Playground	2026	8 to 10	2	9.00	21,600	21,600	1.0%																40,028				
6.871	1,200	1,200	Square Feet	Shade Structures, Canvas Replacements, Splash Pad Playground	2030	8 to 10	6	9.00	10,800	10,800	0.6%																25,121				
6.872	2,400	2,400	Square Feet	Shade Structures, Total Replacement, Pool Area and Jay Thrush Playground	2033	15 to 20	9	32.00	76,800	76,800	4.7%																196,911				
6.873	1,200	1,200	Square Feet	Shade Structures, Total Replacements, Splash Pad Playground	2040	15 to 20	16	32.00	38,400	38,400	1.0%	64,556																			
6.960	1	1	Allowance	Water Features, Pool Area, Refinishing and Repairs	2032	to 5	8	6,500.00	6,500	6,500	0.8%											13,716							16,133		
6.961	1	1	Allowance	Water Features, Pool Area, Replacement	2027	to 15	3	40,000.00	40,000	40,000	1.8%																71,757				
6.962	1	1	Allowance	Water Features, Splash Pad, Refinishing and Repairs	2034	to 5	10	6,000.00	6,000	6,000	0.9%											11,486		13,510							15,891
6.963	1	1	Allowance	Water Features, Splash Pad, Replacement	2029	to 15	5	38,000.00	38,000	38,000	1.8%																72,743				
6.981	1	1	Each	Water Slide, Replacement	2037	15 to 20	13	103,000.00	103,000	103,000	2.5%																				
Anticipated Expenditures, By Year (\$6,404,885 over 30 years)											836,353	26,397	263,170	229,047	191,428	487,550	171,588	242,031	133,401	80,836	292,782	45,412	253,665	401,412	193,345						



RESERVE FUNDING PLAN

CASH FLOW ANALYSIS		Individual Reserve Budgets & Cash Flows for the Next 30 Years															
Waterview Estates																	
Owners Association, Inc.																	
Richmond, Texas		FY2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Reserves at Beginning of Year	(Note 1)	597,443	689,973	475,800	554,964	592,545	628,042	679,108	703,752	688,783	696,943	761,979	862,002	706,715	866,228	415,279	620,982
Total Recommended Reserve Contributions	(Note 2)	88,200	125,900	130,100	134,400	138,800	143,400	148,100	153,000	158,000	163,200	168,600	174,200	179,900	185,800	191,900	198,200
Estimated Interest Earned, During Year	(Note 3)	4,330	15,528	13,730	15,285	16,258	17,411	18,420	18,549	18,458	19,433	21,632	20,896	20,952	17,070	13,803	18,838
Anticipated Expenditures, By Year		0	(355,601)	(64,666)	(112,104)	(119,561)	(109,745)	(141,877)	(186,518)	(168,297)	(117,597)	(90,209)	(350,383)	(41,339)	(653,819)	0	(44,755)
Anticipated Reserves at Year End		<u>\$689,973</u>	<u>\$475,800</u>	<u>\$554,964</u>	<u>\$592,545</u>	<u>\$628,042</u>	<u>\$679,108</u>	<u>\$703,752</u>	<u>\$688,783</u>	<u>\$696,943</u>	<u>\$761,979</u>	<u>\$862,002</u>	<u>\$706,715</u>	<u>\$866,228</u>	<u>\$415,279</u>	<u>\$620,982</u>	<u>\$793,265</u>

(continued)	Individual Reserve Budgets & Cash Flows for the Next 30 Years, Continued														
	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
Reserves at Beginning of Year	793,265	174,503	366,817	331,448	337,005	388,339	148,743	230,912	252,216	392,807	599,388	605,860	872,642	945,394	880,503
Total Recommended Reserve Contributions	204,700	211,500	218,500	225,700	233,100	240,800	248,700	256,900	265,400	274,200	283,200	292,500	302,200	312,200	322,500
Estimated Interest Earned, During Year	12,891	7,210	9,301	8,904	9,662	7,154	5,057	6,435	8,592	13,216	16,054	19,694	24,217	24,321	25,517
Anticipated Expenditures, By Year	(836,353)	(26,397)	(263,170)	(229,047)	(191,428)	(487,550)	(171,588)	(242,031)	(133,401)	(80,836)	(292,782)	(45,412)	(253,665)	(401,412)	(193,345)
Anticipated Reserves at Year End	<u>\$174,503</u>	<u>\$366,817</u>	<u>\$331,448</u>	<u>\$337,005</u>	<u>\$388,339</u>	<u>\$148,743</u>	<u>\$230,912</u>	<u>\$252,216</u>	<u>\$392,807</u>	<u>\$599,388</u>	<u>\$605,860</u>	<u>\$872,642</u>	<u>\$945,394</u>	<u>\$880,503</u>	<u>\$1,035,176</u>
	(NOTE 5)					(NOTE 5)									(NOTE 4)

Explanatory Notes:

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

**FIVE-YEAR OUTLOOK****Waterview Estates  
Owners Association, Inc.**  
Richmond, Texas

Line Item	Reserve Component Inventory	RUL = 0 FY2024	1 2025	2 2026	3 2027	4 2028	5 2029
<u>Property Site Elements</u>							
4.240	Fences, Steel, West Belfort Street, Paint Finishes and Repairs			11,738			
4.280	Fences, Wood, Paint Finishes and Repairs (2025 Major Repairs)		188,230				
4.600	Mailbox Stations, Phased					50,102	
4.660	Playground Equipment, Amenity Area				10,472		
4.662	Playground Equipment, North Pocket Parks					52,379	
4.664	Playground Equipment, Splash Pad				40,785		
4.700	Ponds, Aerator					17,080	
4.800	Signage, Property Identification, Renovations, Phased						12,351
4.830	Tennis Courts, Color Coat		18,743				
<u>Clubhouse and Pavilion Elements</u>							
5.310	Exterior Renovations, Paint Finishes and Repairs (Incl. Pool Mechanical Building)						12,939
5.700	Security System			29,878			
<u>Pool and Splash Pad Elements</u>							
6.200	Concrete Deck, Inspections, Coating Application and Repairs, Pool		37,705				
6.400	Fence, Aluminum, Pool						39,757
6.401	Fence, Aluminum, Splash Pad		32,023				
6.600	Mechanical Equipment, Phased				16,755		
6.800	Pool Finish, Plaster		78,901				
6.870	Shade Structures, Canvas Replacements, Pool Area and Jay Thrush Playground			23,049			
6.961	Water Features, Pool Area, Replacement				44,092		
6.963	Water Features, Splash Pad, Replacement						44,698
<b>Anticipated Expenditures, By Year (\$6,404,885 over 30 years)</b>		<b>0</b>	<b>355,601</b>	<b>64,666</b>	<b>112,104</b>	<b>119,561</b>	<b>109,745</b>

## 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.*

### Property Site Elements

#### Concrete Parking Areas

---

**Line Item:** 4.120

**Quantity:** Approximately 35,600 square feet

**Condition:** Good overall



Concrete parking area



Concrete parking area

**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 10,700 square feet of concrete driveways, or thirty percent (30.1%) of the total, will require replacement during the next 30 years.

## Concrete Sidewalks

**Line Item:** 4.140

**Quantity:** Approximately 53,500 square feet primarily at the common areas and along Waterview Estates Trail

**Condition:** Good to fair overall with trip hazards evident. The Association is currently in the process of replacement the common sidewalks at the property. This project will be completed in 2025 and funded through the operating budget.



Concrete sidewalk



Concrete sidewalk



Previous repairs



Sidewalk trip hazard

**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 8,040 square feet of concrete sidewalks, or fifteen percent (15%) of the total, will require replacement during the next 30 years.

## Fence, Chain Link

---

**Line Items:** 4.220 and 4.221

**Quantity:** Approximately 700 linear feet at the baseball field and 350 linear feet at Juniper Berry Drive and Baldwin Elm Street

**History:** Original

**Condition:** Good overall



Chain link fence at the baseball field



Chain link fence

**Useful Life:** Up to 25 years

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

- Annually:
  - Inspect and repair loose 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.

## Fences, Steel

---

**Line Items:** 4.240 and 4.245

**Quantity:** Approximately 880 linear feet of steel fences along West Belfort Street

**History:** Original

**Condition:** Good overall with finish deterioration evident



Steel fence



Steel fence



Fence finish deterioration

**Useful Life:** Six- to eight-years for paint finishes and up to 35 years for replacement

**Component Detail Notes:** Steel components at grade and key structural connections are especially prone to failure if not thoroughly maintained. Secure and rust free fasteners and connections will prevent premature deterioration. Preparation of the steel before application of the paint finish is critical to maximize the useful life of the finish.

**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, finish deterioration, 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.

## Fences, Wood

---

**Line Items:** 4.280, 4.285 and 4.287

**Quantity:** The Association maintains a total of 7,800 linear feet of wood fences at the following locations:

- Along Waterview Estates Trail
- Along West Belfort Street
- Behind homes by the soccer field
- By the amenity area
- By the splash pad
- Buckeye Pass

**History:** The wood fences by the splash pad and Buckeye Pass are original. The remaining fences were replaced in approximately 2016.

**Condition:** Fair overall with leaning sections evident throughout the property. Management informs us the Association will conduct major repairs in 2025 for approximately \$188,230 due to the damages caused by the recent hurricane.





**Wood fence**



**Fence leaning section**



**Fence damage**



**Fence leaning section**



**Fence leaning section**

***Useful Life:*** Four- to six-years for paint finishes and 15- to 20-years for replacement

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

- Annually:

- Inspect and repair loose sections, finish deterioration 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, Replacement**

---

**Line Item:** 4.420

**Quantity:** The irrigation system at Waterview Estates utilizes 175 zones

**History:** Original

**Condition:** Good overall

**Useful Life:** Up to and sometimes beyond 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

Waterview Estates 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.

## Light Poles and Fixtures

---

**Line Item:** 4.560

**Quantity:** Four each at the amenity center

**History:** The light fixtures were replaced with LED fixtures in 2019

**Condition:** Good overall



Light pole and fixture

**Useful Life:** Up to 25 years

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

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

**Priority/Criticality:** Per Board discretion

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

## Mailbox Stations

---

**Line Item:** 4.600

**Quantity:** The Association maintains mailbox stations throughout the property

**History:** Original

**Condition:** Good overall





**Mailbox stations**

**Useful Life:** Up to 25 years

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

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

**Priority/Criticality:** Per Board discretion

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

## **Playground Equipment**

---

**Line Items:** 4.660 through 4.664

**Quantity:** The Association maintains five playgrounds

**History:** Varies in age

**Condition:** Varies in condition



**Playground equipment at the amenity area**



**Playground equipment at the splash pad**



**Playground equipment and shade structure at Jay Thrush Drive**



**Playground equipment at Quil Rush**



**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. We include an allowance in the unit cost for replacement of the safety surface and border.

## Pond, Aerator

---

**Line Item:** 4.700

**Quantity:** Two each

**History:** Exact age unknown

**Condition:** Good to fair overall



Pond aerator

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

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

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

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

## Signage

---

**Line Item:** 4.800

**Quantity:** The property identification signage includes the following elements:

- Landscape
- Light fixtures

- Masonry

**History:** Original

**Condition:** Good overall



Entrance monument



Entrance monument



Entrance monument



Entrance monument

**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 repointing and repairs to the masonry and replacement of the remaining components listed above.

## Tennis Courts, Fence

---

**Line Item:** 4.840

**Quantity:** 480 linear feet

**History:** Original

**Condition:** Good to fair overall with warped webbing evident.



Chain link fence



Chain link fence



Fence warped webbing

**Useful Life:** Up to 30 years

**Priority/Criticality:** Per Board discretion

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

## **Tennis Courts, Light Poles and Fixtures**

---

**Line Item:** 4.850

**Quantity:** Nine each

**History:** Original

**Condition:** Good overall



**Light poles and fixtures**

**Useful Life:** Up to 35 years

**Priority/Criticality:** Per Board discretion

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

## **Tennis Courts Surface**

---

**Line Items:** 4.830 and 4.860

**Quantity:** Approximately 12,960 square feet of concrete comprising two tennis courts

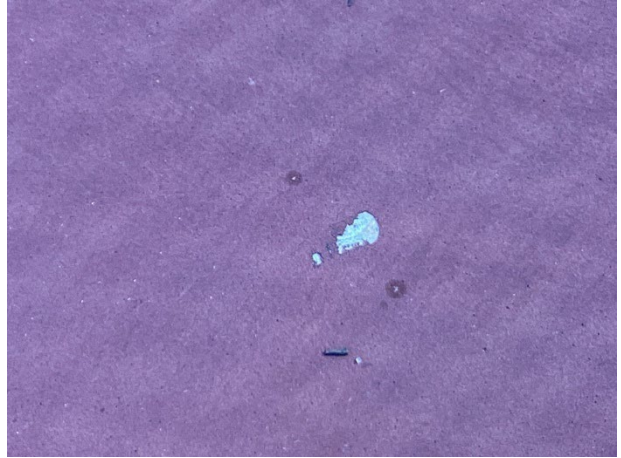
**History:** Original

**Condition:** Good to fair overall with coating deterioration and discoloration evident





**Tennis courts overview**



**Coating deterioration**



**Discoloration**

**Useful Life:** Up to 40 years for replacement of the surface with the benefit of color coat applications and repairs every four- to six-years

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

- Annually:
  - Inspect and repair large cracks, trip hazards and possibly safety hazards
  - Verify gate and fencing is secure
  - Verify lighting is working properly if applicable
  - Inspect and repair standards and windscreens 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.

## Clubhouse Elements

### Doors

---

**Line Item:** 5.200

**Quantity:** Approximately 170 square feet of exterior doors at the clubhouse and pool mechanical building

**History:** Original

**Condition:** Good overall



Door



Door

**Useful Life:** Up to 35 years

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

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

### Exterior Renovations

---

**Line Items:** 5.310 and 5.750

**Quantity:** Components include:

- 490 square feet of masonry
- 2,980 square feet of fiber cement siding

**History:** The Association conducted exterior renovations in 2019

**Condition:** Good overall



**Fiber cement siding overview**



**Fiber cement siding overview**



**Masonry veneer**

**Life:** 8- to 10-years for paint finishes and repairs to the masonry. Up to 50 years for replacement of the fiber cement siding. We include this expenditure on line item 5.750.

**Priority/Criticality:** Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Paint finishes and repairs should include the following:

- Inspections of the masonry walls including partial repointing of up to five percent (5%)
- Application of paint finishes including replacement of a limited amount of fiber cement siding, trim and soffit and fascia
- Replacement of window and door joint sealant as needed



## HVAC Equipment, Split System

---

**Line Item:** 5.450

**Quantity:** One split systems

**History:** Dates to approximately 2021

**Condition:** Reported satisfactory



**Split system condensing unit**

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

**Preventative Maintenance Notes:** We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. We also recommend the Association maintain a maintenance contract with a qualified professional. The required preventative maintenance may vary in frequency and scope based on the unit's age, operational condition, or changes in technology. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Semi-annually:
  - Lubricate motors and bearings
  - Change or clean air filters as needed
  - Inspect condenser base and piping insulation
  - Inspect base pan, coil, cabinet and clear obstructions as necessary
- Annually:
  - Clean coils and drain pans, clean fan assembly, check refrigerant charge, inspect fan drive system and controls
  - Inspect and clean accessible ductwork as needed
  - Clean debris from inside cabinet, inspect condenser compressor and associated tubing for damage

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

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. The condensing unit may require replacement prior to

replacement of the related interior forced air unit. For purposes of this Reserve Study, we assume coordination of replacement of the interior forced air unit, evaporator coil, refrigerant lines and exterior condensing unit.

## Interior Renovations

---

**Line Items:** 5.500 and 5.510

**Quantity:** The clubhouse interior components include:

- Laminate wood floor coverings
- Paint finishes on the walls and ceilings
- Plumbing fixtures
- Light fixtures including exit and emergency lights
- Kitchen cabinets, countertops and appliances
- Furnishings including tables and chairs

**History:** Renovated in recent years

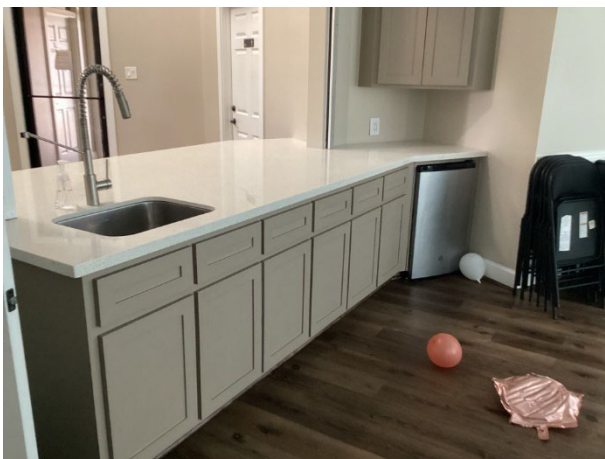
**Condition:** Good overall



Clubhouse interior



Clubhouse interior



Clubhouse interior



Clubhouse rest room



**Useful Life:** Complete renovation up to every 20 years and partial renovation up to 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. The complete renovation should include replacement of all components listed above and the partial renovations should include the following:

- Application of paint finish to all surfaces
- Replacement of the projector
- Replacement of up to fifty percent (50%) of the furnishing
- Replacement of up to twenty-five percent (25%) of the kitchen appliances and rest room fixtures

## Roofs, Metal

---

**Line Items:** 5.600, 5.601 and 5.602

**Quantity:** Approximately 44 *squares*<sup>1</sup> of metal comprising the roofing assemblies of the clubhouse and pool mechanical equipment building and approximately 15 squares at the pavilions at the splash pad and Waterview Meadow Drive

**History:** The pavilion at the splash pad dates to approximately 2015 and the pavilion at Waterview Meadow Drive dates to approximately 2019. The roof at the clubhouse is original.

**Condition:** Good overall



**Metal roof**



**Metal roof at the splash pad pavilion**

<sup>1</sup> We quantify the roof area in squares where one square is equal to 100 square feet of surface area.



**Metal roof**

**Useful Life:** Up to 30 years

**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 fasteners
  - Implement repairs as needed if issues are reoccurring
  - Ensure proper ventilation and verify vents are clear of debris and not blocked from attic insulation
  - Clear valleys of debris
  - Periodic cleaning at areas with organic growth

**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.

## **Security System**

---

**Line Item:** 5.700

**Quantity:** The Association maintains security systems for added security at the clubhouse, pool area, splash pad and at the neighborhood entrances.

**History:** The security system at the neighborhood entrances were installed in 2017 and the system at the amenity areas were installed in approximately 2015

**Condition:** Good to fair overall



**Security system cameras**



**Access control point**

**Useful Life:** Up to 10 years

**Preventative Maintenance Notes:** We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. The required preventative maintenance may vary in frequency and scope based on the unit's age, operational condition, or changes in technology. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Monthly:
  - Check cameras for proper focus, fields of view are unobstructed and camera and lenses are clean and dust-free
  - Check recording equipment for proper operation
  - Verify monitors are free from distortion with correct brightness and contrast
- Annually:
  - Check exposed wiring and cables for wear, proper connections and signal transmission
  - Check power connections, and if applicable, functionality of battery power supply systems

**Priority/Criticality:** Per Board discretion

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

## Windows

---

**Line Item:** 5.800

**Quantity:** Approximately 180 square feet

**History:** Replaced in 2019

**Condition:** Good overall





Window

**Useful Life:** Up to 35 years

**Priority/Criticality:** Not recommended to defer

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

## Pool and Splash Pad Elements

### Concrete Deck

---

**Line Item:** 6.200

**Quantity:** Approximately 7,300 square feet of concrete deck around the pool

**History:** Original

**Condition:** Good to fair overall with concrete cracks, spalled concrete and exposed reinforcement steel evident. Management informs us the Association plans to conduct repairs and coat the deck in 2025.



Concrete pool deck overview



Concrete cracks



**Concrete spalls and exposed reinforcement steel**



**Concrete spalls**

**Useful Life:** The useful life of a concrete pool deck is up to 60 years or more with timely repairs. We recommend the Association conduct inspections, partial replacements and repairs to the deck every 8- to 12-years.

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

- Semi-annually:
  - Inspect and repair large cracks, trip hazards, and possible safety hazards
  - Inspect and repair pool coping for cracks, settlement, heaves or sealant deterioration
  - Repair concrete spalling and conduct coating repairs in areas with delamination
  - Schedule periodic pressure cleanings 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 recommend the Association budget for the following per event:

- Selective cut out and replacements of up to ten percent (10%) of concrete
- Crack repairs as needed
- Mortar joint repairs
- Caulk replacement
- Coating replacement

The estimate of cost is based on information provided by Management.



## Fences, Aluminum

---

**Line Items:** 6.400 and 6.401

**Quantity:** Approximately 520 linear feet at the pool and 620 linear feet at the splash pad

**History:** Original to construction

**Condition:** Good to fair overall. We note picket damage and leaning section at the splash pad. Management informs us the Association plans to replace the fence at the splash pad in 2025.



Aluminum pool fence



Aluminum fence at the splash pad



Aluminum pool fence



Fence leaning section at the splash pad



**Fence picket damage at the splash pad**

**Useful Life:** Up to 25 years

**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:** Not recommended to defer

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

## **Furniture**

---

**Line Item:** 6.500

**Quantity:** The pool furniture includes the following:

- Chairs
- Lounges
- Tables
- Ladders and life safety equipment

**History:** Replaced in 2019

**Condition:** Good overall





**Pool furniture**

**Useful Life:** Up to 12 years

**Priority/Criticality:** Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We recommend interim re-strapping, refinishing, and other repairs to the furniture as normal maintenance to maximize its useful life.

## **Mechanical Equipment**

---

**Line Item:** 6.600

**Quantity:**

- Automatic chlorinator
- Controls
- Filter
- Interconnected pipe, fittings and valves
- Pumps
- Electrical panel

**History:** Replaced as needed

**Condition:** Reported satisfactory



**Pool mechanical equipment**

***Useful Life:*** Up to 15 years

***Preventative Maintenance Notes:*** We recommend the Association maintain a maintenance contract with a qualified professional and follow the manufacturer's specific recommended maintenance and local, state and/or federal inspection guidelines.

***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. Failure of the pool mechanical equipment as a single event is unlikely. Therefore, we include replacement of up to fifty percent (50%) of the equipment per event. We consider interim replacement of motors and minor repairs as normal maintenance.

## **Pool Finishes, Plaster and Tile**

---

***Line Items:*** 6.800 and 6.801

***Quantity:*** 5,700 square feet of plaster based on the horizontal surface area and approximately 400 linear feet of tile

***History and Condition:*** The plaster finish is poor overall. The Association plans to replace the plaster finish in 2025.





**Pool overview**



**Plaster deterioration**

**Useful Life:** 8- to 12-years for the plaster and 15- to 25-years for the tile

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

- Semi-annually:
  - Inspect and patch areas of significant plaster delamination, coping damage and structure cracks
  - Inspect main drain connection and anti-entrapment covers, pressure test circulation piping and valves
  - Test handrails and safety features for proper operation

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

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We recommend the Association budget for full tile replacement every other plaster replacement event. Removal and replacement of the finish provides the opportunity to inspect the pool structures and to allow for partial repairs of the underlying concrete surfaces as needed. To maintain the integrity of the pool structures, we recommend the Association budget for the following:

- Removal and replacement of the plaster finishes
- Partial replacements of the scuppers and coping as needed
- Replacement of tiles as needed
- Replacement of joint sealants as needed
- Concrete structure repairs as needed

The estimate of cost to replace the plaster finish is based on information provided by Management.

## Shade Structures

---

**Line Items:** 6.870 through 6.873

**Quantity:** Approximately 3,600 square feet comprising the shade structures at the pool area, splash pad playground and the playground at Jay Thrush Drive

**History:** The shade structures at the pool area and Jay Thrush Drive dates to approximately 2015 and the shade structure at the splash pad dates to approximately 2020

**Condition:** Good overall



**Shade structures overview**



**Shade structure overview**



**Canvas**



**Shade structure canvas**

**Useful Life:** 15- to 20-years for total replacement and 8- to 10-years for interim canvas replacement

**Priority/Criticality:** Per Board discretion

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



## Water Features

---

**Line Items:** 6.960 through 6.963

**Quantity:** Thea Association maintains water features at the pool area and at the splash pad

**History:** Original. The Association conducted major repairs to the water features at the splash recently.

**Conditions:** Good to fair overall with finish deterioration evident



**Water features at the pool area**



**Finish deterioration**



**Water features at the splash pad**

**Useful Life:** Up to 15 years for replacement with the benefit of refinishing and repairs up to every five years

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

- Annually:
  - Drain all lines if applicable



- Inspect and repair loose connections and fasteners or damaged elements. Check feature accessories for excessive wear.
- Clean periodically
- Verify drains are working properly

**Priority/Criticality:** Per Board discretion

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

## Water Slide

---

**Line Item:** 6.981

**Quantity:** The Association maintains one water slide at the pool area

**History:** Replaced in 2016

**Conditions:** Good overall



**Water slide overview**



**Water slide structure**



**Water slide**

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

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

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

- Weekly:
  - Inspect and repair loose connections and fasteners or damaged elements. Check handrails for stability.
  - Inspect for safety hazards
- Annually:
  - Drain all lines if applicable
  - Clean with non-abrasive cleaner and wax as needed
  - Reseal joints 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.

## 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 every 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.

Waterview Estates can fund capital repairs and replacements in any combination of the following:

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

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

This Reserve Study is in compliance with and exceeds the National standards<sup>1</sup> set forth by the Association of Professional Reserve Analysts (APRA) fulfilling the requirements of a "Level 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<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 Richmond, Texas at an annual inflation rate<sup>3</sup>. Isolated or regional markets of greater

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

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

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



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

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

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

## 6. CREDENTIALS

### HISTORY AND DEPTH OF SERVICE

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

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

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

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

### TOTAL STAFF INVOLVEMENT

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

### OUR GOAL

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

### VAST EXPERIENCE WITH A VARIETY OF BUILDINGS

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

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

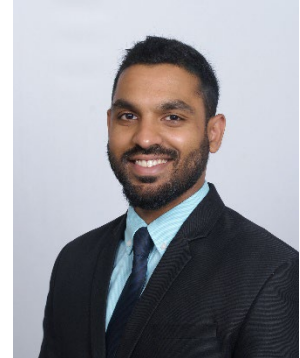
### OLD TO NEW

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

**JAISON T. THOMAS**  
**Responsible Advisor**

**CURRENT CLIENT SERVICES**

Jaision 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 Jaision 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



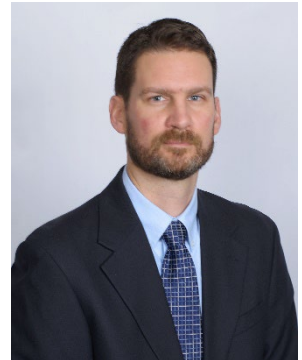


**ALAN M. EBERT, P.E., PRA, RS**  
**Director of Quality Assurance**

**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 Waterview Estates responsibility not likely to require capital repair or replacement during the next 30 years with an unpredictable remaining Useful Life beyond the next 30 years.

**Percent Funded** - The ratio, at a particular point of time (typically the beginning of the Fiscal Year), of the actual (or projected) Reserve Balance to the Fully Funded Balance, expressed as a percentage.

**Remaining Useful Life** - The estimated remaining functional or useful time in years of a *Reserve Component* based on its age, condition and maintenance.

**Reserve Component** - Property elements with: 1) Waterview Estates responsibility; 2) limited Useful Life expectancies; 3) predictable Remaining Useful Life expectancies; and 4) a replacement cost above a minimum threshold.

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

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

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

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

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

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

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



## 8. PROFESSIONAL SERVICE CONDITIONS

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

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

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

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

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



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

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

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

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

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

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