

# FULL RESERVE STUDY

## Phoenix On The Bay II Owners Association, Inc.



**Orange Beach, Alabama**

**March 15, 2017**



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Long-term thinking. Everyday commitment.

Phoenix On The Bay II Owners Association, Inc.  
Orange Beach, Alabama

Dear Board of Directors of Phoenix On The Bay II Owners Association, Inc.:

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Full Reserve Study* of Phoenix On The Bay II Owners Association, Inc. in Orange Beach, Alabama and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, March 15, 2017.

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

An ongoing review by the Board and an Update of this Reserve Study are necessary to ensure an equitable funding plan since a Reserve Study is a snapshot in time. We recommend the Board budget for an Update to this Reserve Study in two years. We look forward to continuing to help Phoenix On The Bay II 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 March 30, 2017 by

*Reserve Advisors, Inc.*

Visual Inspection and Report by: Ashley M. Forte, RS  
Review by: Alan M. Ebert, PRA<sup>1</sup>, RS<sup>2</sup>, Director of Quality Assurance



<sup>1</sup>PRA (Professional Reserve Analyst) is the professional designation of the Association of Professional Reserve Analysts. Learn more about APRA at <http://www.apra-usa.com>.

<sup>2</sup>RS (Reserve Specialist) is the reserve provider professional designation of the Community Associations Institute (CAI) representing America's more than 300,000 condominium, cooperative and homeowners associations.



Long-term thinking. Everyday commitment.

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# 1. RESERVE STUDY EXECUTIVE SUMMARY

**Client:** Phoenix On The Bay II Owners Association, Inc. (Phoenix On The Bay II)

**Location:** Orange Beach, Alabama

**Reference:** 170321

**Property Basics:** Phoenix On The Bay II Owners Association, Inc. is a condominium style development of 104 units in one building. The building was built in 2006.

**Reserve Components Identified:** 56 Reserve Components.

**Inspection Date:** March 15, 2017.

**Funding Goal:** The Funding Goal of this Reserve Study is to maintain reserves above an adequate, not excessive threshold during one or more years of significant expenditures.

The **Reserve Funding Plan** recommends 2047 year end accumulated reserves of approximately \$6,511,000. We judge this amount of accumulated reserves in 2047 desirable or necessary, to fund the likely replacement of the windows and doors after 2047. Future replacement costs beyond the next 30 years for the windows and doors are likely to more than double the current cost of replacement, now estimated at approximately \$4,560,000 (51,820 square feet at \$88 per square foot). These future needs, although beyond the limit of the Cash Flow Analysis of this Reserve Study, are reflected in the amount of accumulated 2047 year end reserves.

The Association should consider funding replacement of the windows and doors located at each unit through means other than reserves to reduce the annual reserve contribution.

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

- current and future local costs of replacement
- 1.2% annual rate of return on invested reserves
- 2.0% future Inflation Rate for estimating Future Replacement Costs

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

**Cash Status of Reserve Fund:**

- \$754,612 as of January 31, 2017
- 2017 budgeted Reserve Contributions of \$100,000
- A potential deficit in reserves might occur by 2024 based upon continuation of the most recent annual reserve contribution of \$100,000 and the identified Reserve Expenditures.

**Project Prioritization:** We recommend the Association prioritize the following projects in the next five years based on the conditions identified:

- Stucco paint finish applications and breezeway coating applications - Restoration of the facade and breezeways to remediate cracks which can lead to water infiltration into the units and spalling at the breezeways.





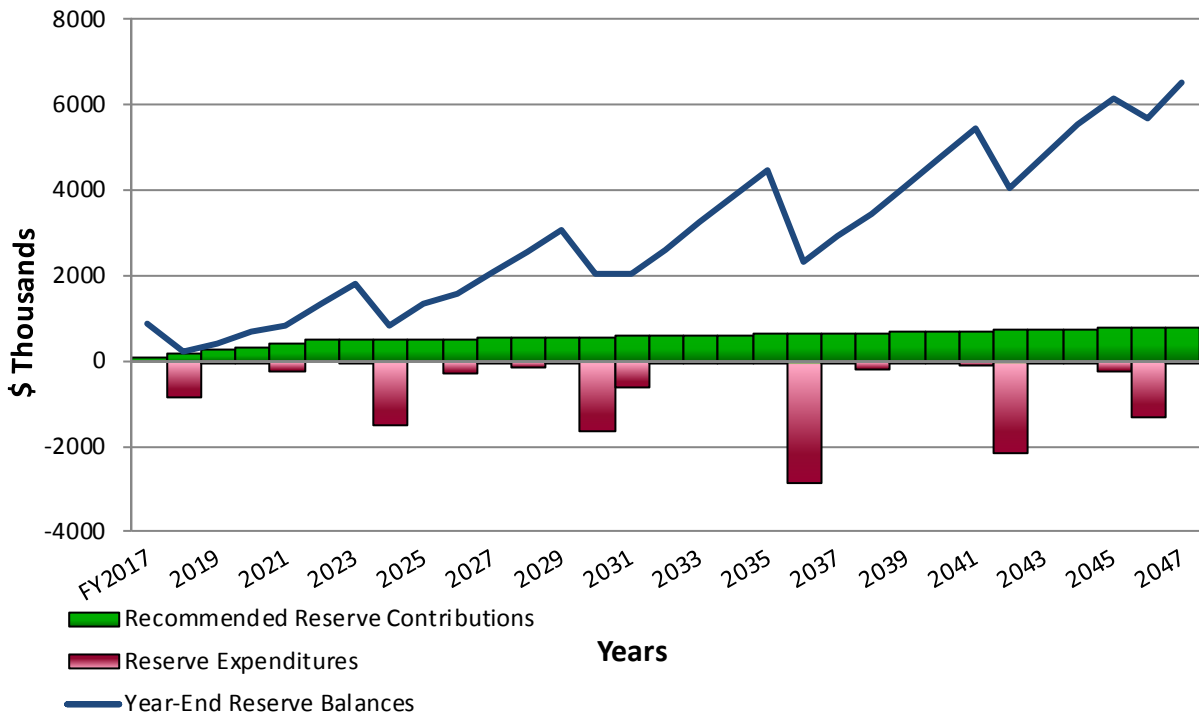
**Recommended Reserve Funding:** We recommend the following in order to achieve a stable and equitable Funding Plan:

- Phased increases of \$76,500 from 2018 through 2022
- Inflationary increases through 2047, the limit of this study's Cash Flow Analysis
- Initial adjustment in Reserve Contributions of \$76,500 represents an average annual increase of \$735.58 per homeowner and about a seven percent (6.5%) adjustment in the 2017 total Operating Budget of \$1,180,082.



**Phoenix On The Bay II**  
Recommended Reserve Funding Table and Graph

Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)
2018	176,500	200,000	2028	543,300	2,532,328	2038	662,300	3,439,528
2019	253,000	393,637	2029	554,200	3,053,207	2039	675,500	4,101,193
2020	329,500	688,298	2030	565,300	2,021,664	2040	689,000	4,791,334
2021	406,000	839,132	2031	576,600	2,020,133	2041	702,800	5,448,245
2022	482,500	1,334,597	2032	588,100	2,616,371	2042	716,900	4,044,817
2023	492,200	1,820,842	2033	599,900	3,240,909	2043	731,200	4,786,013
2024	502,000	828,812	2034	611,900	3,846,046	2044	745,800	5,553,367
2025	512,000	1,353,830	2035	624,100	4,473,347	2045	760,700	6,154,078
2026	522,200	1,582,200	2036	636,600	2,308,551	2046	775,900	5,690,991
2027	532,600	2,093,448	2037	649,300	2,922,180	2047	791,400	6,510,786





## 2. RESERVE STUDY REPORT

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

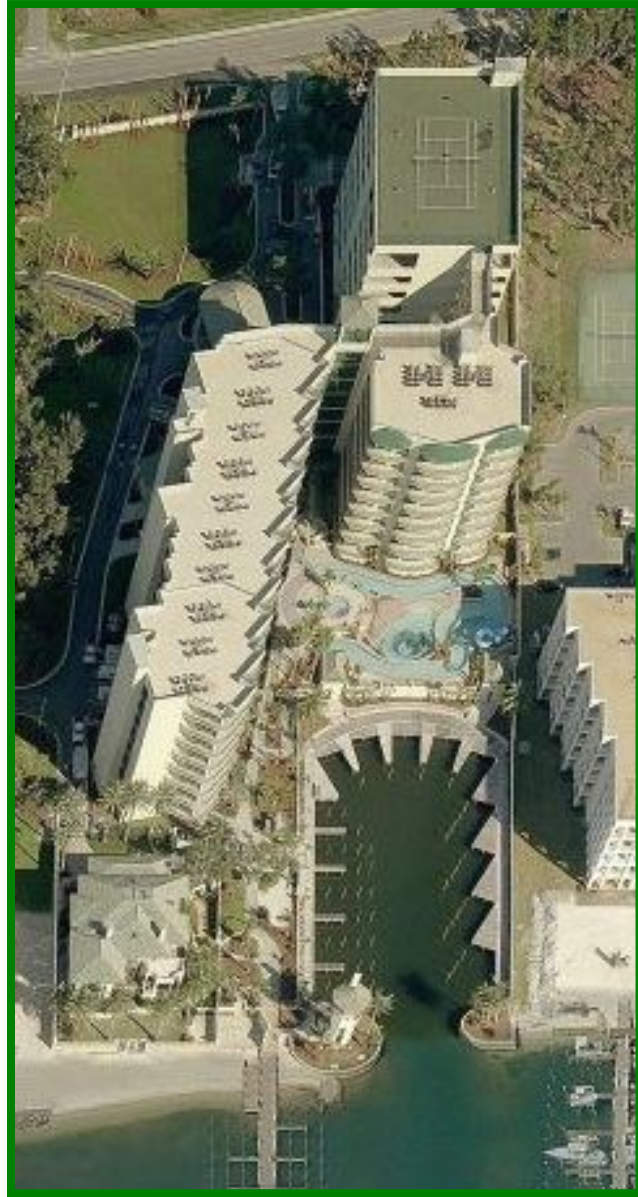
**Phoenix On The Bay II Owners Association, Inc.  
Orange Beach, Alabama**

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, March 15, 2017.

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

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

## IDENTIFICATION OF PROPERTY



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

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

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

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

- Phoenix On The Bay II responsibility
- Limited useful life expectancies
- Predictable remaining useful life expectancies
- Replacement cost above a minimum threshold

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

- Electrical Systems, Common
- Fire Suppression System and Pump
- Foundations
- Fountains, Complete Replacement
- Light Poles, Concrete
- Pipes, Interior Building, Domestic Water, Sanitary Waste, Vent, Sprinkler, Common
- Parking Garage, Complete Replacement
- Pipes, Subsurface Utilities
- Pool and Spa Structures
- Structural Frames
- Trash Chute
- Valves, Large Diameter

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

- General Maintenance to the Common Elements

- Expenditures less than \$9,000 (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)
- Asphalt Pavement, Patch and Seal Coat
- Concrete Flatwork
- Deck, Wood, Lighthouse
- Deck, Wood, Rooftop
- Defibrillators
- Electric Car Charging Station
- Fountains, Plaster Finish and Mechanical Equipment
- Guard House, Interior Renovations
- Indoor Pool, Furniture
- Indoor Pool, Paint Finishes
- Irrigation System
- Landscape
- Life Safety System, Control Panel, Interim Replacement
- Light Fixtures, Interior
- Light Poles and Fixtures, Fixture Replacement
- Paint Finishes, Touch Up
- Parking Garage, Parking Blocks
- Pet Stations
- Pool Deck, Concrete, Coating Applications
- Pumps Less Than Five-HP (horsepower), Includes Fish Station Grinder Pump
- Signage, Monument, Renovation
- Site Furniture
- Trash Chute, Doors
- Valves, Small Diameter (we assume replacement as needed in lieu of an aggregate replacement of all the small diameter valves as a single event)
- Water Heaters, Common
- Other Repairs normally funded through the Operating Budget

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

- Dock Boxes
- Electrical Systems
- Heating, Ventilating and Air Conditioning (HVAC) Units
- Interiors
- Pipes, Interior Building, Water and Sewer
- Water Heaters

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

- Single Family Home, South End of Building (Independent Owner)

### 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
- Unit cost of replacement
- 2017 local cost of replacement
- Total future costs of replacement anticipated during the next 30 years
- Schedule of estimated future costs for each reserve component including inflation

#### Reserve Funding Plan

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

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

**Phoenix On The Bay II  
Owners Association, Inc.**  
Orange Beach, Alabama

**Explanatory Notes:**

- 1) **2.0%** is the estimated future Inflation Rate for estimating Future Replacement Costs.
- 2) FY2017 is Fiscal Year beginning January 1, 2017 and ending December 31, 2017.

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years		Unit (2017)	Costs, \$			RUL = 0 FY2017	1 2018	2 2019	3 2020	4 2021	5 2022	6 2023	7 2024	8 2025	9 2026	10 2027	11 2028	12 2029	13 2030	14 2031	15 2032	
						Useful	Remaining		Per Phase (2017)	Total (2017)	30-Year Total (Inflated)																	
<b>Exterior Building Elements</b>																												
1.060	29,900	29,900	Square Feet	Balconies, Concrete, Repairs, Waterproof Coating Applications and Tile Replacemen	2030	to 25	13	12.00	358,800	358,800	464,146																464,146	
1.070	55,300	55,300	Square Feet	Breezeways, Concrete, Repairs and Waterproof Coating Applications	2018	6 to 8	1	5.00	276,500	276,500	1,813,760	282,030							317,612								357,682	
1.105	7,070	7,070	Linear Feet	Balconies and Breezeways, Railings, Replacement	2046	to 40	29	71.00	501,970	501,970	891,421																	
1.180	305	305	Each	Doors, Front Entry and Common Doors	2031	to 25	14	800.00	244,000	244,000	321,953																321,953	
1.260	270	270	Each	Light Fixtures	2026	to 20	9	74.00	19,980	19,980	59,359										23,878							
1.300	360	360	Squares	Roofs, Built-up	2024	15 to 20	7	1,480.00	532,800	532,800	1,486,135								612,020									
1.360	45	45	Squares	Roofs, Concrete Tiles	2031	to 25	14	890.00	40,050	40,050	52,845																52,845	
1.460	25	25	Squares	Roofs, Metal (Includes the Lighthouse Roof)	2031	to 25	14	980.00	24,500	24,500	32,327																32,327	
1.860	170,350	170,350	Square Feet	Walls, Stucco, Paint Finishes and Capital Repairs	2018	5 to 7	1	2.00	340,700	340,700	2,234,893	347,514							391,357								440,732	
<b>Interior Building Elements</b>																												
2.060	5,940	5,940	Square Feet	Ceilings, Acoustical Tiles and Grid	2036	to 30	19	2.50	14,850	14,850	21,634																	
2.100	3	3	Each	Elevator Cab Finishes	2024	to 20	7	8,500.00	25,500	25,500	71,126								29,291									
2.155	1	1	Allowance	Exercise Equipment, Cardiovascular, Phased	2018	to 5	1 to 4	7,500.00	7,500	7,500	122,920	7,650			8,118		8,446			8,963		9,325					9,896	
2.165	1	1	Allowance	Exercise Equipment, Strength Training	2021	to 15	4	13,500.00	13,500	13,500	34,280				14,613													
2.200	320	320	Square Yards	Floor Coverings, Carpet	2019	8 to 12	2	49.00	15,680	15,680	60,440			16,313													19,886	
2.240	960	960	Square Yards	Floor Coverings, Tile	2036	to 30	19	73.00	70,080	70,080	102,093																	
2.450	4	1	Allowance	Furnishings, Phased	2019	to 20	2 to 17	9,000.00	9,000	36,000	72,994			9,364					10,338								11,414	
2.519	1	1	Allowance	Kitchen, Equipment	2020	to 15	3	8,000.00	8,000	8,000	19,692				8,490													
2.700	104	104	Each	Mailboxes	2041	to 35	24	100.00	10,400	10,400	16,728																	
2.800	16,700	16,700	Square Feet	Paint Finishes	2019	6 to 10	2	0.80	13,360	13,360	51,498			13,900													16,944	
2.820	2	2	Each	Paint Finishes, Stairwells (Including Railings)	2026	15 to 20	9	5,000.00	10,000	10,000	29,709										11,951							
2.900	6	6	Each	Rest Rooms, Renovation	2026	to 20	9	6,500.00	39,000	39,000	115,867										46,609							
<b>Building Services Elements</b>																												
3.070	8	4	Each	Air Handling and Condensing Units, Split Systems, Phased	2019	12 to 18	2 to 10	4,500.00	18,000	36,000	96,499			18,727													21,942	
3.360	3	3	Each	Elevators, Traction, Controls and Equipment	2036	to 30	19	142,000.00	426,000	426,000	620,602																	
3.440	1	1	Each	Generator, Emergency, 300-kW (Includes Transfer Switch)	2036	25 to 35	19	108,500.00	108,500	108,500	158,064																	
3.560	1	1	Allowance	Life Safety System, Control Panel and Emergency Devices	2031	to 25	14	47,000.00	47,000	47,000	62,016																62,016	
3.700	3	3	Each	Pumps, Domestic Cold Water, 7.5-HP	2026	to 20	9	9,500.00	28,500	28,500	84,672										34,060							
3.820	2	1	Allowance	Security System, Phased	2020	to 15	3 to 10	7,500.00	7,500	15,000	39,666				7,959												9,142	
<b>Property Site Elements</b>																												
4.040	2,700	2,700	Square Yards	Asphalt Pavement, Mill and Overlay	2026	15 to 20	9	15.00	40,500	40,500	120,323																48,401	
4.110	3,000	300	Linear Feet	Concrete Curbs and Gutters, Partial	2026	to 65	9 to 30+	26.00	7,800	78,000	23,174										9,322							
4.540	2	2	Each	Lift Stations, Pumps	2018	to 10	1	5,500.00	11,000	11,000	43,497			11,220													14,230	
4.550	1	1	Allowance	Lift Stations, Rebuild	2036	to 30	19	30,000.00	30,000	30,000	43,704																	
4.620	1,440	1,440	Square Feet	Pavers, Masonry, Porte Cochere	2026	15 to 20	9	12.00	17,280	17,280	51,338										20,651							



## RESERVE EXPENDITURES

**Phoenix On The Bay II  
Owners Association, Inc.**  
Orange Beach, Alabama

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years		Unit (2017)	Costs, \$			16 2033	17 2034	18 2035	19 2036	20 2037	21 2038	22 2039	23 2040	24 2041	25 2042	26 2043	27 2044	28 2045	29 2046	30 2047		
						Useful	Remaining		Per Phase (2017)	Total (2017)	30-Year Total (Inflated)																	
<b>Exterior Building Elements</b>																												
1.060	29,900	29,900	Square Feet	Balconies, Concrete, Repairs, Waterproof Coating Applications and Tile Replacemen	2030	to 25	13	12.00	358,800	358,800	464,146																	
1.070	55,300	55,300	Square Feet	Breezeways, Concrete, Repairs and Waterproof Coating Applications	2018	6 to 8	1	5.00	276,500	276,500	1,813,760			402,808							453,628							
1.105	7,070	7,070	Linear Feet	Balconies and Breezeways, Railings, Replacement	2046	to 40	29	71.00	501,970	501,970	891,421														891,421			
1.180	305	305	Each	Doors, Front Entry and Common Doors	2031	to 25	14	800.00	244,000	244,000	321,953																	
1.260	270	270	Each	Light Fixtures	2026	to 20	9	74.00	19,980	19,980	59,359															35,481		
1.300	360	360	Squares	Roofs, Built-up	2024	15 to 20	7	1,480.00	532,800	532,800	1,486,135										874,115							
1.360	45	45	Squares	Roofs, Concrete Tiles	2031	to 25	14	890.00	40,050	40,050	52,845																	
1.460	25	25	Squares	Roofs, Metal (Includes the Lighthouse Roof)	2031	to 25	14	980.00	24,500	24,500	32,327																	
1.860	170,350	170,350	Square Feet	Walls, Stucco, Paint Finishes and Capital Repairs	2018	5 to 7	1	2.00	340,700	340,700	2,234,893			496,336							558,954							
<b>Interior Building Elements</b>																												
2.060	5,940	5,940	Square Feet	Ceilings, Acoustical Tiles and Grid	2036	to 30	19	2.50	14,850	14,850	21,634				21,634													
2.100	3	3	Each	Elevator Cab Finishes	2024	to 20	7	8,500.00	25,500	25,500	71,126										41,835							
2.155	1	1	Allowance	Exercise Equipment, Cardiovascular, Phased	2018	to 5	1 to 4	7,500.00	7,500	7,500	122,920	10,296		10,926		11,367				12,063		12,551				13,319		
2.165	1	1	Allowance	Exercise Equipment, Strength Training	2021	to 15	4	13,500.00	13,500	13,500	34,280				19,667													
2.200	320	320	Square Yards	Floor Coverings, Carpet	2019	8 to 12	2	49.00	15,680	15,680	60,440										24,241							
2.240	960	960	Square Yards	Floor Coverings, Tile	2036	to 30	19	73.00	70,080	70,080	102,093				102,093													
2.450	4	1	Allowance	Furnishings, Phased	2019	to 20	2 to 17	9,000.00	9,000	36,000	72,994		12,602					13,914					15,362					
2.519	1	1	Allowance	Kitchen, Equipment	2020	to 15	3	8,000.00	8,000	8,000	19,692		11,202															
2.700	104	104	Each	Mailboxes	2041	to 35	24	100.00	10,400	10,400	16,728										16,728							
2.800	16,700	16,700	Square Feet	Paint Finishes	2019	6 to 10	2	0.80	13,360	13,360	51,498								20,654									
2.820	2	2	Each	Paint Finishes, Stairwells (Including Railings)	2026	15 to 20	9	5,000.00	10,000	10,000	29,709															17,758		
2.900	6	6	Each	Rest Rooms, Renovation	2026	to 20	9	6,500.00	39,000	39,000	115,867															69,258		
<b>Building Services Elements</b>																												
3.070	8	4	Each	Air Handling and Condensing Units, Split Systems, Phased	2019	12 to 18	2 to 10	4,500.00	18,000	36,000	96,499			25,708												30,122		
3.360	3	3	Each	Elevators, Traction, Controls and Equipment	2036	to 30	19	142,000.00	426,000	426,000	620,602				620,602													
3.440	1	1	Each	Generator, Emergency, 300-kW (Includes Transfer Switch)	2036	25 to 35	19	108,500.00	108,500	108,500	158,064				158,064													
3.560	1	1	Allowance	Life Safety System, Control Panel and Emergency Devices	2031	to 25	14	47,000.00	47,000	47,000	62,016																	
3.700	3	3	Each	Pumps, Domestic Cold Water, 7.5-HP	2026	to 20	9	9,500.00	28,500	28,500	84,672															50,612		
3.820	2	1	Allowance	Security System, Phased	2020	to 15	3 to 10	7,500.00	7,500	15,000	39,666		10,502							12,063								
<b>Property Site Elements</b>																												
4.040	2,700	2,700	Square Yards	Asphalt Pavement, Mill and Overlay	2026	15 to 20	9	15.00	40,500	40,500	120,323															71,922		
4.110	3,000	300	Linear Feet	Concrete Curbs and Gutters, Partial	2026	to 65	9 to 30+	26.00	7,800	78,000	23,174															13,852		
4.540	2	2	Each	Lift Stations, Pumps	2018	to 10	1	5,500.00	11,000	11,000	43,497										18,047							
4.550	1	1	Allowance	Lift Stations, Rebuild	2036	to 30	19	30,000.00	30,000	30,000	43,704				43,704													
4.620	1,440	1,440	Square Feet	Pavers, Masonry, Porte Cochere	2026	15 to 20	9	12.00	17,280	17,280	51,338															30,687		



## RESERVE EXPENDITURES

**Phoenix On The Bay II  
Owners Association, Inc.**  
Orange Beach, Alabama

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years		Unit (2017)	Costs, \$			16 2033	17 2034	18 2035	19 2036	20 2037	21 2038	22 2039	23 2040	24 2041	25 2042	26 2043	27 2044	28 2045	29 2046	30 2047	
						Useful	Remaining		Per Phase (2017)	Total (2017)	30-Year Total (Inflated)																
4.640	9,560	9,560	Square Feet	Perimeter Walls, Stucco, Paint Finishes and Capital Repairs	2018	6 to 8	1	1.10	10,516	10,516	55,272		14,725													17,253	
4.735	700	700	Square Feet	Retaining Walls, Masonry, Replacement	2041	to 35	24	38.00	26,600	26,600	42,784								42,784								
4.745	2,880	2,880	Square Feet	Retaining Walls, Stucco, Inspection, Capital Repairs and Paint Finish Applications	2018	5 to 7	1	2.75	7,920	7,920	51,953			11,538												12,994	
4.830	1,640	1,640	Square Yards	Tennis Court, Waterproof Coating	2024	6 to 8	7	27.00	44,280	44,280	245,299				64,508											72,646	
4.840	600	600	Linear Feet	Tennis Court, Fence	2031	to 25	14	45.00	27,000	27,000	35,626																
4.850	4	4	Each	Tennis Court, Light Poles and Fixtures	2031	to 25	14	3,100.00	12,400	12,400	16,362																
<b>Pool Elements</b>																											
6.200	11,490	11,490	Square Feet	Decks, Pavers (Outdoor Pool)	2036	to 30	19	14.00	160,860	160,860	234,343				234,343												
6.210	2,570	2,570	Square Feet	Deck, Tile (Indoor Pool)	2031	to 25	14	21.00	53,970	53,970	71,212																
6.400	1,000	1,000	Linear Feet	Fences, Aluminum	2036	to 30	19	46.00	46,000	46,000	67,013				67,013												
6.500	1	1	Allowance	Furniture	2026	to 12	9	15,000.00	15,000	15,000	66,416				21,852												26,638
6.550	80	80	Each	Light Fixtures, Bollards	2026	to 20	9	550.00	44,000	44,000	130,721																78,137
6.600	4	1	Allowance	Mechanical Equipment, Phased	2020	to 15	3 to 12	14,500.00	14,500	58,000	203,975			20,710		21,977			23,322			24,750					26,265
6.800	5,980	5,980	Square Feet	Pool Finishes, Plaster (Bird Pool and Lazy River)	2018	8 to 12	1	16.50	98,670	98,670	372,878					149,551											
6.810	360	360	Square Feet	Pool Finishes, Plaster (Outdoor Kiddie Pool & Indoor Spas)	2026	8 to 12	9	16.50	5,940	5,940	26,301				8,653												10,549
6.820	540	540	Square Feet	Pool Finishes, Plaster (Indoor Pool)	2020	8 to 12	3	16.50	8,910	8,910	35,031								14,050								
6.975	1	1	Allowance	Water Slide, Fiberglass, Refinishing	2027	to 10	10	10,000.00	10,000	10,000	30,304																18,114
6.980	1	1	Allowance	Water Slide, Fiberglass, Replacement	2037	to 30	20	45,000.00	45,000	45,000	66,868				66,868												
<b>Garage Elements</b>																											
7.300	103,600	51,800	Square Feet	Concrete, Elevated Floors, Inspections and Capital Repairs, Phased	2018	10 to 15	1 to 7	1.50	77,700	155,400	509,689				113,194												127,475
7.600	200	200	Each	Light Fixtures	2021	to 15	4	255.00	51,000	51,000	129,501				74,297												
<b>Marina Elements</b>																											
8.100	245	245	Linear Feet	Bulkheads, Steel, Replacement	2021	to 55	4	350.00	85,750	85,750	92,819																
8.110	880	880	Linear Feet	Bulkheads, Vinyl, Inspections and Capital Repairs (Includes Steel Bulkhead)	2030	to 15	13	150.00	132,000	132,000	400,571																229,815
8.395	4,800	4,800	Square Feet	Docks and Pilings, Wood, Inspections and Capital Repairs	2021	to 15	4	18.00	86,400	86,400	93,522																
8.400	4,800	4,800	Square Feet	Docks and Pilings, Wood	2036	to 30	19	53.00	254,400	254,400	370,613				370,613												
8.800	32	32	Each	Power Pedestals	2040	to 25	23	750.00	24,000	24,000	37,846																37,846
		1	Allowance	Reserve Study Update with Site Visit	2019	2	2	4,600.00	4,600	4,600	4,600																
<b>Anticipated Expenditures, By Year</b>											<b>\$12,810,894</b>	10,296	49,031	46,418	2,841,845	66,868	182,895	58,809	51,896	106,960	2,176,947	42,673	40,112	229,815	1,309,634	44,379	

# RESERVE FUNDING PLAN

**CASH FLOW ANALYSIS**  
**Phoenix On The Bay II**  
**Owners Association, Inc.**  
**Orange Beach, Alabama**

Individual Reserve Budgets & Cash Flows for the Next 30 Years

	FY2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
<b>Reserves at Beginning of Year (Note 1)</b>	754,612	864,267	200,000	393,637	688,298	839,132	1,334,597	1,820,842	828,812	1,353,830	1,582,200	2,093,448	2,532,328	3,053,207	2,021,664	2,020,133
<b>Total Recommended Reserve Contributions (Note 2)</b>	<b>100,000</b>	<b>176,500</b>	<b>253,000</b>	<b>329,500</b>	<b>406,000</b>	<b>482,500</b>	<b>492,200</b>	<b>502,000</b>	<b>512,000</b>	<b>522,200</b>	<b>532,600</b>	<b>543,300</b>	<b>554,200</b>	<b>565,300</b>	<b>576,600</b>	<b>588,100</b>
Plus <b>Estimated Interest Earned, During Year (Note 3)</b>	9,655	6,348	3,541	6,453	9,110	12,965	18,820	15,803	13,018	17,511	21,922	27,589	33,313	30,268	24,106	27,653
Less <b>Anticipated Expenditures, By Year</b>	0	(847,115)	(62,904)	(41,292)	(264,276)	0	(24,775)	(1,509,833)	0	(311,341)	(43,274)	(132,009)	(66,634)	(1,627,111)	(602,237)	(19,515)
<b>Anticipated Reserves at Year End</b>	<u>\$864,267</u>	<u>\$200,000</u>	<u>\$393,637</u>	<u>\$688,298</u>	<u>\$839,132</u>	<u>\$1,334,597</u>	<u>\$1,820,842</u>	<u>\$828,812</u>	<u>\$1,353,830</u>	<u>\$1,582,200</u>	<u>\$2,093,448</u>	<u>\$2,532,328</u>	<u>\$3,053,207</u>	<u>\$2,021,664</u>	<u>\$2,020,133</u>	<u>\$2,616,371</u>
Predicted Reserves based on 2017 funding level of: \$100,000	864,267	123,041	161,836	222,838	60,250	161,573	239,188	(1,176,234)	(1,089,749)							

(continued)

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

	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047
<b>Reserves at Beginning of Year</b>	2,616,371	3,240,909	3,846,046	4,473,347	2,308,551	2,922,180	3,439,528	4,101,193	4,791,334	5,448,245	4,044,817	4,786,013	5,553,367	6,154,078	5,690,991
<b>Total Recommended Reserve Contributions</b>	<b>599,900</b>	<b>611,900</b>	<b>624,100</b>	<b>636,600</b>	<b>649,300</b>	<b>662,300</b>	<b>675,500</b>	<b>689,000</b>	<b>702,800</b>	<b>716,900</b>	<b>731,200</b>	<b>745,800</b>	<b>760,700</b>	<b>775,900</b>	<b>791,400</b>
Plus <b>Estimated Interest Earned, During Year</b>	34,934	42,268	49,619	40,449	31,197	37,943	44,974	53,037	61,071	56,619	52,669	61,666	69,826	70,647	72,774
Less <b>Anticipated Expenditures, By Year</b>	(10,296)	(49,031)	(46,418)	(2,841,845)	(66,868)	(182,895)	(58,809)	(51,896)	(106,960)	(2,176,947)	(42,673)	(40,112)	(229,815)	(1,309,634)	(44,379)
<b>Anticipated Reserves at Year End</b>	<u>\$3,240,909</u>	<u>\$3,846,046</u>	<u>\$4,473,347</u>	<u>\$2,308,551</u>	<u>\$2,922,180</u>	<u>\$3,439,528</u>	<u>\$4,101,193</u>	<u>\$4,791,334</u>	<u>\$5,448,245</u>	<u>\$4,044,817</u>	<u>\$4,786,013</u>	<u>\$5,553,367</u>	<u>\$6,154,078</u>	<u>\$5,690,991</u>	<u>\$6,510,786</u>

(NOTE 4)

**Explanatory Notes:**

- 1) Year 2017 starting reserves are as of January 31, 2017; FY2017 starts January 1, 2017 and ends December 31, 2017.
- 2) Reserve Contributions for 2017 are budgeted; 2018 is the first year of recommended contributions.
- 3) 1.2% is the estimated annual rate of return on invested reserves; 2017 is a partial year of interest earned.
- 4) Accumulated year 2047 ending reserves consider the need to fund for replacement of the windows and doors shortly after 2047, and the age, size, overall condition and complexity of the property.

## 4. RESERVE COMPONENT DETAIL

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

### Exterior Building Elements



Front overview



Rear overview



Parking garage overview

### Balconies, Concrete

---

*Line Item:* 1.060



**Quantity:** Concrete balconies with tile floor coverings comprising approximately 29,900 square feet of horizontal surface area.

**History:** Original

**Condition:** Good overall with finish deterioration, isolated cracks and exposed reinforcement evident.



**Lower balcony**



**Upper balcony**



**Balcony finish deterioration**



**Crack at balcony underside**



**Exposed reinforcement at balcony edge**



**Balcony finish deterioration**

**Useful Life:** Capital repairs including a close-up visual inspection, patching of delaminated concrete, routing and filling of cracked concrete, replacement of tile floor coverings and waterproof coating applications up to every 25 years.

**Component Detail Notes:** A waterproof coating application minimizes storm water penetration into the concrete and therefore minimizes future concrete deterioration. *Failure to maintain a waterproof coating on the balconies will result in increased concrete repairs and replacements as the balconies age.* Capital repairs may also include replacement of the caulked joint between the balcony and the building, and repair or replacement of the metal railings and railing fastener attachments 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. Our cost includes the following activities per event:

- Partial depth replacement of up to one percent (1%) of the concrete topsides, edges and undersides
- Crack repairs as necessary
- Repairs to the railings as necessary
- Replacement of balcony tile floor coverings
- Replacement of perimeter sealants as needed
- Application of a waterproof coating (Urethane based elastomeric)

## **Breezeways, Concrete**

---

**Line Item:** 1.070

**Quantity:** Concrete breezeways comprising approximately 55,300 square feet of horizontal surface area at the south and west sides of the building.

**History:** Original



**Condition:** Good to fair overall with cracks and finish deterioration evident.



**Breezeway overview**



**Breezeway overview**



**Breezeway floor covering**



**Breezeway crack**



**Breezeway crack and finish deterioration**



**Breezeway crack and finish deterioration**

**Useful Life:** Capital repairs including a close-up visual inspection, patching of delaminated concrete, routing and filling of cracked concrete, and waterproof coating applications every six- to eight-years.

**Component Detail Notes:** A waterproof coating application minimizes storm water penetration into the concrete and therefore minimizes future concrete deterioration. *Failure to maintain a waterproof coating on the breezeways will result in increased concrete repairs and replacements as the breezeways age.* Capital repairs may also include replacement of the caulked joint between the breezeway and the building, and repair or replacement of the metal railings and railing fastener attachments 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. Our cost includes the following activities per event:

- Partial depth replacement of up to one percent (1%) of the concrete topsides, edges and undersides
- Crack repairs as necessary
- Repairs to the railings as necessary
- Replacement of perimeter sealants as needed
- Application of a waterproof coating (Urethane based elastomeric)

## **Balconies and Breezeways, Railings, Aluminum**

---

**Line Item:** 1.105

**Quantity:** 7,070 linear feet embedded in the concrete

**History:** Original

**Condition:** Good overall



**Balcony railings**



**Breezeways railings**

**Useful Life:** Up to 40 years

**Component Detail Notes:** The finish on these types of railings is maintenance free and should last the life of the railing.

**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.

## **Doors, Front Entry and Common Doors**

---

**Line Item:** 1.180

**Quantity:** Approximately 305 front entry and common doors. This quantity does not include the aluminum frame, glass doors.

**History:** Original

**Condition:** Good overall with isolated rust evident.



**Front entry door**



**Common doors**



**Isolated rust at common door**

**Useful Life:** Up to 25 years

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

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We recommend the Association fund touch-up paint to limit rust through the operating budget.

## **Light Fixtures**

---

**Line Item:** 1.260

**Quantity:** Approximately 270 exterior ceiling mounted plastic light fixtures accent the breezeways.

**History:** Original

**Condition:** Good overall



**Breezeway light fixture**

**Useful Life:** Up to 20 years

**Priority/Criticality:** Per Board discretion

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

## **Roofs, Built-up**

---

**Line Item:** 1.300

**Quantity:** 360 squares<sup>1</sup>

**History:** Original

**Condition:** Good overall. Management and the Board do not report history of leaks.

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





**Built-up roof**



**Built-up roof**



**Built-up roof**



**Built-up roof**

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

**Component Detail Notes:** Built-up roofing provides a durable system due to its multi-layer protection. Built-up roofs are composed of asphalt coated roofing sheets installed in layers to add strength to the roofing system. Built-up roofs are an economical option for flat and low-sloped roofs.

Contractors can install a new built-up roof in one of two ways: *tear-off* or an *overlay*. An *overlay* is the application of a new roof membrane over an existing roof. This method, although initially more economical, often covers up problems with the deck, flashing and saturated insulation. The *tear-off* method of replacement includes removal of the existing roofing, flashings and insulation, and installation of a new roofing system.

**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.

## Roofs, Concrete Tiles

---

**Line Item:** 1.360

**Quantity:** 45 squares located at the porte cochere, pool storage buildings and top of the elevators.

**History:** Original

**Condition:** Good overall



Porte cochere concrete tile roof



Pool storage concrete tile roof



Porte cochere concrete tile roof



Pool storage concrete tile roof

**Useful Life:** Up to 25 years

**Component Detail Notes:** A tile roof rarely fails at all points of application simultaneously. Rather, occurrences of roof leaks will increase as more concrete tiles crack, break and dislodge. This deterioration will result in increased maintenance costs such that replacement becomes the least costly long-term alternative as compared to ongoing repairs.



**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.

## Roofs, Metal

---

**Line Item:** 1.460

**Quantity:** 25 squares. This quantity includes the lighthouse roof.

**History:** Original

**Condition:** Good overall.



**Useful Life:** Up to 25 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.

## Walls, Stucco

---

**Line Item:** 1.860

**Quantity:** Approximately 170,350 square feet of the building exteriors. This quantity includes the parking garage and lighthouse.

**History:** Original

**Condition:** Fair overall with biological growth, and isolated cracks evident.



**Stucco paint finish biological growth**



**Stucco crack**



**Stucco paint finish biological growth**

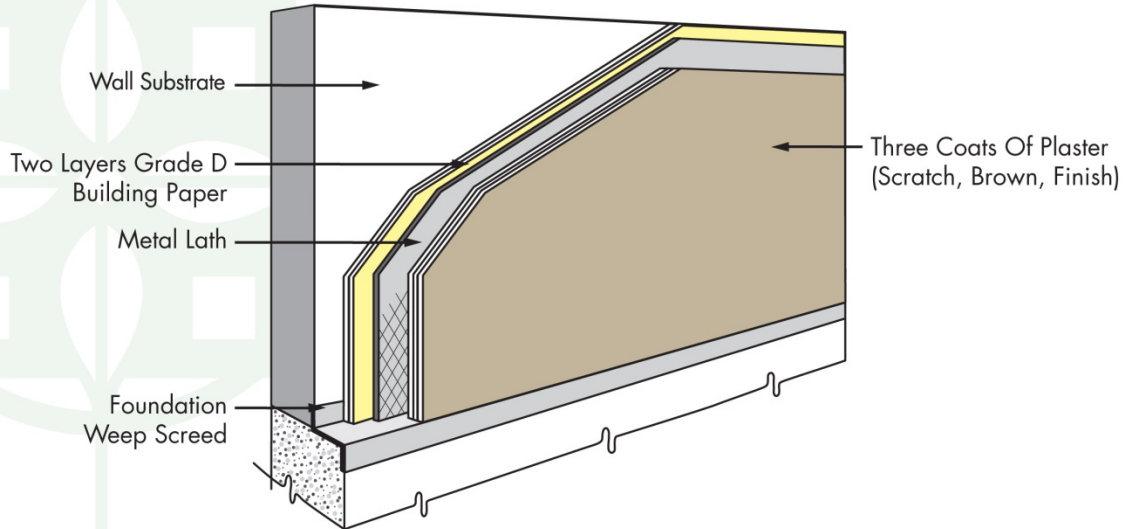


**Parking garage stucco paint finish**

**Useful Life:** We recommend inspections, repairs and paint finish applications every five- to seven-years.

**Component Detail Notes:** The following graphic details the typical components of a stucco wall system on frame construction:

## STUCCO DETAIL



© Reserve Advisors, Inc.

**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 assume the following activities per event:

- Crack repairs as needed (Each paint product has the limited ability to cover and seal cracks but we recommend repair of all cracks which exceed the ability of the paint product to bridge.)
- Replacement of up to one percent (1%) of the stucco walls (The exact amount of area in need of replacement will be discretionary based on the actual future conditions and the desired appearance.)
- Replacement of up to thirty-three percent (33%) of the sealants in coordination with each paint finish application.

## Interior Building Elements

### Ceilings, Acoustical Tiles and Grid

---

**Line Item:** 2.060

**Quantity:** 5,940 square feet at the meeting room, kitchen, storage spaces, fitness room and first, second and third floor common areas.

**History:** Original

**Condition:** Good overall



**Meeting room overview**

**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.

## **Elevator Cab Finishes**

---

**Line Item:** 2.100

**Quantity:** Three elevators

**History:** Original

**Condition:** Fair overall



**Elevator cab finishes**

**Useful Life:** Up to 20 years

**Component Detail Notes:** The elevator cab finishes consist of:

- Tile floor coverings
- Laminate wall coverings
- Metal ceiling with light fixtures

**Priority/Criticality:** Per Board discretion

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

## **Exercise Equipment**

---

**Line Items:** 2.155 and 2.165

**Quantity:** The exercise room contains the following types of cardiovascular aerobic training equipment:

- Ellipticals
- Stationary cycles
- Treadmills

The exercise room contains the following types of strength training equipment:

- Bench
- Free weights
- Isolation strength training

**History:** Primarily original

**Conditions:** Good to fair overall





**Cardiovascular equipment**



**Strength training equipment**

**Useful Life:** The useful life of cardiovascular equipment is up to five years. The useful life of strength training equipment is up to 15 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 Phoenix On The Bay II anticipate replacement of up to fifty percent (50%) of the cardiovascular equipment and all of the strength training equipment per event.

## **Floor Coverings, Carpet**

---

**Line Item:** 2.200

**Quantity:** 320 square yards at the meeting room, storage spaces and fitness room (Contractor measurements will vary from the actual floor area due to standard roll lengths, patterns and installation waste.)

**History:** Original

**Condition:** Fair overall with stains evident



**Meeting room carpet – note stains**



**Exercise room carpet – note stains**

**Useful Life:** 8- 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.

## **Floor Coverings, Tile**

---

**Line Item:** 2.240

**Quantity:** 960 square yards at the lobby, kitchen, second and third floor hallways and portions of the meeting room and fitness center.

**History:** Original

**Condition:** Good overall





**Lobby tile floor coverings**

**Useful Life:** Up to 30 years

**Component Detail Notes:** Replacement of tile is often based on discretionary redecorating prior to the tile reaching the end of its useful life. The Association should fund regrouting of the tiles through the operating budget if necessary

**Priority/Criticality:** Per Board discretion

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

## **Furnishings**

---

**Line Item:** 2.450

**History:** Primarily original

**Condition:** Good overall



**Lobby furnishings**



**Lobby furnishings**



**Lobby furnishings**

**Useful Life:** Varies significantly up to 20 years

**Component Detail Notes:** Furnishings in the lobby and meeting room include:

- Chairs
- Decorations
- Desks
- Tables

**Priority/Criticality:** Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We estimate the present replacement cost of these elements at approximately \$36,000. Due to varied uses, ages and useful lives, we recommend the Association budget \$9,000 plus inflation for phased replacements of up to twenty-five percent (25%) of the furnishings per event.

## **Kitchen, Equipment**

---

**Line Item:** 2.519

**History:** Components are original

**Condition:** Good to fair overall



**Kitchen equipment**

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

**Component Detail Notes:** Appliances include refrigerator, range, dishwasher, microwave and sink.

**Priority/Criticality:** Per Board discretion

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

## **Mailboxes**

---

**Line Item:** 2.700

**Quantity:** 104 unit mailboxes

**History:** Original

**Condition:** Good overall



**Mailboxes**

**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.

## **Paint Finishes**

---

**Line Item:** 2.800

**Quantity:** Approximately 16,700 square feet on walls and ceilings at the lobby, meeting room, kitchen, storage spaces, fitness room and first, second and third floor common areas

**History:** Original

**Condition:** Good to fair overall

**Useful Life:** 6- to 10-years

**Priority/Criticality:** Per Board discretion

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

## **Paint Finishes, Stairwells**

---

**Line Item:** 2.820

**Quantity:** Two each

**History:** Original

**Conditions:** Good overall



**Stairwell paint finishes**

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

**Priority/Criticality:** Per Board discretion

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

## **Rest Rooms**

---

**Line Item:** 2.900

**Quantity:** Six common located at the first, third and basement levels

**History:** Components are original

**Condition:** Good to fair overall





Typical rest room



Typical rest room

**Useful Life:** Renovations up to 20 years

**Component Detail Notes:** Components include:

- Tile floor coverings
- Tile wall coverings
- Paint finishes on the ceilings and portions of the walls
- Light fixtures
- Plumbing fixtures

**Priority/Criticality:** Per Board discretion

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

## Building Services Elements

### Air Handling and Condensing Units, Split Systems

**Line Item:** 3.070

**Quantity:** Eight split systems

**History:** Varied

**Condition:** Reported satisfactory



**Split system condensing units**



**Split system condensing unit**

**Useful Life:** 12- to 18-years

**Component Detail Notes:** A split system air conditioner consists of an outside condensing unit, an interior evaporator coil, refrigerant lines and an interior electric air handling unit. Each condensing unit has a cooling capacity of 3- to 7.5-tons.

**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. We recommend the Association budget for replacement of up to fifty percent (50%) of the systems with each event.

## **Elevators, Traction**

---

**Line Item:** 3.360

**Quantity:** Three Otis traction elevators

**History:** The majority of the elevator system components are original

**Condition:** Reported satisfactory



**Typical elevator equipment**

**Useful Life:** Up to 30 years however, the scarcity of parts, and the potential frequency and duration of service interruption makes controls replacement more desirable as the components age.

**Component Detail Notes:** The elevators utilize programmable logic computer controls.

**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 anticipate replacement of the following traction elevator system components:

- Cab control panels
- Door operators
- Hallway panels/buttons
- Hoists and motors
- Microprocessor based controllers

## **Generator, Emergency**

---

**Line Item:** 3.440

**Quantity:** One Kohler 300-kW (kilowatt) diesel generator

**History:** Original

**Condition:** Reported satisfactory



**Emergency generator**

**Useful Life:** 25- 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. Our estimate of cost includes replacement of the transfer switch.

## **Life Safety System**

---

**Line Item:** 3.560

**Quantity:** The life safety system at Phoenix On The Bay II includes the following components:

- Audio/visual fixtures
- *Simplex* control panel
- Detectors
- Exit light fixtures
- Pull stations
- Voice communication system
- Wiring

**History:** Original

**Conditions:** Reported satisfactory



**Control panel**



**Emergency devices**

**Useful Life:** Up to 25 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. Changes in technology or building codes may make a replacement desirable prior to the end of the functional life. Our estimate of future cost considers only that amount necessary to duplicate the same functionality. Local codes or ordinances at the actual time of replacement may require a betterment as compared to the existing system. A betterment could result in a higher, but at this time unknown, cost of replacement. We recommend the Association fund interim control panel replacements through the operating budget.

## **Pumps**

---

**Line Item:** 3.700

**Quantity, History and Conditions:**

- Domestic cold water - 7.5-HP, three each, original, reported satisfactory





**Domestic water pumps**

**Useful Lives:** Up to 20 years

**Component Detail Notes:** Major pumps included in this Reserve Study are those with a motor drive of at least five-HP. The Association should replace or repair all pumps with motor drives less than five-HP as needed and fund this ongoing maintenance activity through the operating budget. The Association may choose to rebuild pumps prior to complete replacement. However, this activity becomes less desirable as pumps age due to the scarcity of parts. We regard interim replacements of motors and component parts as normal maintenance and base our estimates on complete replacements. An exact replacement time for each individual pump is difficult, if not impossible, to estimate.

**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:** 3.820

**Quantity:** Phoenix On The Bay II utilizes the following security system components:

- Cameras (10)
- Multiplexer (1)
- Recorder (1)

**History:** Original

**Condition:** Reported satisfactory

**Useful Life:** Up to 15 years

**Priority/Criticality:** Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. The Association should anticipate replacement of up to fifty percent (50%) of the security system components per event.

## Property Site Elements

### Asphalt Pavement, Repaving

---

**Line Items:** 4.040

**Quantity:** Approximately 2,700 square yards

**History:** Original

**Condition:** Good overall with isolated cracks evident



Asphalt pavement overview



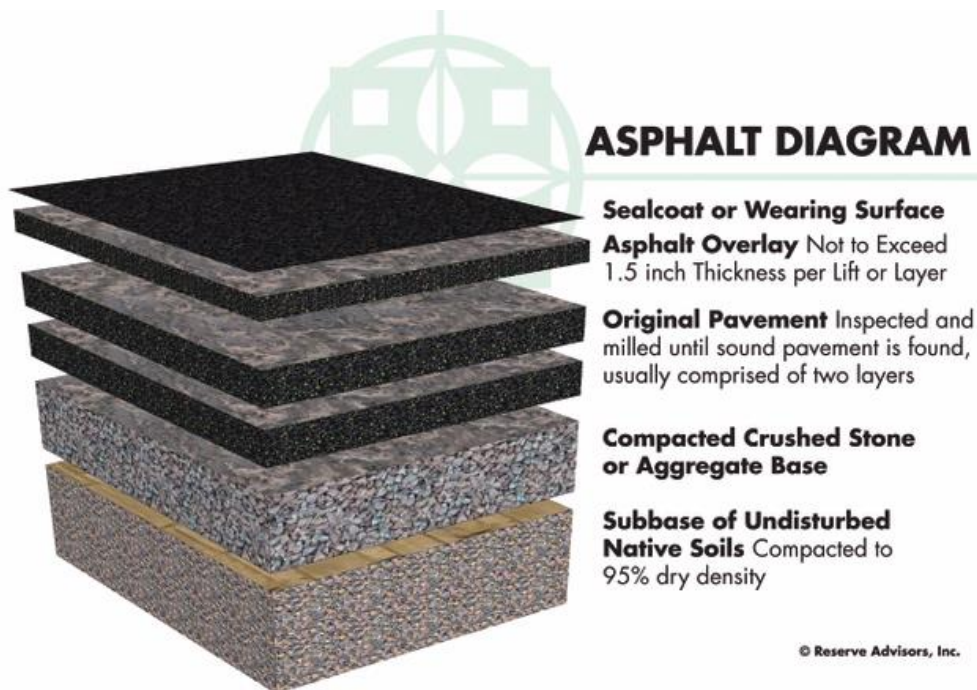
Centerline crack



**Minor asphalt pavement cracks**

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

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



The manner of repaving is either a mill and overlay or total replacement. A mill and overlay is a method of repaving where cracked, worn and failed pavement is mechanically removed or milled until sound pavement is found. A new layer of asphalt is overlaid atop the remaining base course of pavement. Total replacement includes the removal of all existing asphalt down to the base course of aggregate and native soil

followed by the application of two or more new lifts of asphalt. We recommend mill and overlayment on asphalt pavement that exhibits normal deterioration and wear. We recommend total replacement of asphalt pavement that exhibits severe deterioration, inadequate drainage, pavement that has been overlaid multiple times in the past or where the configuration makes overlayment not possible. Based on the apparent visual condition and configuration of the asphalt pavement, we recommend the mill and overlay method of repaving at Phoenix On The Bay II.

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

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our cost for milling and overlayment includes area patching of up to ten percent (10%).

## Concrete Curbs and Gutters

---

**Line Item:** 4.110

**Quantity:** 3,000 linear feet

**Condition:** Good overall

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

**Priority/Criticality:** Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We estimate that up to 600 linear feet of curbs and gutters, or twenty percent (20%) of the total, will require replacement during the next 30 years.

## Lift Station, Pumps

---

**Line Item:** 4.540

**Quantity:** Two each

**History:** Original

**Condition:** Reported good

**Useful Life:** Up to 10 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.



## Lift Station

---

**Line Item:** 4.550

**History:** Original

**Condition:** Reported good overall without any reports of service interruptions



Lift station top



Lift station rails

**Useful Life:** Up to 30 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. Rebuilding of the station includes replacement of pumps, motors, guide rails and electrical components including controls. The Association should fund interim repairs and replacements through the operating budget.

## Pavers, Masonry

---

**Line Item:** 4.620

**Quantity:** 1,440 square feet located at the porte cochere

**History:** Original

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

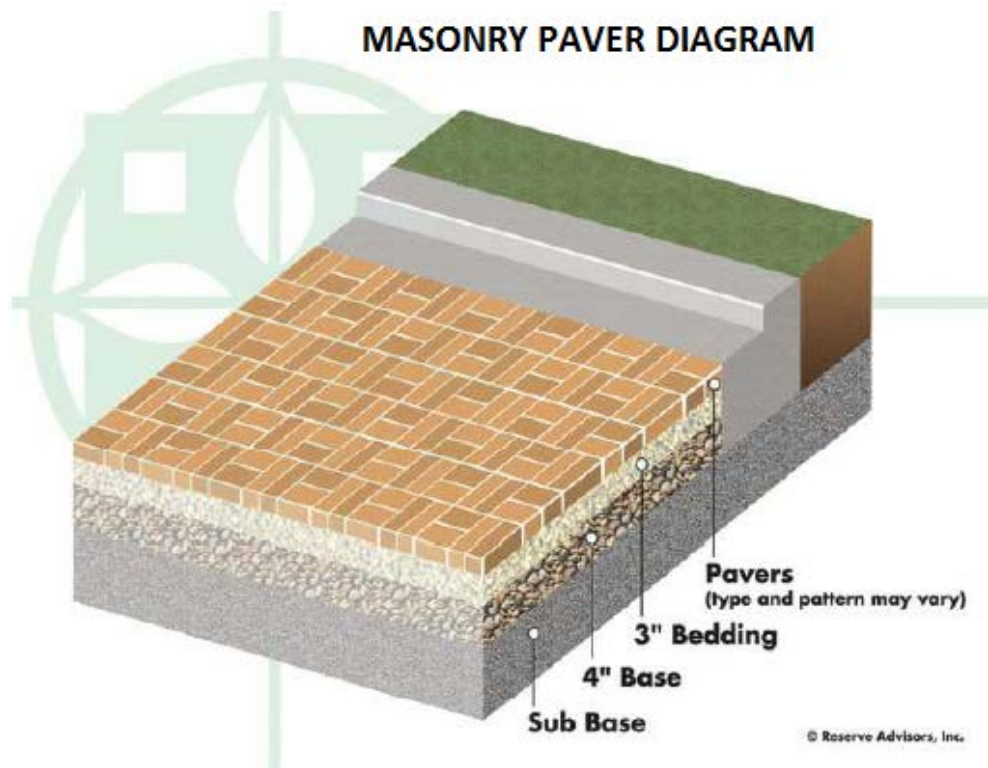




**Masonry pavers at the porte cochere**

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

**Component Detail Notes:** The following diagram depicts the components of a masonry paver system:



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

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We suggest the Association conduct interim resetting

and replacement of minor areas of pavers as normal maintenance, funded from the operating budget.

## Perimeter Walls, Stucco

---

**Line Item:** 4.640

**Quantity:** 890 linear feet and approximately 9,560 square feet of stucco surface area which includes both sides of the walls.

**History:** Original

**Condition:** The walls are in fair condition overall. We note settlement of localized sections of the wall near the northeast corner of the pool area. The paint finish is in fair condition overall.



**Perimeter wall overview**



**Perimeter wall near entrance**



**Settled perimeter wall section**

**Useful Life:** Indefinitely long with periodic finish applications and proper maintenance every five- to seven-years

**Component Detail Notes:** Stucco is Portland cement plaster that is applied directly to a solid base such as masonry or concrete. Periodic paint finish applications and repairs to stucco help prevent water infiltration and spalling from weather exposure, maintain a good appearance and maximize the useful life of the system.

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

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our estimate of cost anticipates repair or replacement of up to one percent (1%), of the stucco and up to ten percent (10%) of the concrete coping tile near the main entrance in coordination with each paint finish application. The exact amount of area in need of repair will be discretionary based on the actual future conditions and the desired appearance. Each paint product has the limited ability to cover and seal cracks but we recommend repair of all cracks which exceed the ability of the paint product to bridge.

## Retaining Walls, Masonry

---

**Line Item:** 4.745

**Quantity:** 700 square feet

**History:** Original

**Condition:** Good overall

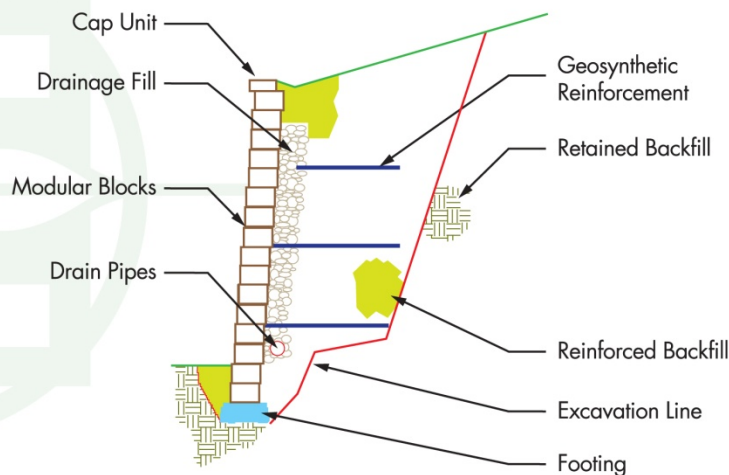


Masonry retaining wall

**Useful Life:** Up to 35 years

**Component Detail Notes:** Properly constructed interlocking masonry retaining walls utilize geosynthetic reinforcement and a drainage system to stabilize the wall and prevent the buildup of hydrostatic pressure behind the wall. Water stains may indicate inadequate drainage or blocked drainage from behind the walls. The following schematic depicts this type of retaining wall:

## MASONRY RETAINING WALL DETAIL



© Reserve Advisors, Inc.

**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.

### Retaining Walls, Stucco

**Line Item:** 4.735

**Quantity:** 2,880 square feet

**History:** Original

**Condition:** Good to fair overall with isolated cracks evident





Retaining wall crack



Retaining wall crack

**Useful Life:** Concrete retaining walls have indeterminate useful lives. However, we recommend the Association plan for inspections and capital repairs every five- to seven-years to forestall deterioration.

**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.

## **Tennis Court, Waterproof Coating**

---

**Line Item:** 4.830

**Quantity:** 1,640 square yards comprising one tennis court located on the top floor of the parking garage.

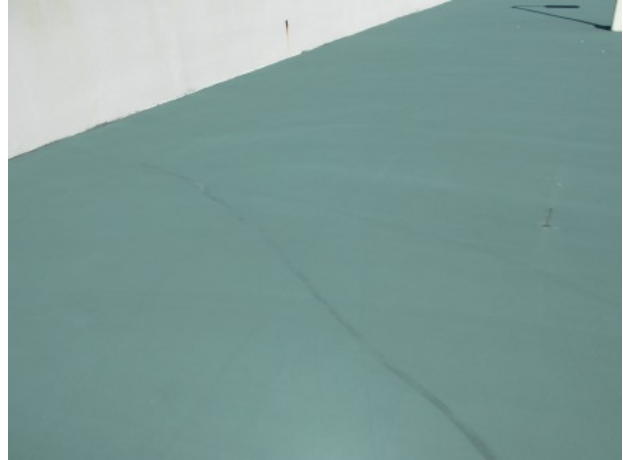
**History:** Color coat age is unknown

**Condition:** Good overall





**Tennis court overview**



**Isolated crack**

**Useful Life:** Six- to eight-years

**Component Detail Notes:** Prior to the application of the color coat, the Association should require the contractor to rout and fill all cracks with hot emulsion. This deters water infiltration and further deterioration of the asphalt playing surface.

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

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

## **Tennis Court, Fence**

---

**Line Item:** 4.840

**Quantity:** 600 linear feet

**History:** Original

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



**Tennis court fence**



**Fence webbing detached from post**

**Useful Life:** 15- to 25-years

**Priority/Criticality:** Per Board discretion

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

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

---

**Line Item:** 4.850

**Quantity:** Four each

**History:** Original

**Condition:** Good overall



**Tennis court light pole**



**Useful Life:** Up to 25 years

**Priority/Criticality:** Per Board discretion

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

## Pool Elements



Outdoor pools overview

### Decks, Pavers (Outdoor Pool)

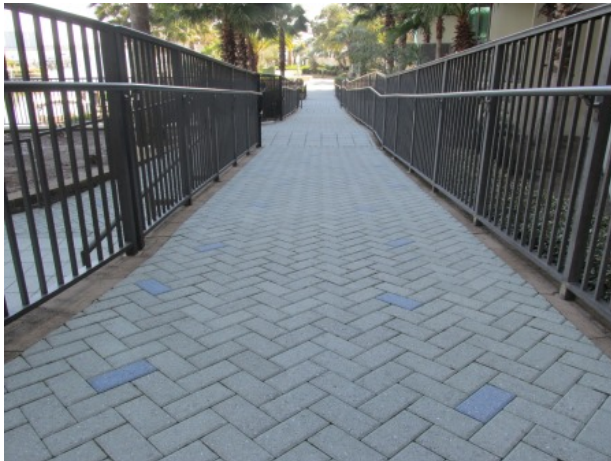
---

**Line Item:** 6.200

**Quantity:** 11,490 square feet

**History:** Original

**Condition:** Good condition with isolated settlement evident



Masonry deck pavers



Masonry deck pavers





**Masonry deck pavers**



**Masonry deck pavers**

**Useful Life:** The pavers have a useful life of up to 30 years. Soil movement and water infiltration underneath the pool decks can cause significant settlement of the surrounding pavers. The pool deck should also be free of trip hazards for the safety of residents and their guests.

**Component Detail Notes:** We recommend the Association budget for complete replacement of the pavers every 30 years.

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

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We recommend the Association conduct interim resetting and replacement of minor areas of pavers as normal maintenance, funded through the operating budget.

## **Deck, Tile (Indoor Pool)**

---

**Line Item:** 6.210

**Quantity:** 2,570 square feet. This quantity includes the wall tile around the pool deck.

**History:** Original

**Condition:** Good condition





**Indoor tile pool deck**



**Wall tile at indoor pool**

**Useful Life:** Up to 25 years

**Component Detail Notes:** We recommend the Association budget for replacement of the tile at the deck and walls every 25 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.

## **Fences, Aluminum**

---

**Line Item:** 6.400

**Quantity:** 1,000 linear feet

**History:** Original

**Condition:** Good overall condition



**Pool fence**



**Pool fence**

**Useful Life:** Up to 30 years

**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:**

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

**History:** Replaced in 2016

**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, cushion replacements, reupholstering and other repairs to the furniture as normal maintenance to maximize its useful life. We base our estimate of cost on information provided by Management and the Board.

## **Light Fixtures, Bollards**

---

**Line Item:** 6.550

**Quantity:** Approximately 80 each

**History:** Original

**Condition:** Good to fair overall



**Typical bollard light fixture**

**Useful Life:** Up to 20 years

**Priority/Criticality:** Per Board discretion

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

## **Mechanical Equipment**

---

**Line Item:** 6.600

**Quantity:**

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

**History:** Varied

**Condition:** Reported satisfactory





**Pump and filter**



**Large lazy river pump**



**Sand filters**



**Sand filters**

**Useful Life:** Up to 15 years

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

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Failure of the mechanical equipment as a single event is unlikely. We consider interim replacement of motors and minor repairs as normal maintenance. Our estimate of cost includes mechanical equipment for the indoor pool, two indoor spas, bird pool, kiddie pool and lazy river.

## **Pool Finishes, Plaster**

---

**Line Items:** 6.800, 6.810 and 6.820

**Quantity:** Based on horizontal surface area:

- 5,980 square feet at the bird pool and lazy river



- 360 square feet at the outdoor kiddie pool and indoor spas
- 540 square feet at the indoor pool

**History:**

- Bird pool and lazy river – original
- Outdoor kiddie pool and indoor spas – 2016
- Indoor pool - original

**Condition:**

- Bird pool and lazy river – Fair overall. We note cracks throughout the lazy river
- Outdoor kiddie pool and indoor spas – Good overall
- Indoor pool – Good to fair overall with isolated discoloration



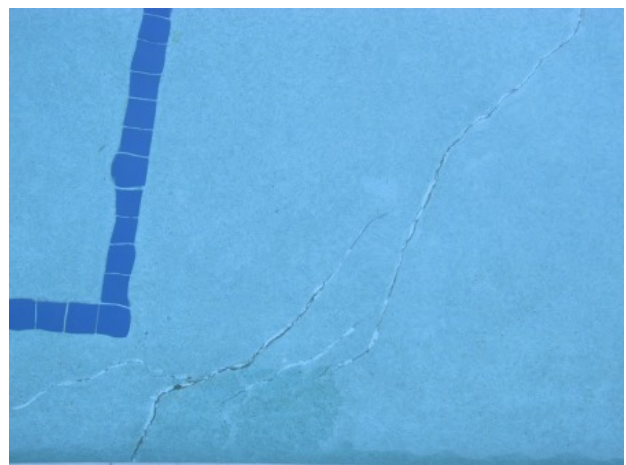
**Bird pool plaster finish**



**Lazy river**



**Lazy river plaster cracks**



**Lazy river plaster cracks**



**Kiddie pool**



**Indoor pool finish**

**Useful Life:** 8- to 12-years

**Component Detail Notes:** Removal and replacement 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 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

**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.

## **Water Slide, Fiberglass**

---

**Line Items:** 6.975 and 6.980

**History:** The slide is original however, Management and the Board inform us the Association completely renovated the slide in 2017 for \$10,000.

**Conditions:** Good overall



**Pool slide**



**Slide staircase**

**Useful Life:** Replacement at up to 30 years and refinishing every 10 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.

**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 base our estimates of cost on information provided by Management and the Board.



## Garage Elements



Parking garage overview

### Concrete, Elevated Floors

---

**Line Item:** 7.300

**Quantity:** 103,600 square feet of elevated cast in place concrete floor structures at the second through eighth floors

**Condition:** Good to fair overall with exposed reinforcing steel and isolated stalactites evident. The elevated structural concrete does not utilize a protective traffic coating.



Garage overview



Exposed reinforcement on driving surface



**Chipped concrete at the driving surface**



**Crack on ceiling**

**Useful Life:** Repairs to the various concrete surfaces every 10- to 15-years

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

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

- Complete inspection of the garage concrete
- Partial depth concrete replacement of a limited amount of the surface area of the concrete floors
- Partial depth concrete replacement of a limited amount of the surface area of the elevated structural concrete ceilings
- Remediation of structural concrete columns and beams as needed
- Crack repairs on all surfaces as needed

## **Light Fixtures**

---

**Line Item:** 7.600

**Quantity:** 200 light fixtures

**History:** Original

**Condition:** Good to fair





Typical light fixture

**Useful Life:** Up to 15 years

**Priority/Criticality:** Per Board discretion

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

## Marina Elements



Harbor overview

## Bulkheads

---

**Line Items:** 8.100 and 8.110

**Quantity:** Approximately 880 linear feet. This quantity comprises 245 linear feet of steel bulkheads and 635 linear feet of vinyl bulkheads.

**History:** The ages of the steel bulkheads are unknown as they predate the building. The vinyl bulkheads were installed in 2015. Management and the Board inform us the Association installed the vinyl bulkheads in front of the existing steel bulkheads and backfilled between the two walls.

**Conditions:** The steel bulkheads are in fair condition with widespread holes evident. The vinyl bulkheads are in good overall condition.



**Steel bulkhead**



**Holes in steel bulkhead**



**Vinyl bulkhead**



**Old steel bulkhead**

**Useful Life:** Steel bulkheads have a useful life of up to 55 years. Vinyl bulkheads have an indeterminate useful life with periodic inspections and capital repairs.

**Component Detail Notes:** The bulkheads include concrete caps.

**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 complete



replacement of the steel bulkhead with a vinyl bulkhead. Upon replacement of the steel bulkhead, we estimate that up to 175 linear feet of vinyl bulkheads, or twenty percent (20%) of the total, will require replacement during the next 30 years.

## **Docks and Pilings, Wood**

---

**Line Items:** 8.395 and 8.400

**Quantity:** Approximately 4,800 square feet of wood docks

**History:** The harbor was completely replaced in 2015. The dock located at the south end of the property was installed in 2006 at the time of construction of the building.

**Condition:** Good condition minor weathered boards



**Harbor docks**



**Dock overview**



**Harbor dock**



**Weathered deck boards**

**Useful Life:** Up to 30 years with deck board replacements every 15 years.

**Component Detail Notes:** The wood docks sit atop wood pilings. Phoenix On The Bay II should also anticipate replacement of the utility lines for the docks at the time of complete replacement.

**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 replacement of the deck boards and up to ten percent (10%) of the pilings interim to complete replacement. Our estimate of cost includes an allowance for removal and disposal of the existing docks, and installation of new docks and utility lines.

## Power Pedestals

---

**Line Item:** 8.800

**Quantity:** 32 each

**History:** Replaced in 2015

**Condition:** Reported satisfactory



Typical power pedestal

**Useful Life:** Up to 25 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.

## Reserve Study Update

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

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

Periodic updates incorporate these variable changes since the last Reserve Study or Update. We recommend the Board budget for an Update to this Reserve Study in two 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.

Phoenix On The Bay II 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 Homeowners pay their "fair share" of the weathering and aging of the commonly owned property each year. Level reserve assessments preserve the property and enhance the resale value of the homes.

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

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

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

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

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

- The past and current maintenance practices of Phoenix On The Bay II 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. 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 Phoenix On The Bay II 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) Phoenix On The Bay II 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.

## 7. PROFESSIONAL SERVICE CONDITIONS

**Our Services** - Reserve Advisors, Inc. will perform its services as an independent contractor in accordance with our professional practice standards. Our compensation is not contingent upon our conclusions.

Our inspection and analysis of the subject property is limited to visual observations and is noninvasive. We will inspect sloped roofs from the ground. We will inspect flat roofs where safe access (stairs or ladder permanently attached to the structure) is available. The report is based upon a “snapshot in time” at the moment of our observation. Conditions can change between the time of inspection and the issuance of the report. Reserve Advisors does not investigate, nor assume any responsibility for any existence or impact of any hazardous materials, structural, latent or hidden defects which may or may not be present on or within the property. Our opinions of estimated costs and remaining useful lives are not a guarantee of the actual costs of replacement, a warranty of the common elements or other property elements, or a guarantee of remaining useful lives.

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

**Report** - Reserve Advisors, Inc. will complete the services in accordance with the Proposal. The Report represents a valid opinion of our findings and recommendations and is deemed complete. However, we will consider any additional information made available to us in the interest of promptly issuing a Revised Report if changes are requested within six months of receiving the Report. We retain the right to withhold a Revised Report if payment for services is not rendered in a timely manner. All files, work papers or documents developed by us during the course of the engagement remains our property.

**Your Obligations** - You agree to provide us access to the subject property during our on-site visual inspection and tour. You will provide to us to the best of your ability and if reasonably available, historical and budgetary information, the governing documents, and other information that we request and deem necessary to complete our Study. You agree to pay our actual attorneys' fees and any other costs incurred in the event we have to initiate litigation to collect on any unpaid balance for our services.

**Use of Our Report and Your Name** - Use of this Report is limited to only the purpose stated herein. Any use or reliance for any other purpose, by you or third parties, is invalid. Our Reserve Study Report in whole or part is not and cannot be used as a design specification, design engineering services or an appraisal. You may show our report in its entirety to those third parties who need to review the information contained herein. The Client and other third parties viewing this report should not reference our name or our report, in whole or in part, in any document prepared and/or distributed to third parties without our written consent. ***This report contains intellectual property developed by Reserve Advisors, Inc. specific to this engagement and***



***cannot be reproduced or distributed to those who conduct reserve studies without the written consent of Reserve Advisors, Inc.***

We reserve the right to include our client's name in our client lists, but we will maintain the confidentiality of all conversations, documents provided to us, and the contents of our reports, subject to legal or administrative process or proceedings. These conditions can only be modified by written documents executed by both parties.

**Payment Terms, Due Dates and Interest Charges** - The retainer payment is due upon authorization and prior to shipment of the report. The final payment of the fee is due immediately upon receipt of the Report. Subsequent changes to the report can be made for up to six months from the initial report date. Any outstanding balance after 30 days of the invoice date is subject to an interest charge of 1.5% per month. Any litigation necessary to collect an unpaid balance shall be venued in Milwaukee County Circuit Court in the State of Wisconsin.

### **CONDITIONS OF OUR SERVICE ASSUMPTIONS**

To the best of our knowledge, all data set forth in this report are true and accurate. Although gathered from reliable sources, we make no guarantee nor assume liability for the accuracy of any data, opinions, or estimates identified as furnished by others that we used in formulating this analysis.

We did not make any soil analysis or geological study with this report; nor were any water, oil, gas, coal, or other subsurface mineral and use rights or conditions investigated.

Substances such as asbestos, urea-formaldehyde foam insulation, other chemicals, toxic wastes, environmental mold or other potentially hazardous materials could, if present, adversely affect the validity of this study. Unless otherwise stated in this report, the existence of hazardous substance, that may or may not be present on or in the property, was not considered. Our opinions are predicated on the assumption that there are no hazardous materials on or in the property. We assume no responsibility for any such conditions. We are not qualified to detect such substances, quantify the impact, or develop the remedial cost.

We have made a visual inspection of the property and noted visible physical defects, if any, in our report. Our inspection and analysis was made by employees generally familiar with real estate and building construction; however, we did not do any invasive testing. Accordingly, we do not opine on, nor are we responsible for, the structural integrity of the property including its conformity to specific governmental code requirements, such as fire, building and safety, earthquake, and occupancy, or any physical defects that were not readily apparent during the inspection.

Our opinions of the remaining useful lives of the property elements do not represent a guarantee or warranty of performance of the products, materials and workmanship.



## 8. CREDENTIALS

### HISTORY AND DEPTH OF SERVICE

**Founded in 1991**, Reserve Advisors, Inc. 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 principals are founders of Community Associations Institute's (CAI) Reserve Committee that developed national standards for reserve study providers. One of our principals 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 the 2,600,000-square foot 98-story Trump International Hotel and Tower in Chicago. 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.

## QUALIFICATIONS

### THEODORE J. SALGADO

#### Principal Owner

#### CURRENT CLIENT SERVICES

Theodore J. Salgado is a co-founder of Reserve Advisors, Inc., which is dedicated to serving community associations, city and country clubs, religious organizations, educational facilities, and public and private entities throughout the United States. He is responsible for the production, management, review, and quality assurance of all reserve studies, property inspection services and consulting services for a nationwide portfolio of more than 6,000 clients. Under his direction, the firm conducts reserve study services for community associations, apartment complexes, churches, hotels, resorts, office towers and vintage architecturally ornate buildings.



#### PRIOR RELEVANT EXPERIENCE

Before founding Reserve Advisors, Inc. with John P. Poehlmann in 1991, Mr. Salgado, a professional engineer registered in the State of Wisconsin, served clients for over 15 years through American Appraisal Associates, the world's largest full service valuation firm. Mr. Salgado conducted facilities analyses of hospitals, steel mills and various other large manufacturing and petrochemical facilities and casinos.

He has served clients throughout the United States and in foreign countries, and frequently acted as project manager on complex valuation, and federal and state tax planning assignments. His valuation studies led to negotiated settlements on property tax disputes between municipalities and property owners.

Mr. Salgado has authored articles on the topic of reserve studies and facilities maintenance. He also co-authored *Reserves*, an educational videotape produced by Reserve Advisors on the subject of Reserve Studies and maintaining appropriate reserves. Mr. Salgado has also written in-house computer applications manuals and taught techniques relating to valuation studies.

#### EXPERT WITNESS

Mr. Salgado has testified successfully before the Butler County Board of Tax Revisions in Ohio. His depositions in pretrial discovery proceedings relating to reserve studies of Crestview Estates Condominium Association in Wauconda, Illinois, Rivers Point Row Property Owners Association, Inc. in Charleston, South Carolina and the North Shore Club Associations in South Bend, Indiana have successfully assisted the parties in arriving at out of court settlements.

**EDUCATION** - Milwaukee School of Engineering - B.S. Architectural Engineering

#### PROFESSIONAL AFFILIATIONS/DESIGNATIONS

American Association of Cost Engineers - Past President, Wisconsin Section

Association of Construction Inspectors - Certified Construction Inspector

Association of Professional Reserve Analysts - Past President & Professional Reserve Analyst (PRA)

Community Associations Institute - Member and Volunteer Leader of multiple chapters

Concordia Seminary, St. Louis - Member, National Steering Committee

Milwaukee School of Engineering - Member, Corporation Board

Professional Engineer, Wisconsin (1982) and North Carolina (2014)

Ted continually maintains his professional skills through American Society of Civil Engineers, ASHRAE, Association of Construction Inspectors, and continuing education to maintain his professional engineer licenses.

**JOHN P. POEHLMANN, RS**  
**Principal**

John P. Poehlmann is a co-founder of Reserve Advisors, Inc. He is responsible for the finance, accounting, marketing, and overall administration of Reserve Advisors, Inc. He also regularly participates in internal Quality Control Team Reviews of Reserve Study reports.



Mr. Poehlmann directs corporate marketing, including business development, advertising, press releases, conference and trade show exhibiting, and electronic marketing campaigns. He frequently speaks throughout the country at seminars and workshops on the benefits of future planning and budgeting for capital repairs and replacements of building components and other assets.

**PRIOR RELEVANT EXPERIENCE**

Mr. Poehlmann served on the national Board of Trustees of Community Associations Institute. An international organization, Community Associations Institute (CAI) is a nonprofit 501(c)(3) trade association created in 1973 to provide education and resources to America's 335,000 residential condominium, cooperative and homeowner associations and related professionals and service providers.

He is a founding member of the Institute's Reserve Committee. The Reserve Committee developed national standards and the Reserve Specialist (RS) Designation Program for Reserve Study providers. Mr. Poehlmann has authored numerous articles on the topic of Reserve Studies, including Reserve Studies for the First Time Buyer, Minimizing Board Liability, Sound Association Planning Parallels Business Concepts, and Why Have a Professional Reserve Study. He is also a contributing author in Condo/HOA Primer, a book published for the purpose of sharing a wide background of industry knowledge to help boards in making informed decisions about their communities.

**INDUSTRY SERVICE AWARDS**

CAI Wisconsin Chapter Award  
CAI National Rising Star Award  
CAI Michigan Chapter Award

**EDUCATION**

University of Wisconsin-Milwaukee - Master of Science Management  
University of Wisconsin - Bachelor of Business Administration

**PROFESSIONAL AFFILIATIONS**

**Community Associations Institute (CAI)** - Founding member of Reserve Committee;  
former member of National Board of Trustees; Reserve Specialist (RS) designation;  
Member of multiple chapters

**Association of Condominium, Townhouse, & Homeowners Associations (ACTHA)** –  
member



**ASHLEY M. FORTE, P.E., RS**  
**Responsible Advisor**

**CURRENT CLIENT SERVICES**

Ashley M. Forte, a Civil Engineer, is an Advisor for Reserve Advisors. Ms. Forte is responsible for the inspection and analysis of the condition of clients' properties, and recommending engineering solutions to prolong the lives of the components. She also forecasts capital expenditures for the repair and/or replacement of the property components and prepares technical reports on assignments. She is responsible for conducting Life Cycle Cost Analyses and Capital Replacement Forecast services and the preparation of Reserve Study Reports for condominiums, townhomes and homeowner associations. Ms. Forte frequently serves as the Quality Assurance Review Coordinator for all types of developments.

The following is a partial list of clients served by Ashley Forte demonstrating her breadth of experiential knowledge of community associations in construction and related buildings systems.

**Gables Court Condominium Association** Located in Miami, Florida, this distinguished condominium association contains multiple building styles comprising 159 units. The Association maintains a large pool, extensive clubhouse house, and common asphalt pavement parking areas.

**Lake Forest Master Community Association** This well-maintained single family home community is located in Sanford, Florida. This heavily sidewalked community consists of 732 single family homes. The community maintains one large pool, six tennis courts, two docks asphalt pavement streets and catch basins.

**Edgehill Condominium Owners Association** This 10 unit condominium located in Charlotte, North Carolina has masonry façade. Constructed in 1998, the community is comprised of concrete and metal balconies, a parking garage located under the building and an asphalt shingle roof.

**Turtle Shores Homeowners Association** This development is comprised of 298 single family homes overlooking the ocean located in Ponte Vedra, Florida. The association maintains a concrete tunnel to offer access to an extensive wood gazebo on the beach as well as a pool, cabanas and timber retaining walls.

**River Marina Estates Homeowners Association** Located in Stuart, Florida, this gated development includes 88 single family homes. The association maintains responsibility for 14 wood docks and associated shorelines, a large pond, mailboxes and gate entry system.

**Meadow Pointe Condominium Association of Brevard County** This condominium community comprises 78 units in 13 buildings in Rockledge, Florida. Amenities of this property include a large pool, sloped asphalt shingle roofs, perimeter walls, irrigation system, fountains and parking area.

**Balcones Woods Club** Located in pristine Austin, Texas, this association maintains an extensive recreation area. The community includes a large pool and wading pool, tennis courts, basketball court, volleyball court, large playground and an asphalt pavement parking area.

**PRIOR RELEVANT EXPERIENCE**

Before joining *Reserve Advisors*, Ms. Forte successfully completed the bachelors program in Civil Engineering from the University of Central Florida as well as the master's program in Engineering Management from the University of Florida. She also has three years of transportation design experience as a roadway engineer in Tampa, FL, where she gained knowledge in the design of roadways, associated drainage design, planning and plans production of engineering drawings.

**EDUCATION**

University of Florida – M.S. Engineering Management  
University of Central Florida - B.S. Civil Engineering

**PROFESSIONAL AFFILIATIONS/DESIGNATIONS**

*Professional Engineer (P.E.)* - State of Florida, 2015  
*Reserve Specialist (RS)* – Community Association Institute (CAI)



**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*

*Reserve Specialist (RS) - Community Associations Institute*

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



## RESOURCES

Reserve Advisors, Inc. 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). Several advisors and a Principal of Reserve Advisors, Inc. hold Senior Memberships with ACI.

**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, Inc. 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, Inc.**, 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.