

# Palma Del Mar Condominium No. 5 of St Petersburg, Inc.

November 30, 2023 • St. Petersburg, FL

**STRUCTURAL INTEGRITY  
RESERVE STUDY**



Palma Del Mar Condominium Association No. 5 of St Petersburg, Inc.  
St. Petersburg, Florida

Dear Board of Directors of Palma Del Mar Condominium Association No. 5 of St Petersburg, Inc.:

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Structural Integrity Reserve Study* of Palma Del Mar Condominium Association No. 5 of St Petersburg, Inc. in St. Petersburg, Florida and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, November 30, 2023.

This *Structural Integrity Reserve Study meets or exceeds all requirements set forth in Florida Statute 718.112 and the Association of Professional Reserve Analysts (APRA) standards fulfilling the requirements of a "Level I Full Reserve Study."*

An ongoing review by the Board and an Update of this Reserve Study are necessary to ensure an equitable funding plan since a Reserve Study is a snapshot in time. We recommend the Board budget for an Update to this Reserve Study in two- to three-years. We look forward to continuing to help Palma Del Mar Condominium Association No. 5 of St Petersburg, 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 December 29, 2023 by

*Reserve Advisors, LLC*

Visual Inspection and Report by: Alexander G. J. Gould, RS<sup>1</sup>

Review by: Nancy S. Daniel, RS

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



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

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



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## 1. RESERVE STUDY EXECUTIVE SUMMARY

**Client:** Palma Del Mar Condominium Association No. 5 of St Petersburg, Inc. (Palma Del Mar Condominium Association)

**Location:** St. Petersburg, Florida

**Reference:** 140637

**Property Basics:** Palma Del Mar Condominium Association No. 5 of St Petersburg, Inc. is a condominium style development which consists of 140 units in seven buildings. The buildings were built from 1981 to 1982.

### Reserve Components Identified:

- 19 *Structural Integrity* Reserve Components
- 37 *General* Reserve Components

**Inspection Date:** November 30, 2023. We conducted the original inspection on May 3, 2022.

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

- *Structural Integrity:* Our recommended Funding Plan recognizes these threshold funding years in 2025 due to the replacement of the built-up roofs and in 2028 due to the inspections and repairs of the balconies as well as applications of traffic coatings at the elevated floors of the garages. In addition, the Reserve Funding Plan recommends 2053 year end accumulated reserves of approximately \$1,783,000. We judge this amount of accumulated reserves in 2053 necessary to fund the likely replacement of the railings at the balconies and breezeways after 2053. These future needs, although beyond the limit of the Cash Flow Analysis of this Reserve Study, are reflected in the amount of accumulated 2053 year end reserves.
- *General:* Our recommended Funding Plan recognizes this threshold funding year in due to the replacement of the . In addition, the Reserve Funding Plan recommends 2053 year end accumulated reserves of approximately \$1,142,300. We judge this amount of accumulated reserves in 2053 necessary to fund the likely replacement of the modernization of the elevators after 2053. These future needs, although beyond the limit of the Cash Flow Analysis of this Reserve Study, are reflected in the amount of accumulated 2053 year end reserves.

### Methodology:

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

- Current and future local costs of replacement
- 2.0% anticipated annual rate of return on invested reserves
- 3.5% future Inflation Rate for estimating Future Replacement Costs

**Project Prioritization:** We note anticipated Reserve Expenditures for the next 30 years in the *Reserve Expenditures* tables and include a *Five-Year Outlook* table following the *Reserve Funding Plan* in section 3. We recommend the Association prioritize the following projects in the next five years based on the conditions identified:

- Structural Integrity - Building restoration project
- Structural Integrity - Replacement of the built-up roofs
- Structural Integrity - Paint finish applications to the Tower building



- General - Renovations of the elevator cab finishes
- General - Replacement of the hoists and motors at the traction elevators
- General - Replacement of the pool finishes
- General - Replacement of the tiki huts

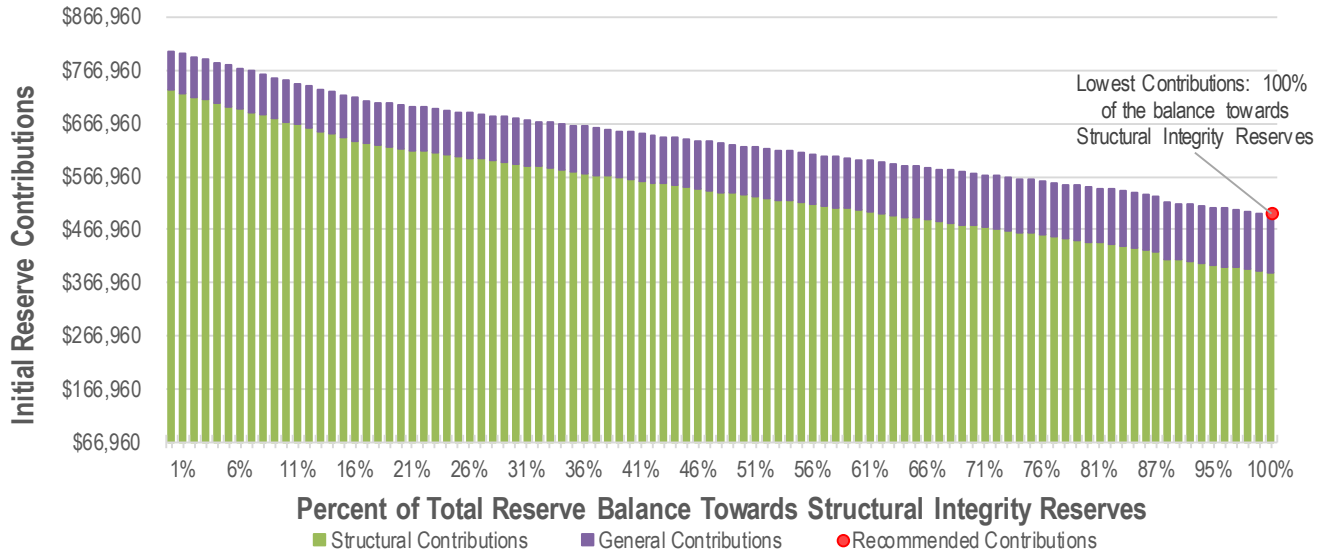
**Unaudited Cash Status of Reserve Fund:**

- \$382,128 as of July 31, 2023<sup>1</sup>
- \$292,000 in budgeted 2023 reserve contributions (\$194,667 remaining)
- \$0 in estimated remaining 2023 reserve expenses
- We project a 2023 Reserve End Balance of \$583,194.

As part of our Cash Flow method we analyzed future expenditures and identified the reserve balance split to produce the lowest overall required contributions. Due to the statutory restrictions on structural integrity reserve funds, we recommend the Association maintain separate funds for Structural Integrity reserves and General (non-structural) reserves. However, the existing reserve funds are not split. We, therefore, analyzed future expenditures and identified the starting reserve balance split that produces the lowest overall reserve contributions. We recommend the Association allocate \$583,194, or 100% of the 2023 Projected Reserve End Balance to the Structural Integrity Reserve Fund to minimize the total combined contributions to the statutory Structural Integrity Fund and the recommended General (non-structural) Fund. A vote of the membership may be required to allocate funds in this manner. The following chart depicts the analysis of future expenditures and the reserve balance split to produce the lowest overall required contributions.

<sup>1</sup> The Fiscal Year (FY 2023) for Palma Del Mar Condominium Association begins April, 1, 2023 and ends March, 31, 2024. For brevity, we refer to the Fiscal Year by its beginning year, i.e. Fiscal Year 2023-24 is FY 2023 or simply 2023.

### Starting Cash Flow - Optimized Reserve Balance Split



<u>Cash Flow - Existing Reserve Balance and Contribution Split</u>	<u>Structural Integrity</u>		<u>General</u>
	<u>FY2023</u>	<u>2024</u>	<u>2024</u>
Beginning Reserve Balance as of July 31, 2023	382,128	583,194	0
<b>Remaining Budgeted Reserve Contributions:</b>	<b>194,667</b>	<b>386,600</b>	<b>109,600</b>
Estimated Remaining Interest Earned:	6,400	100%	
Anticipated Remaining Structural Expenditures:	0	0%	
Anticipated Remaining General Expenditures:	0		
<b>Anticipated Reserves at Year End:</b>	<b><u>\$583,194</u></b>		





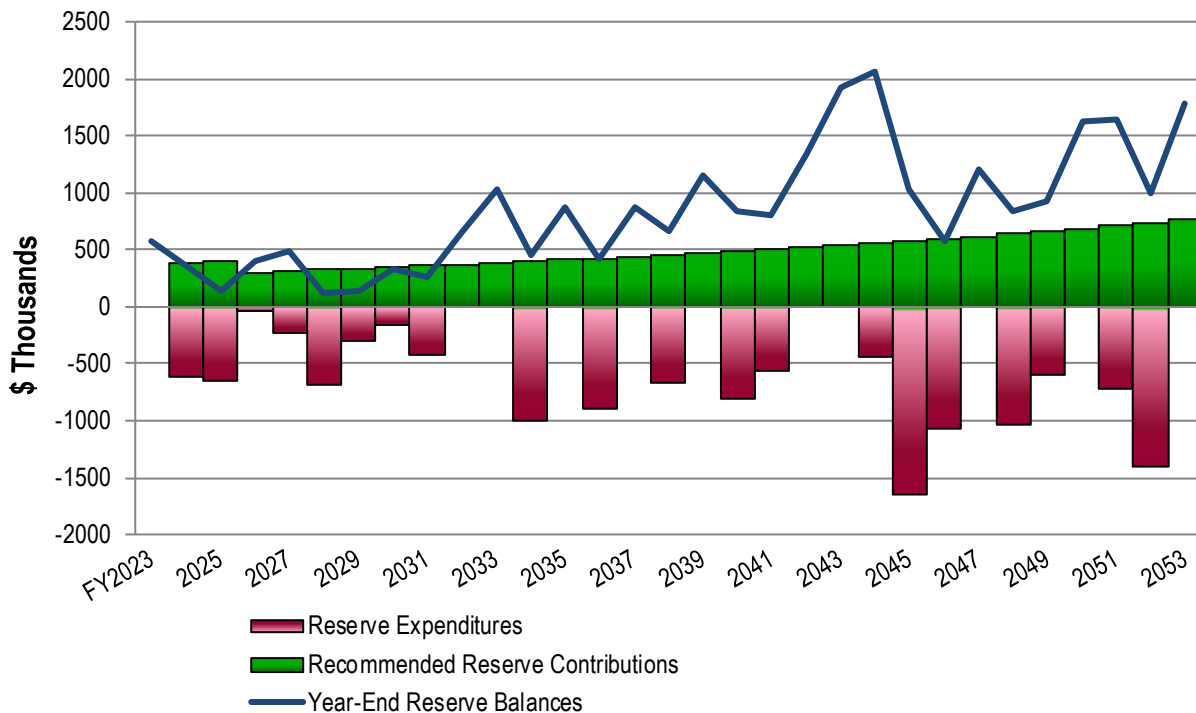
**Structural Integrity**

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

- We recommend the Association adopt a Structural Integrity reserve budget of \$386,600 in 2024
- Inflationary increase in 2025
- Decrease to \$300,000 by 2026 due to fully funding for the replacement of the built-up roofs
- Inflationary increases thereafter through 2053, the limit of this study's Cash Flow Analysis
- Initial adjustment of \$386,600 is equivalent to an increase of \$230.12 in the monthly contributions per unit owner.
- Florida Statute 718.112 prohibits waiving or reducing reserves for Structural Integrity items

**Recommended Reserve Funding Table and Graph**

Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)
2024	386,600	370,543	2034	395,000	446,790	2044	557,100	2,064,418
2025	400,100	129,322	2035	408,800	868,614	2045	576,600	1,027,597
2026	300,000	392,916	2036	423,100	412,948	2046	596,800	576,436
2027	310,500	478,292	2037	437,900	863,486	2047	617,700	1,211,842
2028	321,400	111,566	2038	453,200	658,262	2048	639,300	837,036
2029	332,600	145,283	2039	469,100	1,145,218	2049	661,700	916,323
2030	344,200	326,210	2040	485,500	839,534	2050	684,900	1,626,398
2031	356,200	259,589	2041	502,500	803,469	2051	708,900	1,641,870
2032	368,700	637,168	2042	520,100	1,344,839	2052	733,700	996,123
2033	381,600	1,035,327	2043	538,300	1,915,419	2053	759,400	1,783,039





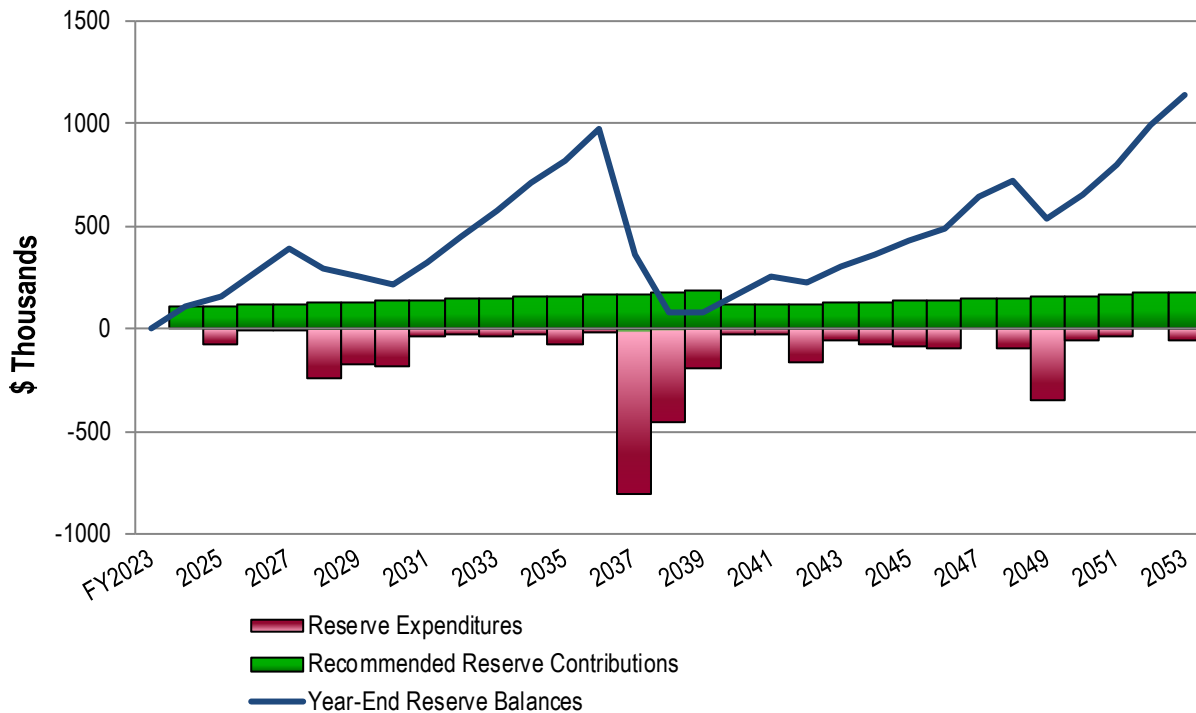
**General**

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

- We recommend the Association adopt a General reserve budget of \$109,600 in 2024
- Inflationary increases from 2025 through 2039
- Decrease to \$115,000 by 2040 due to fully funding for the replacement the hoists and motors
- Inflationary increases thereafter through 2053, the limit of this study's Cash Flow Analysis
- Initial adjustment of \$109,600 is equivalent to an increase of \$65.24 in the monthly contributions per unit owner.

**Recommended Reserve Funding Table and Graph**

Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)
2024	109,600	110,696	2034	154,700	714,876	2044	132,000	365,545
2025	113,400	154,980	2035	160,100	815,481	2045	136,600	429,875
2026	117,400	271,278	2036	165,700	977,823	2046	141,400	487,703
2027	121,500	394,493	2037	171,500	359,694	2047	146,300	645,220
2028	125,800	290,127	2038	177,500	84,439	2048	151,400	717,951
2029	130,200	256,037	2039	183,700	75,865	2049	156,700	540,668
2030	134,800	215,258	2040	115,000	163,225	2050	162,200	654,654
2031	139,500	325,879	2041	119,000	257,038	2051	167,900	801,600
2032	144,400	449,333	2042	123,200	225,156	2052	173,800	993,170
2033	149,500	573,697	2043	127,500	306,182	2053	179,900	1,142,288





## 2. RESERVE STUDY REPORT

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

**Palma Del Mar Condominium Association No. 5 of St Petersburg, Inc.**

**St. Petersburg, Florida**

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, November 30, 2023. We conducted the original inspection on May 3, 2022.

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

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

## IDENTIFICATION OF PROPERTY



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

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

- Reserve Components (Structural and General)
- Long-Lived Property Elements
- Operating Budget Funded Repairs and Replacements
- Property Maintained by Unit Owners
- 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:

- Palma Del Mar Condominium Association responsibility
- Limited useful life expectancies
- Predictable remaining useful life expectancies
- Replacement cost above a minimum threshold



**Structural Integrity Reserve Expenditures** - At the direction of the Board that recognizes their fiduciary responsibility and as required by Florida Statute 718.103 (25), we have conducted a *Structural Integrity Reserve Study* of Palma Del Mar Condominium Association No. 5 of St Petersburg, Inc. A *Structural Integrity Reserve Study* states the estimated remaining useful life, the estimated replacement cost or deferred maintenance expense of the common areas being visually inspected and provides a recommended annual reserve amount that achieves the estimated replacement cost or deferred maintenance expense of each common area being visually inspected by the end of the estimated remaining useful life of each common area. Specifically, as per Florida Statute 718.112(2)(g), we have investigated the structural integrity and safety of common elements within the following:

- Roof
- Load Bearing Walls or Other Primary Structural Members
- Exterior Doors
- Fireproofing and Fire Protection Elements
- Plumbing
- Electrical Systems
- Structure
- Waterproofing and Exterior Painting
- Windows
- Any other item that has a deferred maintenance expense or replacement cost that exceeds \$10,000 and the failure to replace or maintain such item negatively affects the items listed above

**Items Excluded from Structural Integrity Reserve Expenditures** - We exclude expenditures for the elements below for one or more of the following categories of reasons:

- Remaining useful lives or their replacement may occur beyond the 30-year scope of the study
- Current condition does not warrant predictable maintenance expenditures
- Issue applies to a unit owner maintained element

We discuss specific exclusions for the following elements:

- Structure and Primary Structural Members - We anticipate a useful life of up to and beyond 100 years and consider full replacement unlikely and cost prohibitive. Management and the Board report no history of water infiltration or repairs to the foundations. Based on the current condition, we do not anticipate the need for replacement, repair or maintenance expenditures through reserves within the 30-year scope of this study. Future updates of this Reserve Study may incorporate costs for remediation based on historical data if they become significant enough to require reserve funding.
- Windows and Doors – Maintained and replaced by the unit owners

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

- Foundations
- Pipes, Interior Building, Sprinkler, Common
- Railings, Aluminum, Balconies and Breezeways (Replaced in 2008)
- Seawall, Concrete
- Steel Structure, Mansard Roof, Tower Building



**Railings**



**Steel structure**

**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 \$6,000 (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)
- Asphalt Pavement, Patch and Seal Coat
- Concrete Curbs and Gutters
- Concrete Sidewalks
- Catch Basins
- Concrete Patios
- Intercom panel
- Irrigation System, Controllers
- Landscape
- Maintenance Golf Cart (Shared with Palma Del Mar No. 4)
- Paint Finishes, Touch Up

- Pumps Less Than Five-HP (horsepower)
- Railings, Balconies and Breezeways, Capital Repairs
- Signage
- Valves, Small Diameter (We assume replacement as needed in lieu of an aggregate replacement of all small diameter valves as a single event.)
- Other Repairs normally funded through the Operating Budget

**Homeowner Responsibility** - Items designated as the responsibility of the unit owners to repair or replace at their cost. Property Maintained by Unit Owners, including items billed back to Unit Owners, relates to unit:

- Balcony and Patio Floor Coverings (Excludes the Waterproof Coatings)
- Balcony and Patio Light Fixtures
- Electrical Systems (Including Circuit Protection Panels)
- Heating, Ventilating and Air Conditioning (HVAC) Units
- Hurricane Shutters
- Interiors
- Pipes (Within Units)
- Screens and Frames
- Windows and Doors

**Others' Responsibility** - Items designated as the responsibility of others to repair or replace. Property Maintained by Others relates to:

- Golf Course (Isla del Sol Yacht and Country Club)
- Light Poles and Fixtures, Streets (Duke Energy)
- Pipes, Subsurface Utilities (City of St. Petersburg)

### **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
- 2023 local cost of replacement
  - Per unit
  - Per phase
  - Replacement of total quantity
- Percentage of future expenditures anticipated during the next 30 years
- Schedule of estimated future costs for each reserve component including inflation

#### **Reserve Funding Plan**

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

#### **Five-Year Outlook**

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

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

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



**Structural Integrity**  
**RESERVE EXPENDITURES**

Palma Del Mar Condominium Association  
No. 5 of St Petersburg, Inc.  
St. Petersburg, Florida

**Explanatory Notes:**

- 1) **3.5%** is the estimated Inflation Rate for estimating Future Replacement Costs.
- 2) FY2023 is Fiscal Year beginning April 1, 2023 and ending March 31, 2024.

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis Years		Costs, \$			Percentage of Future Expenditures	RUL = 0 FY2023	1 2024	2 2025	3 2026	4 2027	5 2028	6 2029	7 2030	8 2031	9 2032	10 2033	11 2034	12 2035	13 2036	14 2037	15 2038
						Useful	Remaining	Unit (2023)	Per Phase (2023)	Total (2023)																	
<b>Exterior Building Elements</b>																											
1.060	11,700	11,700	Square Feet	Balconies, Concrete, Repairs and Waterproof Coating Applications	2028	8 to 12	5	20.00	234,000	234,000	8.8%						277,919										392,032
1.061	6,600	6,600	Square Feet	Breezeways, Concrete, Repairs and Waterproof Coating Applications, Subsequent	2034	8 to 12	11	15.00	99,000	99,000	2.5%											144,537					
1.240	3,750	3,750	Linear Feet	Gutters and Downspouts, Aluminum	2026	15 to 20	3	10.00	37,500	37,500	0.9%				41,577												
1.250	1	1	Allowance	Restoration Project, Concrete Repairs and Waterproof Coating Applications (2024 is Planned)	2024	N/A	1	469,815.00	469,815	469,815	3.5%	486,259															
1.300	20,110	20,110	Square Feet	Roofs, Built-up	2025	15 to 20	2	30.00	603,300	603,300	13.8%		646,270														
1.360	300	300	Squares	Roofs, Concrete Tiles	2036	to 30	13	1,900.00	570,000	570,000	6.4%													891,455			
1.600	5,230	5,230	Square Feet	Steel Structure, Mansard, Inspections and Capital Repairs	2024	to 10	1	16.50	86,295	86,295	2.8%	89,315											125,988				
1.605	1	1	Allowance	Structural Members, Inspection	2024	to 10	1	32,000.00	32,000	32,000	1.0%	33,120											46,719				
1.880	67,900	67,900	Square Feet	Walls, Stucco, Paint Finishes and Capital Repairs, Tower	2027	5 to 7	4	3.00	203,700	203,700	10.0%				233,750									297,396			
1.881	56,000	56,000	Square Feet	Walls, Stucco, Paint Finishes and Capital Repairs, Villas, Subsequent	2031	5 to 7	8	3.00	168,000	168,000	9.4%										221,224						281,459
1.980	1,500	1,500	Square Feet	Windows and Doors, Storefront	2031	45 to 50	8	105.00	157,500	157,500	1.5%										207,397						
<b>Building Services Elements</b>																											
3.300	1	1	Allowance	Electrical System, Main Panels	2051	to 70+	28	95,000.00	95,000	95,000	1.8%																
3.440	1	1	Each	Generator, Emergency, 180-kW (Includes Transfer Switch)	2040	to 35	17	101,500.00	101,500	101,500	1.3%																
3.560	1	1	Allowance	Life Safety System, Control Panel and Emergency Devices	2030	to 25	7	132,000.00	132,000	132,000	1.2%								167,941								
3.605	140	28	Units	Pipes, Riser Sections, Domestic Water, Waste and Vent, Partial	2046	to 80+	23 to 30+	6,500.00	182,000	910,000	6.3%																
3.770	1	1	Each	Pump, Fire Suppression, 60-HP (Incl. Controller)	2041	to 50	18	95,000.00	95,000	95,000	1.3%																
<b>Garage Elements</b>																											
7.300	35,030	35,030	Square Feet	Concrete, Elevated Floors, Inspections and Capital Repairs	2028	10 to 15	5	2.50	87,575	87,575	3.6%						104,012										
7.360	35,030	35,030	Square Feet	Concrete, On-grade (Including Drain Repairs), Partial	2028	to 90	5	7.50	262,725	262,725	17.6%						312,035						383,571				
7.800	35,030	35,030	Square Feet	Traffic Coating, Elevated Floors, Parking Areas	2029	to 20	6	7.00	245,210	245,210	6.5%							301,426									
<b>Anticipated Expenditures, By Year (\$13,971,970 over 30 years)</b>												0	608,694	646,270	41,577	233,750	693,966	301,426	167,941	428,621	0	0	998,211	0	891,455	0	673,491

**Structural Integrity**  
**RESERVE EXPENDITURES**

Palma Del Mar Condominium Association  
No. 5 of St Petersburg, Inc.  
St. Petersburg, Florida

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis		Costs, \$			Percentage of Future Expenditures	16 2039	17 2040	18 2041	19 2042	20 2043	21 2044	22 2045	23 2046	24 2047	25 2048	26 2049	27 2050	28 2051	29 2052	30 2053	
						Useful	Remaining	Unit (2023)	Per Phase (2023)	Total (2023)																	
<b>Exterior Building Elements</b>																											
1.060	11,700	11,700	Square Feet	Balconies, Concrete, Repairs and Waterproof Coating Applications	2028	8 to 12	5	20.00	234,000	234,000	8.8%															552,999	
1.061	6,600	6,600	Square Feet	Breezeways, Concrete, Repairs and Waterproof Coating Applications, Subsequent	2034	8 to 12	11	15.00	99,000	99,000	2.5%						203,884										
1.240	3,750	3,750	Linear Feet	Gutters and Downspouts, Aluminum	2026	15 to 20	3	10.00	37,500	37,500	0.9%							82,729									
1.250	1	1	Allowance	Restoration Project, Concrete Repairs and Waterproof Coating Applications (2024 is Planned)	2024	N/A	1	469,815.00	469,815	469,815	3.5%																
1.300	20,110	20,110	Square Feet	Roofs, Built-up	2025	15 to 20	2	30.00	603,300	603,300	13.8%							1,285,941									
1.360	300	300	Squares	Roofs, Concrete Tiles	2036	to 30	13	1,900.00	570,000	570,000	6.4%																
1.600	5,230	5,230	Square Feet	Steel Structure, Mansard, Inspections and Capital Repairs	2024	to 10	1	16.50	86,295	86,295	2.8%							177,719									
1.605	1	1	Allowance	Structural Members, Inspection	2024	to 10	1	32,000.00	32,000	32,000	1.0%						65,902										
1.880	67,900	67,900	Square Feet	Walls, Stucco, Paint Finishes and Capital Repairs, Tower	2027	5 to 7	4	3.00	203,700	203,700	10.0%			378,371								481,393					
1.881	56,000	56,000	Square Feet	Walls, Stucco, Paint Finishes and Capital Repairs, Villas, Subsequent	2031	5 to 7	8	3.00	168,000	168,000	9.4%							358,094							455,595		
1.980	1,500	1,500	Square Feet	Windows and Doors, Storefront	2031	45 to 50	8	105.00	157,500	157,500	1.5%																
<b>Building Services Elements</b>																											
3.300	1	1	Allowance	Electrical System, Main Panels	2051	to 70+	28	95,000.00	95,000	95,000	1.8%															248,916	
3.440	1	1	Each	Generator, Emergency, 180-kW (Includes Transfer Switch)	2040	to 35	17	101,500.00	101,500	101,500	1.3%		182,160														
3.560	1	1	Allowance	Life Safety System, Control Panel and Emergency Devices	2030	to 25	7	132,000.00	132,000	132,000	1.2%																
3.605	140	28	Units	Pipes, Riser Sections, Domestic Water, Waste and Vent, Partial	2046	to 80+	23 to 30+	6,500.00	182,000	910,000	6.3%							401,513							476,871		
3.770	1	1	Each	Pump, Fire Suppression, 60-HP (Incl. Controller)	2041	to 50	18	95,000.00	95,000	95,000	1.3%			176,461													
<b>Garage Elements</b>																											
7.300	35,030	35,030	Square Feet	Concrete, Elevated Floors, Inspections and Capital Repairs	2028	10 to 15	5	2.50	87,575	87,575	3.6%		157,169													237,493	
7.360	35,030	35,030	Square Feet	Concrete, On-grade (Including Drain Repairs), Partial	2028	to 90	5	7.50	262,725	262,725	17.6%		471,506					579,601								712,478	
7.800	35,030	35,030	Square Feet	Traffic Coating, Elevated Floors, Parking Areas	2029	to 20	6	7.00	245,210	245,210	6.5%															599,773	
<b>Anticipated Expenditures, By Year (\$13,971,970 over 30 years)</b>												0	810,835	554,832	0	0	447,505	1,644,035	1,063,843	0	1,034,392	599,773	0	725,787	1,405,566	0	

# RESERVE FUNDING PLAN

## Structural Integrity

### CASH FLOW ANALYSIS

Palma Del Mar Condominium Association

No. 5 of St Petersburg, Inc.

St. Petersburg, Florida

		Individual Reserve Budgets & Cash Flows for the Next 30 Years															
		FY2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Reserves at Beginning of Year	(Note 1)	N/A	583,194	370,543	129,322	392,916	478,292	111,566	145,283	326,210	259,589	637,168	1,035,327	446,790	868,614	412,948	863,486
Total Recommended Reserve Contributions	(Note 2)	N/A	386,600	400,100	300,000	310,500	321,400	332,600	344,200	356,200	368,700	381,600	395,000	408,800	423,100	437,900	453,200
Estimated Interest Earned, During Year	(Note 3)	N/A	9,443	4,949	5,171	8,626	5,840	2,543	4,668	5,800	8,879	16,559	14,674	13,024	12,689	12,638	15,067
Anticipated Expenditures, By Year		N/A	(608,694)	(646,270)	(41,577)	(233,750)	(693,966)	(301,426)	(167,941)	(428,621)	0	0	(998,211)	0	(891,455)	0	(673,491)
Anticipated Reserves at Year End		<u>\$583,194</u>	<u>\$370,543</u>	<u>\$129,322</u>	<u>\$392,916</u>	<u>\$478,292</u>	<u>\$111,566</u>	<u>\$145,283</u>	<u>\$326,210</u>	<u>\$259,589</u>	<u>\$637,168</u>	<u>\$1,035,327</u>	<u>\$446,790</u>	<u>\$868,614</u>	<u>\$412,948</u>	<u>\$863,486</u>	<u>\$658,262</u>

(NOTE 5)

(continued)

	Individual Reserve Budgets & Cash Flows for the Next 30 Years, Continued														
	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
Reserves at Beginning of Year	658,262	1,145,218	839,534	803,469	1,344,839	1,915,419	2,064,418	1,027,597	576,436	1,211,842	837,036	916,323	1,626,398	1,641,870	996,123
Total Recommended Reserve Contributions	469,100	485,500	502,500	520,100	538,300	557,100	576,600	596,800	617,700	639,300	661,700	684,900	708,900	733,700	759,400
Estimated Interest Earned, During Year	17,856	19,651	16,267	21,270	32,280	39,404	30,614	15,882	17,706	20,286	17,360	25,175	32,359	26,119	27,516
Anticipated Expenditures, By Year	0	(810,835)	(554,832)	0	0	(447,505)	(1,644,035)	(1,063,843)	0	(1,034,392)	(599,773)	0	(725,787)	(1,405,566)	0
Anticipated Reserves at Year End	<u>\$1,145,218</u>	<u>\$839,534</u>	<u>\$803,469</u>	<u>\$1,344,839</u>	<u>\$1,915,419</u>	<u>\$2,064,418</u>	<u>\$1,027,597</u>	<u>\$576,436</u>	<u>\$1,211,842</u>	<u>\$837,036</u>	<u>\$916,323</u>	<u>\$1,626,398</u>	<u>\$1,641,870</u>	<u>\$996,123</u>	<u>\$1,783,039</u>

(NOTE 4)

#### Explanatory Notes:

- 1) Year 2023 ending reserves are projected as of March 31, 2024 and exclude funds in the General Reserve Funding Plan; FY2023 starts April 1, 2023 and ends March 31, 2024.
- 2) Reserve Contributions are budgeted through 2023. Anticipated Reserves at Year End include these budgeted contributions and anticipated Reserve Expenditures. 2024 is the first year of recommended contributions.
- 3) 2.0% is the estimated annual rate of return on invested reserves; 2023 is a partial year of interest earned.
- 4) Accumulated year 2053 ending reserves consider the need to fund for replacement of the railings at the balconies and breezeways shortly after 2053, and the age, size, overall condition and complexity of the property.
- 5) Threshold Funding Years (reserve balance at critical point).

**Structural Integrity**  
**FIVE-YEAR OUTLOOK**

**Palma Del Mar Condominium Association**  
**No. 5 of St Petersburg, Inc.**  
St. Petersburg, Florida

Line Item	Reserve Component Inventory	RUL = 0 FY2023	1 2024	2 2025	3 2026	4 2027	5 2028
<b><u>Exterior Building Elements</u></b>							
1.060	Balconies, Concrete, Repairs and Waterproof Coating Applications						277,919
1.240	Gutters and Downspouts, Aluminum				41,577		
1.250	Restoration Project, Concrete Repairs and Waterproof Coating Applications (2024 is Planned)	486,259					
1.300	Roofs, Built-up			646,270			
1.600	Steel Structure, Mansard, Inspections and Capital Repairs	89,315					
1.605	Structural Members, Inspection	33,120					
1.880	Walls, Stucco, Paint Finishes and Capital Repairs, Tower					233,750	
<b><u>Garage Elements</u></b>							
7.300	Concrete, Elevated Floors, Inspections and Capital Repairs						104,012
7.360	Concrete, On-grade (Including Drain Repairs), Partial						312,035
<b>Anticipated Expenditures, By Year (\$13,971,970 over 30 years)</b>		0	608,694	646,270	41,577	233,750	693,966

**General**  
**RESERVE EXPENDITURES**

**Palma Del Mar Condominium Association**  
**No. 5 of St Petersburg, Inc.**  
St. Petersburg, Florida

**Explanatory Notes:**

- 1) **3.5%** is the estimated Inflation Rate for estimating Future Replacement Costs.
- 2) FY2023 is Fiscal Year beginning April 1, 2023 and ending March 31, 2024.

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years Useful Remaining	Unit (2023)	Costs, \$ Per Phase (2023)	Total (2023)	Percentage of Future Expenditures	RUL = 0 FY2023	1 2024	2 2025	3 2026	4 2027	5 2028	6 2029	7 2030	8 2031	9 2032	10 2033	11 2034	12 2035	13 2036	14 2037	15 2038
<b>Exterior Building Elements</b>																										
1.260	50	50	Each	Light Fixtures	2028	to 25	5	110.00	5,500	5,500	0.6%					6,532										
<b>Interior Building Elements</b>																										
2.100	2	2	Each	Elevator Cab Finishes	2028	to 20	5	16,500.00	33,000	33,000	3.4%					39,194										
2.200	1,100	1,100	Square Yards	Floor Coverings, Carpet, Hallways	2030	8 to 12	7	59.00	64,900	64,900	6.0%							82,571								
2.240	150	150	Square Yards	Floor Coverings, Tile, Lobby	2030	to 30	7	100.00	15,000	15,000	0.6%							19,084								
2.700	140	140	Each	Mailboxes	2030	to 35	7	140.00	19,600	19,600	0.7%															
2.800	20,900	20,900	Square Feet	Paint Finishes, Hallways	2030	8 to 12	7	0.80	16,720	16,720	2.7%							21,273								
2.820	2	2	Each	Paint Finishes, Stairwells (Includes Railings)	2034	15 to 20	11	9,000.00	18,000	18,000	0.8%												26,279			
2.840	1	1	Allowance	Social Room, Renovation, Complete	2029	to 20	6	46,000.00	46,000	46,000	4.9%						56,546									
2.845	1	1	Allowance	Social Room, Renovation, Partial	2039	to 10	16	28,000.00	28,000	28,000	1.4%															
2.900	2	2	Each	Rest Rooms, Renovation	2033	to 25	10	12,500.00	25,000	25,000	1.0%										35,265					
<b>Building Services Elements</b>																										
3.060	1	1	Each	Air Handling Unit, Rooftop Heating and Cooling Unit, 10-tons, Hallways	2037	12 to 18	14	28,000.00	28,000	28,000	1.3%														45,323	
3.070	2	2	Each	Air Handling and Condensing Units, Split Systems, Lobby and Social Room	2041	12 to 18	18	5,500.00	11,000	11,000	0.6%															
3.360	2	2	Each	Elevators, Traction, Controls and Call Buttons	2037	to 25	14	234,000.00	468,000	468,000	21.9%														757,549	
3.365	2	2	Each	Elevators, Traction, Hoists and Motors	2028	to 40	5	64,000.00	128,000	128,000	4.4%						152,024									
3.470	2	2	Each	Intercom Panels	2030	15 to 20	7	3,500.00	7,000	7,000	0.8%								8,906							
3.500	4	4	Each	Laundry Equipment, Washers and Dryers	2028	to 10	5	1,500.00	6,000	6,000	0.9%						7,126								10,052	
3.700	2	2	Each	Pumps, Domestic Water	2039	to 20	16	17,000.00	34,000	34,000	1.7%															
3.820	2	1	Allowance	Security System	2036	10 to 15	13	13,500.00	13,500	27,000	1.6%												21,113			
3.880	12	12	Floors	Trash Chute and Doors	2046	to 65	23	3,500.00	42,000	42,000	2.7%															
<b>Property Site Elements</b>																										
4.040	2,350	2,350	Square Yards	Asphalt Pavement, Mill and Overlay	2025	15 to 20	2	16.00	37,600	37,600	3.5%			40,278												
4.100	410	410	Square Feet	Fishing Pier, Deck Boards, Composite and Partial Structure, Replacement	2030	to 25	7	45.00	18,450	18,450	0.7%							23,474								
4.420	12	12	Zones	Irrigation System	2035	to 40+	12	2,950.00	35,400	35,400	1.5%												53,492			
4.560	14	14	Each	Light Poles and Fixtures	2032	to 25	9	1,500.00	21,000	21,000	0.8%												28,621			
4.735	700	700	Linear Feet	Seawalls, Concrete Inspections and Capital Repairs	2029	to 15	6	55.00	38,500	38,500	3.7%							47,326								
4.800	1	1	Allowance	Signage, Renovation	2039	15 to 20	16	7,000.00	7,000	7,000	0.4%															
<b>Pool Elements</b>																										
6.200	6,490	6,490	Square Feet	Deck, Pavers	2038	to 30	15	7.00	45,430	45,430	2.2%														76,111	
6.400	370	370	Linear Feet	Fence, Aluminum	2038	to 30	15	42.00	15,540	15,540	0.8%														26,035	
6.500	1	1	Allowance	Furniture	2031	to 12	8	26,000.00	26,000	26,000	2.5%								34,237							
6.599	4	4	Each	Mechanical Equipment, Heaters, Geothermal	2029	to 10	6	10,700.00	42,800	42,800	6.7%							52,612								
6.600	2	1	Allowance	Mechanical Equipment, Phased	2028	to 15	5 to 12	14,000.00	14,000	28,000	2.9%					16,628							21,155			
6.800	1,420	1,420	Square Feet	Pool and Spa Finishes, Plaster (2025 is for Pool Only)	2025	8 to 12	2	15.50	22,010	22,010	2.1%			17,683												
6.801	160	160	Linear Feet	Pool and Spa Finishes, Tile (2025 is for Pool Only)	2025	15 to 25	2	38.00	6,080	6,080	0.6%			4,885												
6.850	2	2	Each	Rest Rooms, Renovations	2028	to 25	5	6,500.00	13,000	13,000	1.5%						15,440									
6.870	430	430	Square Feet	Shade Structure, Pergola	2029	to 20	6	25.00	10,750	10,750	1.1%						13,214									
6.900	1,420	1,420	Square Feet	Structure, Total Replacement	2038	to 60	15	145.00	205,900	205,900	10.0%														344,954	
6.950	4	4	Each	Tiki Huts	2026	10 to 15	3	1,200.00	4,800	4,800	0.4%				5,322											

**General  
RESERVE EXPENDITURES**

Palma Del Mar Condominium Association  
No. 5 of St Petersburg, Inc.  
St. Petersburg, Florida

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years		Costs, \$			Percentage of Future Expenditures	16 2039	17 2040	18 2041	19 2042	20 2043	21 2044	22 2045	23 2046	24 2047	25 2048	26 2049	27 2050	28 2051	29 2052	30 2053
						Useful	Remaining	Unit (2023)	Per Phase (2023)	Total (2023)																
<b>Exterior Building Elements</b>																										
1.260	50	50	Each	Light Fixtures	2028	to 25	5	110.00	5,500	5,500	0.6%															15,437
<b>Interior Building Elements</b>																										
2.100	2	2	Each	Elevator Cab Finishes	2028	to 20	5	16,500.00	33,000	33,000	3.4%									77,987						
2.200	1,100	1,100	Square Yards	Floor Coverings, Carpet, Hallways	2030	8 to 12	7	59.00	64,900	64,900	6.0%				124,770											
2.240	150	150	Square Yards	Floor Coverings, Tile, Lobby	2030	to 30	7	100.00	15,000	15,000	0.6%															
2.700	140	140	Each	Mailboxes	2030	to 35	7	140.00	19,600	19,600	0.7%															
2.800	20,900	20,900	Square Feet	Paint Finishes, Hallways	2030	8 to 12	7	0.80	16,720	16,720	2.7%		30,007												42,328	
2.820	2	2	Each	Paint Finishes, Stairwells (Includes Railings)	2034	15 to 20	11	9,000.00	18,000	18,000	0.8%															
2.840	1	1	Allowance	Social Room, Renovation, Complete	2029	to 20	6	46,000.00	46,000	46,000	4.9%															112,514
2.845	1	1	Allowance	Social Room, Renovation, Partial	2039	to 10	16	28,000.00	28,000	28,000	1.4%	48,552														
2.900	2	2	Each	Rest Rooms, Renovation	2033	to 25	10	12,500.00	25,000	25,000	1.0%															
<b>Building Services Elements</b>																										
3.060	1	1	Each	Air Handling Unit, Rooftop Heating and Cooling Unit, 10-tons, Hallways	2037	12 to 18	14	28,000.00	28,000	28,000	1.3%															
3.070	2	2	Each	Air Handling and Condensing Units, Split Systems, Lobby and Social Room	2041	12 to 18	18	5,500.00	11,000	11,000	0.6%			20,432												
3.360	2	2	Each	Elevators, Traction, Controls and Call Buttons	2037	to 25	14	234,000.00	468,000	468,000	21.9%															
3.365	2	2	Each	Elevators, Traction, Hoists and Motors	2028	to 40	5	64,000.00	128,000	128,000	4.4%															
3.470	2	2	Each	Intercom Panels	2030	15 to 20	7	3,500.00	7,000	7,000	0.8%															17,721
3.500	4	4	Each	Laundry Equipment, Washers and Dryers	2028	to 10	5	1,500.00	6,000	6,000	0.9%															14,179
3.700	2	2	Each	Pumps, Domestic Water	2039	to 20	16	17,000.00	34,000	34,000	1.7%	58,956														
3.820	2	1	Allowance	Security System	2036	10 to 15	13	13,500.00	13,500	27,000	1.6%															35,372
3.880	12	12	Floors	Trash Chute and Doors	2046	to 65	23	3,500.00	42,000	42,000	2.7%															92,657
<b>Property Site Elements</b>																										
4.040	2,350	2,350	Square Yards	Asphalt Pavement, Mill and Overlay	2025	15 to 20	2	16.00	37,600	37,600	3.5%															80,145
4.100	410	410	Square Feet	Fishing Pier, Deck Boards, Composite and Partial Structure, Replacement	2030	to 25	7	45.00	18,450	18,450	0.7%															
4.420	12	12	Zones	Irrigation System	2035	to 40+	12	2,950.00	35,400	35,400	1.5%															
4.560	14	14	Each	Light Poles and Fixtures	2032	to 25	9	1,500.00	21,000	21,000	0.8%															
4.735	700	700	Linear Feet	Seawalls, Concrete Inspections and Capital Repairs	2029	to 15	6	55.00	38,500	38,500	3.7%															79,288
4.800	1	1	Allowance	Signage, Renovation	2039	15 to 20	16	7,000.00	7,000	7,000	0.4%	12,138														
<b>Pool Elements</b>																										
6.200	6,490	6,490	Square Feet	Deck, Pavers	2038	to 30	15	7.00	45,430	45,430	2.2%															
6.400	370	370	Linear Feet	Fence, Aluminum	2038	to 30	15	42.00	15,540	15,540	0.8%															
6.500	1	1	Allowance	Furniture	2031	to 12	8	26,000.00	26,000	26,000	2.5%															51,735
6.599	4	4	Each	Mechanical Equipment, Heaters, Geothermal	2029	to 10	6	10,700.00	42,800	42,800	6.7%	74,215														104,687
6.600	2	1	Allowance	Mechanical Equipment, Phased	2028	to 15	5 to 12	14,000.00	14,000	28,000	2.9%					26,915										34,243
6.800	1,420	1,420	Square Feet	Pool and Spa Finishes, Plaster (2025 is for Pool Only)	2025	8 to 12	2	15.50	22,010	22,010	2.1%															53,836
6.801	160	160	Linear Feet	Pool and Spa Finishes, Tile (2025 is for Pool Only)	2025	15 to 25	2	38.00	6,080	6,080	0.6%															14,871
6.850	2	2	Each	Rest Rooms, Renovations	2028	to 25	5	6,500.00	13,000	13,000	1.5%															36,488
6.870	430	430	Square Feet	Shade Structure, Pergola	2029	to 20	6	25.00	10,750	10,750	1.1%															26,294
6.900	1,420	1,420	Square Feet	Structure, Total Replacement	2038	to 60	15	145.00	205,900	205,900	10.0%															
6.950	4	4	Each	Tiki Huts	2026	10 to 15	3	1,200.00	4,800	4,800	0.4%															8,916

General  
**RESERVE EXPENDITURES**

Palma Del Mar Condominium Association  
No. 5 of St Petersburg, Inc.  
St. Petersburg, Florida

Explanatory Notes:

- 1) 3.5% is the estimated Inflation Rate for estimating Future Replacement Costs.
- 2) FY2023 is Fiscal Year beginning April 1, 2023 and ending March 31, 2024.

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years		Costs, \$			Percentage of Future Expenditures	RUL = 0 FY2023	1 2024	2 2025	3 2026	4 2027	5 2028	6 2029	7 2030	8 2031	9 2032	10 2033	11 2034	12 2035	13 2036	14 2037	15 2038	
						Useful	Remaining	Unit (2023)	Per Phase (2023)	Total (2023)																		
<u>Garage Elements</u>																												
7.600	50	25	Each	Light Fixtures, Phased	2027	to 30	4 to 19	170.00	4,250	8,500	0.4%					4,877												
	1	1	Allowance	Structural Integrity Reserve Study Update with Site Visit	2025	2	2	8,900.00	8,900	8,900	0.3%		8,900															
Anticipated Expenditures, By Year (\$3,451,872 over 30 years)												0	0	71,746	5,322	4,877	236,944	169,698	180,245	34,237	28,621	35,265	26,279	74,647	21,113	802,872	457,152	

**RESERVE EXPENDITURES**

Palma Del Mar Condominium Association  
 No. 5 of St Petersburg, Inc.  
 St. Petersburg, Florida

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years		Costs, \$			Percentage of Future Expenditures	16 2039	17 2040	18 2041	19 2042	20 2043	21 2044	22 2045	23 2046	24 2047	25 2048	26 2049	27 2050	28 2051	29 2052	30 2053	
						Useful	Remaining	Unit (2023)	Per Phase (2023)	Total (2023)																	
<u>Garage Elements</u>																											
7.600	50	25	Each	Light Fixtures, Phased	2027	to 30	4 to 19	170.00	4,250	8,500	0.4%				8,171												
	1	1	Allowance	Structural Integrity Reserve Study Update with Site Visit	2025	2	2	8,900.00	8,900	8,900	0.3%																
												<b>Anticipated Expenditures, By Year (\$3,451,872 over 30 years)</b>															
												193,861	30,007	29,348	159,856	51,735	79,288	80,145	92,657	0	92,166	346,445	60,049	35,372	0	51,925	



# RESERVE FUNDING PLAN

## General

### CASH FLOW ANALYSIS

Palma Del Mar Condominium Association

No. 5 of St Petersburg, Inc.

St. Petersburg, Florida

		Individual Reserve Budgets & Cash Flows for the Next 30 Years															
		FY2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Reserves at Beginning of Year	(Note 1)	N/A	0	110,696	154,980	271,278	394,493	290,127	256,037	215,258	325,879	449,333	573,697	714,876	815,481	977,823	359,694
Total Recommended Reserve Contributions	(Note 2)	N/A	109,600	113,400	117,400	121,500	125,800	130,200	134,800	139,500	144,400	149,500	154,700	160,100	165,700	171,500	177,500
Estimated Interest Earned, During Year	(Note 3)	N/A	1,096	2,630	4,220	6,592	6,778	5,408	4,666	5,358	7,675	10,129	12,758	15,152	17,755	13,243	4,397
Anticipated Expenditures, By Year		N/A	0	(71,746)	(5,322)	(4,877)	(236,944)	(169,698)	(180,245)	(34,237)	(28,621)	(35,265)	(26,279)	(74,647)	(21,113)	(802,872)	(457,152)
Anticipated Reserves at Year End		\$0	\$110,696	\$154,980	\$271,278	\$394,493	\$290,127	\$256,037	\$215,258	\$325,879	\$449,333	\$573,697	\$714,876	\$815,481	\$977,823	\$359,694	\$84,439

(NOTE 5)

(continued)

		Individual Reserve Budgets & Cash Flows for the Next 30 Years, Continued														
		2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
Reserves at Beginning of Year		84,439	75,865	163,225	257,038	225,156	306,182	365,545	429,875	487,703	645,220	717,951	540,668	654,654	801,600	993,170
Total Recommended Reserve Contributions		183,700	115,000	119,000	123,200	127,500	132,000	136,600	141,400	146,300	151,400	156,700	162,200	167,900	173,800	179,900
Estimated Interest Earned, During Year		1,587	2,367	4,161	4,774	5,261	6,651	7,875	9,085	11,217	13,497	12,462	11,835	14,418	17,770	21,143
Anticipated Expenditures, By Year		(193,861)	(30,007)	(29,348)	(159,856)	(51,735)	(79,288)	(80,145)	(92,657)	0	(92,166)	(346,445)	(60,049)	(35,372)	0	(51,925)
Anticipated Reserves at Year End		\$75,865	\$163,225	\$257,038	\$225,156	\$306,182	\$365,545	\$429,875	\$487,703	\$645,220	\$717,951	\$540,668	\$654,654	\$801,600	\$993,170	\$1,142,288

(NOTE 4)

#### Explanatory Notes:

- 1) Year 2023 ending reserves are projected as of March 31, 2024 and exclude funds in the Structural Integrity Reserve Funding Plan; FY2023 starts April 1, 2023 and ends March 31, 2024.
- 2) Reserve Contributions are budgeted through 2023. Anticipated Reserves at Year End include these budgeted contributions and anticipated Reserve Expenditures. 2024 is the first year of recommended contributions.
- 3) 2.0% is the estimated annual rate of return on invested reserves; 2023 is a partial year of interest earned.
- 4) Accumulated year 2053 ending reserves consider the need to fund for replacement of the modernization of the elevators shortly after 2053, and the age, size, overall condition and complexity of the property.
- 5) Threshold Funding Year (reserve balance at critical point).

**General**  
**FIVE-YEAR OUTLOOK**

**Palma Del Mar Condominium Association**  
**No. 5 of St Petersburg, Inc.**  
St. Petersburg, Florida

Line Item	Reserve Component Inventory	RUL = 0 FY2023	1 2024	2 2025	3 2026	4 2027	5 2028
<b><u>Exterior Building Elements</u></b>							
1.260	Light Fixtures						6,532
<b><u>Interior Building Elements</u></b>							
2.100	Elevator Cab Finishes						39,194
<b><u>Building Services Elements</u></b>							
3.365	Elevators, Traction, Hoists and Motors						152,024
3.500	Laundry Equipment, Washers and Dryers						7,126
<b><u>Property Site Elements</u></b>							
4.040	Asphalt Pavement, Mill and Overlay			40,278			
<b><u>Pool Elements</u></b>							
6.600	Mechanical Equipment, Phased						16,628
6.800	Pool and Spa Finishes, Plaster (2025 is for Pool Only)			17,683			
6.801	Pool and Spa Finishes, Tile (2025 is for Pool Only)			4,885			
6.850	Rest Rooms, Renovations						15,440
6.950	Tiki Huts				5,322		
<b><u>Garage Elements</u></b>							
7.600	Light Fixtures, Phased						4,877
<b>Structural Integrity Reserve Study Update with Site Visit</b>					8,900		
<b>Anticipated Expenditures, By Year (\$3,451,872 over 30 years)</b>		0	0	71,746	5,322	4,877	236,944

## 4. RESERVE COMPONENT DETAIL

The Reserve Component Detail of this *Structural Integrity 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.*

### STRUCTURAL INTEGRITY - Exterior Building Elements



Three-story Villa - typical



Two-story Villa - typical



Tower – typical

## Balconies and Breezeways, Concrete

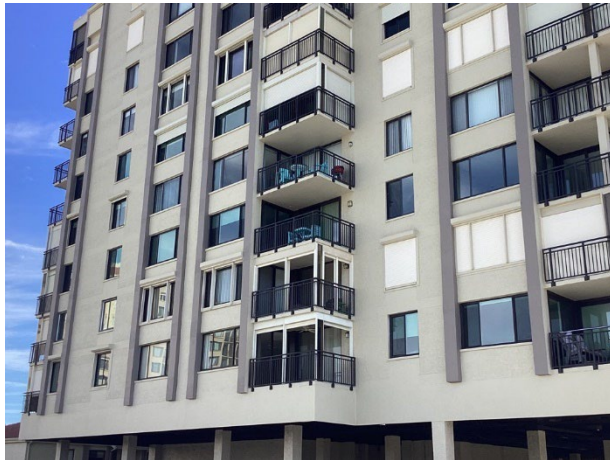
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**Line Items:** 1.060 and 1.061

**Quantity:** 140 concrete balconies comprising approximately 11,700 square feet of horizontal surface area. The balconies comprise reinforced concrete with a waterproof coating application. Additionally, the Association maintains approximately 6,600 square feet of concrete breezeways with a waterproof coating application. This quantity includes the waterproof coating applications on the staircases.

**History:** The Association is undertaking a restoration project which will begin in 2024 and will address concrete repairs and waterproof coating applications at locations throughout the community. Based on our review of the scope of work, not all locations of concrete throughout the Association are within the scope of work. Concrete repairs at the breezeways as well as applications of waterproof coating applications are part of the scope the restoration project. We are informed that the Association conducted capital repairs and waterproof coating applications on approximately 30 balconies at the tower building in 2021.

**Condition:** Fair overall with deterioration of the waterproof coating at the breezeways evident during our noninvasive inspection. We assume that the waterproof coating applications at the breezeways will be in good condition upon completion of the ongoing restoration project.



**Balconies - overview**



**Balconies - overview**



**Balconies - overview**



**Balconies - overview**



**Balconies - overview**



**Balconies - overview**



**Breezeways - overview**



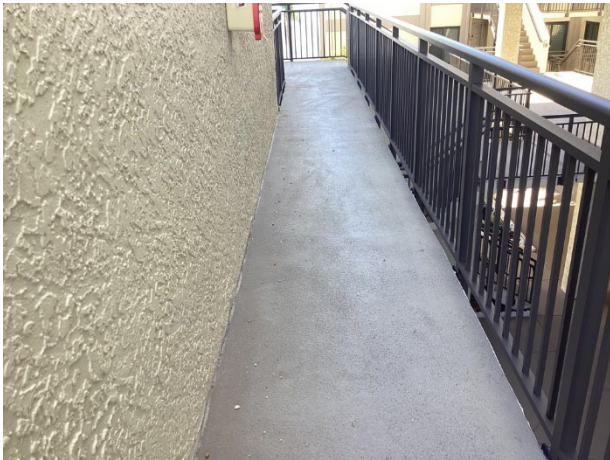
**Breezeways - overview**



**Breezeways – deterioration of the waterproof coating applications evident**



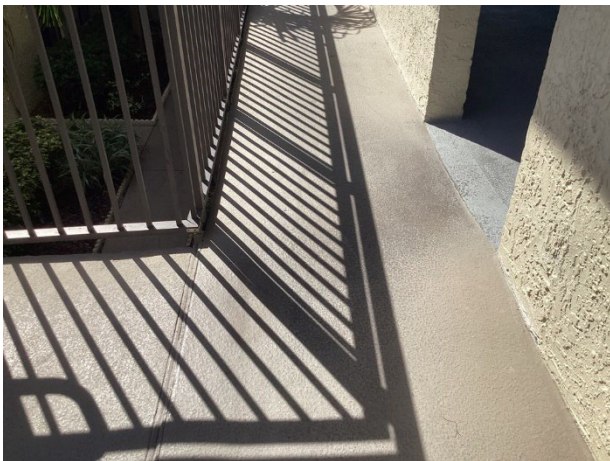
**Breezeways - overview**



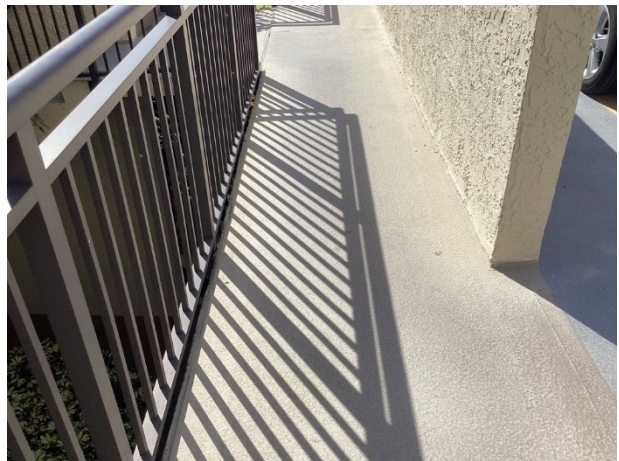
**Breezeways - overview**



**Breezeways – deterioration of the waterproof coating applications evident**



**Breezeways – deterioration of the waterproof coating applications evident**



**Breezeways – deterioration of the waterproof coating applications evident**



**Breezeways – deterioration of the waterproof coating applications evident**



**Breezeways – deterioration of the waterproof coating applications evident**



**Breezeways – overview**

**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 8- to 12-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 and breezeways will result in increased concrete repairs and replacements as the balconies and breezeways age.* Capital repairs may also include replacement of the caulked joint between the balcony and 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)
- Paint application to the undersides

## Gutters and Downspouts

---

**Line Item:** 1.240

**Quantity:** Approximately 3,750 linear feet of aluminum five-inch seamless gutters and two-inch by three-inch downspouts at the Villa units

**History:** The gutters and downspouts are at varied but unknown ages

**Condition:** Fair overall with minor corrosion evident



Gutters and downspouts - overview



Gutters and downspouts - overview

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

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

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





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

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

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

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

## **Restoration Project, Concrete**

---

**Line Item:** 1.250

**History:** We are informed that the Association is planning for a restoration project in the near term that will address issues with the concrete as well as waterproofing throughout a select quantity of locations throughout the Association.

**Component Detail Notes:** The scope of work includes the following:

- Waterproof applications and capital repairs of the concrete at the breezeways
- Paint finish applications at the Villa facades and garage exterior
- Partial replacement of the sealants at the windows and doors at the Villas units

**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 for the project was provided by the Association.

## **Roofs, Built-up**

---

**Line Item:** 1.300

**Quantity:** Approximately 20,110 square feet

**History:** The built-up roofs were reported to have been installed in 2006

**Condition:** Fair overall with granular loss evident. Management and the Board report a history of leaks and have request that we depict replacement in the near term.



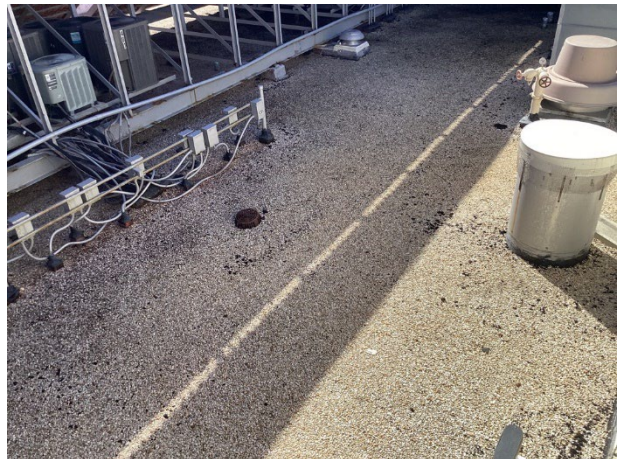
**Built-up roof - overview**



**Built-up roof - granular loss evident**



**Built-up roof - granular loss evident**



**Built-up roof - granular loss evident**



**Built-up roof - overview**

**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.

The contractor should follow the manufacturer's directions and specifications upon installation of the roof. The contractor should remove the original insulation if saturated or compacted and apply a new layer of insulation per the manufacturer's instructions. The insulation should fit loosely with gaps no greater than ¼ inch. Gaps will cause failure of the membrane later. Mechanical fastening of the insulation is the best manner of installation. The contractor applies the base sheet of roofing over the insulation board. This sheet is normally 30-pound material. The contractor should start the installation of a roof membrane from the lowest points of the roof. Mechanical fastening and embedding the base sheet in a flood coat of hot asphalt is the best manner of installation. Felt or glass fiber plies saturated with asphalt are usually used for level or low-pitch roofs because of their greater resistance to standing water. A membrane of three- or four-ply is common, the more plies used, the more durable a roof.

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

- Semi-annually:
  - Note drainage issues with water ponding after 48 hours of rainfall event. Verify scuppers and drains are free of debris. Replace damaged or missing drain covers.
  - Inspect perimeter flashing for loose fasteners, deflections, and sealant damage
  - Verify membrane surface is free of ruptures or damage, and areas of extensive blistering or bubbling
  - Remove oil spills or contaminants from mechanical equipment
  - In areas of possible foot traffic, remove any sharp debris or trash and note areas of crushed insulation
  - Ensure ballast is not displaced near roofing corners, edges and near mechanical equipment
  - If frequency of leaks increase or location of water infiltration is unknown, we recommend the consideration of a thermal image inspection

**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:** Approximately 300 squares<sup>1</sup>

**History:** Replaced in 2006 per a report provided by the Association

**Condition:** Good overall with no significant deterioration evident from our visual inspection



Concrete tile roofs - overview



Concrete tile roofs - overview



Concrete tile roofs - overview



Concrete tile roofs - overview

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



**Concrete tile roofs - overview**

**Useful Life:** Up to 30 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.

A concrete tile roof system comprises sheathing, underlayments, battens and the tiles themselves. Replacement standards should conform to the local building code and manufacturer's specifications at the time of actual replacement. The manner of construction is such that the underlayment is the primary line of defense from water infiltration. The tiles act to shade the underlayment from harmful sunlight and to protect the roof from heavy winds. Most storm water is shed from the roof tiles into the gutters or over the edge of the roof. However, this tile style is meant to allow water to pass between the tiles onto the underlayment. The underlayment thus sheds any remaining water into the gutters. In fact, horizontal driving rains will force their way up and under the tile only to be shed at some other point.

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

- Annually:
  - Record any areas of water infiltration, flashing deterioration, damage or loose tiles
  - Implement repairs as needed if issues are reoccurring
  - Ensure proper ventilation and verify vents are clear of debris and not blocked from attic insulation
  - Trim tree branches that are near or in contact with roof

- Periodic cleaning at areas with organic growth (We do not recommend pressure washing as it may cause further damage to tiles.)

**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

## **Steel Structure, Mansard, Inspections and Capital Repairs**

---

**Line Item:** 1.600

**Quantity:** Approximately 5,230 square feet of metal structure supports a mansard roof at the top of the tower building

**History:** Presumed to be original

**Condition:** Fair overall with corrosion evident. We are informed that the connection points are in need of inspection and welding in order to re-establish the connection. We depict these repairs in the near term.



**Steel structure – corrosion evident**



**Steel structure – corrosion evident**



**Steel structure – corrosion evident**



**Steel structure – corrosion evident**



**Steel structure – overview**

**Useful Life:** Inspections and capital repairs every 10 years to be done in conjunction with roof replacement projects

**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 for the near term paint finish applications and capital repairs is based on historical costs provided by the Association.

## **Structural Members, Inspections**

---

**Line Item:** 1.605

**Quantity:** The primary structural members of the building comprise:

- Foundation
- Floors
- Load-bearing walls

- Structural frame

**Condition:** Palma Del Mar Condominium Association does not report a history of water infiltration, settlement or structural concerns with the primary structural members. Our visual, non-invasive inspection is limited to visually apparent components of the structural members.

**Useful Life:** Up to and likely beyond 100 years; however, we consider full replacement unlikely and cost prohibitive. Per Florida Bill SB 4-D, condominium and cooperative buildings three stories or more in height require milestone inspections 30 years after initial occupancy. Subsequent milestone inspections are required every 10 years thereafter.

**Component Details:** Per the Bill (553.899(2-7)), a milestone inspection consists of two phases. The initial milestone inspection (Phase 1), conducted by a licensed engineer or architect, includes a visual examination “including the major structural components of a building, and provide a qualitative assessment of the structural conditions of the building”. Phase 2 is only required if “substantial structural deterioration is identified”.

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

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. At this time we do not anticipate capital repairs related to the structural members. Rather we include an expenditure for required inspections discussed above. Updates of this Reserve Study would incorporate significant repair costs deemed necessary following necessary inspections.

## **Walls, Stucco**

---

**Line Items:** 1.880 and 1.881

**Quantities and Histories:** Approximately 123,900 square feet of the building exteriors comprise the following:

- Approximately 67,900 square feet of paint finishes at the tower building which were repainted between 2019 and 2021
- Approximately 56,000 square of paint finishes at the villas which were repainted in 2015. Paint finish applications at the Villas are part of the scope of the near term restoration project

**Condition:** The paint finishes throughout the community are in good to fair condition overall with deterioration of the paint finishes and cracks evident





**Paint finish applications – Villas - overview**



**Paint finish applications – Villas – paint finish deterioration evident**



**Paint finish applications – Villas - overview**



**Paint finish applications – Villas - overview**



**Paint finish applications – Villas - overview**



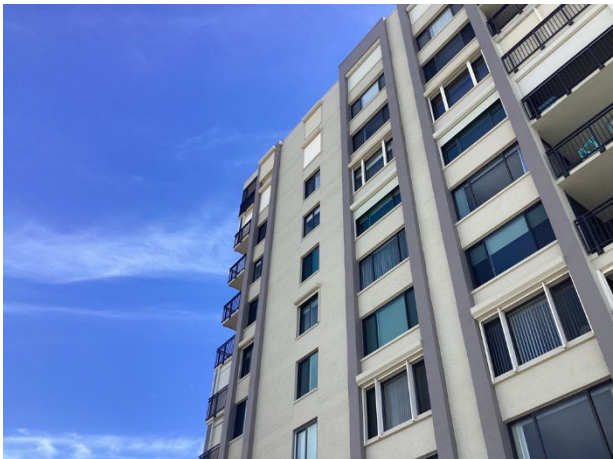
**Paint finish applications – Villas - overview**



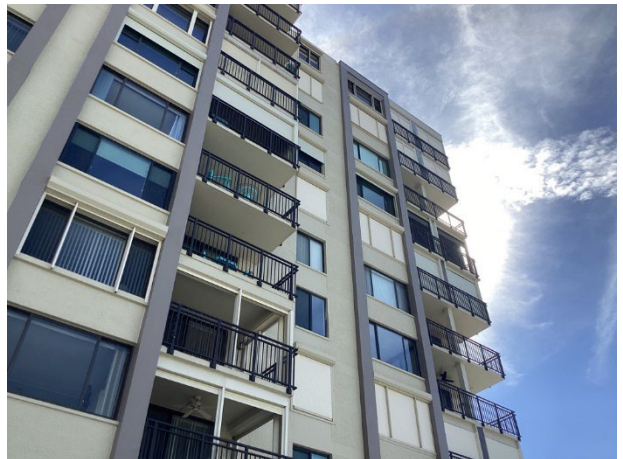
**Paint finish applications – Villas - overview**



**Paint finish applications – Villas - overview**



**Paint finish applications – Tower - overview**



**Paint finish applications – Tower - overview**



**Paint finish applications – Garage - overview**



**Paint finish applications – Garage - overview**



**Paint finish applications – Tower – cracks evident**



**Paint finish applications – Tower – paint finish deterioration evident**



**Paint finish applications – Garage - overview**



**Paint finish applications – Garage - overview**



**Paint finish applications – Garage – cracks evident**

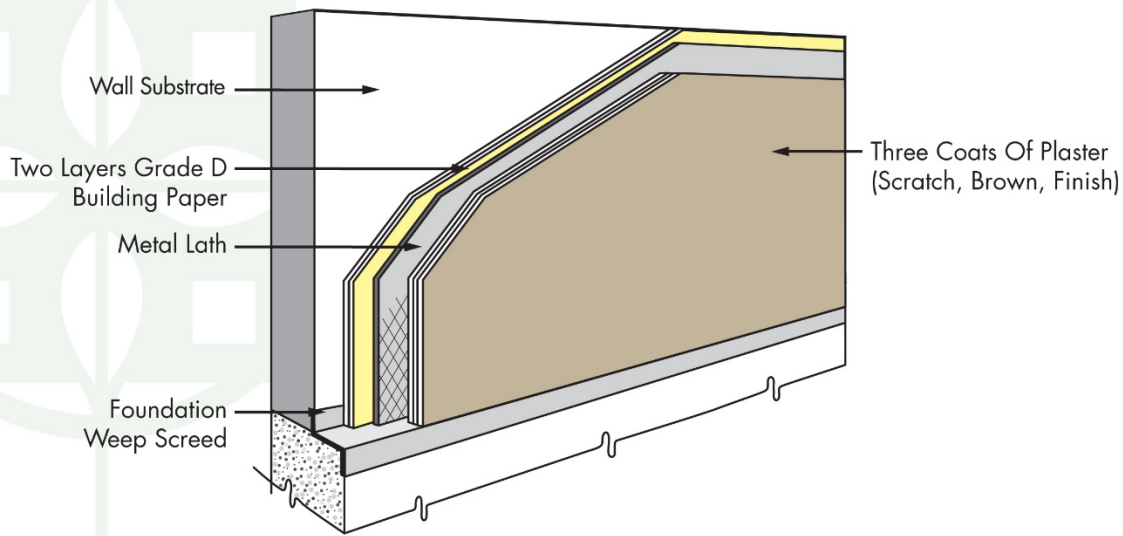


**Paint finish applications – Garage – overview**

**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 although it may not reflect the actual configuration at Palma Del Mar Condominium Association:

## STUCCO DETAIL



© Reserve Advisors

Correct and complete preparation of the surface before application of the paint finish maximizes the useful life of the paint finish and surface. The contractor should remove all loose, peeled or blistered paint before application of the new paint finish. The contractor should then power wash the surface to remove all dirt and biological growth. Water-soluble cleaners that will not attack Portland cement are acceptable for removing stains.

**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 anticipates the following in coordination with each paint finish application:

- Complete inspection of the stucco
- 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.

## Windows and Doors

---

**Line Item:** 1.980

**Quantity:** 1,500 square feet of storefront windows and doors at the tower building

**History:** Original

**Condition:** Good overall with no significant deterioration evident.



**Storefront windows**

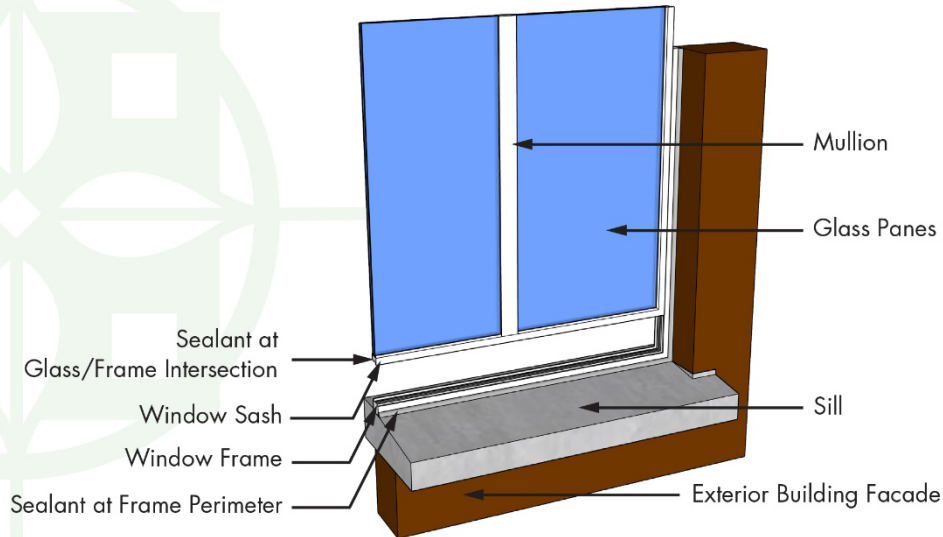
**Useful Life:** 45- to 50-years

**Component Detail Notes:** Construction includes the following:

- Aluminum frame
- Fixed windows
- Hinged doors

The following schematic depicts the typical components of a window system although it may not reflect the actual configuration at Palma Del Mar Condominium Association:

## WINDOW DETAIL



© Reserve Advisors

Properly designed window and door assemblies anticipate the penetration of some storm water beyond the gaskets. This infiltrated storm water collects in an internal drainage system and drains, or exits, the frames through weep holes. These weep holes can become clogged with dirt or if a sealant is applied, resulting in trapped storm water. However, as window frames, gaskets and sealants deteriorate, leaks into the interior can result. The windows and doors will eventually need replacement or major capital repairs to prevent water infiltration and damage from wind driven rain.

The thermal efficiencies of the window and door assemblies are affected by their design and construction components. These components include glazings, thickness of air space between glazings, low-conductivity gas, tinted coatings, low-e coatings and thermal barriers. The Association should thoroughly investigate these component options at the time of replacement. Some manufacturers may include these components as part of the standard product and other manufacturers may consider these components as options for an additional cost. Palma Del Mar Condominium Association should review the specifications provided by the manufacturers to understand the thermal design and construction components of the proposed assemblies.

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

- Annually:
  - Inspect and repair loose weather stripping and/or lock damage
  - Inspect for broken glass and damaged screens
  - Record instances of water infiltration, trapped moisture or leaks

- As-needed:
  - Verify weep holes are unobstructed and not blocked with dirt or sealant, if applicable
  - Replace damaged or deteriorated sliding glass rollers, if applicable

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

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

## STRUCTURAL INTEGRITY - Building Services Elements

### Electrical System

---

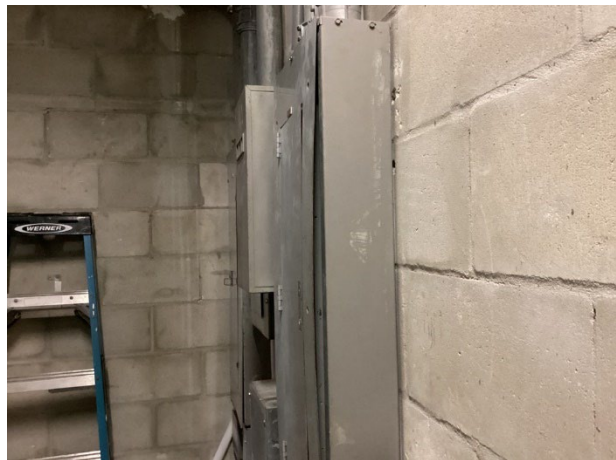
**Line Item:** 3.300

**History:** Primarily original to construction

**Condition:** Reported satisfactory without operational deficiencies. We note the following:



**Electrical panels**



**Bus bar**



**Electrical panels**

**Useful Life:** Up to and sometimes beyond 70 years

**Component Detail Notes:** We give a brief overview of electrical system components in the following sections of this narrative:

*Primary Switchgear* - The primary switchgear is located where the electric supply comes into the building. Switchgear can include associated controls, regulating, metering and protective devices, and is used for the transmission, distribution and conversion of electric power for use within the building. Switchgear components have a useful life of up to and sometimes beyond 70 years. Replacement is often determined by a desired upgrade of the entire electrical system.

*Transformer* - A transformer is an electric device with two or more coupled windings used to convert a power supply from one voltage to another voltage. Transformers within a building lower the supplied electrical voltage to a level that can be utilized by the building's equipment and unit owners. Transformers do not utilize mechanical components and therefore have a long useful life. However, the Association should anticipate periodic replacement of a limited quantity of transformers.

*Distribution Panel* - The distribution panel is an electric switchboard or panel used to control, energize or turn off electricity in total or for individual circuits. The panel also distributes electricity to individual and controllable circuits. One or more distribution panels may exist and further distribute electricity to individual panel boards for each unit. The distribution panel is enclosed in a box and contains circuit breakers, fuses and switches. Distribution panels have a useful life of up to and sometimes beyond 70 years.

*Bus Bar* - A bus bar is an electric conductor that serves as a common connection for two or more circuits and carries a large current. The metal enclosure contains factory assembled conductors, usually copper or aluminum bars or tubes. Bus bars typically convey electricity in a vertical riser to the multiple stories in the building. This component has an indefinite useful life and would rarely require



replacement in total unless an upgrade of the capacity of the electrical system is desired.

*Circuit Protection* - Once electricity is distributed throughout the building and is at a usable voltage level, the electricity is divided into circuits. Each circuit requires circuit protection. Circuit protection is necessary to prevent injury and fires, and minimize damage to electrical components and disturbances to the electrical system. Abnormalities in the circuit can include overloads, short circuits and surges. Circuit protection devices are commonly referred to as circuit breakers and fuses. For the protection of the circuits in the units and common areas, we recommend the use of only circuit breakers as they are safer than fuses. However, the use of fuses is common for equipment like emergency systems and individual items of equipment. Fuses with a low capacity rating can easily be replaced with fuses of a higher rating resulting in an unprotected, overloaded and unsafe circuit. The circuit protection panels have a useful life of up to and sometimes beyond 70 years.

*Conductors* - Conductors are the electrical wires that convey electricity to the units, light fixtures, receptacles and appliances.

*Conductor Insulation and Conduit* - Conductor insulation provides protection against the transfer of electricity. Conductor insulation can eventually become brittle and damaged from rodents or heat from many years of service. Conductor conduit is a pipe or tube used to enclose insulated electric wires to protect them from damage. Steel conductor conduit, although galvanized, will eventually rust if used in damp conditions. The useful life of conductor insulation and conduit is indeterminate.

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

- Annually:
  - Inspect system for signs of electrical overheating, deterioration, and/or panel corrosion
  - Clean and vacuum exterior and interior switchboards
- Five-Year Cycles:
  - Check power meters, lamps, indicators, and transformers for deficiencies
  - Inspect wiring, relays, power supply units, and timers
  - Verify surge protection is intact
- As-needed:
  - Test outlets and ground-fault circuit interrupters (GFCI's) for faulty components

- Examine the insulation at switchgears for signs of deterioration or cracking
- Ensure all conductors are clean and dry with no moisture build-up
- Check and inspect for loose wire connections
- Clean and clear dust and debris away from system components
- Check for flickering or dimming light fixtures as these could indicate a short in the wiring, arcing, or an over-extension of the electrical system
- Conduct thermal image scanning if system experiences numerous or consistent outages
- Keep an accurate record of all repairs to the electrical 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. We recommend the Association budget to replace the main switchgear, distribution and circuit protection panels. Updates of this Reserve Study will consider possible changes in the scope and times of component replacements based on the conditions, including the need for replacement of the wires.

We recommend the Association conduct thermoscans of the distribution panels and circuit protection panels, and inspections of the transformers for any indications of arcing, burning or overheating on a regular basis, funded through the operating budget. Verification of the integrity of all connection points minimizes the potential for arcing and fires.

## **Generator, Emergency**

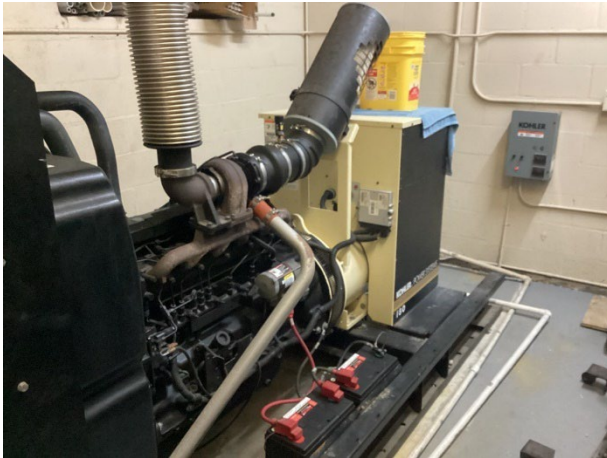
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**Line Item:** 3.440

**Quantity:** One Kohler 180-kW (kilowatt) diesel generator

**History:** The age was unavailable at the time of our inspection but note that it is not original

**Condition:** Reported satisfactory with operational deficiencies



**Generator**



**Fuel tank**

**Useful Life:** Up to 35 years

**Preventative Maintenance Notes:** We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. The Association conducts weekly load tests. We also recommend the Association maintain a maintenance contract with a qualified professional. As a reference, the Association may consult the following document: *NFPA 110, Standard for Emergency and Standby Power Systems*. The required preventative maintenance may vary in frequency and scope based on the unit's age, operational condition, or changes in technology. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Weekly:
  - Check fuel and oil levels
  - Inspect cooling and exhaust systems
  - Check battery, electrical components and transfer switches
  - Run generator without load and look for unusual conditions such as leaks
- Monthly:
  - Exercise generator under load test for minimum of 30 minutes
  - Check oil levels before running and after 10 minutes of run time
- Annually:
  - Complete full inspection and necessary repairs
  - Change fuel and air filters
  - Change oil and replace oil filter
  - Change spark plugs
  - Flush cooling 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. Our estimate of cost includes replacement of the transfer switch. We recognize that the transfer switch may require replacement prior to the replacement of the generator. For purposes of this Reserve Study, we assume coordination of replacement with the generator.

## Life Safety System

**Line Items:** 3.555 and 3.560

**Quantity:** The life safety system at Palma Del Mar Condominium Association includes the following components:

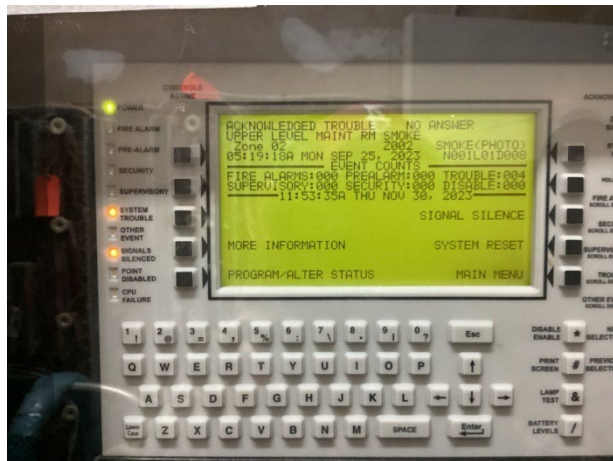
- Audio/visual fixtures
- Control panel
- Detectors
- Pull stations
- Wiring

**History:** Original

**Conditions:** Reported satisfactory without operational deficiencies



Control panel



Control panel



Emergency devices

**Useful Life:** Up to 25 years for the devices and up to 15 years for the control panel

**Preventative Maintenance Notes:** We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. In accordance with *NFPA 72* (National Fire Alarm and Signaling Code) we also recommend the Association maintain a maintenance contract with a qualified professional. The display panel read 'System Normal' at the time of our inspection. The required preventative maintenance may vary in frequency and scope based on the age of the components, operational condition, or changes in technology. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Semi-annually:
  - Inspect and test all components and devices, including, but not limited to, control panels, annunciators, detectors, audio/visual fixtures, signal transmitters and magnetic door holders
  - Test backup batteries
- As-needed:
  - Ensure clear line of access to components such as pull stations
  - Ensure detectors are properly positioned and clean of debris

**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. Our estimate of cost includes for an allowance for an upgrade to the communications equipment.

## Pipes

---

**Line Items:** 3.605

**Quantity:** Based on the layout and configuration of the units, we have estimated the quantity of the interior building plumbing. Future updates of this Reserve Study will incorporate additional information if it becomes available.

**History:**

- Domestic Water, Supply and Return – Original
- Sanitary Waste Disposal and Vent – Original

**Condition:**

- Domestic Water, Supply and Return – Reported satisfactory without operational deficiencies
- Sanitary Waste Disposal and Vent – Reported satisfactory without operational deficiencies

**Component Detail Notes:**

**Domestic Water, Supply and Return** - The useful life of domestic supply and return pipes is up to and sometimes beyond 70 years.

**Sanitary Waste Disposal and Vent** - The pipes typically deteriorate from the inside out as a result of sewer gases, condensation and rust.

**Valves** - The piping systems include various valves. Identification of a typical useful life and remaining useful life for individual valves is difficult. Associations typically replace valves on an as needed basis in our experience.

**Pipes, Remaining** - We anticipate a useful life of up to and sometimes beyond 100 years for the remaining pipes, which may include fire standpipes, gas supply lines, interior sprinkler pipes, among others. Therefore, we do not foresee the need to budget for replacement of these pipes within the 30-year scope of this study. Future updates of this study will revisit the need to include partial replacement of these pipes.

**Preventative Maintenance Notes:** The required preventative maintenance may vary in frequency and scope based on the building's age and demands of the piping systems. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Quarterly:
  - Inspect all visible piping for corrosion and leaks, including common areas or areas immediately surrounding pipes such as insulation, ceiling tiles or the floor for moisture, water accumulation, mold or mildew
- Annually:
  - Verify system pressure is sufficient (pressurized piping systems)
  - Check accessible valves for proper operation
  - Test backflow prevention devices
  - Inspect and obtain certification for pressure relief valves
  - Test drain line flow rates
  - Mechanically or chemically clean waste lines 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 for a single riser section assumes replacement of all pipes located within each wall opening, associated branch piping, fittings and minimal interior finishes. However, the cost does not include temporary housing for affected residents, pipes within the units or significant interior finishes. Our estimate provides funds to replace approximately forty percent (40%) of the riser sections during the next 30 years.

An invasive analysis of the piping systems will provide various replacement options. Replacement of the systems as an aggregate event will likely require the use of special assessments or loans to fund the replacements.

Although it is likely that the times of replacement and extent of repair costs may vary from the budgetary allowance, Palma Del Mar Condominium Association could budget sufficient reserves for the beginning of these pipe replacements and have the opportunity to adjust its future reserves up or down to meet any changes to these budgetary estimates. Updates of this Reserve Study would incorporate changes to budgetary costs through a continued historical analysis of the rate of deterioration and actual pipe replacements to budget sufficient reserves.

We recommend the Association budget for replacement of the following items through the operating budget:

- Replacement of valves on an as-needed basis
- Minor pipe repairs and replacements
- Invasive investigation of the condition of the piping system prior to beginning more aggregate replacements
- Rodding of waste pipe systems

## **Pump, Fire Suppression**

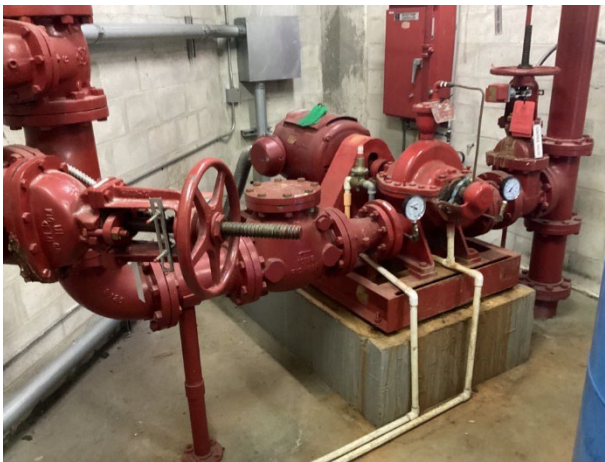
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**Line Item:** 3.770

**Quantity:** One 60-HP electric fire suppression pump

**History:** The pump assembly is original and the control panel was replaced in 2020

**Condition:** Reported satisfactory without major issues



**Fire suppression pump**



**Fire suppression pump - controls**

**Useful Life:** Up to 50 years

**Component Detail Notes:** Prior to replacement, the Association should schedule periodic inspections to maintain its correct operation in the event of an emergency. Palma Del Mar Condominium Association should also anticipate, as normal maintenance, interim repairs and component replacements to maximize its remaining useful life.

**Preventative Maintenance Notes:** We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. The Association conducts weekly churn tests. In accordance with *NFPA 25* (National Fire Protection Systems Code), we also recommend the Association maintain a maintenance contract with a qualified professional. The required preventative maintenance may vary in frequency and scope based on the unit's age, operational condition, or changes in technology. Valuable motor information to note in a preventative maintenance plan or schedule includes age of unit and last time of repair, horsepower and rpm (revolutions per minute), bearing type and conditions surrounding motor/pump. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Weekly:
  - Check/adjust controls
  - Check/adjust pressure levels
  - Check for leaks
  - Conduct churn tests
- Quarterly:
  - Inspect/clean motors
  - Inspect mountings and connections for proper alignment, torque and condition
  - Inspect/replace pump packing as needed, consider replacement with mechanical seals
  - Check for appropriate oil levels
- Semi-annually:
  - Lubricate pumps, motors and motor bearings
- Annually:
  - Clean filters if present
  - Assess proper internal component performance and replace damaged or malfunction components as necessary, and tighten fittings
  - Access temperature and vibration performance of motors in accordance with the intended design

**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 pump, motor, and motor controller.



## STRUCTURAL INTEGRITY - Garage Elements

### Concrete, Elevated Floor

---

**Line Item:** 7.300

**Quantity:** Approximately 35,030 square feet of elevated concrete floor structures

**Condition:** Good to fair overall. We note the following:

- The elevated structural concrete utilizes a protective traffic coating.
- Knee walls in good condition without deterioration evident
- Exposed to salt air due to proximity to the Gulf of Mexico
- No major evidence of water infiltration
- Minor spalling and cracks evident



**Elevated concrete – spalling evident**



**Elevated concrete - overview**



**Elevated concrete - overview**



**Elevated concrete - overview**



**Elevated concrete – drain detail**



**Elevated concrete – cracks evident**



**Elevated concrete - overview**

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

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

- Semi-annually:
  - Clean floors and remove vehicular oil stains
- Annually:
  - Inspect for large cracks, concrete spalls and vehicular damage at walls and columns
  - Verify drains are working properly and check for areas of extensive water ponding
  - Check for any signs of exposed rebar

**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

## Concrete, On-grade

---

**Line Item:** 7.360

**Quantity:** Approximately 35,030 square feet of on-grade concrete

**Condition:** Good to fair overall. We note the following:

- Cracks evident
- Previous repairs evident



**On-grade concrete – cracks evident**



**On-grade concrete – cracks evident**



**On-grade concrete – cracks evident**



**On-grade concrete – cracks evident**



**On-grade concrete – overview**



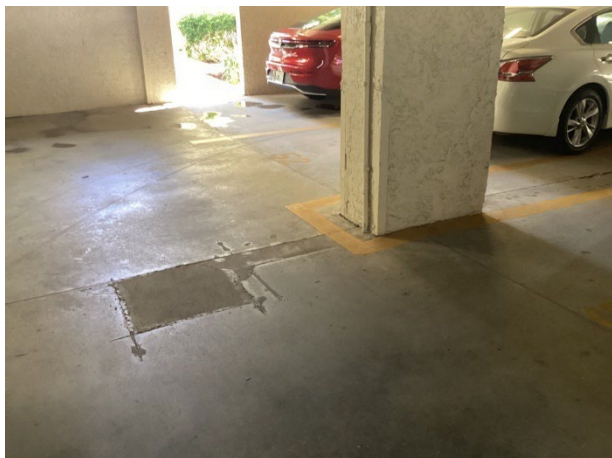
**On-grade concrete – column detail**



**On-grade concrete – overview**



**On-grade concrete – overview**



**On-grade concrete – previous repairs evident**



**On-grade concrete – cracks evident**



**On-grade concrete – cracks evident**

**Useful Life:** Up to 90 years

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

- Semi-annually:
  - Clean floors and remove vehicular oil stains
- Annually:
  - Inspect for large cracks, concrete spalls and vehicular damage at walls and columns
  - Verify drains are working properly and check for areas of extensive water ponding

**Priority/Criticality:** Per Board discretion

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

- Complete inspection of the floor
- Selective cut out and replacement of up to five percent (5%), or 1,750 square feet, of the on-grade concrete
- Crack repairs as needed

## **Traffic Coating**

---

**Line Item:** 7.800

**Quantity:** Approximately 35,030 square feet

**History:** We are informed that a portion was replaced between 2020 and 2021

**Condition:** Good to fair overall with minor deterioration evident

**Useful Life:** Up to every 20 years

**Component Detail Notes:** In our experience, active periodic maintenance and protection with a traffic coating on elevated concrete structures results in a longer useful life, safer operation and a lower overall life cycle costs. Failure to maintain a traffic coating on elevated floors will result in accelerated concrete deterioration at concrete ceilings below the elevated floors and a higher overall capital investment in the parking structure over time.

Salts and moisture-driven chemical reactions are detrimental to the integrity of an elevated structural concrete garage floor. Road salts deposited as snow melts from vehicles or chlorides and moisture contained in ambient air penetrate the concrete surface. The dissolved chlorides and moisture then migrate to the imbedded reinforcing steel through pores in the concrete or directly through cracks. Once they reach the steel, salts and moisture cause expansive corrosion, ultimately causing the concrete to expand and “pop” or spall. Left unrepaired, additional chlorides and moisture will continue to infiltrate the concrete, eventually causing structural failure. This type of deterioration is progressive and costly to repair. The utilization of a traffic coating atop the concrete minimizes the infiltration of salts and moisture into the concrete thereby minimizing future capital 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. Expenditures assume:

- Complete inspection of the garage concrete and concrete repairs as described in the previous narratives “Concrete, On-grade” and “Concrete, Elevated Floor”
- Preparation of the concrete surface
- Application of a urethane base coat, intermediate aggregate coating and top coat to the elevated floors
- Parking and directional line striping as needed

## GENERAL - Exterior Building Elements

### Light Fixtures

---

**Line Item:** 1.260

**Quantity:** Approximately 50 exterior light fixtures

**History:** The light fixtures have a history of as needed replacements

**Condition:** Good to fair overall



**Light fixtures**

**Useful Life:** Up to 25 years

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

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

**Priority/Criticality:** Per Board discretion

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

## **GENERAL - Interior Building Elements**

### **Elevator Cab Finishes**

---

**Line Item:** 2.100

**Quantity:** Two elevators; the cab finishes consist of:

- Rubber floor coverings
- Laminate wall coverings
- Acrylic ceiling finishes

**History:** The elevator finishes are at an unknown age

**Condition:** Good overall

**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

## Floor Coverings, Carpet, Hallways

---

**Line Item:** 2.200

**Quantity:** Approximately 1,100 square yards at the hallways (Contractor measurements will vary from the actual floor area due to standard roll lengths, patterns and installation waste.

**History:** Unknown age

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



**Carpet floor coverings**



**Carpet floor coverings**



**Carpet floor coverings**



**Carpet floor coverings**

**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, Lobbies

---

**Line Item:** 2.240

**Quantity:** 150 square yards at the lobbies

**History:** Reported to be original

**Condition:** Good overall



**Tile floor coverings - overview**



**Tile floor coverings - overview**



**Tile floor coverings - overview**



**Tile floor coverings - overview**



**Tile floor coverings – overview**

**Useful Life:** Up to 30 years although replacement of tile is often based on discretionary redecorating prior to the tile reaching the end of its useful life.

**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 fund regrouting of the tiles through the operating budget if necessary.

## **Mailboxes**

---

**Line Item:** 2.700

**Quantity:** 140 unit mailboxes

**History:** Reported to be original

**Condition:** Reported good overall

**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, Hallways

---

**Line Item:** 2.800

**Quantity:** Approximately 20,900 square feet on the walls and ceilings at the hallways

**History:** Unknown ages

**Condition:** Good overall with no significant deterioration evident.



Paint finishes – overview

**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

## Paint Finishes, Stairwells

---

**Line Item:** 2.820

**Quantity:** Two staircases

**History:** The paint finishes are at an unknown age

**Conditions:** Good to fair overall

**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

## Social Room

---

**Line Items:** 2.840 and 2.845

**Quantity:** The party room components include:

- Carpet floor coverings
- Paint finishes on the walls and ceilings
- Furnishings (this includes the furnishings in the lobby)
- Light fixtures
- Televisions
- Countertop
- Appliances

**History:** The finishes are at an unknown age

**Condition:** Good to fair overall



**Social room renovations - overview**



**Social room renovations - overview**



**Social room renovations - overview**



**Social room renovations - overview**

**Useful Life:** Complete renovation up to every 20 years and partial renovation up to every 10 years

**Priority/Criticality:** Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. The complete renovation should include replacement of all components listed above and the partial renovations should include the following:

- Applications of paint finishes
- Replacement of the carpet floor coverings
- Replacement of up to fifty percent (50%) of the furnishings

## Rest Rooms

---

**Line Item:** 2.900

**Quantity:** The two common area rest rooms comprise the following components:

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

**History:** The rest room finishes are at an unknown age

**Condition:** Good overall



Rest rooms – overview

**Useful Life:** Renovation up to every 25 years

**Priority/Criticality:** Per Board discretion

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

## GENERAL - Building Services Elements

### Air Handling Unit, Rooftop Heating and Cooling Unit

---

**Line Item:** 3.060

**Quantity:** One rooftop air handling unit

**History:** Replaced in 2019

**Condition:** Reported satisfactory



**Rooftop HVAC**

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

**Component Detail Notes:** The unit has the following characteristics:

- Cooling capacity of 10-tons

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

- Quarterly:
  - Inspect belts for alignment, tension and condition
  - Clean/replace filter and screen cleaning as needed
  - Inspect/clean coils, blowers and motors
  - Check refrigerant pressure and oil levels
  - Clean drainage and inspect drain pans
  - Check/adjust controls
- Semi-annually:
  - Lubricate motor bearings

- Annually:
  - Replace belts

**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

## **Air Handling and Condensing Units, Split Systems**

---

**Line Item:** 3.070

**Quantity:** Two split systems provide conditioned air to the lobby and social room

**History:** Replaced in 2023

**Condition:** Reported satisfactory with operational deficiencies



**HVAC – split system**

**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 air handling unit

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

- Semi-annually:
  - Lubricate motors and bearings
  - Change or clean air filters as needed

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

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

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. The condensing unit may require replacement prior to replacement of the related interior forced air unit. For purposes of this Reserve Study, we assume coordination of replacement of the interior forced air unit, evaporator coil, refrigerant lines and exterior condensing unit.

## Elevator, Traction

---

**Line Items:** 3.360 and 3.365

**Quantity:** Two *ThyssenKrupp* traction elevators

**History:**

- Controls and call buttons: Replaced in 2012.
- Hoists and motors: Original

**Condition:** The controls and call buttons are reported in satisfactory condition and the hoists and motors are reported in satisfactory condition. Service interruptions are reportedly infrequent.



**Elevators - controls**

**Useful Life:** Up to 25 years for the controls and call buttons and up to 40 years for the hoists and motors. 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

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

- Ongoing:
  - Maintain a maintenance contract with a qualified professional for the elevator(s) and follow the manufacturer's specific recommended maintenance plan adhering to local, state, and/or federal inspection guidelines
- As-needed:
  - Keep an accurate log of all repairs and inspection dates
  - Inspect and adjust misaligned door operators
  - Clear and remove any items located in the elevator machine room(s) not associated with the elevator components (These rooms should never be used for storage)
  - Inspect electrical components for signs of overheating or failure
  - Inspect controls
  - Lubricate the hoist cables
  - Inspect hoist cables and motors for signs of wear or deterioration
  - Ensure air temperature and humidity of machine/pump housing room meets the designated specified range for proper operation
  - Ensure all call buttons are in working condition

**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

## **Intercom Panels**

---

**Line Item:** 3.470

**Quantity:** Two each

**History:** Unknown age

**Condition:** Reported satisfactory without operational deficiencies

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

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

- Monthly:
  - Inspect panel for damage and ensure the panel is mounted securely, tighten or replace any loose or damaged fasteners.
  - Inspect panel for proper operation of buttons, displays, microphone and speaker.
- Annually:
  - Check power connections, and if applicable, functionality of battery power supply systems

**Priority/Criticality:** Per Board discretion

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

## Laundry Equipment

---

**Line Item:** 3.500

**Quantity:** Four pieces of residential grade clothes washers and dryers

**History:** Replaced in 2018

**Condition:** Reported satisfactory without operational deficiencies

**Useful Life:** Up to 10 years

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

- Semi-annually:
  - Ensure areas surrounding dryers are clear of combustible materials
  - Check hoses and belts for damage and cracks
  - Check dryer exhaust connections for proper alignment and connection.
  - Check unit for loose electrical connections
- As-needed:
  - Replace belts
  - Clear unit of lint and any debris

- Clean or replace water inlet filters, remove drum debris and wipe down door gaskets
- Ensure water outlet is free of dirt and soap residue

**Priority/Criticality:** Per Board discretion

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

## **Pumps, Domestic Water**

---

**Line Item:** 3.700

**Quantity:** Two pumps provide domestic water to the residents in the tower building

**History:** Replaced in 2019

**Condition:** Reported satisfactory without operational deficiencies



**Domestic water pumps**

**Useful Life:** 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.

**Preventative Maintenance Notes:** We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. We also recommend the Association maintain a maintenance contract with a qualified professional. The required

preventative maintenance may vary in frequency and scope based on the unit's age, operational condition, or changes in technology. Valuable motor information to note in a preventative maintenance plan or schedule includes age of unit and last time of repair, horsepower and rpm (revolutions per minute), bearing type and conditions surrounding motor/pump. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Weekly:
  - Check/adjust controls
  - Check/adjust pressure levels
  - Check for leaks
  - Conduct churn tests
- Quarterly:
  - Inspect/clean motors
  - Inspect mountings and connections for proper alignment, torque and condition
  - Inspect/replace pump packing as needed, consider replacement with mechanical seals
  - Check for appropriate oil levels
- Semi-annually:
  - Lubricate pumps, motors and motor bearings
- Annually:
  - Inspect belts for wear and/or replace belts
  - Clean filters if present
  - Assess proper internal component performance and replace damaged or malfunction components as necessary, and tighten fittings
  - Access temperature and vibration performance of motors in accordance with the intended design

**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 costs include an allowance for replacement of the variable frequency drives (VFD) and controls.

## Security System

---

**Line Item:** 3.820

**Quantity:** Palma Del Mar Condominium Association utilizes the following security system components:

- Security cameras
- Controlled access

**History:** Installed in 2021

**Condition:** Reported satisfactory without operational deficiencies

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

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

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

**Priority/Criticality:** Per Board discretion

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

## Trash Chute and Doors

---

**Line Item:** 3.880

**Quantity:** One trash chute

**History:** Original

**Condition:** Reported satisfactory without operational deficiencies

**Useful Life:** Up to 65 years.

**Component Detail Notes:** Damaged doors or poor door operation will result in a decreased useful life. The Association should fund interim repairs and partial replacements of the doors through the operating budget.

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

- Weekly:
  - Clean doors and latches
  - In accordance with *NFPA 82* and fire code, ensure all trash chute doors self-latch and self-close

- Monthly:
  - Check operation of discharge door
  - Inspect fusible link and replace if necessary
  - If applicable, inspect, reinforce and/or replace discharge elbow
- Quarterly:
  - If applicable, check vent cap for damage and tighten fasteners
- Semi-annually:
  - Lubricate and/or replace doors, hinges and latches
  - Clear obstructions, clean and scrape trash chute and doors. The frequency of this activity may vary based upon occupancy and usage rates. This activity may also be based upon limitation of unwanted odors, prevention of harmful bacteria, pest infiltration and debris removal to further prevent fire hazards.

**Priority/Criticality:** Per Board discretion

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

## GENERAL - Property Site Elements

### Asphalt Pavement, Repaving

---

**Line Item:** 4.040

**Quantity:** Approximately 2,350 square yards at the streets

**History:** The asphalt pavement is at an unknown age

**Condition:** Fair overall with seal coat deterioration as well as alligator cracks evident



Asphalt pavement – alligator cracks evident



Asphalt pavement – alligator cracks evident

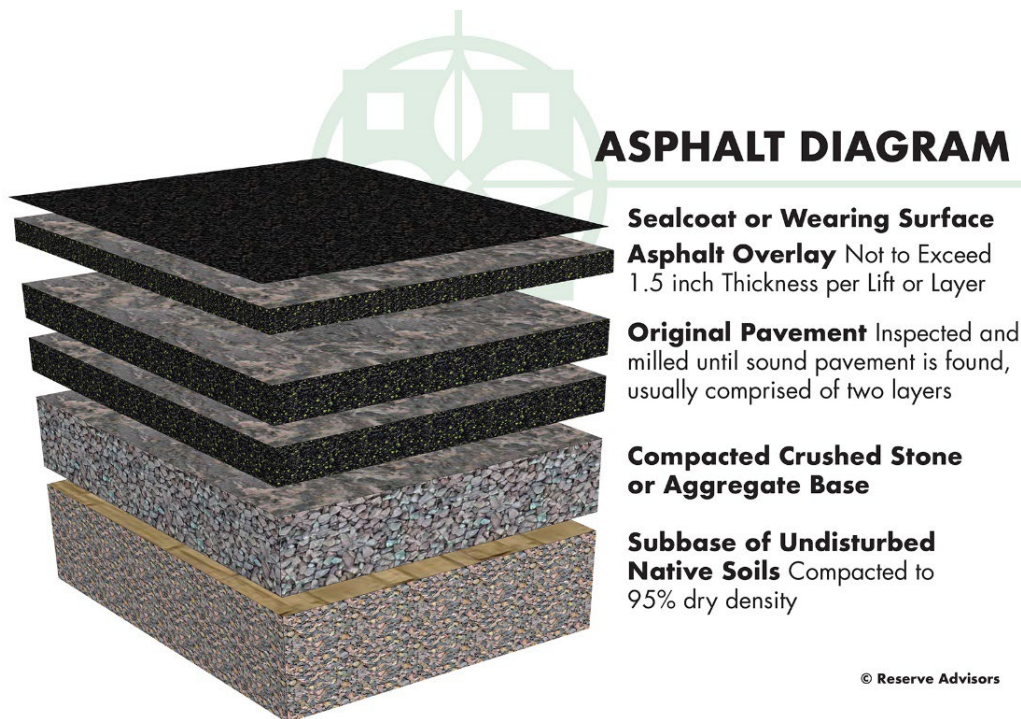


**Asphalt pavement – alligator cracks evident**

**Useful Life:** 15- to 20-years with the benefit of timely patching and seal coat applications to be funded through the Operating Budget

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

The following diagram depicts the typical components although it may not reflect the actual configuration at Palma Del Mar Condominium Association:



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 Palma Del Mar Condominium Association.

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

- Annually:
  - Inspect for settlement, large cracks and trip hazards, and ensure proper drainage
  - Repair areas which could cause vehicular damage such as potholes
- As needed:
  - Perform crack repairs and patching

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

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

## **Fishing Pier**

---

**Line Item:** 4.100

**Quantity:** Approximately 410 square feet of composite deck board and wood structure

**History:** Unknown age

**Condition:** Good overall





Fishing pier - overview



Fishing pier – overview

**Useful Life:** We recommend the Association conduct complete replacement of the composite deck boards and partial replacements of the structures 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. Our estimate of cost includes for replacement of up to thirty percent (30%) of the structure per event.

## Irrigation System, Replacement

---

**Line Item:** 4.420

**Quantity:** 12 zones

**History:** Primarily original with isolated replacements competed as needed

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

**Useful Life:** Up to and sometimes beyond 40 years

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

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

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

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

- Semi-annually:
  - Conduct seasonal repairs which includes valve repairs, controller repairs, partial head replacements and pipe repairs

**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

## **Light Poles and Fixtures**

---

**Line Item:** 4.560

**Quantity:** 14 poles with light fixtures

**History:** Unknown age

**Condition:** Fair overall



**Light poles and fixtures - typical**

**Useful Life:** Up to 25 years

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

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

**Priority/Criticality:** Per Board discretion

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

## Seawall, Concrete

---

**Line Item:** 4.735

**Quantity:** Approximately 700 linear feet

**History:** Presumably original

**Condition:** Fair overall with cracks in the concrete cap evident



Seawall - overview



Seawall - overview



Seawall - overview



Seawall – cap deterioration evident

**Useful Life:** We recommend the Association conduct inspections and capital repairs every 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 estimate of cost for inspections and capital repairs includes for replacement of up to ten percent (10%) of the total quantity per event.

**Useful Life:** We recommend the Association conduct inspections and capital repairs every 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 estimate of cost for inspections and capital repairs includes for replacement of up to ten percent (10%) of the total quantity per event.

## **Signage, Entrance Monument**

---

**Line Item:** 4.800

**Quantity:** The Association maintains a sign at the community entrance

**History:** Replaced in 2019

**Condition:** Good overall

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

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

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

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

**Priority/Criticality:** Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our estimate of cost for replacement is based on historical costs for replacement.

## GENERAL - Pool Elements

### Deck, Pavers

---

**Line Item:** 6.200

**Quantity:** 6,490 square feet

**History:** The age was unavailable at the time of our inspection.

**Condition:** Good overall with no significant deterioration



Deck pavers - overview



Deck pavers - overview



Deck pavers - overview



Deck pavers - overview



**Deck pavers - overview**

**Useful Life:** Up to 30 years

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

- Annually:
  - Inspect and repair settlement, trip hazards and significant paver spall
  - Reset and/or reseal damaged pavers as necessary
  - Periodically clean and remove overgrown vegetation 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

## **Fence, Aluminum**

---

**Line Item:** 6.400

**Quantity:** 370 linear feet

**History:** The age was unavailable at the time of our inspection.

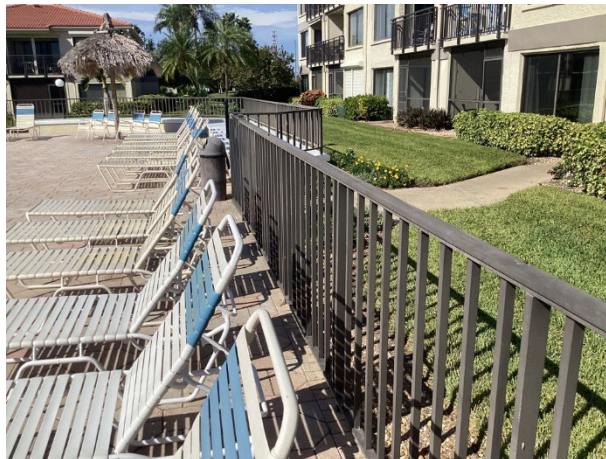
**Condition:** Good to fair overall with deterioration of the finishes evident



**Fences - overview**



**Fences – finish deterioration evident**



**Fences – finish deterioration evident**

**Useful Life:** Up to 30 years

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

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

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

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

## Furniture

---

**Line Item:** 6.500

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

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

**History:** Varied ages

**Condition:** Good overall



Furniture - overview

**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.

## Mechanical Equipment

---

**Line Items:** 6.599 and 6.600

**Quantity:** The mechanical equipment includes the following:

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



- Filters
- Geothermal heaters

**History:** The geothermal heaters were installed in 2019

**Condition:** Reported satisfactory overall



Pool mechanical equipment - overview



Pool mechanical equipment – overview

**Useful Life:** Up to 10 years for the geothermal heaters and up to 15 years for the remaining mechanical equipment

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

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

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Failure of the pool mechanical equipment as a single event is unlikely. Therefore, we include replacement of up to fifty percent (50%) of the equipment per event. We consider interim replacement of motors and minor repairs as normal maintenance.

## Pool Finishes, Plaster and Tile

---

**Line Items:** 6.800 and 6.801

**Quantity:** 1,420 square feet of plaster based on the horizontal surface area and approximately 120 linear feet of tile

**History:**

- Plaster finish: The spa finish was replaced in 2023 and the pool is at an unknown age

- Tile and coping: The spa tiles were replaced in 2023 and the pool is at an unknown age

Our estimate of cost for the next pool finish event is only for the pool due to the recent spa finish replacement project.

**Condition:** Good



**Pool finishes**



**Pool finishes**



**Pool finishes**



**Spa finishes**



**Spa finishes**



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

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

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

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

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

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

## Rest Rooms

---

**Line Item:** 6.850

**Quantity:** Two common area rest rooms at the pool

**History:** The finishes are at an unknown age

**Condition:** Good overall

**Useful Life:** Renovations 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

## Shade Structure

---

**Line Item:** 6.870

**Quantity:** 430 square feet of wood members

**History:** Inspections and capital repairs occurred in 2019

**Condition:** Good to fair overall



Pergola - overview



Pergola - overview



Pergola - overview

**Useful Life:** Replacement every 20 years

**Priority/Criticality:** Per Board discretion

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

## Structure

---

**Line Item:** 6.900

**Quantity:** 1,420 square feet of horizontal surface area

**History:** Original

**Conditions:** Visually appear in good condition. The concrete floor and walls have a plaster finish. This finish makes it difficult to thoroughly inspect the concrete structure during a noninvasive visual inspection.

**Useful Life:** Up to 60 years

**Component Detail Notes:** The need to replace a pool structure depends on the condition of the concrete structure, the condition of the embedded or concealed water circulation piping, possible long term uneven settlement of the structure, and the increasing cost of repair and maintenance. Deterioration of any one of these component systems could result in complete replacement of the pool. For example, deferral of a deteriorated piping system could result in settlement and cracks in the pool structure. This mode of failure is more common as the system ages and deterioration of the piping system goes undetected. For reserve budgeting purposes, we recommend Palma Del Mar Condominium Association plan to replace the following components:

- Concrete decks
- Pool structure
- Subsurface piping

**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

## Tiki Huts

---

**Line Item:** 6.950

**Quantity:** Four tiki huts

**History:** Unknown age

**Condition:** Fair overall. Based on information provided by the Association, we have accelerated the replacement of the tiki huts.



**Tiki huts – overview**

**Useful Life:** 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

## **GENERAL - Garage Elements**

### **Light Fixtures**

---

**Line Item:** 7.600

**Quantity:** Approximately 50 light fixtures

**History:** We are informed that a portion of the fluorescent light fixtures was replaced in 2018

**Condition:** Reported satisfactory



**Light fixtures - overview**

**Useful Life:** Up to 30 years

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

- As-needed:
  - Inspect and replace/repair broken or dislodged fixtures
  - Replace burned out bulbs

**Priority/Criticality:** Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We depict replacement in a phases manner with replacement of approximately fifty percent (50%) of the total quantity per event.

## 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. The Association can expense the fee for an Update with site visit from the reserve account. This fee is included in the Reserve Funding Plan. We base this



budgetary amount on updating the same property components and quantities of this Reserve Study report. We recommend the Board budget for an Update to this Reserve Study in two- to three-years. Budgeting for an Update demonstrates the Board's objective to continue fulfilling its fiduciary responsibility to maintain the commonly owned property and to fund reserves appropriately.



## 5. METHODOLOGY

Reserves for replacement are the amounts of money required for future expenditures to repair or replace Reserve Components that wear out before the entire facility or project wears out. Reserving funds for future repair or replacement of the Reserve Components is also one of the most reliable ways of protecting the value of the property's infrastructure and marketability.

Palma Del Mar Condominium Association can fund capital repairs and replacements in any combination of the following:

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

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

This Reserve Study is in compliance with Florida Statute 718.112 and exceeds the National standards<sup>1</sup> set forth by the Association of Professional Reserve Analysts (APRA) fulfilling the requirements of a "Level I Full Reserve Study." These standards require a Reserve Component to have a "predictable remaining Useful Life." Estimating Remaining Useful Lives and Reserve Expenditures beyond 30 years is often indeterminate. Long-Lived Property Elements are necessarily excluded from this analysis. We considered the following factors in our analysis:

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

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

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

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

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

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



## 6. CREDENTIALS

### HISTORY AND DEPTH OF SERVICE

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

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

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

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

### TOTAL STAFF INVOLVEMENT

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

### OUR GOAL

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

### VAST EXPERIENCE WITH A VARIETY OF BUILDINGS

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

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

### OLD TO NEW

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

**ALEXANDER G. J. GOULD**  
Responsible Advisor

**CURRENT CLIENT SERVICES**

Alexander Gould is an Associate Engineer for Reserve Advisors, LLC. Mr. Gould is responsible for the inspection and analysis of the condition of clients' property, and recommending engineering solutions to prolong the lives of the components. He also forecasts capital expenditures for the repair and/or replacement of the property components and prepares technical reports on assignments. He is responsible for conducting Life Cycle Cost Analysis and Capital Replacement Forecast services and the preparation of Reserve Study for condominiums, townhomes and homeowners associations.



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

**Verona at Renaissance Homeowners' Association, Inc.** - Located in Sun City Center, Florida, this community consists of 244 residential units. The units are a mixture of single family homes and duplex units that are comprised of painted stucco exterior walls and asphalt shingle roofs.

**Westbrook Estates Homeowners Association, Inc.** - This homeowners' association is located in Wesley Chapel, Florida features single family homes, multiple ponds, and a swimming pool with a pool house located at the center of the community.

**Remington Reserve Condominium Association** – This condominium association located in Naples, Florida was constructed in 2007. The community is comprised of 48 units in 12 buildings. The buildings are comprised of painted stucco exterior walls, concrete tile roofs, and balconies located on the front and sides of the buildings. Additionally the property has a clubhouse and a swimming pool.

**Nottingham Villas at Kings Point Homeowners' Association, Inc.** – Located in Sun City Center, Florida, this community is comprised of duplex style homes that were constructed in 2013. The community shares the responsibility of the common areas of the community with a master association.

**Arbor Ridge Homeowners' Association of Apopka, Inc.** - Located in Apopka, Florida, this property is comprised of 437 single family homes that were constructed in 2005. In addition to the single family homes, the property contains a swimming pool, ponds, and an extensive system of large masonry retaining walls.

**PRIOR RELEVANT EXPERIENCE**

Before joining *Reserve Advisors, LLC*, Mr. Gould was an Assistant Superintendent for a commercial construction firm that specialized in airport construction. He was responsible for the successful completion of large scale renovation projects of airport infrastructure while ensuring that the airport remained at a non-reduced operating capacity.

**EDUCATION**

University of South Florida - B.S. Civil and Environmental Engineering

**PROFESSIONAL AFFILIATIONS/DESIGNATIONS**

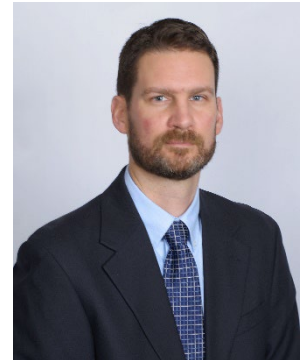
*Reserve Specialist (RS)* - Community Associations Institute

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

**CURRENT CLIENT SERVICES**

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

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



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

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

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

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

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

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

**PRIOR RELEVANT EXPERIENCE**

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

**EDUCATION**

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

**PROFESSIONAL AFFILIATIONS/DESIGNATIONS**

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

*Reserve Specialist (RS)* - Community Associations Institute

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

**NANCY S. DANIEL, P.E., RS**  
**Responsible Advisor**

**CURRENT CLIENT SERVICES**

Nancy S. Daniel, a Mechanical Engineer, is an Advisor for *Reserve Advisors*. Ms. Daniel is responsible for the inspection and analysis of the condition of clients' properties, and for recommending engineering solutions to prolong the lives of the components. She forecasts capital expenditures for the repair and/or replacement of the property components and prepares technical reports on assignments. She is also responsible for conducting Life Cycle Cost Analyses and Capital Replacement Forecast services and the preparation of Reserve Study Reports for apartments, condominiums, townhomes and homeowner associations.



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

**Queen's Harbour Yacht and Country Club Owners Association, Inc.** – An exclusive Master planned community for the common elements shared by 1,000 single family homes. Located in Jacksonville, Florida, the Queen's Harbour Yacht and Country Club Owners Association contains a marina, a lock and dam, sea walls, as well as community center, fitness center and maintenance facility.

**Riviera Dunes Marina** – A premier marina with 219 wet slips with slip sizes up to 100 feet located near Bradenton, Florida. The community contains floating docks, utility and pump out services, marina fuel station, floating pools, a dock master office, and restaurant.

**PGA Village Property Owners' Association** – A 3,000-acre Master planned community located in Port St. Lucie, Florida. The exclusive community consists of 2,500 single-family homes, townhomes and condominiums. The PGA Village contains a clubhouse and pool area, approximately 33 miles of paved streets, irrigation distribution systems, and 46 lakes.

**YC Coconut Grove Hotel and Condominium** - A 24-story high-rise condominium community with 211 units, located in Miami, Florida. This all-inclusive condominium includes a commercial hotel, restaurants, fitness center, pool, parking garage, and building services equipment.

**Jade Signature Condominium** – A 57-story high-rise condominium community with 193 units, located in Sunny Isles Beach, Florida. This exclusive condominium contains a spa and wellness center, restaurants, pools and spas, parking garage, and building services equipment.

**Vero Beach Museum of Art** – A nonprofit art museum for the appreciation and teaching of the arts and humanities, located in Vero Beach, Florida. The museum contains art galleries, sculpture gardens, performance halls, art studios, children's art zone, and building services equipment.

**PRIOR RELEVANT EXPERIENCE**

Before joining *Reserve Advisors*, Ms. Daniel was a licensed Community Association Manager for Condominium Associates in Tampa, Florida. Ms. Daniel also was employed as a Process Engineer for Anheuser Busch and Lockwood Greene Engineering. She was responsible for process engineering design, construction and process start-up for beverage manufacturing facilities across the United States. She has also served as a Board Member and Treasurer for her condominium association.

**EDUCATION**

University of Illinois – B.S. Mechanical Engineering  
North Carolina State University – M.A. Humanities and Social Sciences

**PROFESSIONAL AFFILIATIONS**

*Professional Engineer (P.E.)* – State of Texas  
*Reserve Specialist (RS)* - Community Associations Institute



## RESOURCES

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

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

**American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.**, (ASHRAE) the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., devoted to the arts and sciences of heating, ventilation, air conditioning and refrigeration; recognized as the foremost, authoritative, timely and responsive source of technical and educational information, standards and guidelines, found on the web at [www.ashrae.org](http://www.ashrae.org). Reserve Advisors actively participates in its local chapter and holds individual memberships.

**Community Associations Institute**, (CAI) America's leading advocate for responsible communities noted as the only national organization dedicated to fostering vibrant, responsive, competent community associations. Their mission is to assist community associations in promoting harmony, community, and responsible leadership.

**Marshall & Swift / Boeckh**, (MS/B) the worldwide provider of building cost data, co-sourcing solutions, and estimating technology for the property and casualty insurance industry found on the web at [www.marshallswift.com](http://www.marshallswift.com).

**R.S. Means CostWorks**, North America's leading supplier of construction cost information. As a member of the Construction Market Data Group, Means provides accurate and up-to-date cost information that helps owners, developers, architects, engineers, contractors and others to carefully and precisely project and control the cost of both new building construction and renovation projects found on the web at [www.rsmeans.com](http://www.rsmeans.com).

Reserve Advisors' library of numerous periodicals relating to reserve studies, condition analyses, chapter community associations, and historical costs from thousands of capital repair and replacement projects, and product literature from manufacturers of building products and building systems.

## 7. DEFINITIONS

Definitions are derived from the standards set forth by the Community Associations Institute (CAI) representing America's 305,000 condominium and homeowners associations and cooperatives, and the Association of Professional Reserve Analysts, setting the standards of care for reserve study practitioners.

**Cash Flow Method** - A method of calculating Reserve Contributions where contributions to the reserve fund are designed to offset the variable annual expenditures from the reserve fund. Different Reserve Funding Plans are tested against the anticipated schedule of reserve expenses until the desired funding goal is achieved.

**Component Method** - A method of developing a Reserve Funding Plan with the total contribution is based on the sum of the contributions for individual components.

**Current Cost of Replacement** - That amount required today derived from the quantity of a *Reserve Component* and its unit cost to replace or repair a Reserve Component using the most current technology and construction materials, duplicating the productive utility of the existing property at current *local* market prices for *materials*, *labor* and manufactured equipment, contractors' overhead, profit and fees, but without provisions for building permits, overtime, bonuses for labor or premiums for material and equipment. We include removal and disposal costs where applicable.

**Fully Funded Balance** - The Reserve balance that is in direct proportion to the fraction of life "used up" of the current Repair or Replacement cost similar to Total Accrued Depreciation.

**Funding Goal (Threshold)** - The stated purpose of this Reserve Study is to determine the adequate, not excessive, minimal threshold reserve balances.

**Future Cost of Replacement** - *Reserve Expenditure* derived from the inflated current cost of replacement or current cost of replacement as defined above, with consideration given to the effects of inflation on local market rates for materials, labor and equipment.

**Long-Lived Property Component** - Property component of Palma Del Mar Condominium Association 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) Palma Del Mar Condominium Association 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.

Structural Integrity Reserve Study - A budget planning tool that separates items depicted in Florida Statute 718.112(2)(g), identifies the current status of the reserve fund and a stable and equitable Funding Plan to offset the anticipated future major common area expenditures





## 8. PROFESSIONAL SERVICE CONDITIONS

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

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

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

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

**Report** - RA will complete the services in accordance with the Proposal. The Report represents a valid opinion of RA's findings and recommendations with respect to the reserve study and is deemed complete. RA will consider any additional information made available to RA within 6 months of issuing the Report and issue a revised Report based on such additional information if a timely request for a revised Report is made by you. RA retains the right to withhold



a revised Report if payment for services was not tendered in a timely manner. All information received by RA and all files, work papers or documents developed by RA during the course of the engagement shall remain the property of RA and may be used for whatever purpose it sees fit. RA reserves the right to, and you acknowledge and agree that RA may, use any data provided by you in connection with the services, or gathered as a result of providing such services, including in connection with creating and issuing any Report, in a de-identified and aggregated form for RA's business purposes.

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

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

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

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

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