FULL RESERVE STUDY

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

St. Petersburg, Florida
May 3, 2022

RESERVE™ ADVISORS
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Corporate Office
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Milwaukee, WI 53202

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 *Full Reserve Study* of Palma Del Mar Condominium Association No. 5 of St Petersburg, Inc. in City, State and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, May 3, 2022.

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

An ongoing review by the Board and an Update of this Reserve Study are necessary to ensure an equitable funding plan since a Reserve Study is a snapshot in time. We recommend the Board budget for an Update to this Reserve Study in two- to three-years. We look forward to continuing to help 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 June 21, 2022 by

Reserve Advisors, LLC

Visual Inspection and Report by: Alexander G.J. Gould, RS[1]
Review by: Alan M. Ebert, RS, PRA[2], Director of Quality Assurance

[1] RS (Reserve Specialist) is the reserve provider professional designation of the Community Associations Institute (CAI) representing America's more than 300,000 condominium, cooperative and homeowners associations.
[2] PRA (Professional Reserve Analyst) is the professional designation of the Association of Professional Reserve Analysts. Learn more about APRA at http://www.apra-usa.com.

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1. RESERVE STUDY EXECUTIVE SUMMARY

Client: 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. The property contains a 12-story tower building that comprises 72 units, and the remaining units are located in two- and three- story villas. The buildings comprise flat roofs, concrete breezeways and balconies with a waterproofing coating application, and walls with stucco coatings. The community contains an elevated parking garage, a pool, and a seawall.

Reserve Components Identified: 54 Reserve Components.

Inspection Date: 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. Our recommended Funding Plan recognizes this threshold funding year in 2039 due to the total replacement of the pool structure and deck. In addition, the Reserve Funding Plan recommends 2052 year end accumulated reserves of approximately $881,200. We judge this amount of accumulated reserves in 2052 necessary to fund the likely replacement of the total replacement of the concrete seawall after 2052. Future replacement costs beyond the next 30 years for the replacement of the total replacement of the concrete seawall are likely to more than double the current cost of replacement. These future needs, although beyond the limit of the Cash Flow Analysis of this Reserve Study, are reflected in the amount of accumulated 2052 year end reserves.

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

- Current and future local costs of replacement
- 0.7% anticipated annual rate of return on invested reserves
- 3.5% future Inflation Rate for estimating Future Replacement Costs

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

Unaudited Cash Status of Reserve Fund:

- $177,144 as of April 1, 2022[1]
- 2022 budgeted Reserve Contributions of $120,000
- A potential deficit in reserves might occur by 2026 based upon continuation of the most recent annual reserve contribution of $120,000 and the identified Reserve Expenditures.

[1] The Fiscal Year (FY 2022) for Palma Del Mar Condominium Association begins April 1, 2022 and ends March 31, 2023. For brevity, we refer to the Fiscal Year by its beginning year, i.e. Fiscal Year 2022-23 is FY 2022 or simply 2022.

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:

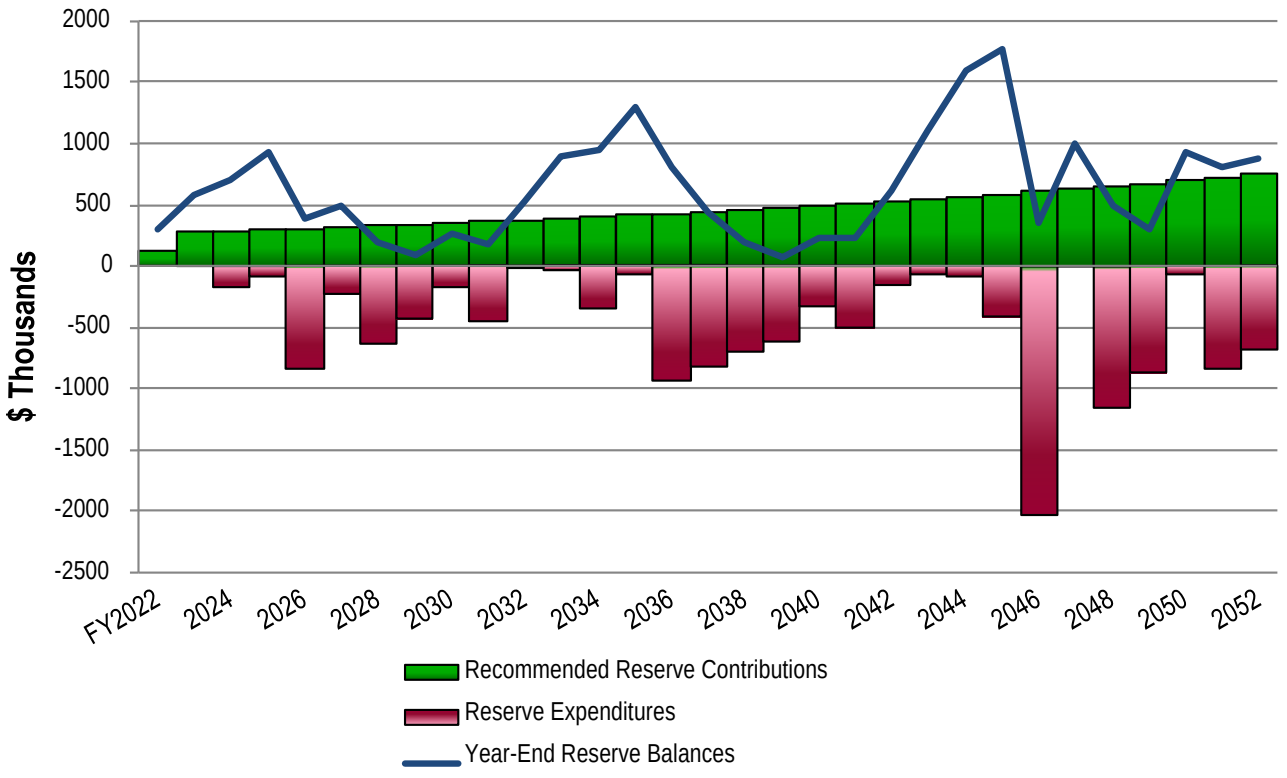
- Paint finish applications and repairs to the stucco coatings at the Villas and Tower Building
- Replacement of the built-up roof system

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

- Increase to $275,000 in 2023
- Inflationary increases through 2052, the limit of this study's Cash Flow Analysis
- Initial adjustment in Reserve Contributions of $155,000 represents an average monthly increase of $92.26 per unit owner and about an eighteen percent (18.2%) adjustment in the 2022 total Operating Budget of $849,402.

Palma Del Mar Condominium Association
Recommended Reserve Funding Table and Graph

Year	Reserve Contributions ($)	Reserve Balances ($)	Year	Reserve Contributions ($)	Reserve Balances ($)	Year	Reserve Contributions ($)	Reserve Balances ($)
2023	275,000	576,858	2033	387,800	889,477	2043	547,000	1,099,344
2024	284,600	698,236	2034	401,400	944,317	2044	566,100	1,592,771
2025	294,600	920,739	2035	415,400	1,290,251	2045	585,900	1,766,593
2026	304,900	393,207	2036	429,900	798,126	2046	606,400	358,150
2027	315,600	489,097	2037	444,900	433,100	2047	627,600	990,454
2028	326,600	189,286	2038	460,500	192,999	2048	649,600	485,989
2029	338,000	96,733	2039	476,600	63,589	2049	672,300	293,910
2030	349,800	268,762	2040	493,300	224,419	2050	695,800	931,835
2031	362,000	176,836	2041	510,600	237,106	2051	720,200	813,372
2032	374,700	530,304	2042	528,500	619,459	2052	745,400	881,200



2. RESERVE STUDY REPORT

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

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, 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
- 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

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

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

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

- General Maintenance to the Common Elements
- Expenditures less than $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)
- 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

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

- 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

Certain items have been 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
- 2022 local cost of replacement
  - Per unit
  - Per phase
  - Replacement of total quantity
- Percentage of future expenditures anticipated during the next 30 years
- Schedule of estimated future costs for each reserve component including inflation

Reserve Funding Plan

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

Years 2022 to 2037

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) FY2022 is Fiscal Year beginning April 1, 2022 and ending March 31, 2023.

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years Useful	Remaining	Unit Costs, $ (2022)	Per Phase (2022)	Total (2022)	Percentage of Future Expenditures	RUL = 0 FY2022	1 2023	2 2024	3 2025	4 2026	5 2027	6 2028	7 2029	8 2030	9 2031	10 2032	11 2033	12 2034	13 2035	14 2036	15 2037
				Exterior Building Elements																							
1.060	11,700	11,700	Square Feet	Balconies, Concrete, Repairs and Waterproof Coating Applications	2028	8 to 12	6	15.00	175,500	175,500	6.9%							215,734									
1.061	6,600	6,600	Square Feet	Breezeways, Concrete, Repairs and Waterproof Coating Applications	2028	8 to 12	6	11.00	72,600	72,600	2.9%							89,244									
1.240	3,750	3,750	Linear Feet	Gutters and Downspouts, Aluminum	2026	15 to 20	4	10.00	37,500	37,500	0.9%					43,032											
1.260	50	50	Each	Light Fixtures	2028	to 20	6	110.00	5,500	5,500	0.1%							6,761									
1.300	20,110	20,110	Square Feet	Roofs, Built-up	2026	15 to 20	4	30.00	603,300	603,300	15.1%					692,301											
1.360	300	300	Squares	Roofs, Concrete Tiles	2036	to 30	14	1,750.00	525,000	525,000	6.2%															849,815	
1.600	5,230	5,230	Square Feet	Steel Structure, Mansard, Inspections and Capital Repairs	2026	to 15	4	7.00	36,610	36,610	1.3%					42,011										59,260	
1.880	67,900	67,900	Square Feet	Walls, Stucco, Paint Finishes and Capital Repairs, Tower	2027	5 to 7	5	2.70	183,330	183,330	9.4%						217,739						277,024				
1.881	56,000	56,000	Square Feet	Walls, Stucco, Paint Finishes and Capital Repairs, Villas	2024	5 to 7	2	2.70	151,200	151,200	10.1%			161,969							206,070						
1.980	1,500	1,500	Square Feet	Windows and Doors, Storefront	2031	45 to 50	9	105.00	157,500	157,500	1.6%										214,656						
				Interior Building Elements																							
2.100	2	2	Each	Elevator Cab Finishes	2028	to 20	6	15,500.00	31,000	31,000	0.8%							38,107									
2.200	1,100	1,100	Square Yards	Floor Coverings, Carpet, Hallways	2030	8 to 12	8	51.00	56,100	56,100	1.3%									73,873							
2.240	150	150	Square Yards	Floor Coverings, Tile, Lobby	2030	to 30	8	100.00	15,000	15,000	0.1%									19,752							
2.700	140	140	Each	Mailboxes	2030	to 35	8	105.00	14,700	14,700	0.1%									19,357							
2.800	20,900	20,900	Square Feet	Paint Finishes, Hallways	2030	8 to 12	8	0.80	16,720	16,720	0.7%									22,017							
2.820	2	2	Each	Paint Finishes, Stairwells (Includes Railings)	2034	15 to 20	12	8,500.00	17,000	17,000	0.2%													25,688			
2.840	1	1	Allowance	Social Room, Renovation, Complete	2029	to 20	7	44,000.00	44,000	44,000	1.2%								55,980								
2.845	1	1	Allowance	Social Room, Renovation, Partial	2039	to 10	17	26,000.00	26,000	26,000	0.3%																
2.900	2	2	Each	Rest Rooms, Renovation	2033	to 25	11	11,500.00	23,000	23,000	0.2%												33,579				
				Building Services Elements																							
3.060	1	1	Each	Air Handling Unit, Rooftop Heating and Cooling Unit, 10-tons, Hallways	2037	12 to 18	15	28,000.00	28,000	28,000	0.3%																46,910
3.070	2	1	Each	Air Handling and Condensing Units, Split Systems, Lobby and Social Room, Phased	2025	12 to 18	3 to 12	10,000.00	10,000	20,000	0.5%				11,087									15,111				
3.300	1	1	Allowance	Electrical System, Main Panels	2051	to 70+	29	93,000.00	93,000	93,000	1.8%																
3.360	2	2	Each	Elevators, Traction, Controls and Call Buttons	2037	to 25	15	229,000.00	458,000	458,000	5.6%																767,310
3.365	2	2	Each	Elevators, Traction, Hoists and Motors	2028	to 40	6	62,000.00	124,000	124,000	1.1%							152,428									
3.440	1	1	Each	Generator, Emergency, 180-kW (Includes Transfer Switch)	2040	to 35	18	80,500.00	80,500	80,500	1.1%																
3.470	2	2	Each	Intercom Panels	2030	15 to 20	8	3,500.00	7,000	7,000	0.2%									9,218							
3.500	4	4	Each	Laundry Equipment, Washers and Dryers	2028	to 10	6	1,500.00	6,000	6,000	0.2%							7,376									
3.560	1	1	Allowance	Life Safety System, Control Panel and Emergency Devices	2026	to 25	4	52,000.00	52,000	52,000	1.5%					59,671											
3.605	140	28	Units	Pipes, Riser Sections, Domestic Water, Waste and Vent, Partial	2046	to 80+	24 to 30+	5,500.00	154,000	770,000	5.6%																
3.700	2	2	Each	Pumps, Domestic Water	2039	to 20	17	12,500.00	25,000	25,000	0.3%																
3.770	1	1	Each	Pump, Fire Suppression, 60-HP (Incl. Controller)	2041	to 50	19	76,500.00	76,500	76,500	1.1%																
3.820	2	1	Allowance	Security System	2036	10 to 15	14	12,500.00	12,500	25,000	0.4%															20,234	
3.880	12	12	Floors	Trash Chute and Doors	2046	to 65	24	3,500.00	42,000	42,000	0.7%																
				Property Site Elements																							
4.040	2,350	2,350	Square Yards	Asphalt Pavement, Mill and Overlay	2025	15 to 20	3	14.00	32,900	32,900	0.8%				36,477												
4.100	410	410	Square Feet	Fishing Pier, Deck Boards, Composite and Partial Structure, Replacement	2030	to 25	8	45.00	18,450	18,450	0.2%									24,295							
4.420	12	12	Zones	Irrigation System	2035	to 40+	13	2,900.00	34,800	34,800	0.4%														54,426		
4.560	14	14	Each	Light Poles and Fixtures	2032	to 25	10	1,200.00	16,800	16,800	0.2%											23,698					
4.735	700	700	Linear Feet	Seawalls, Concrete Inspections and Capital Repairs	2029	to 15	7	55.00	38,500	38,500	1.0%								48,983								

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 Useful	Remaining	Costs, $ Unit (2022)	Per Phase (2022)	Total (2022)	Percentage of Future Expenditures	16 2038	17 2039	18 2040	19 2041	20 2042	21 2043	22 2044	23 2045	24 2046	25 2047	26 2048	27 2049	28 2050	29 2051	30 2052
				Exterior Building Elements																						
1.060	11,700	11,700	Square Feet	Balconies, Concrete, Repairs and Waterproof Coating Applications	2028	8 to 12	6	15.00	175,500	175,500	6.9%	304,315										429,266				
1.061	6,600	6,600	Square Feet	Breezeways, Concrete, Repairs and Waterproof Coating Applications	2028	8 to 12	6	11.00	72,600	72,600	2.9%	125,887										177,577				
1.240	3,750	3,750	Linear Feet	Gutters and Downspouts, Aluminum	2026	15 to 20	4	10.00	37,500	37,500	0.9%									85,625						
1.260	50	50	Each	Light Fixtures	2028	to 20	6	110.00	5,500	5,500	0.1%											13,453				
1.300	20,110	20,110	Square Feet	Roofs, Built-up	2026	15 to 20	4	30.00	603,300	603,300	15.1%									1,377,532						
1.360	300	300	Squares	Roofs, Concrete Tiles	2036	to 30	14	1,750.00	525,000	525,000	6.2%															
1.600	5,230	5,230	Square Feet	Steel Structure, Mansard, Inspections and Capital Repairs	2026	to 15	4	7.00	36,610	36,610	1.3%									83,593						
1.880	67,900	67,900	Square Feet	Walls, Stucco, Paint Finishes and Capital Repairs, Tower	2027	5 to 7	5	2.70	183,330	183,330	9.4%				352,452							448,418				
1.881	56,000	56,000	Square Feet	Walls, Stucco, Paint Finishes and Capital Repairs, Villas	2024	5 to 7	2	2.70	151,200	151,200	10.1%	262,179							333,565							424,387
1.980	1,500	1,500	Square Feet	Windows and Doors, Storefront	2031	45 to 50	9	105.00	157,500	157,500	1.6%															
				Interior Building Elements																						
2.100	2	2	Each	Elevator Cab Finishes	2028	to 20	6	15,500.00	31,000	31,000	0.8%											75,825				
2.200	1,100	1,100	Square Yards	Floor Coverings, Carpet, Hallways	2030	8 to 12	8	51.00	56,100	56,100	1.3%					111,627										
2.240	150	150	Square Yards	Floor Coverings, Tile, Lobby	2030	to 30	8	100.00	15,000	15,000	0.1%															
2.700	140	140	Each	Mailboxes	2030	to 35	8	105.00	14,700	14,700	0.1%															
2.800	20,900	20,900	Square Feet	Paint Finishes, Hallways	2030	8 to 12	8	0.80	16,720	16,720	0.7%			31,057										43,809		
2.820	2	2	Each	Paint Finishes, Stairwells (Includes Railings)	2034	15 to 20	12	8,500.00	17,000	17,000	0.2%															
2.840	1	1	Allowance	Social Room, Renovation, Complete	2029	to 20	7	44,000.00	44,000	44,000	1.2%												111,389			
2.845	1	1	Allowance	Social Room, Renovation, Partial	2039	to 10	17	26,000.00	26,000	26,000	0.3%		46,662													
2.900	2	2	Each	Rest Rooms, Renovation	2033	to 25	11	11,500.00	23,000	23,000	0.2%															
				Building Services Elements																						
3.060	1	1	Each	Air Handling Unit, Rooftop Heating and Cooling Unit, 10-tons, Hallways	2037	12 to 18	15	28,000.00	28,000	28,000	0.3%															
3.070	2	1	Each	Air Handling and Condensing Units, Split Systems, Lobby and Social Room, Phased	2025	12 to 18	3 to 12	10,000.00	10,000	20,000	0.5%						20,594									28,068
3.300	1	1	Allowance	Electrical System, Main Panels	2051	to 70+	29	93,000.00	93,000	93,000	1.8%														252,205	
3.360	2	2	Each	Elevators, Traction, Controls and Call Buttons	2037	to 25	15	229,000.00	458,000	458,000	5.6%															
3.365	2	2	Each	Elevators, Traction, Hoists and Motors	2028	to 40	6	62,000.00	124,000	124,000	1.1%															
3.440	1	1	Each	Generator, Emergency, 180-kW (Includes Transfer Switch)	2040	to 35	18	80,500.00	80,500	80,500	1.1%			149,528												
3.470	2	2	Each	Intercom Panels	2030	15 to 20	8	3,500.00	7,000	7,000	0.2%													18,341		
3.500	4	4	Each	Laundry Equipment, Washers and Dryers	2028	to 10	6	1,500.00	6,000	6,000	0.2%	10,404										14,676				
3.560	1	1	Allowance	Life Safety System, Control Panel and Emergency Devices	2026	to 25	4	52,000.00	52,000	52,000	1.5%														141,018	
3.605	140	28	Units	Pipes, Riser Sections, Domestic Water, Waste and Vent, Partial	2046	to 80+	24 to 30+	5,500.00	154,000	770,000	5.6%									351,633					417,629	
3.700	2	2	Each	Pumps, Domestic Water	2039	to 20	17	12,500.00	25,000	25,000	0.3%		44,867													
3.770	1	1	Each	Pump, Fire Suppression, 60-HP (Incl. Controller)	2041	to 50	19	76,500.00	76,500	76,500	1.1%				147,071											
3.820	2	1	Allowance	Security System	2036	10 to 15	14	12,500.00	12,500	25,000	0.4%														33,898	
3.880	12	12	Floors	Trash Chute and Doors	2046	to 65	24	3,500.00	42,000	42,000	0.7%									95,900						
				Property Site Elements																						
4.040	2,350	2,350	Square Yards	Asphalt Pavement, Mill and Overlay	2025	15 to 20	3	14.00	32,900	32,900	0.8%								72,581							
4.100	410	410	Square Feet	Fishing Pier, Deck Boards, Composite and Partial Structure, Replacement	2030	to 25	8	45.00	18,450	18,450	0.2%															
4.420	12	12	Zones	Irrigation System	2035	to 40+	13	2,900.00	34,800	34,800	0.4%															
4.560	14	14	Each	Light Poles and Fixtures	2032	to 25	10	1,200.00	16,800	16,800	0.2%															
4.735	700	700	Linear Feet	Seawalls, Concrete Inspections and Capital Repairs	2029	to 15	7	55.00	38,500	38,500	1.0%							82,063								

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) FY2022 is Fiscal Year beginning April 1, 2022 and ending March 31, 2023.

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years Useful	Remaining	Costs, $ Unit (2022)	Per Phase (2022)	Total (2022)	Percentage of Future Expenditures	RUL = 0 FY2022	1 2023	2 2024	3 2025	4 2026	5 2027	6 2028	7 2029	8 2030	9 2031	10 2032	11 2033	12 2034	13 2035	14 2036	15 2037
4.800	1	1	Allowance	Signage, Renovation	2039	15 to 20	17	7,000.00	7,000	7,000	0.1%																
				Pool Elements																								
6.200	6,490	6,490	Square Feet	Deck, Pavers	2039	to 30	17	7.00	45,430	45,430	0.6%																
6.400	370	370	Linear Feet	Fence, Aluminum	2039	to 30	17	42.00	15,540	15,540	0.2%																
6.500	1	1	Allowance	Furniture	2031	to 12	9	25,500.00	25,500	25,500	0.6%										34,754						
6.599	4	4	Each	Mechanical Equipment, Heaters, Geothermal	2029	to 10	7	5,100.00	20,400	20,400	0.8%								25,954								
6.600	2	1	Allowance	Mechanical Equipment, Phased	2028	to 15	6 to 13	14,600.00	14,600	29,200	0.8%							17,947						22,834			
6.800	1,420	1,420	Square Feet	Pool and Spa Finishes, Plaster	2025	8 to 12	3	15.00	21,300	21,300	0.6%				23,616												
6.801	160	160	Linear Feet	Pool and Spa Finishes, Tile	2025	15 to 25	3	37.00	5,920	5,920	0.2%				6,564												
6.850	2	2	Each	Rest Rooms, Renovations	2034	to 25	12	5,500.00	11,000	11,000	0.1%													16,622			
6.870	430	430	Square Feet	Shade Structure, Pergola	2029	to 20	7	20.00	8,600	8,600	0.2%								10,942								
6.900	1,420	1,420	Square Feet	Structure, Total Replacement	2039	to 60	17	140.00	198,800	198,800	2.6%																
6.950	4	4	Each	Tiki Huts	2030	10 to 15	8	2,000.00	8,000	8,000	0.2%									10,534							
				Garage Elements																								
7.300	35,030	35,030	Square Feet	Concrete, Elevated Floors, Inspections and Capital Repairs	2028	10 to 15	6	2.00	70,060	70,060	3.0%							86,122									
7.360	35,030	1,750	Square Feet	Concrete, On-grade (Including Drain Repairs), Partial	2028	to 90	6 to 30+	7.00	12,250	245,210	0.9%							15,058						18,511			
7.600	50	25	Each	Light Fixtures, Phased	2027	to 30	5 to 20	170.00	4,250	8,500	0.1%						5,048										
7.800	35,030	35,030	Square Feet	Traffic Coating, Elevated Floors, Parking Areas	2029	to 20	7	6.50	227,695	227,695	6.3%								289,692								
	1	Allowance		Reserve Study Update with Site Visit	2024	2	2	5,700.00	5,700	5,700	0.0%			5,700													
				Anticipated Expenditures, By Year ($13,740,832 over 30 years)								0	0	167,669	77,744	837,015	222,787	628,777	431,551	179,046	455,480	23,698	33,579	352,956	77,260	929,309	814,220

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 Useful	Remaining	Costs, $ Unit (2022)	Per Phase (2022)	Total (2022)	Percentage of Future Expenditures	16 2038	17 2039	18 2040	19 2041	20 2042	21 2043	22 2044	23 2045	24 2046	25 2047	26 2048	27 2049	28 2050	29 2051	30 2052
4.800	1	1	Allowance	Signage, Renovation	2039	15 to 20	17	7,000.00	7,000	7,000	0.1%		12,563													
				Pool Elements																						
6.200	6,490	6,490	Square Feet	Deck, Pavers	2039	to 30	17	7.00	45,430	45,430	0.6%		81,532													
6.400	370	370	Linear Feet	Fence, Aluminum	2039	to 30	17	42.00	15,540	15,540	0.2%		27,889													
6.500	1	1	Allowance	Furniture	2031	to 12	9	25,500.00	25,500	25,500	0.6%						52,516									
6.599	4	4	Each	Mechanical Equipment, Heaters, Geothermal	2029	to 10	7	5,100.00	20,400	20,400	0.8%		36,611										51,644			
6.600	2	1	Allowance	Mechanical Equipment, Phased	2028	to 15	6 to 13	14,600.00	14,600	29,200	0.8%					29,051							36,961			
6.800	1,420	1,420	Square Feet	Pool and Spa Finishes, Plaster	2025	8 to 12	3	15.00	21,300	21,300	0.6%												53,922			
6.801	160	160	Linear Feet	Pool and Spa Finishes, Tile	2025	15 to 25	3	37.00	5,920	5,920	0.2%												14,987			
6.850	2	2	Each	Rest Rooms, Renovations	2034	to 25	12	5,500.00	11,000	11,000	0.1%															
6.870	430	430	Square Feet	Shade Structure, Pergola	2029	to 20	7	20.00	8,600	8,600	0.2%												21,771			
6.900	1,420	1,420	Square Feet	Structure, Total Replacement	2039	to 60	17	140.00	198,800	198,800	2.6%		356,781													
6.950	4	4	Each	Tiki Huts	2030	10 to 15	8	2,000.00	8,000	8,000	0.2%								17,649							
				Garage Elements																						
7.300	35,030	35,030	Square Feet	Concrete, Elevated Floors, Inspections and Capital Repairs	2028	10 to 15	6	2.00	70,060	70,060	3.0%			130,136												196,644
7.360	35,030	1,750	Square Feet	Concrete, On-grade (Including Drain Repairs), Partial	2028	to 90	6 to 30+	7.00	12,250	245,210	0.9%			22,754						27,971						34,383
7.600	50	25	Each	Light Fixtures, Phased	2027	to 30	5 to 20	170.00	4,250	8,500	0.1%					8,457										
7.800	35,030	35,030	Square Feet	Traffic Coating, Elevated Floors, Parking Areas	2029	to 20	7	6.50	227,695	227,695	6.3%												576,425			
	1	Allowance		Reserve Study Update with Site Visit	2024	2	2	5,700.00	5,700	5,700	0.0%															
				Anticipated Expenditures, By Year ($13,740,832 over 30 years)								702,785	606,905	333,475	499,523	149,135	73,110	82,063	423,795	2,022,254	0	1,159,215	867,099	62,150	844,750	683,482

RESERVE FUNDING PLAN

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

		FY2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Reserves at Beginning of Year	*(Note 1)*	177,144	298,804	576,858	698,236	920,739	393,207	489,097	189,286	96,733	268,762	176,836	530,304	889,477	944,317	1,290,251	798,126
Total Recommended Reserve Contributions	*(Note 2)*	120,000	275,000	284,600	294,600	304,900	315,600	326,600	338,000	349,800	362,000	374,700	387,800	401,400	415,400	429,900	444,900
Estimated Interest Earned, During Year	*(Note 3)*	1,660	3,054	4,447	5,647	4,583	3,077	2,366	998	1,275	1,554	2,466	4,952	6,396	7,794	7,284	4,294
Anticipated Expenditures, By Year		0	0	(167,669)	(77,744)	(837,015)	(222,787)	(628,777)	(431,551)	(179,046)	(455,480)	(23,698)	(33,579)	(352,956)	(77,260)	(929,309)	(814,220)
Anticipated Reserves at Year End		$298,804	$576,858	$698,236	$920,739	$393,207	$489,097	$189,286	$96,733	$268,762	$176,836	$530,304	$889,477	$944,317	$1,290,251	$798,126	$433,100
Predicted Reserves based on 2022 funding level of:	$120,000	298,804	421,316	376,429	421,468	(295,106)	(400,318)										

(continued)

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

	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052
Reserves at Beginning of Year	433,100	192,999	63,589	224,419	237,106	619,459	1,099,344	1,592,771	1,766,593	358,150	990,454	485,989	293,910	931,835	813,372
Total Recommended Reserve Contributions	460,500	476,600	493,300	510,600	528,500	547,000	566,100	585,900	606,400	627,600	649,600	672,300	695,800	720,200	745,400
Estimated Interest Earned, During Year	2,184	895	1,005	1,610	2,988	5,995	9,390	11,717	7,411	4,704	5,150	2,720	4,275	6,087	5,910
Anticipated Expenditures, By Year	(702,785)	(606,905)	(333,475)	(499,523)	(149,135)	(73,110)	(82,063)	(423,795)	(2,022,254)	0	(1,159,215)	(867,099)	(62,150)	(844,750)	(683,482)
Anticipated Reserves at Year End	$192,999	$63,589 *(NOTE 5)*	$224,419	$237,106	$619,459	$1,099,344	$1,592,771	$1,766,593	$358,150	$990,454	$485,989	$293,910	$931,835	$813,372	$881,200 *(NOTE 4)*

Explanatory Notes:

1) Year 2022 starting reserves are as of April 1, 2022; FY2022 starts April 1, 2022 and ends March 31, 2023.
2) Reserve Contributions for 2022 are budgeted; 2023 is the first year of recommended contributions.
3) 0.7% is the estimated annual rate of return on invested reserves.
4) Accumulated year 2052 ending reserves consider the need to fund for replacement of the concrete seawall shortly after 2052, and the age, size, overall condition and complexity of the property.
5) Threshold Funding Year (reserve balance at critical point).

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

FIVE-YEAR OUTLOOK

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

Line Item	Reserve Component Inventory	RUL = 0 FY2022	1 2023	2 2024	3 2025	4 2026	5 2027
	Exterior Building Elements						
1.240	Gutters and Downspouts, Aluminum					43,032	
1.300	Roofs, Built-up					692,301	
1.600	Steel Structure, Mansard, Inspections and Capital Repairs					42,011	
1.880	Walls, Stucco, Paint Finishes and Capital Repairs, Tower						217,739
1.881	Walls, Stucco, Paint Finishes and Capital Repairs, Villas			161,969			
	Building Services Elements						
3.070	Air Handling and Condensing Units, Split Systems, Lobby and Social Room, Phased				11,087		
3.560	Life Safety System, Control Panel and Emergency Devices					59,671	
	Property Site Elements						
4.040	Asphalt Pavement, Mill and Overlay				36,477		
	Pool Elements						
6.800	Pool and Spa Finishes, Plaster				23,616		
6.801	Pool and Spa Finishes, Tile				6,564		
	Garage Elements						
7.600	Light Fixtures, Phased						5,048
	Reserve Study Update with Site Visit			5,700			
	Anticipated Expenditures, By Year ($13,740,832 over 30 years)	0	0	167,669	77,744	837,015	222,787

4. RESERVE COMPONENT DETAIL

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

Exterior Building Elements

Typical 3-story building

Tower building

Typical 2-story building

Balconies and Breezeways, Concrete

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 waterproof coating applications at the breezeways were replaced in 2015. 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

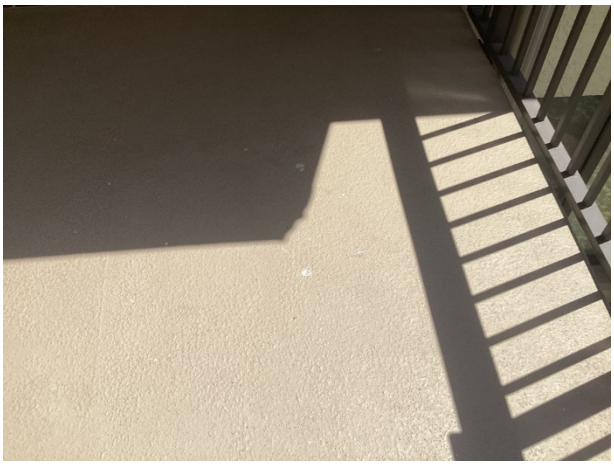
Balconies - overview

Balconies - overview

Balconies - overview

Balconies – railing connection detail

Balconies - overview



Breezeways – deterioration of the waterproof coating application evident

Staircases - overview

Breezeways - overview

Breezeways – deterioration of the waterproof coating application evident

Breezeways – deterioration of the waterproof coating application evident

Breezeways – deterioration of the waterproof coating application evident

Breezeways – deterioration of the waterproof coating application 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)
-

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

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

Condition: Fair overall with minor corrosion evident

Gutter and downspout assembly detail

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.

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.

Light Fixtures

Line Item: 1.260

Quantity: Approximately 50 exterior light fixtures of varied styles

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

Condition: Good to fair overall

Light fixtures – globe fixture

Light fixtures – globe fixture

Useful Life: Up to 20 years

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

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

Priority/Criticality: Per Board discretion

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

Roofs, 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 standing water and granular loss evident. Management and the Board report a minor history of leaks.

Built-up roof – granular loss evident

Built-up roof – granular loss evident

Built-up roof – penetration detail

Built-up roof – penetration detail

Built-up roof – granular loss evident

Built-up roof – coping detail

Built-up roof – granular loss evident

Built-up roof – villa configuration

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-plies 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. Our estimate of cost for the replacement of the roof is based on a historical cost experienced by a neighboring community with a similar configuration

Roofs, Concrete Tiles

Line Item: 1.360

Quantity: Approximately 300 *squares*[1]

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 – villas configuration

Concrete tile roofs – mansard detail at the tower building

Concrete tile roofs – mansard detail at the tower building

Concrete tile roofs – villas configuration

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

Concrete tile roofs – villas configuration

Concrete tile roofs – villas configuration

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

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

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

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

Paint finishes – villas - overview

Paint finishes – tower - overview

Paint finishes – villas - overview

Paint finishes – tower - overview

Paint finishes – tower - overview

Paint finishes – tower - overview

Paint finishes – tower - overview

Paint finishes – tower - overview

Paint finishes – tower - overview

Paint finishes – tower - overview

Paint finishes – villas - overview

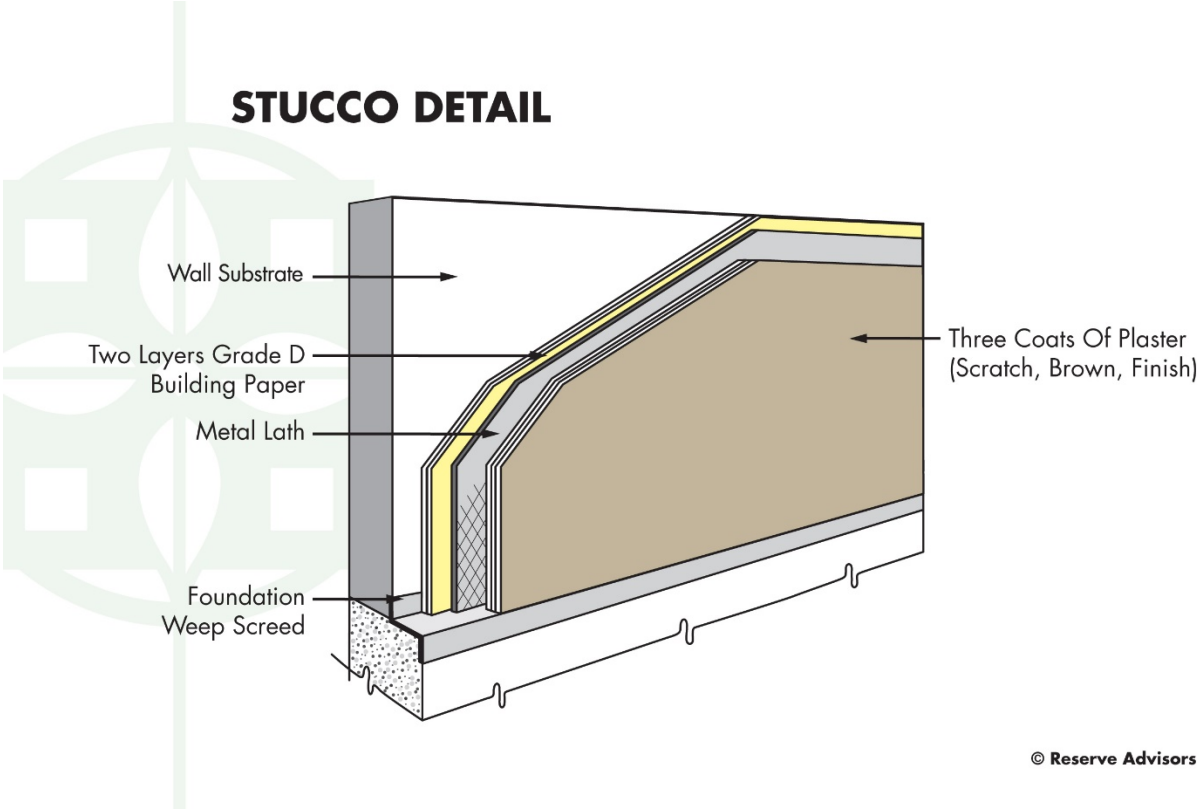
Paint finishes – villas - overview

Paint finishes – villas - overview

Paint finishes – villas - 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:



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, Storefront

Line Item: 1.980

Quantity: 1,500 square feet

History: Original

Condition: Good overall with no significant deterioration evident.

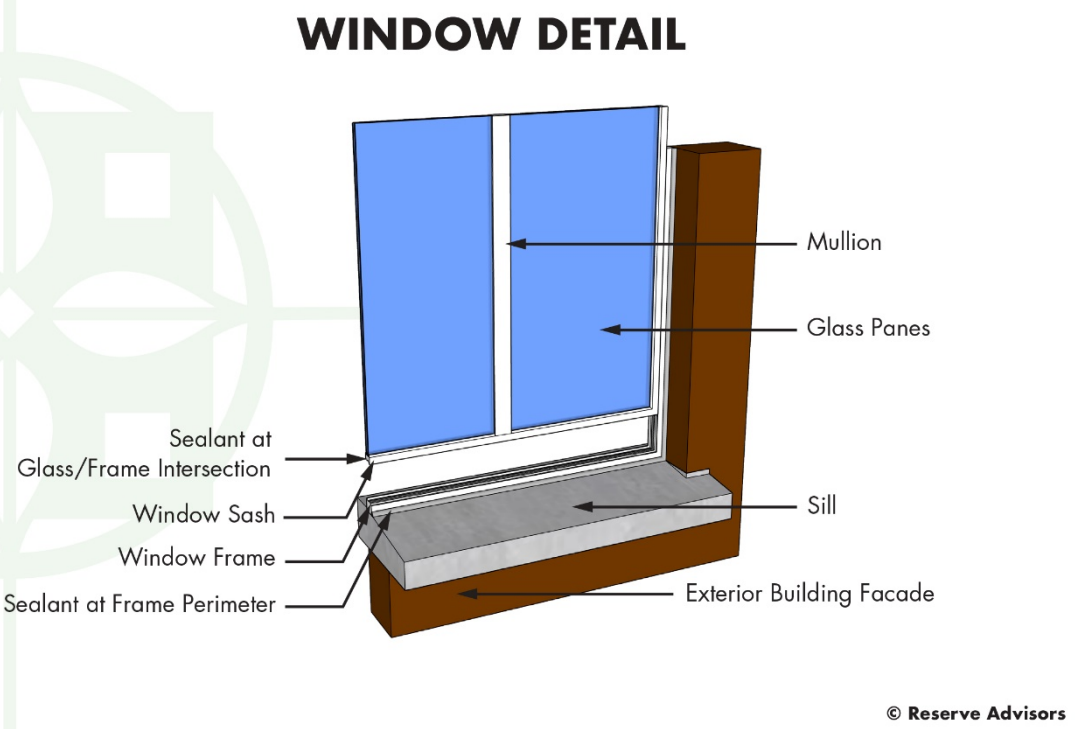
Storefront windows - overview

Storefront windows and doors – overview

Useful Life: 45- to 50-years

Component Detail Notes: Construction includes the following:

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:



Properly designed window 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 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

Interior Building Elements

Elevator Cab Finishes

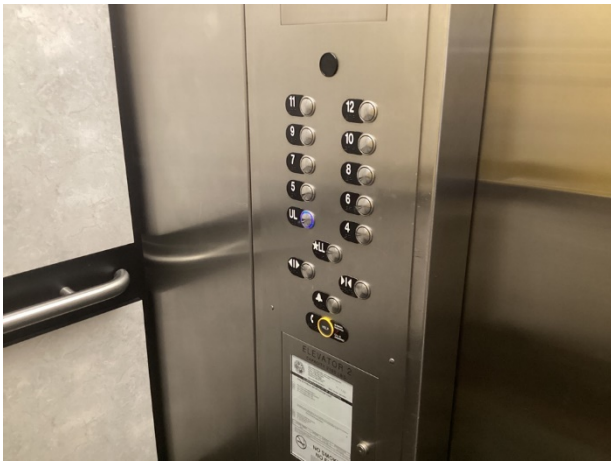
Line Item: 2.100

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 with no significant deterioration evident.



Elevator cab finishes

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

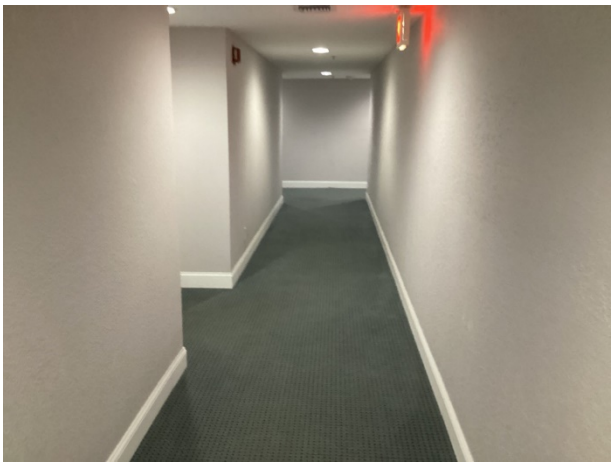
Line Item: 2.200

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 no significant deterioration evident.

Hallway floor coverings - overview



Hallway floor coverings - 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

Floor Coverings, Tile, Hallways

Line Item: 2.240

Quantity: 150 square yards at the lobby

History: Reported to be original

Condition: Good overall with no significant deterioration evident.

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

Mailboxes - overview

Mailboxes – overview

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 age

Condition: Good overall with no significant deterioration evident.

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

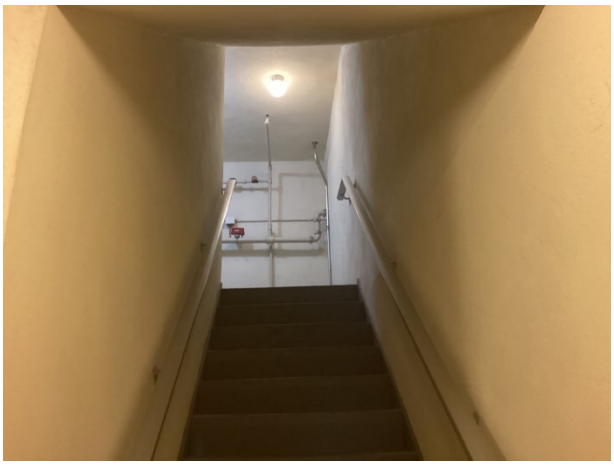
Paint Finishes, Stairwells

Line Item: 2.820

Quantity: Two staircases

History: The paint finishes are at an unknown age

Conditions: Good to fair overall



Paint finishes – stairwells - overview

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 overall with no significant deterioration evident.

Social room renovation - overview

Social room renovation - overview

Social room renovation - 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 with no significant deterioration evident.

Rest rooms - typical

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.

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 with operational deficiencies

Roof top unit

Useful Life: 15- to 20-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: One was replaced in 2005 and the other appears to have been replaced in 2019

Condition: Reported satisfactory with operational deficiencies

Split systems – overview

Split systems - overview

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. Due to the varied ages of the split systems we depict replacement in phased manner with replacement of up to fifty percent (50%) of the total quantity per event.

Electrical System

Line Item: 3.300

History: Primarily original to construction

Condition: Reported satisfactory without operational deficiencies

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.

Elevators, Traction

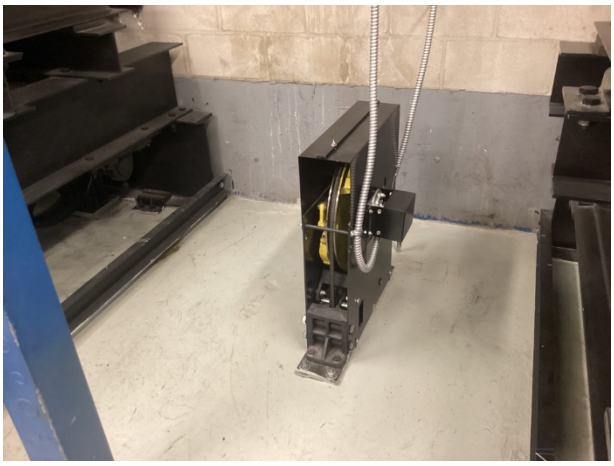
Line Items: 3.360 and 3.365

Quantity: Two *ThyssenKrupp* traction elevators

History:

- Controls and call buttons: The Association conducted a modernization of the elevator controls and equipment in 2012
- Hoists and motors: Unknown age

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.



Elevator equipment - hoists

Elevator equipment – control panel

Elevator equipment - hoists

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. 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

Generator, Emergency

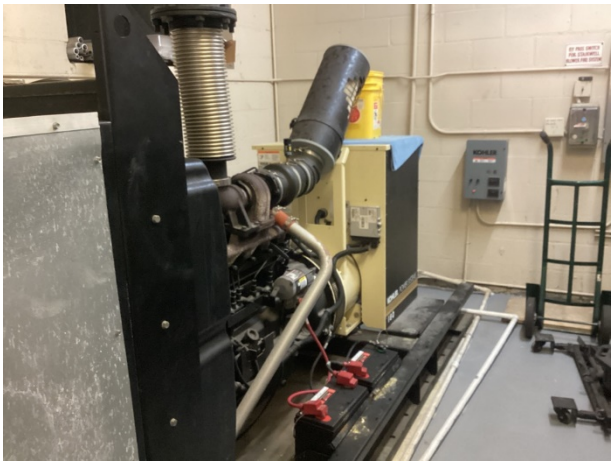
Line Item: 3.440

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

History: The age was unavailable at the time of our inspection. We are that is was replaced at some point.

Condition: Reported satisfactory without operational deficiencies

Diesel generator



Diesel generator

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.

Intercom Panel

Line Item: 3.470

Quantity: Two each

History: The age was unavailable at the time of our inspection. Software and panel has been updated.

Condition: Reported satisfactory

Intercom panel - typical

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: Two washer and dryer sets

History: Replaced in 2018

Condition: Reported satisfactory with operational deficiencies

Laundry equipment

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

Life Safety System

Line Item: 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: Reported to be likely original

Conditions: Reported satisfactory

Useful Life: Up to 25 years for the devices and 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.

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 material 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

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

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.

Pump, Fire Suppression

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

Fire pump - overview

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:
  - 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 estimate of cost includes replacement of the pump, motor, and motor controller.

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

History: Original

Condition: Reported satisfactory

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

Property Site Elements

Asphalt Pavement, Repaving

Line Item: 4.040

Quantity: Approximately 2,350 square yards

History: The asphalt pavement is at an unknown age

Condition: Fair overall with deterioration of the seal coat application as well as deterioration of the asphalt pavement evident

Asphalt pavement – deterioration of the seal coat application as well as cracks evident

Asphalt pavement – deterioration of the seal coat application evident

Asphalt pavement – previous patch repairs evident

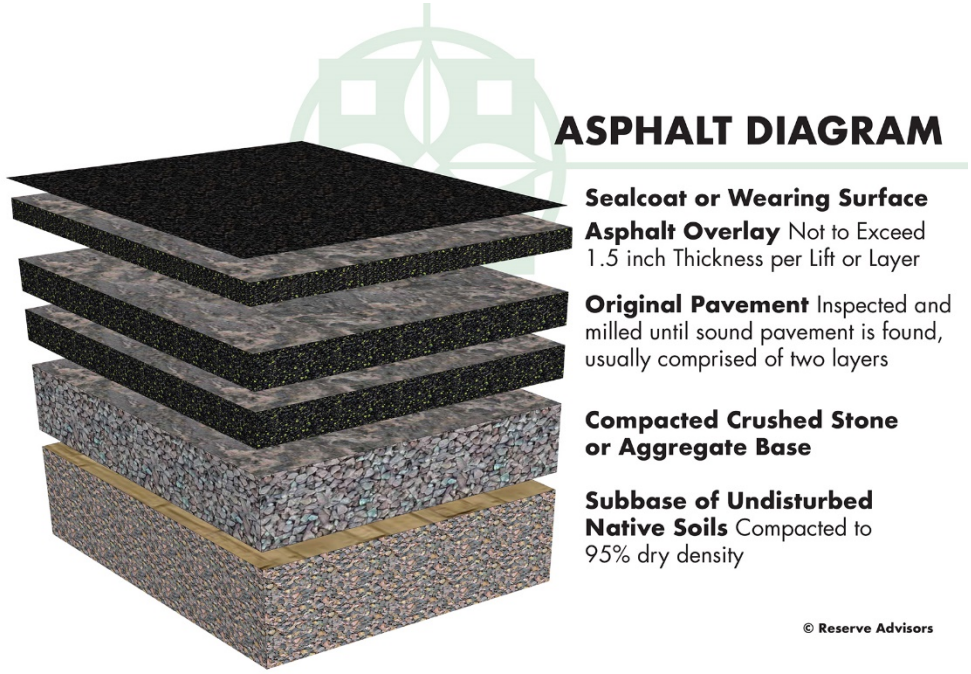
Asphalt pavement – cracks evident

Asphalt pavement – deterioration of the seal coat application as well as cracks evident

Asphalt pavement – deterioration of the seal coat application as well as cracks evident

Useful Life: 15- to 20-years with the benefit of timely crack repairs and patching

Component Detail Notes: The initial installation of asphalt uses at least two lifts, or two separate applications of asphalt, over the base course. The first lift is the binder course. The second lift is the wearing course. The wearing course comprises a finer aggregate for a smoother more watertight finish. The following diagram depicts the typical components although it may not reflect the actual configuration at 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. Due to the quantity of the asphalt pavement, we recommend the Association conduct capital repairs and seal coat applications through the Operating Budget.

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 – composite deck boards

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: Approximately 180 heads with 12 zones

History: Primarily original with isolated replacement of the system by the pool

Condition: Reported to be in satisfactory operational condition and Management and the Board does not report any deficiencies.

Useful Life: Up to 40 years

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

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

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 pole and fixture

Light pole and fixture

Useful Life: Up to 25 years

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

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

Priority/Criticality: Per Board discretion

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

Seawall, Concrete

Line Item: 4.735

Quantity: Approximately 700 linear feet

History: Presumably original

Condition: Fair overall with cracks in the concrete cap evident

Cracks in the concrete cap evident

Concrete seawall - overview

Concrete seawall - overview

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.

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

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. We recommend the Association fund interim inspections, partial replacements and repairs through the operating budget.

Fence, Aluminum

Line Item: 6.400

Quantity: Approximately 370 linear feet

History: Unknown age

Condition: Good overall

Pool fences - overview

Pool fences - 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 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:

Condition: Good overall with no significant deterioration evident

Pool 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 – overviews

Pool mechanical equipment – overviews

Pool mechanical equipment – overviews

Pool mechanical equipment – geothermal heaters

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: The pool finishes are at an unknown age

Condition: Good to fair overall with minor cracks evident. We are informed that there are some leaks at the spa and have allocated monies to replace the finishes at the pool in the near term.

Pool finishes – overview

Pool finishes – overview

Pool finishes – cracks evident

Spa finishes - overview

Spa finishes - overview

Spa finishes - overview

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 each

History: Inspections and capital repairs occurred in 2019

Condition: Good to fair overall

Shade structure - overview

Shade structure – support detail

Shade structure – support detail

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

Tiki huts

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

Garage Elements

Concrete, Elevated Floor

Line Item: 7.300

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

Condition: Good overall isolated cracks and patch repairs evident

Elevated concrete - overview

Elevated concrete – drainage detail evident

Elevated concrete - overview

Elevated concrete - overview

Elevated concrete – concrete patches evident

Elevated concrete – cracks evident

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

History and Condition: Good to fair overall cracks evident

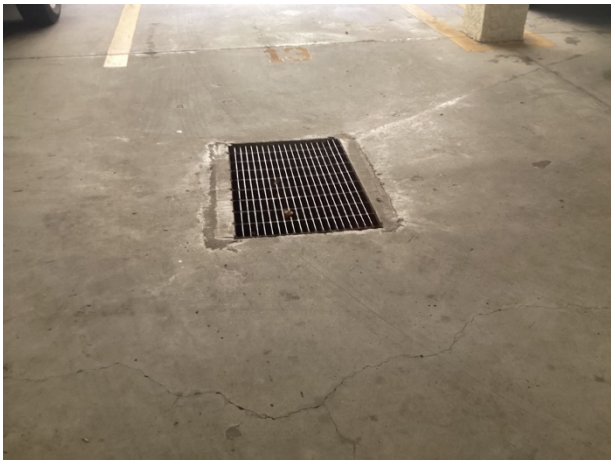
On grade concrete – cracks evident

On grade concrete – cracks evident

On grade concrete – cracks evident

On grade concrete – cracks evident

On grade concrete – cracks evident



On grade concrete – drainage detail

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

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

Garage light fixtures

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 of the light fixtures in a phased manner with replacement of up to fifty percent (50%) of the total quantity per event.

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 deterioration of the traffic coating evident

Traffic coating – deterioration evident

Traffic coating – deterioration evident

Traffic coating – deterioration evident

Traffic coating – deterioration evident

Traffic coating – deterioration evident

Traffic coating – 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.

Moisture-driven chemical reactions are detrimental to the integrity of an elevated structural concrete garage floor. Once it reaches the steel, moisture causes expansive corrosion, ultimately causing the concrete to expand and “pop” or spall. Left unrepaired, additional 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 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

Reserve Study Update

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

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

Periodic updates incorporate these variable changes since the last Reserve Study or Update. We recommend the Board budget for an Update to this Reserve Study in two- to three-years. Budgeting for an Update demonstrates the Board's objective to continue fulfilling its fiduciary responsibility to maintain the commonly owned property and to fund reserves appropriately.

5. METHODOLOGY

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

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 and exceeds the National standards[1] 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[2] costs of material, equipment and labor
- Current and future costs of replacement for the Reserve Components
- Costs of demolition as part of the cost of replacement
- Local economic conditions and a historical perspective to arrive at our estimate of long-term future inflation for construction costs in City, State at an annual inflation rate[3]. Isolated or regional markets of greater

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

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 Engineering

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

CURRENT CLIENT SERVICES

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

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

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

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

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

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

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

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

PRIOR RELEVANT EXPERIENCE

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

EDUCATION

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

PROFESSIONAL AFFILIATIONS/DESIGNATIONS

Professional Engineering License – Wisconsin, North Carolina, Illinois, Colorado
Reserve Specialist (RS) **-** Community Associations Institute
Professional Reserve Analyst (PRA) **-** Association of Professional Reserve Analysts

RESOURCES

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

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

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

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

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

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

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

7. DEFINITIONS

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

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

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

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

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

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

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

Long-Lived Property Component - Property component of 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.

8. PROFESSIONAL SERVICE CONDITIONS

Our Services - Reserve Advisors, LLC (RA) performs its services as an independent contractor in accordance with our professional practice standards and its compensation is not contingent upon our conclusions. The purpose of our reserve study is to provide a budget planning tool that identifies the current status of the reserve fund, and an opinion recommending an annual funding plan to create reserves for anticipated future replacement expenditures of the property.

Our inspection and analysis of the subject property is limited to visual observations, is noninvasive and is not meant to nor does it include investigation into statutory, regulatory or code compliance. RA inspects sloped roofs from the ground and inspects flat roofs where safe access (stairs or ladder permanently attached to the structure) is available. The report is based upon a "snapshot in time" at the moment of inspection. RA may note visible physical defects in our report. The inspection is made by employees generally familiar with real estate and building construction but in the absence of invasive testing RA cannot opine on, nor is RA responsible for, the structural integrity of the property including its conformity to specific governmental code requirements for fire, building, earthquake, and occupancy, or any physical defects that were not readily apparent during the inspection.

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

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

Report - RA completes the services in accordance with the Proposal. The Report represents a valid opinion of RA's findings and recommendations and is deemed complete. RA, however, considers any additional information made available to us within 6 months of issuing the Report if a timely request for a revised Report is made. RA retains the right to withhold a revised Report if payment for services was not tendered in a timely manner. All information received by RA and all files, work papers or documents developed by RA during the course of the engagement shall remain the property of RA and may be used for whatever purpose it sees fit.

Your Obligations - You agree to provide us access to the subject property for an on-site visual inspection You agree to provide RA all available, historical and budgetary information, the governing documents, and other information that we request and deem necessary to complete the Report. You agree to pay actual attorneys' fees and any other costs incurred to collect on any unpaid balance for RA's services.

Use of Our Report and Your Name - Use of this Report is limited to only the purpose stated herein. You hereby acknowledge that any use or reliance by you on the Report for any unauthorized purpose is at your own risk and you shall hold RA harmless from any consequences of such use. Use by any unauthorized third party is unlawful. The Report in whole or in part ***is not and cannot be used*** *as a design specification for design engineering purposes or as an appraisal.* You may show our Report in its entirety to the following third parties: members of your organization, your accountant, attorney, financial institution and property manager who need to review the information contained herein. Without the written consent of RA, you shall not disclose the Report to any other third party. The Report contains intellectual property developed by RA and ***shall not be reproduced or distributed to any party that conducts reserve studies without the written consent of RA.***

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

Payment Terms, Due Dates and Interest Charges - Retainer payment is due upon authorization and prior to inspection. The balance is due net 30 days from the report shipment date. Any balance remaining 30 days after delivery of the Report shall accrue an interest charge of 1.5% per month. Any litigation necessary to collect an unpaid balance shall be venued in Milwaukee County Circuit Court for the State of Wisconsin.