# FULL RESERVE STUDY

## The Sandarac Association, Inc.


**Fort Myers Beach, Florida**
**February 11, 2019**

RESERVE™ ADVISORS
Long-term thinking. Everyday commitment.

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Corporate Office
Reserve Advisors, Inc.
735 N. Water Street, Suite 175
Milwaukee, WI 53202

The Sandarac Association, Inc.
Fort Myers Beach, Florida

Dear Board of Directors of The Sandarac Association, Inc.:

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Full Reserve Study* of The Sandarac Association, Inc. in Fort Myers Beach, Florida and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, February 11, 2019.

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 The Sandarac Association, Inc. plan for a successful future.

As part of our long-term thinking and everyday commitment to our clients, we are available to answer any questions you may have regarding this study.

Respectfully submitted on March 11, 2019 by

*Reserve Advisors, Inc.*

Visual Inspection and Report by: Graham W. Culkar, 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:** The Sandarac Association, Inc. (Sandarac I)
**Location:** Fort Myers Beach, Florida
**Reference:** 182573

**Property Basics:** The Sandarac Association, Inc. is a condominium style development of 88 units in two buildings. The buildings were built in 1976.

**Reserve Components Identified:** 35 Reserve Components.

**Inspection Date:** February 11, 2019.

**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 2030 due to replacement of the carport roofs and masonry pavers.

**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
- 0.0% anticipated annual rate of return on invested reserves
- 0.0% future Inflation Rate for estimating Future Replacement Costs

We exclude interest and inflation from our analysis due to recent interpretations of the Florida Administrative code by the Division of Condominiums, Timeshares and Mobile Homes. The Division has opined that any increase in reserve contributions over the length of a cash flow analysis would be considered "balloon payments" and prohibited by the Fla. Admin. Code, Rule 61B-22.0005(3)(b). Nothing in the Code purports to define “balloon payments” in a manner inconsistent with the general understanding of the word, which contemplates a series of smaller payments followed by a significantly larger lump-sum payment. However, the Division maintains their opinion and has cited Associations for non-compliance due to this issue. To obtain more information on the Division's position, please contact Chief of the Bureau of Compliance, Patrick Flynn (850.717.1471, patrick.flynn@myfloridalicense.com). In order to ensure compliance, the funding plan, contributions and expenditure projections shown in this study exclude any increases due to inflation or adjustments for interest.

Please contact us if you would like us to prepare an alternate funding plan inclusive of these variables for your consideration. However, please note that a cash flow funding plan with any future increases in contributions would not comply with Fla. Admin. Code based on the Division’s recent interpretations.

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

**Cash Status of Reserve Fund:**

- $235,832 as of March 31, 2019
- 2019 budgeted Reserve Contributions of $119,680[1]
- A potential deficit in reserves might occur by 2023 based upon continuation of the most recent annual reserve contribution of $119,680 and the identified Reserve Expenditures.

**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:

- Breezeways, Concrete Repairs and Waterproof Coating Applications
- Roofs, Modified Bitumen
- Walls, Stucco, Paint Finishes and Capital Repairs

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

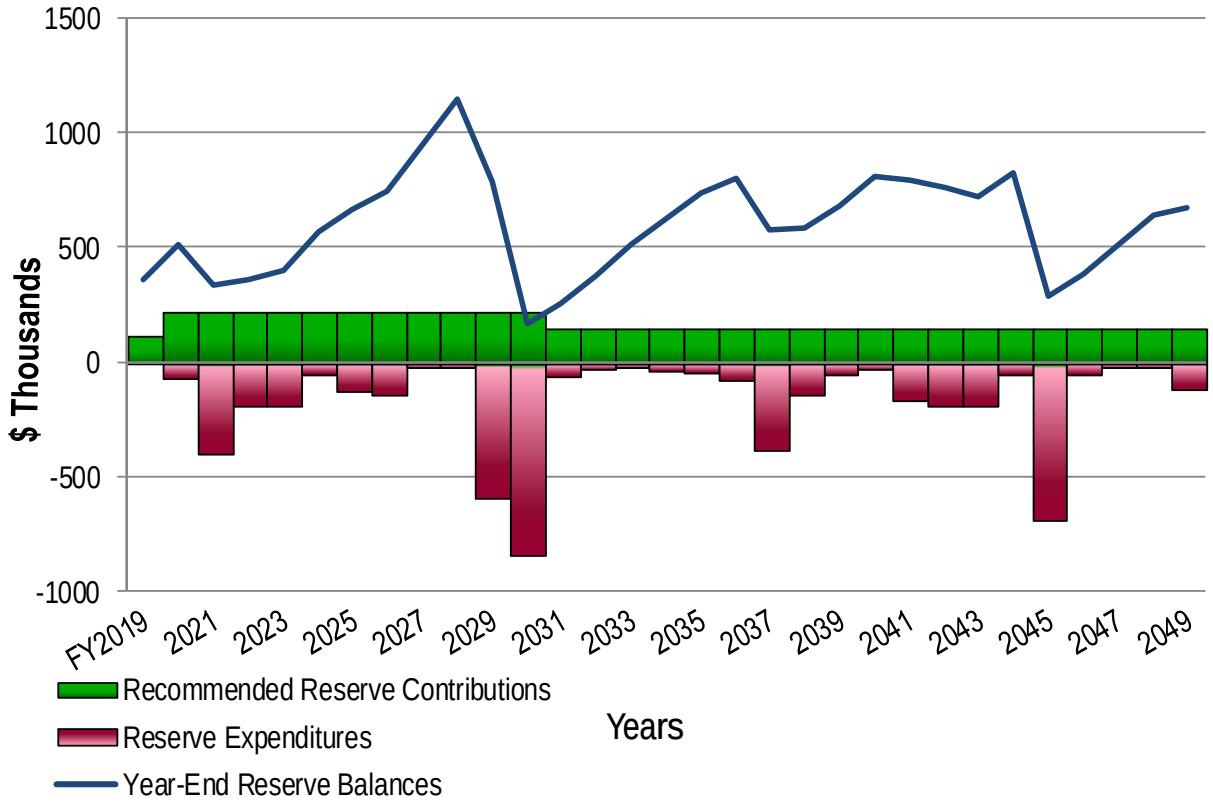
- Stable contributions of $221,000 from 2020 through 2030
- Decrease to $150,000 by 2031 due to fully funding for replacement of the carport roofs and masonry pavers
- Stable contributions of $150,000 through 2049, the limit of this study's Cash Flow Analysis
- Initial adjustment in Reserve Contributions of $101,320 represents an average monthly increase of $95.95 per homeowner and about a nineteen percent (19.3%) adjustment in the 2019 total Operating Budget of $526,200.

[1] The Fiscal Year (FY 2019) for Sandarac I begins April 1, 2019 and ends March 31, 2020. For brevity, we refer to the Fiscal Year by its beginning year, i.e. Fiscal Year 2019-20 is FY 2019 or simply 2019.

**Sandarac I**

Recommended Reserve Funding Table and Graph

| Year | Reserve Contributions ($) | Reserve Balances ($) | Year | Reserve Contributions ($) | Reserve Balances ($) | Year | Reserve Contributions ($) | Reserve Balances ($) |
|---|---|---|---|---|---|---|---|---|
| 2020 | 221,000 | 509,067 | 2030 | 221,000 | 166,493 | 2040 | 150,000 | 805,436 |
| 2021 | 221,000 | 330,828 | 2031 | 150,000 | 254,999 | 2041 | 150,000 | 792,120 |
| 2022 | 221,000 | 360,078 | 2032 | 150,000 | 378,874 | 2042 | 150,000 | 757,870 |
| 2023 | 221,000 | 396,828 | 2033 | 150,000 | 508,874 | 2043 | 150,000 | 723,620 |
| 2024 | 221,000 | 564,028 | 2034 | 150,000 | 624,759 | 2044 | 150,000 | 822,495 |
| 2025 | 221,000 | 664,748 | 2035 | 150,000 | 733,039 | 2045 | 150,000 | 284,100 |
| 2026 | 221,000 | 748,248 | 2036 | 150,000 | 803,831 | 2046 | 150,000 | 380,100 |
| 2027 | 221,000 | 949,248 | 2037 | 150,000 | 573,436 | 2047 | 150,000 | 510,100 |
| 2028 | 221,000 | 1,150,248 | 2038 | 150,000 | 581,936 | 2048 | 150,000 | 640,100 |
| 2029 | 221,000 | 783,793 | 2039 | 150,000 | 683,436 | 2049 | 150,000 | 673,100 |



# 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

**The Sandarac Association, Inc.**

**Fort Myers Beach, Florida**

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, February 11, 2019.

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

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

# IDENTIFICATION OF PROPERTY


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

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

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

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

- Sandarac I responsibility
- Limited useful life expectancies
- Predictable remaining useful life expectancies
- Replacement cost above a minimum threshold

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

- Electrical Systems, Common
- Foundations
- Pipes, Interior Building, Sanitary Waste and Vent, Common (Replaced in 2010)
- Pipes, Subsurface Utilities
- Structural Frames
- Valves, Large Diameter

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

- General Maintenance to the Common Elements
- Expenditures less than $6,000 (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)
- Air Handling and Condensing Unit, Split System, Office
- Air Handling Wall Units, Lobbies
- Bocce Court
- Fountain
- Grill Station
- Irrigation System
- Landscape
- Light Poles and Fixtures
- Lobbies, Renovations
- Office, Interior Renovations
- Paint Finishes, Touch Up
- Pool Mechanical Equipment (Excluding Heaters)
- Rest Rooms, Pool, Renovations
- Sea Wall, Inspections and Capital Repairs
- Signage
- 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:

- Air Handling Units
- Balconies and Enclosures
- Balcony Light Fixtures
- Electrical Systems (Including Circuit Protection Panels)
- 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:

- Fences, North and South Perimeters (Neighboring Communities)
- Office Elements (51% Ownership) (The Sandarac II Association, Inc.)
- Pavers, Masonry (51% Ownership) (The Sandarac II Association, Inc.)
- Pool Elements (51% Ownership) (The Sandarac II Association, Inc.)

# 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
- 2019 local cost of replacement
  - Per unit
  - Per phase
  - Replacement of total quantity
- Total aggregate costs of replacement anticipated during the next 30 years
- Schedule of estimated costs for each reserve component

**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

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 2019 to 2034

# RESERVE EXPENDITURES

The Sandarac Association, Inc.
Fort Myers Beach, Florida

**Explanatory Notes:**

1) **0.0% is the estimated Inflation Rate; see Executive Summary for details.**
2) **FY2019 is Fiscal Year beginning April 1, 2019 and ending March 31, 2020.**

| Line Item | Total Quantity | Per Phase Quantity | Units | Reserve Component Inventory | Estimated 1st Year of Event | Life Analysis, Years Useful | Life Analysis, Years Remaining | Unit Cost, $ | Percentage Ownership | Costs, $ Per Phase (2019) | Costs, $ Total (2019) | Costs, $ 30-Year Total | RUL = 0 FY2019 | 1 2020 | 2 2021 | 3 2022 | 4 2023 | 5 2024 | 6 2025 | 7 2026 | 8 2027 | 9 2028 | 10 2029 | 11 2030 | 12 2031 | 13 2032 | 14 2033 | 15 2034 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | **Exterior Building Elements** | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.060 | 20,750 | 20,750 | Square Feet | Breezeways, Concrete, Repairs and Waterproof Coating Applications | 2021 | 8 to 12 | 2 | 8.00 | 100% | 166,000 | 166,000 | 664,000 | | | 166,000 | | | | | | | | 166,000 | | | | | |
| 1.105 | 3,870 | 3,870 | Linear Feet | Breezeways, Railings, Aluminum (Incl. Staircases) | 2029 | to 50 | 10 | 38.00 | 100% | 147,060 | 147,060 | 147,060 | | | | | | | | | | | 147,060 | | | | | |
| 1.180 | 50 | 10 | Each | Doors, Common, Phased | 2020 | to 25 | 1 to 21 | 800.00 | 100% | 8,000 | 40,000 | 48,000 | | 8,000 | | | | | 8,000 | | | | | 8,000 | | | | |
| 1.260 | 250 | 250 | Each | Light Fixtures | 2024 | to 25 | 5 | 100.00 | 100% | 25,000 | 25,000 | 50,000 | | | | | | 25,000 | | | | | | | | | | |
| 1.500 | 13,140 | 6,570 | Square Feet | Roofs, Modified Bitumen, Phased (Replace with Thermoplastic) | 2022 | 15 to 20 | 3 to 4 | 25.00 | 100% | 164,250 | 328,500 | 657,000 | | | | 164,250 | 164,250 | | | | | | | | | | | |
| 1.530 | 3,600 | 3,600 | Square Feet | Roofs, Thermoplastic | 2038 | 15 to 20 | 19 | 25.00 | 100% | 90,000 | 90,000 | 90,000 | | | | | | | | | | | | | | | | |
| 1.860 | 114,350 | 114,350 | Square Feet | Walls, Stucco, Paint Finishes and Capital Repairs | 2021 | 6 to 8 | 2 | 1.70 | 100% | 194,395 | 194,395 | 777,580 | | | 194,395 | | | | | | | | 194,395 | | | | | |
| 1.980 | 570 | 570 | Square Feet | Windows, Common | 2025 | to 45 | 6 | 80.00 | 100% | 45,600 | 45,600 | 45,600 | | | | | | | 45,600 | | | | | | | | | |
| | | | | **Interior Building Elements** | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.100 | 2 | 2 | Each | Elevator Cab Finishes | 2029 | to 20 | 10 | 16,000.00 | 100% | 32,000 | 32,000 | 64,000 | | | | | | | | | | | 32,000 | | | | | |
| 2.240 | 380 | 380 | Square Yards | Floor Coverings, Tile, 1st Floor Breezeway | 2039 | to 30 | 20 | 75.00 | 100% | 28,500 | 28,500 | 28,500 | | | | | | | | | | | | | | | | |
| 2.700 | 88 | 88 | Each | Mailboxes | 2024 | to 35 | 5 | 100.00 | 100% | 8,800 | 8,800 | 8,800 | | | | | | 8,800 | | | | | | | | | | |
| 2.840 | 1 | 1 | Allowance | Social Room, Renovation | 2029 | to 20 | 10 | 28,000.00 | 100% | 28,000 | 28,000 | 56,000 | | | | | | | | | | | 28,000 | | | | | |
| | | | | **Building Services Elements** | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.070 | 1 | 1 | Allowance | Condensing Units, Split Systems, Replacements, Phased | 2020 | to 1 | 1 | 20,000.00 | 100% | 20,000 | 20,000 | 600,000 | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 |
| 3.360 | 2 | 2 | Each | Elevators, Traction, Controls and Equipment | 2045 | to 35 | 26 | 150,000.00 | 100% | 300,000 | 300,000 | 300,000 | | | | | | | | | | | | | | | | |
| 3.440 | 1 | 1 | Each | Generator, Emergency (Includes Transfer Switch) | 2049 | to 35 | 30 | 37,000.00 | 100% | 37,000 | 37,000 | 37,000 | | | | | | | | | | | | | | | | |
| 3.470 | 2 | 2 | Each | Intercom Panels | 2026 | 10 to 15 | 7 | 4,500.00 | 100% | 9,000 | 9,000 | 18,000 | | | | | | | | 9,000 | | | | | | | | |
| 3.560 | 1 | 1 | Allowance | Life Safety System, Control Panel and Emergency Devices | 2025 | to 25 | 6 | 31,000.00 | 100% | 31,000 | 31,000 | 31,000 | | | | | | | 31,000 | | | | | | | | | |
| 3.605 | 106 | 11 | Each | Pipes, Riser Sections, Domestic Water, Partial | 2031 | to 80+ | 12 to 30+ | 2,500.00 | 100% | 26,500 | 265,000 | 106,000 | | | | | | | | | | | | | 26,500 | | | |
| 3.700 | 1 | 1 | Each | Pump, Domestic Water, 3-HP (Incl. Controls & VFD) | 2034 | 15 to 20 | 15 | 8,000.00 | 100% | 8,000 | 8,000 | 8,000 | | | | | | | | | | | | | | | | 8,000 |
| 3.770 | 1 | 1 | Each | Pump, Fire Suppression (Includes Controller) | 2026 | to 50 | 7 | 33,500.00 | 100% | 33,500 | 33,500 | 33,500 | | | | | | | | 33,500 | | | | | | | | |
| 3.880 | 2 | 2 | Each | Trash Chutes and Doors | 2026 | to 50 | 7 | 30,000.00 | 100% | 60,000 | 60,000 | 60,000 | | | | | | | | 60,000 | | | | | | | | |
| | | | | **Property Site Elements** | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.400 | 44 | 44 | Each | Light Fixtures, Carports | 2030 | 20 to 25 | 11 | 140.00 | 100% | 6,160 | 6,160 | 6,160 | | | | | | | | | | | | 6,160 | | | | |
| 4.500 | 1 | 1 | Each | Maintenance Cart | 2022 | to 8 | 3 | 7,500.00 | 100% | 7,500 | 7,500 | 30,000 | | | | 7,500 | | | | | | | | 7,500 | | | | |
| 4.620 | 106,000 | 106,000 | Square Feet | Pavers, Masonry | 2030 | to 25 | 11 | 6.00 | 49% | 311,640 | 311,640 | 311,640 | | | | | | | | | | | | 311,640 | | | | |
| 4.800 | 19,400 | 19,400 | Square Feet | Roofs, Thermoplastic, Carports | 2030 | 20 to 25 | 11 | 25.00 | 100% | 485,000 | 485,000 | 485,000 | | | | | | | | | | | | 485,000 | | | | |
| | | | | **Office Elements** | | | | | | | | | | | | | | | | | | | | | | | | |
| 5.600 | 2,670 | 2,670 | Square Feet | Roof, Thermoplastic (Incl. Pool Rest Room) | 2036 | 15 to 20 | 17 | 25.00 | 49% | 32,708 | 32,708 | 32,708 | | | | | | | | | | | | | | | | |
| 5.700 | 1 | 1 | Allowance | Security System | 2026 | 10 to 15 | 7 | 15,000.00 | 100% | 15,000 | 15,000 | 30,000 | | | | | | | | 15,000 | | | | | | | | |
| 5.800 | 400 | 400 | Square Feet | Windows and Doors | 2025 | to 45 | 6 | 80.00 | 49% | 15,680 | 15,680 | 15,680 | | | | | | | 15,680 | | | | | | | | | |

Years 2035 to 2049

# RESERVE EXPENDITURES

The Sandarac Association, Inc.
Fort Myers Beach, Florida

| Line Item | Total Quantity | Per Phase Quantity | Units | Reserve Component Inventory | Estimated 1st Year of Event | Life Analysis, Years Useful | Remaining | Unit Cost, $ | Percentage Ownership | Costs, $ Per Phase (2019) | Total (2019) | 30-Year Total | 16 2035 | 17 2036 | 18 2037 | 19 2038 | 20 2039 | 21 2040 | 22 2041 | 23 2042 | 24 2043 | 25 2044 | 26 2045 | 27 2046 | 28 2047 | 29 2048 | 30 2049 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | **Exterior Building Elements** | | | | | | | | | | | | | | | | | | | | | | | |
| 1.060 | 20,750 | 20,750 | Square Feet | Breezeways, Concrete, Repairs and Waterproof Coating Applications | 2021 | 8 to 12 | 2 | 8.00 | 100% | 166,000 | 166,000 | 664,000 | | | 166,000 | | | | | | | | 166,000 | | | | |
| 1.105 | 3,870 | 3,870 | Linear Feet | Breezeways, Railings, Aluminum (Incl. Staircases) | 2029 | to 50 | 10 | 38.00 | 100% | 147,060 | 147,060 | 147,060 | | | | | | | | | | | | | | | |
| 1.180 | 50 | 10 | Each | Doors, Common, Phased | 2020 | to 25 | 1 to 21 | 800.00 | 100% | 8,000 | 40,000 | 48,000 | 8,000 | | | | | 8,000 | | | | | 8,000 | | | | |
| 1.260 | 250 | 250 | Each | Light Fixtures | 2024 | to 25 | 5 | 100.00 | 100% | 25,000 | 25,000 | 50,000 | | | | | | | | | | 25,000 | | | | | |
| 1.500 | 13,140 | 6,570 | Square Feet | Roofs, Modified Bitumen, Phased (Replace with Thermoplastic) | 2022 | 15 to 20 | 3 to 4 | 25.00 | 100% | 164,250 | 328,500 | 657,000 | | | | | | | | 164,250 | 164,250 | | | | | | |
| 1.530 | 3,600 | 3,600 | Square Feet | Roofs, Thermoplastic | 2038 | 15 to 20 | 19 | 25.00 | 100% | 90,000 | 90,000 | 90,000 | | | | 90,000 | | | | | | | | | | | |
| 1.860 | 114,350 | 114,350 | Square Feet | Walls, Stucco, Paint Finishes and Capital Repairs | 2021 | 6 to 8 | 2 | 1.70 | 100% | 194,395 | 194,395 | 777,580 | | | 194,395 | | | | | | | | 194,395 | | | | |
| 1.980 | 570 | 570 | Square Feet | Windows, Common | 2025 | to 45 | 6 | 80.00 | 100% | 45,600 | 45,600 | 45,600 | | | | | | | | | | | | | | | |
| | | | | **Interior Building Elements** | | | | | | | | | | | | | | | | | | | | | | | |
| 2.100 | 2 | 2 | Each | Elevator Cab Finishes | 2029 | to 20 | 10 | 16,000.00 | 100% | 32,000 | 32,000 | 64,000 | | | | | | | | | | | | | | | 32,000 |
| 2.240 | 380 | 380 | Square Yards | Floor Coverings, Tile, 1st Floor Breezeway | 2039 | to 30 | 20 | 75.00 | 100% | 28,500 | 28,500 | 28,500 | | | | | 28,500 | | | | | | | | | | |
| 2.700 | 88 | 88 | Each | Mailboxes | 2024 | to 35 | 5 | 100.00 | 100% | 8,800 | 8,800 | 8,800 | | | | | | | | | | | | | | | |
| 2.840 | 1 | 1 | Allowance | Social Room, Renovation | 2029 | to 20 | 10 | 28,000.00 | 100% | 28,000 | 28,000 | 56,000 | | | | | | | | | | | | | | | 28,000 |
| | | | | **Building Services Elements** | | | | | | | | | | | | | | | | | | | | | | | |
| 3.070 | 1 | 1 | Allowance | Condensing Units, Split Systems, Replacements, Phased | 2020 | to 1 | 1 | 20,000.00 | 100% | 20,000 | 20,000 | 600,000 | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 |
| 3.360 | 2 | 2 | Each | Elevators, Traction, Controls and Equipment | 2045 | to 35 | 26 | 150,000.00 | 100% | 300,000 | 300,000 | 300,000 | | | | | | | | | | | 300,000 | | | | |
| 3.440 | 1 | 1 | Each | Generator, Emergency (Includes Transfer Switch) | 2049 | to 35 | 30 | 37,000.00 | 100% | 37,000 | 37,000 | 37,000 | | | | | | | | | | | | | | | 37,000 |
| 3.470 | 2 | 2 | Each | Intercom Panels | 2026 | 10 to 15 | 7 | 4,500.00 | 100% | 9,000 | 9,000 | 18,000 | | | | 9,000 | | | | | | | | | | | |
| 3.560 | 1 | 1 | Allowance | Life Safety System, Control Panel and Emergency Devices | 2025 | to 25 | 6 | 31,000.00 | 100% | 31,000 | 31,000 | 31,000 | | | | | | | | | | | | | | | |
| 3.605 | 106 | 11 | Each | Pipes, Riser Sections, Domestic Water, Partial | 2031 | to 80+ | 12 to 30+ | 2,500.00 | 100% | 26,500 | 265,000 | 106,000 | | 26,500 | | | | | 26,500 | | | | | 26,500 | | | |
| 3.700 | 1 | 1 | Each | Pump, Domestic Water, 3-HP (Incl. Controls & VFD) | 2034 | 15 to 20 | 15 | 8,000.00 | 100% | 8,000 | 8,000 | 8,000 | | | | | | | | | | | | | | | |
| 3.770 | 1 | 1 | Each | Pump, Fire Suppression (Includes Controller) | 2026 | to 50 | 7 | 33,500.00 | 100% | 33,500 | 33,500 | 33,500 | | | | | | | | | | | | | | | |
| 3.880 | 2 | 2 | Each | Trash Chutes and Doors | 2026 | to 50 | 7 | 30,000.00 | 100% | 60,000 | 60,000 | 60,000 | | | | | | | | | | | | | | | |
| | | | | **Property Site Elements** | | | | | | | | | | | | | | | | | | | | | | | |
| 4.400 | 44 | 44 | Each | Light Fixtures, Carports | 2030 | 20 to 25 | 11 | 140.00 | 100% | 6,160 | 6,160 | 6,160 | | | | | | | | | | | | | | | |
| 4.500 | 1 | 1 | Each | Maintenance Cart | 2022 | to 8 | 3 | 7,500.00 | 100% | 7,500 | 7,500 | 30,000 | | | | 7,500 | | | | | | | | 7,500 | | | |
| 4.620 | 106,000 | 106,000 | Square Feet | Pavers, Masonry | 2030 | to 25 | 11 | 6.00 | 49% | 311,640 | 311,640 | 311,640 | | | | | | | | | | | | | | | |
| 4.800 | 19,400 | 19,400 | Square Feet | Roofs, Thermoplastic, Carports | 2030 | 20 to 25 | 11 | 25.00 | 100% | 485,000 | 485,000 | 485,000 | | | | | | | | | | | | | | | |
| | | | | **Office Elements** | | | | | | | | | | | | | | | | | | | | | | | |
| 5.600 | 2,670 | 2,670 | Square Feet | Roof, Thermoplastic (Incl. Pool Rest Room) | 2036 | 15 to 20 | 17 | 25.00 | 49% | 32,708 | 32,708 | 32,708 | | 32,708 | | | | | | | | | | | | | |
| 5.700 | 1 | 1 | Allowance | Security System | 2026 | 10 to 15 | 7 | 15,000.00 | 100% | 15,000 | 15,000 | 30,000 | | | | 15,000 | | | | | | | | | | | |
| 5.800 | 400 | 400 | Square Feet | Windows and Doors | 2025 | to 45 | 6 | 80.00 | 49% | 15,680 | 15,680 | 15,680 | | | | | | | | | | | | | | | |

Years 2019 to 2034

# RESERVE EXPENDITURES

The Sandarac Association, Inc.
Fort Myers Beach, Florida

**Explanatory Notes:**

1) **0.0% is the estimated Inflation Rate; see Executive Summary for details.**
2) **FY2019 is Fiscal Year beginning April 1, 2019 and ending March 31, 2020.**

| Line Item | Total Quantity | Per Phase Quantity | Units | Reserve Component Inventory | Estimated 1st Year of Event | Life Analysis, Years Useful | Remaining | Unit Cost, $ | Percentage Ownership | Costs, $ Per Phase (2019) | Total (2019) | 30-Year Total | RUL = 0 FY2019 | 1 2020 | 2 2021 | 3 2022 | 4 2023 | 5 2024 | 6 2025 | 7 2026 | 8 2027 | 9 2028 | 10 2029 | 11 2030 | 12 2031 | 13 2032 | 14 2033 | 15 2034 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Pool Elements | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.200 | 2,900 | 2,900 | Square Feet | Deck, Pavers | 2041 | to 30 | 22 | 6.00 | 49% | 8,526 | 8,526 | 8,526 | | | | | | | | | | | | | | | | |
| 6.400 | 240 | 240 | Linear Feet | Fence, Aluminum | 2034 | to 25 | 15 | 52.00 | 49% | 6,115 | 6,115 | 6,115 | | | | | | | | | | | | | | | | 6,115 |
| 6.500 | 1 | 1 | Allowance | Furniture | 2020 | to 12 | 1 | 12,500.00 | 49% | 6,125 | 6,125 | 18,375 | | 6,125 | | | | | | | | | | | | 6,125 | | |
| 6.600 | 4 | 4 | Each | Geothermal Heaters | 2020 | to 15 | 1 | 7,000.00 | 49% | 13,720 | 13,720 | 27,440 | | 13,720 | | | | | | | | | | | | | | |
| 6.800 | 1,700 | 1,700 | Square Feet | Pool Finish, Plaster | 2021 | 8 to 12 | 2 | 18.00 | 49% | 14,994 | 14,994 | 29,988 | | | 14,994 | | | | | | | | | | 14,994 | | | |
| 6.900 | 1,700 | 1,700 | Square Feet | Structure and Deck, Total Replacement | 2041 | to 65 | 22 | 130.00 | 49% | 108,290 | 108,290 | 108,290 | | | | | | | | | | | | | | | | |
| 6.950 | 1 | 1 | Allowance | Tiki Hut, Replacement | 2020 | N/A | 1 | 40,000.00 | 49% | 19,600 | 19,600 | 19,600 | | 19,600 | | | | | | | | | | | | | | |
| | | 1 | Allowance | Reserve Study Update with Site Visit | 2021 | 2 | 2 | 3,850.00 | 100% | 3,850 | 3,850 | 3,850 | | | 3,850 | | | | | | | | | | | | | |
| | | | | Anticipated Expenditures, By Year | | | | | | | | $4,963,412 | 0 | 67,445 | 399,239 | 191,750 | 184,250 | 53,800 | 120,280 | 137,500 | 20,000 | 20,000 | 587,455 | 838,300 | 61,494 | 26,125 | 20,000 | 34,115 |

Years 2035 to 2049

# RESERVE EXPENDITURES

The Sandarac Association, Inc.
Fort Myers Beach, Florida

| Line Item | Total Quantity | Per Phase Quantity | Units | Reserve Component Inventory | Estimated 1st Year of Event | Life Analysis, Years Useful | Remaining | Unit Cost, $ | Percentage Ownership | Costs, $ Per Phase (2019) | Total (2019) | 30-Year Total | 16 2035 | 17 2036 | 18 2037 | 19 2038 | 20 2039 | 21 2040 | 22 2041 | 23 2042 | 24 2043 | 25 2044 | 26 2045 | 27 2046 | 28 2047 | 29 2048 | 30 2049 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Pool Elements | | | | | | | | | | | | | | | | | | | | | | | |
| 6.200 | 2,900 | 2,900 | Square Feet | Deck, Pavers | 2041 | to 30 | 22 | 6.00 | 49% | 8,526 | 8,526 | 8,526 | | | | | | | 8,526 | | | | | | | | |
| 6.400 | 240 | 240 | Linear Feet | Fence, Aluminum | 2034 | to 25 | 15 | 52.00 | 49% | 6,115 | 6,115 | 6,115 | | | | | | | | | | | | | | | |
| 6.500 | 1 | 1 | Allowance | Furniture | 2020 | to 12 | 1 | 12,500.00 | 49% | 6,125 | 6,125 | 18,375 | | | | | | | | | | 6,125 | | | | | |
| 6.600 | 4 | 4 | Each | Geothermal Heaters | 2020 | to 15 | 1 | 7,000.00 | 49% | 13,720 | 13,720 | 27,440 | 13,720 | | | | | | | | | | | | | | |
| 6.800 | 1,700 | 1,700 | Square Feet | Pool Finish, Plaster | 2021 | 8 to 12 | 2 | 18.00 | 49% | 14,994 | 14,994 | 29,988 | | | | | | | | | | | | | | | |
| 6.900 | 1,700 | 1,700 | Square Feet | Structure and Deck, Total Replacement | 2041 | to 65 | 22 | 130.00 | 49% | 108,290 | 108,290 | 108,290 | | | | | | | 108,290 | | | | | | | | |
| 6.950 | 1 | 1 | Allowance | Tiki Hut, Replacement | 2020 | N/A | 1 | 40,000.00 | 49% | 19,600 | 19,600 | 19,600 | | | | | | | | | | | | | | | |
| | | 1 | Allowance | Reserve Study Update with Site Visit | 2021 | 2 | 2 | 3,850.00 | 100% | 3,850 | 3,850 | 3,850 | | | | | | | | | | | | | | | |
| | | | | Anticipated Expenditures, By Year | | | | | | | | $4,963,412 | 41,720 | 79,208 | 380,395 | 141,500 | 48,500 | 28,000 | 163,316 | 184,250 | 184,250 | 51,125 | 688,395 | 54,000 | 20,000 | 20,000 | 117,000 |

# RESERVE FUNDING PLAN

CASH FLOW ANALYSIS
The Sandarac
Association, Inc.
Fort Myers Beach, Florida

Individual Reserve Budgets & Cash Flows for the Next 30 Years

| | | FY2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Reserves at Beginning of Year (Note 1) | 235,832 | 355,512 | 509,067 | 330,828 | 360,078 | 396,828 | 564,028 | 664,748 | 748,248 | 949,248 | 1,150,248 | 783,793 | 166,493 | 254,999 | 378,874 | 508,874 |
| | Total Recommended Reserve Contributions (Note 2) | 119,680 | 221,000 | 221,000 | 221,000 | 221,000 | 221,000 | 221,000 | 221,000 | 221,000 | 221,000 | 221,000 | 221,000 | 150,000 | 150,000 | 150,000 | 150,000 |
| Plus | Estimated Interest Earned, During Year (Note 3) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Less | Anticipated Expenditures, By Year | 0 | (67,445) | (399,239) | (191,750) | (184,250) | (53,800) | (120,280) | (137,500) | (20,000) | (20,000) | (587,455) | (838,300) | (61,494) | (26,125) | (20,000) | (34,115) |
| | Anticipated Reserves at Year End | $355,512 | $509,067 | $330,828 | $360,078 | $396,828 | $564,028 | $664,748 | $748,248 | $949,248 | $1,150,248 | $783,793 | $166,493 (NOTE 5) | $254,999 | $378,874 | $508,874 | $624,759 |
| | Predicted Reserves based on 2019 funding level of: $119,680 | 355,512 | 407,747 | 128,188 | 56,118 | (8,452) | | | | | | | | | | | |

(continued)

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

| | | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 | 2045 | 2046 | 2047 | 2048 | 2049 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Reserves at Beginning of Year | 624,759 | 733,039 | 803,831 | 573,436 | 581,936 | 683,436 | 805,436 | 792,120 | 757,870 | 723,620 | 822,495 | 284,100 | 380,100 | 510,100 | 640,100 |
| | Total Recommended Reserve Contributions | 150,000 | 150,000 | 150,000 | 150,000 | 150,000 | 150,000 | 150,000 | 150,000 | 150,000 | 150,000 | 150,000 | 150,000 | 150,000 | 150,000 | 150,000 |
| Plus | Estimated Interest Earned, During Year | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Less | Anticipated Expenditures, By Year | (41,720) | (79,208) | (380,395) | (141,500) | (48,500) | (28,000) | (163,316) | (184,250) | (184,250) | (51,125) | (688,395) | (54,000) | (20,000) | (20,000) | (117,000) |
| | Anticipated Reserves at Year End | $733,039 | $803,831 | $573,436 | $581,936 | $683,436 | $805,436 | $792,120 | $757,870 | $723,620 | $822,495 | $284,100 | $380,100 | $510,100 | $640,100 | $673,100 (NOTE 4) |

Explanatory Notes:

1) Year 2019 starting reserves are as of March 31, 2019; FY2019 starts April 1, 2019 and ends March 31, 2020.
2) Reserve Contributions for 2019 are budgeted; 2020 is the first year of recommended contributions.
3) 0.0% is the estimated annual rate of return on invested reserves; see Executive Summary for details
4) Accumulated year 2049 ending reserves consider the age, size, overall condition and complexity of the property.
5) Threshold Funding Year (reserve balance at critical point).

# 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

**Building exterior overview**

**Building exterior overview**

**Building exterior overview**

**Building exterior overview**

**Building exterior overview**

**Building exterior overview**

## Breezeways, Concrete

***Line Item:*** 1.060

***Quantity:*** Approximately 20,750 square feet of horizontal surface area. This quantity includes the staircases

***History:*** Previous repairs evident; coating applications conducted in 2013

***Condition:*** Good to fair overall

**Breezeway with waterproof coating**

**Breezeway with waterproof coating**

**Waterproof coating deterioration**

**Waterproof coating deterioration**

**Concrete repair at Unit A 810 entrance**

**Waterproof coating deterioration**

***Useful Life:*** Capital repairs including a close-up visual inspection, patching of delaminated concrete, routing and filling of cracked concrete, and waterproof coating applications every 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 breezeways will result in increased concrete repairs and replacements as the breezeways age*. Capital repairs may also include replacement of the caulked joint between the breezeway and the building, and repair or replacement of the metal railings and railing fastener attachments as needed.

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

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

- Partial depth replacement of up to one percent (1%) of the concrete topsides, edges and undersides
- Crack repairs as necessary

- Repairs to the railings as necessary
- Replacement of perimeter sealants as needed
- Application of a waterproof coating (Urethane based elastomeric)

## Breezeways, Railings, Aluminum

***Line Item:*** 1.105

***Quantity:*** 3,870 linear feet at the breezeways and staircases

***History:*** Original

***Condition:*** Good overall

**Breezeway railings**

**Staircase railings**

***Useful Life:*** Up to 50 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.

## Doors, Common

***Line Item:*** 1.180

***Quantity:*** Approximately 50 common exterior doors

***History:*** Unknown ages

***Condition:*** Good to fair overall

***Useful Life:*** Up to 25 years

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

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

## Light Fixtures

***Line Item:*** 1.260

***Quantity:*** Approximately 250 exterior wall-mounted light fixtures accent the breezeways and the front entries.

***History:*** Unknown age

***Condition:*** Good overall

**Typical light fixture**

***Useful Life:*** Up to 25 years

***Priority/Criticality:*** Per Board discretion

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

## Roofs, Modified Bitumen

***Line Item:*** 1.500

***Quantity:*** 13,140 square feet at roof stacks 3 through 11

***History:*** The roofs were installed between 2002 and 2003

***Condition:*** Fair overall

**Modified bitumen roof**

**Modified bitumen roof**

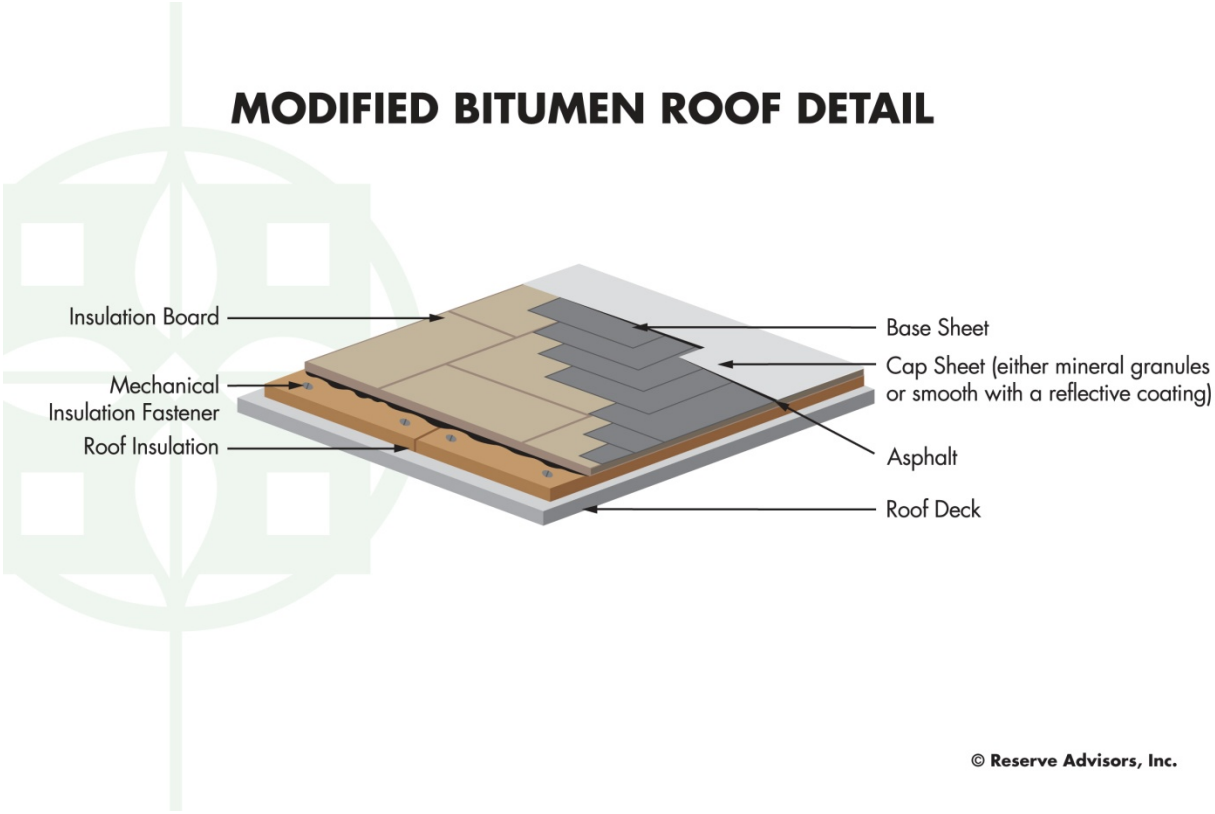
**Modified bitumen roof (roof stack 6 with coating on right)**

**Modified bitumen roof**

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

***Component Detail Notes:*** Modified bitumen roofing systems are composed of factory manufactured sheets of polymer-modified bitumen with polyester and/or fiberglass reinforcements. The bitumen adds a waterproof characteristic to the system and the reinforcements add strength and puncture resistance. These factory assembled roofing systems offer the advantages of a built-up roofing system through a less labor intensive

installation. The following detail depicts a typical modified bitumen roof although it may not reflect the actual configuration at Sandarac I:




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

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

***Expenditure Detail Notes:*** Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. Management informs us the Association plans to replace the modified bitumen roofs with thermoplastic roofing material at the time of replacement. The estimate of cost is based on a historical cost provided by Management.

## Roofs, Thermoplastic

***Line Item:*** 1.530

***Quantity:*** 3,600 square feet at roof stacks 1 and 2

***History:*** Installed in 2018

***Condition:*** Good overall

**Thermoplastic roof**

**Thermoplastic roof**

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

***Component Detail Notes:*** The following characteristics define most thermoplastic roofs:

- Attachment to the roof deck is either fully adhered, mechanical or ballasted
- Membranes are commonly white and reinforced with polyester
- Seams are sealed with heat or chemical welding
- Sheet widths range from 6- to 12-feet wide
- Sheets are typically 40- to 100-mils thick
- Single ply (one layer)

Over time, exposure to ultraviolet light, heat and weather degrade the membrane. This degradation results in membrane damage from thermal expansion and contraction, adverse weather and pedestrian traffic. The aging process makes the membrane less pliable and more difficult to maintain. Ponding water on the roof can increase the effects of ultraviolet light on the membrane and contaminants in ponded water can cause the membrane to deteriorate prematurely. Thermoplastic roofs (especially TPO) are relatively new and their long term performance is not well defined.

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

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

***Expenditure Detail Notes:*** Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. The estimate of cost is based on a historical cost provided by Management.

## Walls, Stucco

***Line Item:*** 1.860

***Quantity:*** Approximately 114,350 square feet of the building exteriors

***History:*** Paint finish applications conducted in 2013

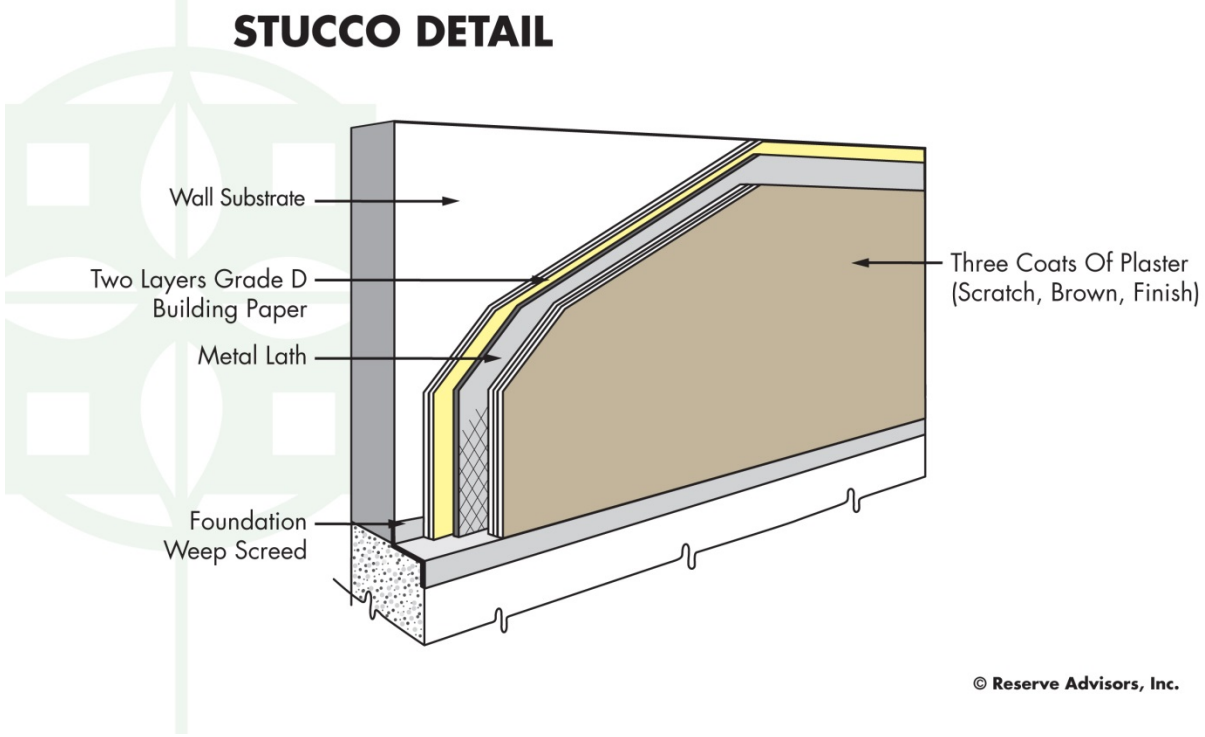
***Condition:*** Good to fair overall with isolated finish deterioration

**Exterior stucco walls**

**Isolated paint finish deterioration**

***Useful Life:*** We recommend inspections, repairs and paint finish applications every six- to eight-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 Sandarac I:




***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:

- 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, Common

***Line Item:*** 1.980

***Quantity:*** 570 square feet of common windows at the lobbies and Social Room

***History:*** Original

***Condition:*** Good overall

***Useful Life:*** Up to 45 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. The estimate of cost is based on replacement with hurricane impact rated windows.

# Interior Building Elements

## Elevator Cab Finishes

***Line Item:*** 2.100

***Quantity:*** Two elevators

***History:*** The Association renovated the cabs in 2009

***Condition:*** Good overall

**Elevator cab finishes**

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

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

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

***Priority/Criticality:*** Per Board discretion

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

## Floor Coverings, Tile

***Line Item:*** 2.240

***Quantity:*** 380 square yards at the 1st floor breezeway including the lobbies

***History:*** Installed in 2009

***Condition:*** Good overall

**Tile floor coverings at lobby**

**Tile floor coverings at 1st floor breezeway**

***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:*** 88 unit mailboxes

***History:*** Original

***Condition:*** Reported satisfactory overall


**Typical unit mailboxes**

***Useful Life:*** Up to 35 years

***Priority/Criticality:*** Per Board discretion

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

## Social Room, Renovations

***Line Item:*** 2.840

***History:*** Renovations conducted in 2009 and paint finishes in 2018

***Condition:*** Good overall

**Social room overview**

**Social room rest room**

***Useful Life:*** Up to 20 years for renovations

***Component Detail Notes:*** Components include:

- Tile floor coverings
- Paint finishes on the walls and ceilings
- Appliances
- Cabinets and countertops
- Furnishings
- Light fixtures
- Plumbing fixtures

***Priority/Criticality:*** Per Board discretion

***Expenditure Detail Notes:*** Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We recommend the Association fund interim paint finish applications through the operating budget as needed.

# Building Services Elements

## Condensing Units, Split Systems

***Line Item:*** 3.070

***Quantity:*** Management informs us the Association is responsible for each unit's air condenser located on the roof

***History:*** Various ages

***Condition:*** Reported satisfactory without operational deficiencies

**Air condensing units**

***Useful Life:*** Split system air condensing units have a useful life of 12- to 18-years. Due to the various ages of each system and at the direction of Management, we include an annual allowance for replacements.

***Component Detail Notes:*** A split system air conditioner consists of an outside condensing unit, an interior evaporator coil, refrigerant lines and an interior electric air handling unit.

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

***Expenditure Detail Notes:*** Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. At the direction of Management we include an annual allowance of $20,000 for replacement of the air condensing units. Management informs us the homeowners are responsible for the cost of replacing their individual air handling unit, which is replaced in coordination with the condensing unit.

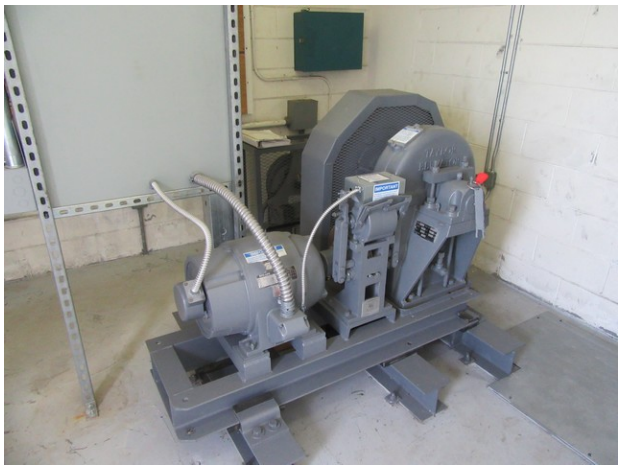
## Elevators, Traction

***Line Item:*** 3.360

***Quantity:*** Two *Otis* traction elevators

***History:*** The majority of the elevator system components were replaced in 2015.

***Condition:*** Reported satisfactory operational and service interruptions are reportedly infrequent.



**Elevator machine and hoist**

***Useful Life:*** Up to 35 years however, the scarcity of parts, and the potential frequency and duration of service interruption makes controls replacement more desirable as the components age.

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

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

***Expenditure Detail Notes:*** Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We anticipate replacement of the following traction elevator system components:

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

## Generator, Emergency

***Line Item:*** 3.440

***Quantity:*** One diesel generator

***History:*** Replaced in 2016

***Condition:*** Reported satisfactory without operational deficiencies

**Generator**

***Useful Life:*** Up to 35 years

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

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

## Intercom Panels

***Line Item:*** 3.470

***Quantity:*** Two each

***History:*** Installed in 2014

***Condition:*** Reported satisfactory operational


**Intercom panel**

***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.

## Life Safety System

***Line Item:*** 3.560

***Quantity:*** The life safety system at Sandarac I includes the following components:

- Audio/visual fixtures
- *Silent Knight by Honeywell* control panel
- Emergency light fixtures
- Exit light fixtures
- Pull stations
- Wiring

***History:*** Various ages

***Conditions:*** Reported satisfactory operational


**Life safety system components**

**Life safety system control panel**

***Useful Life:*** Up to 25 years

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

***Expenditure Detail Notes:*** Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We recommend the Association fund interim replacement of the control panel through the operating budget as needed. 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 Item:*** 3.605

***Quantity:*** We estimate that each unit has two sets of pipes. We estimate that each unit shares domestic water plumbing pipes for both the kitchen and bathroom with the adjacent unit.

***History and Condition:***

- Domestic Water, Supply and Return – Original and reported in satisfactory condition
- Sanitary Waste Disposal and Vent – Replaced in 2010 and reported in satisfactory condition

**Domestic water pipes**

**Domestic water pipe**

**Sanitary waste pipes (Replaced in 2010)**

**Sanitary waste pipes (Replaced in 2010)**

***Component Detail Notes:*** The Association is responsible for maintenance and replacement of the piping systems arranged in vertical and horizontal segments. These pipes comprise the following:

- Domestic cold water
- Vent plumbing fixtures
- Sanitary waste disposal

The exact locations and conditions of the pipes were not ascertained due to the nature of their location and the non-invasive nature of our inspection. We comment on the respective quantities and conditions of the piping systems in the following sections of this narrative.

***Domestic Water*** - Copper piping is the predominant type of pipe used in new construction for domestic water piping. With low mineral content in the water, the useful life of copper domestic water pipes is up to and sometimes beyond 80 years. However, there is recent evidence that copper piping prematurely develops pinhole leaks. Studies have shown that changes in water treatment practices, recently required in response to U.S. Environmental Protection Agency regulations, are dramatically increasing the risk of pitting corrosion in many geographic locations. Utility companies are implementing higher chloride levels to prevent outbreaks of waterborne disease. These higher chloride levels can accelerate corrosion of copper pipes and indeterminately reduce their useful life.

In the event that numerous pinhole leaks develop or occur throughout the system of pipes, Sandarac I should also consider “in-place” pipe restoration technology. This process includes drying, sandblasting away interior pipe occlusions and applying an epoxy lining to the interior surfaces of the pipes. Future updates of this study will consider the possibility of the pipe restoration process in lieu of pipe replacement at Sandarac I. Restoration technology can extend the useful life of a pipe system thus avoiding a system pipe replacement.

***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.

***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 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.

We recommend the Association fund interim pipe replacements, prior to more aggregate replacements identified in the following paragraphs, from the operating budget. We also recommend the Association contract for an invasive investigation of the condition of the piping system prior to beginning more aggregate replacements, funded through the operating budget.

We recommend the Association budget the following expenditures:

- Domestic Water - We include expenditures to replace approximately forty percent (40%) of the pipes during the next 30 years.
- Sanitary Waste and Vent – At this time we do not anticipate replacement of the waste pipes during the next 30 years due to the replacement in 2010.

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, Sandarac I 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

## Pump, Domestic Water

***Line Item:*** 3.700

***Quantity:*** One 3-HP (Horsepower) pump

***History:*** Management informs us the water pump was replaced in 2016

***Condition:*** Reported satisfactory without operational deficiencies

**Domestic water pump**

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

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

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

***Expenditure Detail Notes:*** Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. Our costs include an allowance for replacement of the variable frequency drives (VFD) and controls.

## Pump, Fire Suppression

***Line Item:*** 3.770

***Quantity:*** One fire suppression pump

***History:*** Original

***Condition:*** Reported satisfactory without operational deficiencies

**Fire suppression system pump**

***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. Sandarac I should also anticipate, as normal maintenance, interim repairs and component replacements to maximize its remaining useful life.

***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.

## Trash Chute and Doors

***Line Item:*** 3.880

***Quantity:*** Two trash chutes

***History:*** Original

***Condition:*** Reported fair overall


**Trash chute door**

***Useful Life:*** Up to 50 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.

***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

## Light Fixtures, Carports

***Line Item:*** 4.400

***Quantity:*** Approximately 44 light fixtures accent the carports

***History:*** Unknown age

***Condition:*** Satisfactory operational

**Carport light fixture**

**Carport light fixture**

***Useful Life:*** 20- to 25-years

***Priority/Criticality:*** Per Board discretion

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

## Maintenance Cart

***Line Item:*** 4.500

***History:*** Unknown age

***Condition:*** Satisfactory operational

**Maintenance Cart**

***Useful Life:*** Up to eight years

***Priority/Criticality:*** Per Board discretion

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

## Pavers, Masonry

***Line Item:*** 4.620

***Quantity:*** 106,000 square feet of driveways and parking areas

***History:*** Installed in 2004

***Condition:*** Good overall

**Masonry paver driveway and parking areas**

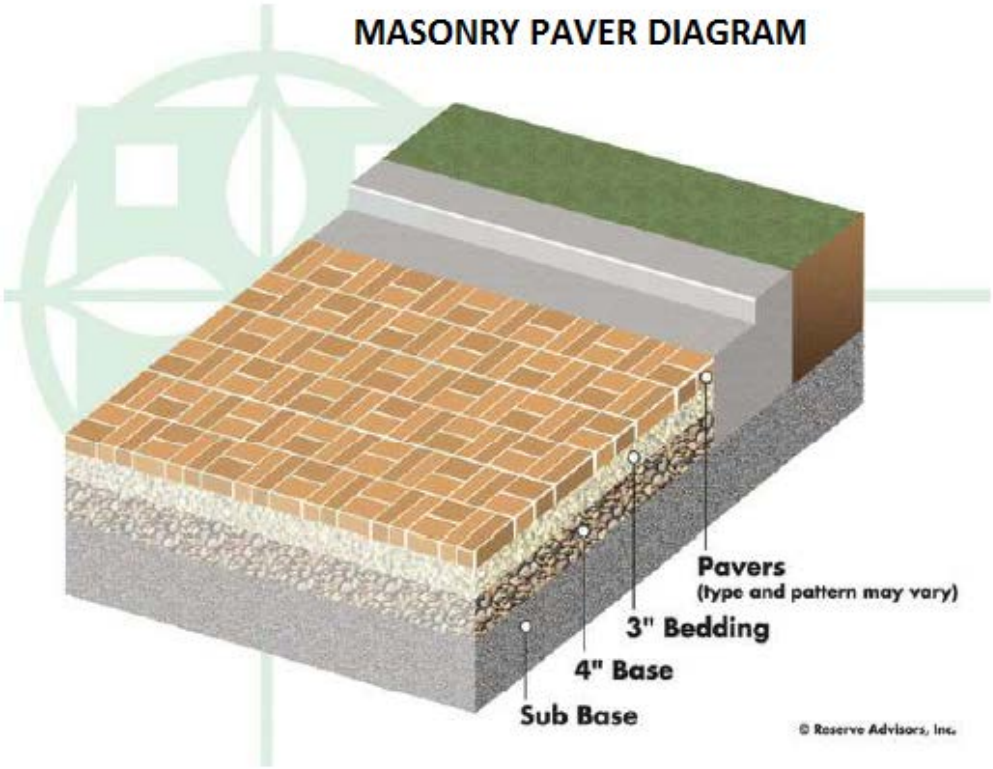
**Masonry paver driveway and parking areas**

**Masonry paver driveway and parking areas**

**Masonry paver driveway and parking areas**

***Useful Life:*** Up to 25 years

***Component Detail Notes:*** The following diagram depicts the typical components of a masonry paver system although it may not reflect the actual configuration at Sandarac I:




***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 suggest the Association conduct interim resetting and replacement of minor areas of pavers as normal maintenance, funded from the operating budget.

## Roofs, Thermoplastic, Carports

***Line Item:*** 4.800

***Quantity:*** 19,400 square feet

***History:*** Installed in 2005

***Condition:*** Good overall

**Carport thermoplastic roofs**

**Carport thermoplastic roof**

***Useful Life:*** 20- to 25-years

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

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

# Office Elements


**Office exterior overview**

## Roof, Thermoplastic

***Line Item:*** 5.600

***Quantity:*** 2,670 square feet including the pool rest rooms

***History:*** Replaced in 2016

***Condition:*** Reported good overall

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

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

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

## Security System

***Line Item:*** 5.700

***Quantity:*** Sandarac I utilizes the following security system components:

- Cameras (13)
- Multiplexer (1)
- Recorder (1)

***History:*** Installed in 2014

***Condition:*** Reported satisfactory operational

**Security system camera**


**Security system monitor**

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

***Priority/Criticality:*** Per Board discretion

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

## Windows and Doors

***Line Item:*** 5.800

***Quantity:*** 400 square feet

***History:*** Original

***Condition:*** Good to fair overall

**Office window**

***Useful Life:*** Up to 45 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. The estimate of cost is based on replacement with hurricane impact rated windows and doors.

# Pool Elements

**Pool area overview**

**Pool area overview**

## Deck, Pavers

***Line Item:*** 6.200

***Quantity:*** 2,900 square feet

***History:*** Installed in 2009

***Condition:*** Good overall

**Masonry paver pool deck**

**Masonry paver pool deck**

***Useful Life:*** Up to 30 years

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

***Expenditure Detail Notes:*** Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We recommend the Association fund interim inspections, partial replacements and repairs through the operating budget.

## Fence, Aluminum

***Line Item:*** 6.400

***Quantity:*** 240 linear feet

***History:*** Installed in 2009

***Condition:*** Good overall

**Aluminum pool fence**

**Aluminum pool fence**

***Useful Life:*** Up to 25 years

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

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

## Furniture

***Line Item:*** 6.500

***Quantity:***

- Chairs (16)
- Lounges (42)
- Tables (2)
- Ladders and life safety equipment

***History:*** Management informs us the Association re-strapped the furniture in 2012

***Condition:*** Good overall

**Pool furniture**

**Pool furniture**

***Useful Life:*** Up to 12 years

***Priority/Criticality:*** Per Board discretion

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

## Geothermal Heaters

***Line Item:*** 6.600

***Quantity:*** Four each

***History:*** Unknown age

***Condition:*** Management informs us the heaters will require near term replacement

**Geothermal heaters**

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

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

***Expenditure Detail Notes:*** Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We recommend the Association fund replacement of the remaining pool mechanical equipment from the operating budget as needed.

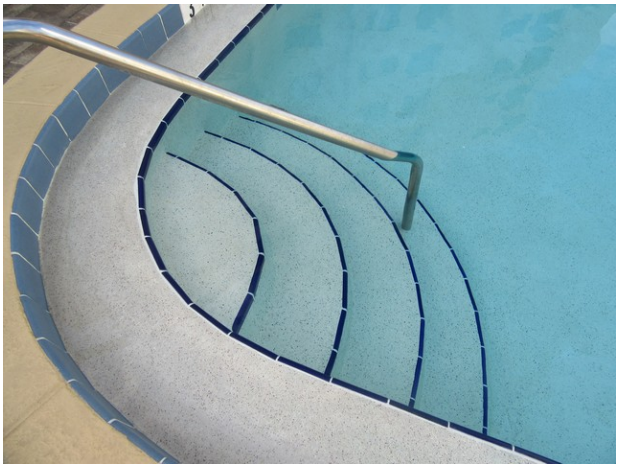
## Pool Finish, Plaster

***Line Item:*** 6.800

***Quantity:*** 1,700 square feet based on the horizontal surface area

***History:*** Resurfaced in 2009

***Condition:*** Good overall



**Pool plaster finish**

**Pool plaster finish**

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

***Component Detail Notes:*** Removal and replacement provides the opportunity to inspect the pool structure and to allow for partial repairs of the underlying concrete surfaces as needed. To maintain the integrity of the pool structure, we recommend the Association budget for the following:

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

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

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

## Structure and Deck

***Line Item:*** 6.900

***Quantity:*** 1,700 square feet of horizontal surface area

***History:*** Original

***Conditions:*** Visually appears 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 65 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 Sandarac I plan to replace the following components:

- 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 Hut, Replacement

***Line Item:*** 6.950

***History:*** Unknown age

***Condition:*** Fair overall


**Tiki hut overview**

**Tiki hut thatched roof**

**Missing thatched roof**

***Component Detail Notes:*** The tiki hut is a wood structure with a thatched roof that covers the pool mechanical equipment

***Priority/Criticality:*** Per Board discretion

***Expenditure Detail Notes:*** Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. At the request of Management, we include an allowance of $40,000 in 2020 for complete replacement of the tiki hut. Future updates to the reserve study will incorporate costs associated with the new structure built in its place.

# Reserve Study Update

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

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

Periodic updates incorporate these variable changes since the last Reserve Study or Update. The Association can expense the fee for an Update with site visit from the reserve account. This fee is included in the Reserve Funding Plan. We base this budgetary amount on updating the same property components and quantities of this Reserve Study report. We recommend the Board budget for an Update to this Reserve Study in two- to three-years. Budgeting for an Update demonstrates the Board's objective to continue fulfilling its fiduciary responsibility to maintain the commonly owned property and to fund reserves appropriately.

# 5. METHODOLOGY

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

Sandarac I 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 reserve assessments to fund the expected major future expenditures
4. Special assessments

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

This Reserve Study is in compliance with and exceeds the National standards[1] set forth by the Community Associations Institute (CAI) and 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 Fort Myers

[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.

Beach, Florida at an annual inflation rate[3]. Isolated or regional markets of greater construction (development) activity may experience slightly greater rates of inflation for both construction materials and labor.

- The past and current maintenance practices of Sandarac I 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.

[3] Derived from Marshall & Swift, historical costs and the Bureau of Labor Statistics.

# 6. CREDENTIALS

## HISTORY AND DEPTH OF SERVICE

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

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

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

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

## TOTAL STAFF INVOLVEMENT

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

## OUR GOAL

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

## VAST EXPERIENCE WITH A VARIETY OF BUILDINGS

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

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

## OLD TO NEW

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

# QUALIFICATIONS
## THEODORE J. SALGADO
### Principal Owner

**CURRENT CLIENT SERVICES**

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

**PRIOR RELEVANT EXPERIENCE**

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

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

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

**EXPERT WITNESS**

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

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

**PROFESSIONAL AFFILIATIONS/DESIGNATIONS**

American Association of Cost Engineers - Past President, Wisconsin Section
Association of Construction Inspectors - Certified Construction Inspector
Association of Professional Reserve Analysts - Past President & Professional Reserve Analyst (PRA)
Community Associations Institute - Member and Volunteer Leader of multiple chapters
Concordia Seminary, St. Louis - Member, National Steering Committee
Milwaukee School of Engineering - Member, Corporation Board
Professional Engineer, Wisconsin (1982) and North Carolina (2014)

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

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

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

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

**PRIOR RELEVANT EXPERIENCE**

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

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

**INDUSTRY SERVICE AWARDS**

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

**EDUCATION**

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

**PROFESSIONAL AFFILIATIONS**

**Community Associations Institute (CAI)** - Founding member of Reserve Committee; former member of National Board of Trustees; Reserve Specialist (RS) designation; Member of multiple chapters
**Association of Condominium, Townhouse, & Homeowners Associations (ACTHA)** – member

**GRAHAM W. CULKAR, RS**
**Responsible Advisor**

## CURRENT CLIENT SERVICES

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

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

**Harbor Light Waterfront Condominium Association** Built in 1974 this 10-story mid-rise condominium association is located in picturesque Clearwater, Florida on the intercostal waterway. The building contains 92 units along with a fitness room, party room and lobby. The association is also responsible for two elevators, the surrounding asphalt pavement, carports, retaining walls, and a pool.

**Tiers II Condominium Association** This condominium development located in Kingstowne, Virginia is responsible for maintaining six building exteriors and the surrounding property elements. These elements include asphalt shingle roofs, windows and doors, exterior vinyl siding, asphalt pavement, concrete flatwork and mailbox stations.

**Weston Lakes Property Owners Association** Located near Houston, Texas this community contains 1,465 single family homes spanning over 1,775 acres. In addition to the extensive concrete streets, the association maintains two playgrounds, metal fencing, a gate house, masonry perimeter walls and multiple masonry entrance monuments.

**Harbour Light Condominium Association** A 19-story high rise condominium consisting of 136 units in Clearwater Beach, Florida. Built from 1974 to 1978 this condominium association is responsible for two elevators, elevated concrete breezeways and balconies, a two story parking garage, asphalt pavement and a pool.

**Little Oak Island Community Association** Located near Charleston, South Carolina this community association is responsible for the common elements shared by two condominium associations and 35 single family homes. The community association maintains timber bulkheads along the causeway, two tennis courts, two ponds, a pool and a dock.

**Jardin Master Association** A master association located in Jacksonville Beach, Florida is responsible for the common elements shared by 22 individual condominium associations that comprise 176 total units. The community contains timber and vinyl bulkheads at the detention pond, asphalt pavement streets, concrete flatwork, chain link fencing and an irrigation system.

## PRIOR RELEVANT EXPERIENCE

Before joining Reserve Advisors**,** Mr. Culkar attended Florida Gulf Coast University in Fort Myers, Florida where he attained his Bachelor of Science degree in Environmental Engineering. During his time at Florida Gulf Coast University, Mr. Culkar participated in an internship at Algenol Biofuels where he worked with a team of engineers on the design and fabrication of photo-bioreactors and the construction of a photo-bioreactor flow system to convert algae into ethanol fuel. Mr. Culkar was also the student chapter president for the Water Environment Association at Florida Gulf Coast University.

## EDUCATION

Florida Gulf Coast University - B.S. Environmental Engineering

## PROFESSIONAL AFFILIATIONS / DESIGNATIONS

*Reserve Specialist (RS) – Community Association Institute*
*Engineer In Training (E.I.T.) Registration* – Florida 2014

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

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

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

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

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

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

# 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 Sandarac I 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) Sandarac I 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, Inc. (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.