

FULL RESERVE STUDY

Kingston Plantation Master Association, Inc.



Myrtle Beach, South Carolina

March 9, 2018



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RESERVE ADVISORS

Long-term thinking. Everyday commitment.

Corporate Office

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

Kingston Plantation Master Association, Inc.
Myrtle Beach, South Carolina

Dear Board of Directors of Kingston Plantation Master Association, Inc.:

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Full Reserve Study* of Kingston Plantation Master Association, Inc. in Myrtle Beach, South Carolina and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, March 9, 2018.

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

An ongoing review by the Board and an Update of this Reserve Study are necessary to ensure an equitable funding plan since a Reserve Study is a snapshot in time. We recommend the Board budget for an Update to this Reserve Study in two years. We look forward to continuing to help Kingston Plantation Master 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 May 21, 2018 by

Reserve Advisors, Inc.

Visual Inspection and Report by: Jeffrey B. Dow, RS²
Review by: Alan M. Ebert, PRA¹, RS, Director of Quality Assurance



¹ 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>.

² 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.



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1. RESERVE STUDY EXECUTIVE SUMMARY

Client: Kingston Plantation Master Association, Inc. (Kingston Plantation)

Location: Myrtle Beach, South Carolina

Reference: 171942

Property Basics: Kingston Plantation Master Association, Inc. is a master association which is responsible for the common elements shared by 1,386 units. Construction of the common elements of the Association began in 1985 and continued to the present.

Reserve Components Identified: 96 Reserve Components.

Inspection Date: March 9, 2018.

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 2032 due to replacement of the asphalt pavement.

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

- Current and future local costs of replacement
- 1.2% annual rate of return on invested reserves
- 1.7% future Inflation Rate for estimating Future Replacement Costs

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

Cash Status of Reserve Fund:

- \$1,991,300 as of January 1, 2018
- 2018 budgeted Reserve Contributions of \$299,805
- A potential deficit in reserves might occur by 2031 based upon continuation of the most recent annual reserve contribution of \$299,805 and the identified Reserve Expenditures.

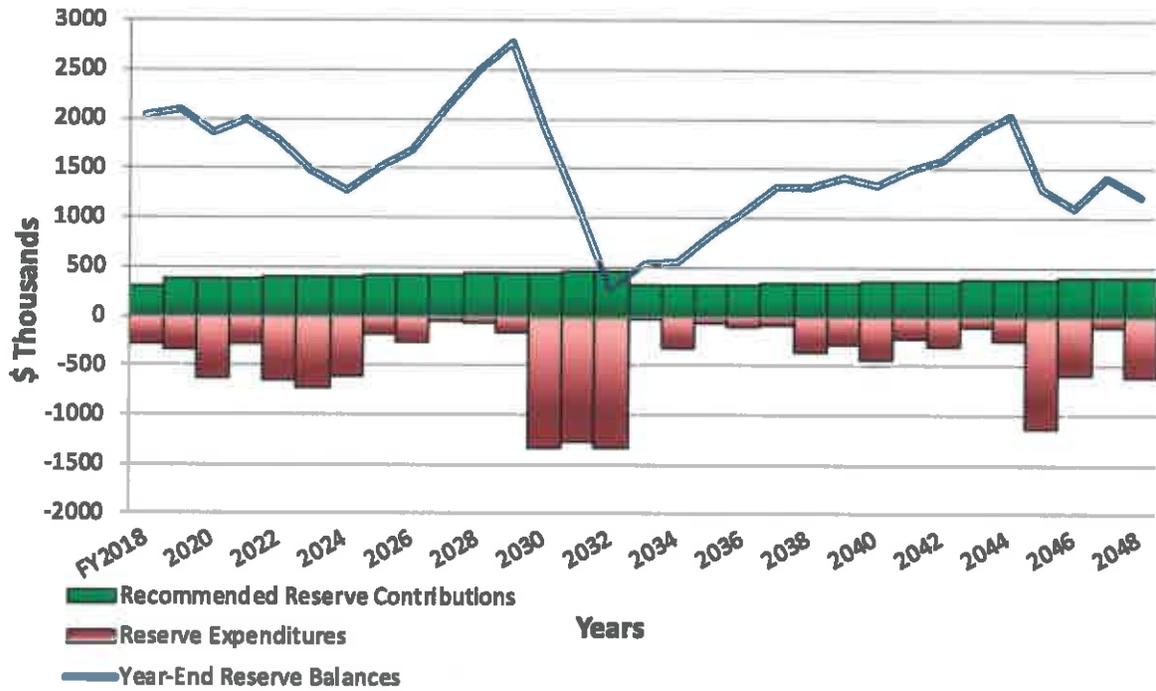
Recommended Reserve Funding: We recommend the following in order to achieve a stable and equitable Funding Plan:

- Increase to \$372,000 in 2019
- Inflationary increases from 2020 through 2032
- Decrease to \$315,000 by 2033 due to fully funding for replacement of the asphalt pavement
- Inflationary increases from 2034 through 2048, the limit of this study's Cash Flow Analysis
- Initial adjustment in Reserve Contributions of \$72,195 represents an average monthly increase of \$4.34 per homeowner and about a three percent (2.6%) adjustment in the 2018 total Operating Budget of \$2,754,211.



**Kingston Plantation
Recommended Reserve Funding Table and Graph**

Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)
2019	372,000	2,092,015	2029	440,300	2,789,870	2039	348,400	1,403,049
2020	378,300	1,865,618	2030	447,800	1,905,526	2040	354,300	1,337,248
2021	384,700	2,000,400	2031	455,400	1,113,028	2041	360,300	1,492,937
2022	391,200	1,772,473	2032	483,100	254,608	2042	366,400	1,577,152
2023	397,900	1,459,774	2033	315,000	541,456	2043	372,800	1,866,888
2024	404,700	1,266,851	2034	320,400	557,081	2044	378,900	2,028,972
2025	411,600	1,504,193	2035	325,800	820,649	2045	385,300	1,297,329
2026	418,600	1,878,594	2036	331,300	1,052,005	2046	391,900	1,105,051
2027	425,700	2,085,141	2037	336,900	1,316,360	2047	398,600	1,413,180
2028	432,900	2,471,073	2038	342,600	1,322,752	2048	405,400	1,225,327





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

Kingston Plantation Master Association, Inc.

Myrtle Beach, South Carolina

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, March 9, 2018.

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

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

IDENTIFICATION OF PROPERTY



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

Our process of identification helps assure that future boards and the management team understand whether reserves, the operating budget or Homeowners



fund certain replacements and assists in preparation of the annual budget. We derive these segregated classes of property from our review of the information provided by the Association and through conversations with Management. 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:

- Kingston Plantation 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, Gate House, Meeting House and Pump Houses
- Pipes, Interior Building, Domestic Water, Sanitary Waste and Vent, Gate House (Constructed 2017)-
- Pipes, Subsurface Utilities
- Structural Frames, Gate House, Meeting House and Pump Houses
- Walls, Fiber Cement Siding, Gate House (Constructed 2017)
- Windows and Doors, Gate House (Constructed 2017)

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 \$5,000 (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)

- Doors, Metal, Laurel Court Meeting Building, Interim Replacements
- Fences, Wood, Gloucester on the Point, Paint Finish Applications
- Fences, Wood, Split-Rail
- Irrigation System (Per Management)
- Landscape (Includes Landscape Light Fixtures)
- Light Fixtures, Exterior, Laurel Court Meeting Building and Pool Houses
- Paint Finishes, Touch-Up
- Pipes, Interior Building, Domestic Water, Sanitary Waste and Vent, Meeting House
- Pool Houses, Interim Roof Replacements
- Pumps Less Than Five-HP (horsepower)
- Valves (We assume replacement as needed in lieu of an aggregate replacement of all valves as a single event.)
- Water Heaters, Common
- Other Repairs normally funded through the Operating Budget

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

- Asphalt Pavement, Parking Areas at Embassy Suites, Conference Center and Splash Park (Developer)
- Asphalt Pavement, Queensway Boulevard from Wetherby Way to Plantation Lakes Drive (Developer)
- Fence, Wood, South Perimeter (Developer)
- Gate Elements, South Entrance (Developer)
- Intercom Panel (Developer)
- Lift Station (Municipality)
- Light Poles and Fixtures with Serial Numbers (Santee Cooper)
- Parking Garages, Margate (Developer)
- Ponds, Maintenance and Sediment Removal (Developer)
- Pump House #5 (Developer)
- Residence Buildings and Townhomes (Separate Associations)
- The Landing Sport and Health Center and Associated Elements (Including Sport Courts) (Developer)
- Vehicles, Maintenance Carts (Leased)



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
- 2018 local cost of replacement
 - Per unit
 - Per phase
 - Replacement of total quantity
- Total future costs of replacement anticipated during the next 30 years
- Schedule of estimated future costs for each reserve component including inflation

Reserve Funding Plan

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

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

RESERVE FUNDING PLAN

CASH FLOW ANALYSIS
 Kingston Plantation
 Master Association, Inc.

Myrtle Beach, South Carolina

Individual Reserve Budgets & Cash Flows for the Next 30 Years

	FY2016	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Reserves at Beginning of Year (Note 1)	1,991,300	2,032,091	2,082,015	1,865,618	2,000,400	1,772,473	1,459,774	1,268,851	1,504,193	1,678,594	2,085,141	2,471,073	2,769,670	1,905,528	1,113,029	254,608
Total Recommended Reserve Contributions (Note 2)	289,895	372,899	378,306	394,706	387,908	387,908	404,706	411,606	418,888	425,706	432,909	440,306	447,800	455,400	463,100	315,000
Plus Estimated Interest Earned, During Year (Note 3)	23,988	24,597	23,904	23,658	22,502	19,278	18,282	16,527	18,983	22,446	27,174	31,257	27,884	18,003	8,157	4,748
Less Anticipated Expenditures, By Year	(283,010)	(336,673)	(628,303)	(272,674)	(841,629)	(729,677)	(613,865)	(190,785)	(263,182)	(41,801)	(74,142)	(172,900)	(1,339,828)	(1,285,900)	(1,328,679)	(32,900)
Anticipated Reserves at Year End	\$2,032,091	\$2,082,015	\$1,865,618	\$2,000,400	\$1,772,473	\$1,459,774	\$1,268,851	\$1,504,193	\$1,678,594	\$2,085,141	\$2,471,073	\$2,769,670	\$1,905,528	\$1,113,029	\$254,608	\$541,458

Predicted Reserves based on 2016 funding level of: \$299,805 2,019,387 1,713,151 1,780,701 1,437,954 1,022,557 718,863 837,163 894,052 1,154,414 1,365,284 1,539,633 511,845

(NOTE 5)
 (\$453,904) (1,405,403)

(continued)

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

	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
Reserves at Beginning of Year	547,456	557,081	620,648	1,052,005	1,316,360	1,322,752	1,403,049	1,337,248	1,492,537	1,577,152	1,665,988	2,026,972	1,297,329	1,105,051	1,413,180
Total Recommended Reserve Contributions	339,400	325,808	331,360	336,900	342,800	347,480	354,300	360,360	366,480	372,600	378,760	385,360	391,560	398,000	405,400
Plus Estimated Interest Earned, During Year	0,652	8,217	11,769	14,125	15,740	16,257	16,344	16,880	16,311	20,541	23,224	19,827	14,328	15,019	15,737
Less Anticipated Expenditures, By Year	(311,327)	(70,449)	(111,113)	(86,670)	(351,948)	(284,360)	(438,447)	(221,489)	(300,466)	(103,405)	(242,040)	(1,134,770)	(659,506)	(105,490)	(806,990)
Anticipated Reserves at Year End	\$557,081	\$620,648	\$1,052,005	\$1,316,360	\$1,322,752	\$1,403,049	\$1,337,248	\$1,492,537	\$1,577,152	\$1,665,988	\$2,026,972	\$1,297,329	\$1,105,051	\$1,413,180	\$1,225,372

(NOTE 4)

Explanatory Notes:

- 1) Year 2019 starting reserves are as of January 1, 2018; FY2018 starts January 1, 2018 and ends December 31, 2018.
- 2) Reserve Contributions for 2018 are budgeted; 2019 is the first year of recommended contributions.
- 3) 1.2% is the estimated annual rate of return on invested reserves.
- 4) Accumulated year 2048 ending reserves consider the age, size, overall condition and complexity of the property.
- 5) Threshold Funding Year (reserve balance at critical point).