

# Capital Reserve Study

**KEG File: 18RS-0379**  
**Updated December 26, 2020**

For:

***Bay Isles Bayou Association***

In Care of:

***Frank Pack***  
***Asset Management Chair***  
***595 Bay Isles Road***  
***Suite 100***  
***Longboat Key, Florida 34228***



*December 26, 2020*

Mr. Frank Pack  
Bay Isles Bayou Association  
Asset Management Chair  
595 Bay Isles Road, Suite 100  
Longboat Key, FL 34228

Via Email: [fmpack@me.com](mailto:fmpack@me.com)

**RE: Bay Isles Bayou Association**  
**KEG File No. 18RS-0379**  
**Professional Engineering Services – HOA Capital Reserve Study Update**

Dear Mr. Pack and Members of the Board of Directors:

As requested, Karins Engineering Group, Inc. (KEG) visited **Bay Isles Bayou Association**, and reviewed the provided documentation in order to issue this updated capital reserve study report in compliance of Florida Statute Chapter 720.303(6). We appreciate this opportunity to be of service and look forward to continued participation in the management of your valuable assets.

### **EXECUTIVE SUMMARY**

**Bay Isles Bayou Association** is a community of single family residences with common elements consisting of:

- Asphalt Roadways & pavers
- Concrete Sidewalks
- Exterior Lighting
- Storm Water Drainage System
- Landscaping Contingency

Bay Isles Bayou Association, Inc. is a well-maintained complex with overall conditions as typically expected for a property of its vintage and type. The current association consists of one hundred twenty-four (124) single-family homes, which initially began construction in approximately 1978.

The following table summarizes three major changes to planned capital expenditures.

TASK	AMOUNT	YEAR OF EXPENDITURE	COMMENTS
Replace sections of curb & gutter	\$55,000	2029 expenditure	Not addressed in 2018 CRS
Major Landscaping Improvements	\$15,000	2034 expenditure	Reflects recent entry improvements
Replacement of entrance pavers	\$26,000	Moved forward from 2029 to 2020 expenditure	Compliment updated entry landscaping

**Annual Reserve Contributions and Owner Assessments**

Reserve contributions are funded by resident assessments and therefore must allow for funding Bayou HOA operations. Contributions levels reflect the following objectives:

1. Fully fund capital expenditures
2. Maintain minimum reserve balances above annual contribution
3. Avoid special assessments

Resident assessments must support both Bayou capital expenditures and annual operating expenses. Current annual Bayou assessment is \$800 per property, a total of approximately \$100,000.

The table below shows reserve contributions and the associated annual assessment for the period 2020-2050 from the revised CRS. Over time, both contributions and assessments rise, reflecting inflation impacts. The assessment's rise from \$800 to \$1,000 over 30 years represents less a 1% annual compounded rate of increase.

<b>PERIOD</b>	<b>RESERVE CONTRIBUTION</b>	<b>ASSESSMENT</b>
<b>2020</b>	\$4,000	\$800
<b>2021 - 2030</b>	\$15,000	\$800
<b>2031 – 2035</b>	\$21,250	\$850
<b>2036 - 2040</b>	\$27,500	\$900
<b>2041 - 2045</b>	\$33,750	\$950
<b>2046 - 2050</b>	\$40,000	\$1,000

**PRELIMINARY MATTERS**

Our observations were limited to visible surfaces of accessible exterior components referenced specifically herein. Our observations were of a general nature. Neither our observations nor this report is intended to cover hidden defects, mechanical, electrical, architectural features, code compliance or other areas of the community not specifically mentioned.

**LINE ITEM COMMENTARY AND ASSUMPTION**

**ASPHALT ROADWAY & PAVERS**

The entryway off Harbourside Drive consists of pavers. Paver roadways generally have an anticipated useful life of 30 to 35 years. Assuming the pavers were installed when the initial asphalt overlay was performed, the projected remaining useful life for the pavers is 11 years with anticipated replacement in 2029.

*However, KEG was informed of Bay Isles Bayou wishes to replace the pavers in 2020, and we have budgeted \$26,0000.00 in today's dollars for replacement in 2020, and every 30 years following.*



The asphalt roadways throughout Bay Isles Bayou appear to be in average condition. Numerous gouges and cracks in the asphalt from construction and delivery equipment were noted and should be addressed to prevent water intrusion which accelerates the deterioration of the existing roadway. The anticipated life expectancy for asphalt roadways is 20 years with proper maintenance. Recommended maintenance includes sealcoating every five years with the next scheduled sealer to be applied in 2024, anticipating that the current asphalt will be replaced in 2029. KEG recommends Bay Isles Bayou include funds in their yearly maintenance budget of \$22,689.50 for sealcoating 19,730 square yard (SY) of asphalt every 5 years to extend the useful expected life of the pavement. When the asphalt becomes too deteriorated, the remediation required shall be to mill the existing surface following by an overlay of new asphalt.

***KEG recommended Bay Isles Bayou engage the services of Universal Engineering to obtain two asphalt test core samples to confirm the exact thicknesses of the asphalt system in place. The two asphalt samples taken show existing shell base of 3.75 inches and 4.0 inches thickness at the two locations, which is less than the minimum 6" base thickness KEG would recommend for a project such as Bay Isles Bayou.***

***We budget \$278,000 in today's dollars for milling the existing asphalt followed by an overlay of 19,730 SY to be scheduled for 2029, and again in 2049.***

## **CONCRETE SIDEWALKS**

The concrete sidewalks are in fair condition with numerous cracks. The sidewalks have been maintained by power washing and the milling of high spots where necessary in 2015. The anticipated useful life expectancy for concrete sidewalks is 50 years. Assuming that the sidewalks were installed when the association was developed, the projected remaining life of the sidewalk system in its entirety is 10 years with wholesale replacement anticipated in 2028.

***Bay Isles Bayou has elected to use a deferred maintenance approach to sidewalk remediation and we hereby budget \$285.38 dollars per year, beginning 2020, for the next 30 years for sidewalk remediation. Reference Photos (8): 1, 2, 3, 4, 5, 6, 7, & 8***

## **EXTERIOR LIGHTING**

The exterior lighting at Bay Isles Bayou consists of several antique style lighting poles. Other illumination is in place that highlights the amenities of the association such as landscaping and front entrance and are in satisfactory form. Exterior lighting has an estimated useful life of 30 years. The estimated remaining useful life is 25 years with replacement anticipated in 2043.

***We budget \$29,450, for antique style light pole replacement in the year 2030, and again in 2080.***



## **DRAINAGE**

The drainage system at Bay Isles Bayou combines over land sheet flow, drainage inlets, an underground piping network as well as concrete curb and gutter drains. The life expectancy for drainage systems is over 100 years with the proper maintenance. The elements available for observation appeared to be in good condition apart from the curb and gutter drains. KEG observed recurrent cracks and ponding in some locations within the drain system which could hasten the deterioration of the concrete due to moisture infiltration and destabilization of the subgrade material. Projecting the curb and gutter drains were in place when the initial asphalt overlay was installed, the estimated remaining useful life of the curb and gutter drain system in its entirety is 60 years with wholesale replacement anticipated in 2078.

***KEG recommends allowing for replacement of 5% of the valley drains, or 704 lineal feet, where settlement may have occurred creating ponding, or concrete is deteriorated. We budget \$45,760 for replacement of 704 feet of valley drain in the year 2029, or a unit cost of \$65 per foot, to be completed with the anticipated asphalt replacement.***

The underground piping and drainage inlets typically have a life expectancy outside the time covered by this report. It is recommended that Bay Isles Bayou reserves \$4,000.00 every 100 years to replace the tops of its drainage inlets with the next scheduled replacement outside the scope of this study expected in 2078. Expected maintenance required periodically would be removal of rust from the angle iron on front and recoating with a rust-oleum protective coating for protection from the elements, and a similar coating for the drain-hole covers. The underground piping typically has a life expectancy outside the time covered by this report. If the Association considers replacing the sewer system in the future, we can provide cost data.

## **LANDSCAPING**

***Bay Isles Bayou has elected to provide a reserve landscaping allowance of \$15,000, to be used in 2034, and again in 2049, for landscape remediation and replacements. This allowance is subject to the 2% inflation for expenditures.***



## **CONCLUSIONS**

Reserve studies generally account for any item for which the deferred maintenance expense or replacement cost exceeds \$10,000. Florida statute requires reserves for roofs, painting and pavement regardless of the value if those items are common assets of an association. Items of less value than those reserved may be budgeted by expense classifications such as maintenance and covered under the “day to day” operating expense budget.

KEG recommends this report be reviewed and adjusted annually with on-site condition observations performed approximately every three years. If elements or quantities need to be verified a full study may be necessary.

Based on our observations, it is our professional opinion that **Bay Isles Bayou Association** is generally well maintained and in very good condition. The gouges in the asphalt pavement should be sealed to prevent early deterioration and water intrusion. The valley curb sections and sections of sidewalk with significant cracks should be replaced on an “as needed” basis.

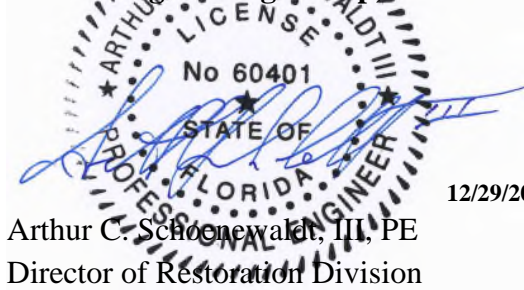
Costs reported in written commentary are current dollars. Cost reference data was researched using data from similar projects.

This report is prepared for the sole benefit of the client. Any unauthorized use without our permission shall result in no liability or legal exposure to Karins Engineering Group, Inc. We trust this information is helpful. Should questions arise, please do not hesitate to call.

Thank you for the opportunity to assist you with your project.

Sincerely,

**Karins Engineering Group, Inc.**



12/29/2020

Arthur C. Schoenewald, III, PE  
Director of Restoration Division  
FL PE#60401

