



# PROFESSIONAL RESERVE STUDY



## Raft Island Homeowners Association

Raft Island, Gig Harbor, WA 98335

For:

**Raft Island Homeowners Association**  
c/o Carolyn Tucker, Property Manager  
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## 1.0 EXECUTIVE SUMMARY

### 1.1 DISCLOSURES REQUIRED BY STATE OF WA RCW 64.90.550

The undersigned makes the following disclosures required by RCW 64.90.550 to establish that this Reserve Study meets all requirements of the Washington Uniform Common Interest Ownership Act, Chapter 64.90 RCW:

- a. This Reserve Study was prepared with the assistance of a reserve study professional, and that professional was independent;
- b. This Reserve Study includes all information required by RCW 64.90.550 Reserve Study – Contents; and
- c. This reserve study should be reviewed carefully. It may not include all common and limited common element components that will require major maintenance, repair, or replacement in future years, and may not include regular contributions to a reserve account for the cost of such maintenance, repair, or replacement. The failure to include a component in a reserve study, or to provide contributions to a reserve account for a component, may, under some circumstances, require the association to (1) defer major maintenance, repair, or replacement, (2) increase future reserve contributions, (3) borrow funds to pay for major maintenance, repair, or replacement, or (4) impose special assessments for the cost of major maintenance, repair, or replacement.

### 1.2 GENERAL DESCRIPTION OF PROPERTY

Raft Island is located in Henderson Bay of South Puget Sound in the suburban area west of Gig Harbor. The island is 201.86 acres and contains 226 single family lots, including a church camp in this Association (6 lots). We understand that the property was constructed in the 1950s. The property consists of approximately 3.5 miles of new private asphalt roads, a bridge to access the island, a tennis court, and two community beaches and a community dock.

There are no buildings that are the responsibility of the Homeowners Association.

Like all properties, this property will require capital maintenance. We have itemized areas of capital maintenance that we anticipate over the next thirty (30) years along with estimated costs and estimated schedule of repair/replacement.

### 1.3 IMMEDIATE NECESSARY CAPITAL EXPENDITURES

Table 1.3 below shows the items that are in need of action immediately or within the near future. This is a summary; all tasks are explained in greater detail in Section 3.0 Physical Analysis.

**Table 1.3: Summary of Immediate Necessary Capital Expenditures**

Component	Cost	Urgency	Section
Drainage project at tennis court area	\$50,000	2022/2023	3.2

#### 1.4 CURRENT STATUS OF CAPITAL RESERVE FUND

Table 1.4 below shows the current status of the Capital Reserve Fund and how it relates to Full Funding. The current Reserve Fund data was provided to us by Carolyn Tucker.

**Table 1.4: Current Status of the Reserve Fund**

Current Reserve Balance	\$183,561 as of July 31, 2022
Current Annual Reserve Fund Contribution	\$29,592
Average Per Unit Per Month	\$10.91
Planned Special Assessment(s)	N/A
Balance Required for Full Funding	\$419,169
Current Percentage of Full Funding	43.8%

## 1.5 RECOMMENDATIONS AND ASSUMPTIONS FOR FUTURE RESERVE CONTRIBUTIONS

The following table is a summary of our assumptions and several options that we have provided for funding contributions to the Reserve Fund. This is only a summary table; for a detailed view of our recommended funding plans, please see section 4 of this report.

**Table 1.5: Recommendations and Assumptions for Future Reserve Contributions**

Assumed Average Future Inflation Rate over 30 Years	3%
Assumed Average Future Interest Rate over 30 Years	3%
<b>Option 1 – Immediate Full Funding</b>	
Immediate Special Assessment Required <u>IF</u> the Association is to be Fully Funded Immediately	\$235,608
Average Initial Special Assessment per Unit	\$1,043
Annual Reserve Fund Contribution Required for the Reserve Fund to remain Fully Funded	\$67,918
Average Contribution per Unit per Month	\$25.04
<b>Option 2 – Path to Full Funding in 5 Years</b>	
Annual Reserve Fund Contribution Required for the Reserve Fund to be Fully Funded in <u>5 years</u>	\$117,866 of which \$49,948 will be “make-up” funding
Average Contribution per Unit per Month	\$43.46
<b>Option 3 - Path to Full Funding in 10 Years</b>	
Annual Reserve Fund Contribution Required for the Reserve Fund to be Fully Funded in <u>10 years</u>	\$94,734 of which \$26,816 will be “make-up” funding
Average Contribution per Unit per Month	\$34.93
<b>Option 4 - Path to Full Funding in 30 Years*</b>	
Annual Reserve Fund Contribution Required for the Reserve Fund to be Fully Funded in <u>30 years</u>	\$79,589 of which \$11,670 will be “make-up” funding
Average Contribution per Unit per Month	\$29.35
<b>Option 5 – Baseline Funding*</b>	
Annual Reserve Fund Contribution Required for Baseline Funding (Keeping the Reserve Fund above Zero over the 30 Year Period)	\$72,788
Average Contribution per Unit per Month	\$26.84

*\*These funding levels are required by WA State RCW 64.90.550. They are “bare minimum” funding plans and therefore carry a higher level of risk. Because of this, these options are not recommended by Samdal & Associates.*

## 2.0 RESERVE STUDY BACKGROUND

### 2.1 PURPOSE OF THIS LEVEL 2 RESERVE STUDY

The primary purpose of this Level 2 Reserve Study is to provide the Association with a planning and budgeting tool to adequately maintain the property 30 years into the future without unexpected special assessments. This study is intended to provide the Association with an understanding of their property and to bring to light necessary immediate expenditures and reasonably anticipated future capital expenses that should be addressed.

Associations have a responsibility to their members to adequately maintain their properties and our Reserve Studies provide our clients with the tools to implement capital maintenance. When small issues and maintenance items are addressed prior to becoming larger problems, there is typically a significant overall savings for a property owner. Properly maintained properties maintain higher property values than those with an abundance of deferred maintenance.

An additional benefit of this Reserve Study is that it is one of the qualifications required for Associations to obtain FHA approval (which is helpful in selling or refinancing individual units). Many other sources of funding are also beginning to require them as well.

### 2.2 WASHINGTON STATE RCW 64.90.550

As of July 1, 2018, WA State RCW 64.90.550 defined a Reserve Study in WA State as the following:

- (1) Any reserve study is supplemental to the association's operating and maintenance budget.
- (2) A reserve study must include:
  - (a) A reserve component list, including any reserve component, the replacement cost of which exceeds one percent of the annual budget of the association, excluding contributions to the reserves for that reserve component. If one of these reserve components is not included in the reserve study, the study must explain the basis for its exclusion. The study must also include quantities and estimates for the useful life of each reserve component, the remaining useful life of each reserve component, and current major replacement costs for each reserve component;
  - (b) The date of the study and a disclosure as to whether the study meets the requirements of this section;
  - (c) The following level of reserve study performed:
    - (i) Level I: Full reserve study funding analysis and plan;
    - (ii) Level II: Update with visual site inspection; or
    - (iii) Level III: Update with no visual site inspection;
  - (d) The association's reserve account balance;
  - (e) The percentage of the fully funded balance to which the reserve account is funded;
  - (f) Special assessments already implemented or planned;
  - (g) Interest and inflation assumptions;
  - (h) Current reserve account contribution rates for a full funding plan and a baseline funding plan;
  - (i) A recommended reserve account contribution rate for a full funding plan to achieve one hundred percent fully funded reserves by the end of the thirty-year study period, a recommended reserve account contribution rate for a baseline funding plan to maintain the reserve account balance above zero throughout the thirty-year study period without special assessments, and a reserve account contribution rate recommended by the reserve study professional;

This reserve study  
meets the  
qualifications of  
WA State RCW  
64.90.550

(j) A projected reserve account balance for thirty years based on each funding plan presented in the reserve study;

(k) A disclosure on whether the reserve study was prepared with the assistance of a reserve study professional, and whether the reserve study professional was independent; and

(l) A statement of the amount of any current deficit or surplus in reserve funding expressed on a dollars per unit basis. The amount is calculated by subtracting the association's reserve account balance as of the date of the study from the fully funded balance, and then multiplying the result by the fraction or percentage of the common expenses of the association allocable to each unit; except that if the fraction or percentage of the common expenses of the association allocable vary by unit, the association must calculate any current deficit or surplus in a manner that reflects the variation.

(3) A reserve study must also include the following disclosure:

"This reserve study should be reviewed carefully. It may not include all common and limited common element components that will require major maintenance, repair, or replacement in future years, and may not include regular contributions to a reserve account for the cost of such maintenance, repair, or replacement. The failure to include a component in a reserve study, or to provide contributions to a reserve account for a component, may, under some circumstances, require the association to (1) defer major maintenance, repair, or replacement, (2) increase future reserve contributions, (3) borrow funds to pay for major maintenance, repair, or replacement, or (4) impose special assessments for the cost of major maintenance, repair, or replacement."

## 2.3 SCOPE AND METHODOLOGY

This Level 2 Reserve Study has been prepared based on Community Associations Institute (CAI) standards and our proposal to the Association dated January 19, 2022, which was based on our correspondence with Carolyn Tucker and the previous Reserve Studies that we have prepared for this property.

### Information Gathering

Our initial task was to gather information regarding the property such as financials, drawings, maintenance records, and historical background. This Reserve Study is a reflection of the information provided to us.

### Physical Analysis

Following the initial correspondence regarding the property, we performed an inspection of the property on September 22, 2022 so that we may provide an opinion of the current condition of the common building components. This is also the basis for our opinion of the anticipated capital needs that the Association will be responsible for over the next 30 years. This was a visual inspection, and no invasive or destructive testing was performed. This visual inspection focused on the typical features of a building and surrounding property such as structure, drainage, roof, exterior, electrical, plumbing, HVAC systems, and interior finishes. This inspection was limited to accessible and visible areas.

The physical analysis included the following tasks:

**1. Identification of Anticipated Capital Expenses:** We consider anticipated capital expenses to be major expenses that can be reasonably predicted. Anticipated capital expenses are not considered routine maintenance such as routine landscaping or touch-up paint; routine maintenance should be taken care of through an operating budget. Nor do we consider anticipated capital needs to be expenditures that result from an accident or an unpredictable event, such as flood damage or earthquake damage; these items should be paid for by insurance.

The general criteria that we used to define an anticipated capital expense that warranted inclusion on our Itemized capital expenses is the following:

- The component must be a common component that is the responsibility of the Association.
- Repair or replacement of the component is significant and not budgeted for in the operating budget.



- The component repair or replacement occurs within the period of this study.

**2. Estimated Replacement Schedule:** Our opinions of the various life expectancy estimates that we prepared are based on a combination of the following:

- National Association of Home Builders (NAHB) averages
- Building Owners and Managers (BOMA) averages
- Product vendors and suppliers
- Our company database

**3. Estimated Replacement Cost:** Our opinions of the various costs for repair or replacement are based on a combination of the following:

- R.S. Means
- Product vendors and suppliers
- Our company database

**4. Financial Analysis:** We performed an analysis on the financial needs and current status at the property. The financial analysis provides the following:

- Forecasts the anticipated Capital Reserves necessary at the property over the next 30 years.
- Projects future Capital Reserve balances and determines the appropriate funding levels necessary.
- Reviews the current funding plan and current financial position.
- Provides our recommended annual contribution to the Reserve Fund to maintain Full Funding.

## 2.4 SOURCES OF INFORMATION

The following people provided us information for this study:

- Carolyn Tucker, Community Manager, HOA Community Solutions
- Charlotte Crain, Board Member

The following documents were viewed as part of this study:

- Balance Sheet, dated July 31, 2022
- 2023 Approved Budget
- List of Recent Expenditures, prepared by Carolyn Tucker on August 5, 2022

The physical inspection of the property occurred on the following date:

- September 22, 2022

## 2.5 DEFINITIONS

**Assumed Inflation** - Our assumed inflation rate is our best guess of the long-term average of the inflation rate over the next thirty years; it is not based on the current Consumer Price Index (CPI). Our number is much closer to the historical average of the CPI over the previous 25 years.

**Capital Reserves Balance** - Actual or projected funds as of a particular point in time that the Association has identified for use to defray the future repair or replacement of those major components which the Association is obligated to maintain. Also known as reserves, reserve accounts, cash reserves.

**Component** - An individual line item in the Reserve Study developed or updated in the physical analysis. These elements form the building blocks of the Reserve Study. Components typically are: 1) Association responsibility, 2) with limited useful life expectancies, 3) predictable remaining useful life expectancies, 4) above a minimum threshold cost, and 5) as required by local codes.

**Component Inventory** - The task of selecting and quantifying reserve components. This task is accomplished through onsite visual observations, review of Association design and organizational documents, and a review of established Association precedents.

**Deficit** - An actual (or projected) reserve balance less than the fully funded balance. The opposite would be a surplus.

**Effective Age** - The difference between useful life and remaining useful life. Not always equivalent to chronological age since some components age irregularly. Used primarily in computation.

**Financial Analysis** - The portion of a Reserve Study where current status of the reserves (measured as cash or percent funded) and a recommended reserve contribution rate (reserve funding plan) are derived. The financial analysis is one of the two parts of a Reserve Study.

**Fully Funded** - 100% funded. When the actual (or projected) reserve balance is equal to the fully funded balance.

**Fully Funded Balance (FFB)** - Total accrued depreciation. An indicator against which actual (or projected) reserve balance can be compared. In essence, it is the reserve balance that is proportional to the current Repair/replacement cost and the fraction of life "used up". This number is calculated for each component, then summed together for an Association total.

**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.

**Special Assessment** - An assessment levied on the members of an Association in addition to regular assessments. Special assessments are often regulated by governing documents or local statutes.

## 2.6 FREQUENTLY ASKED QUESTIONS ABOUT RESERVE STUDIES

### What is a reserve study?

Reserve studies are comprehensive reports that are used as budget planning tools that will assess the current financial health of the reserve fund as well as create a plan for future funding to offset anticipated major future common area expenditures.

According to *Community Association Institute's Best Practices, Reserve Studies/Management*: "There are two components of a reserve study—a physical analysis and a financial analysis. During the physical analysis, a reserve provider evaluates information regarding the physical status and repair/replacement cost of the association's major common area components. To do so, the provider conducts a component inventory, a condition assessment, and life and valuation estimates. A financial analysis assesses only the association's reserve balance or fund status (measured in cash or as percent funded) to determine a recommendation for an appropriate reserve contribution rate (funding plan)."

### What are the different types of reserve studies?

Reserve studies fit into one of three categories: Full; Update with Site Visit; and Update with No Site Visit. They are frequently called Level 1, Level 2, and Level 3 respectively (as defined by Washington State RCW 64.90.550).

**Level 1: A full reserve study** – the reserve provider conducts a component inventory, a condition assessment (based upon on-site visual observations), and life and valuation estimates to determine both a fund status and a funding plan. They typically extend 30-years. A full reserve study must be in place before a Level 2 or Level 3 can take place.

**Level 2: An update with site visit (on-site review)** -- the reserve study provider conducts a component inventory (verification only, not quantification), a condition assessment (based on on-site visual observations), and life and valuation estimates to determine both a fund status and a funding plan. A Level 2 update is performed every third year, with the first one scheduled 3 years after the Level 1 was completed.

**Level 3: An update with no site visit (off-site review)** -- the reserve study provider conducts life and valuation estimates to determine a fund status and a funding plan. A Level 3 update is performed annually, except in years when a Level 1 or Level 2 has been conducted.

## When should associations obtain reserve studies?

Most association experts would agree that an initial full 30-year reserve study should be conducted sooner rather than later if one is not already in place. They are typically updated annually after that to account for things such as inflation and any adjustments in funding levels, budgets, repairs, or replacements.

If you follow Washington State RCW 64.90.555 (which we recommend), your reserve study schedule would look like this:

- Year 1: Level 1 full 30-year study
- Years 2, 3: Level 3 annual updates
- Year 4: Level 2 update with site visit
- Years 5, 6: Level 3 annual updates
- Year 7: Level 2 update with site visit

The cycle of Level 2 and Level 3 updates continues indefinitely. A Level 1 full study is not necessary after year 1.

## What are the benefits of a Reserve Study?

Benefits of reserve studies, in short, include improved property maintenance (and therefore value) as well as complying with the law. In more detail:

### Complying with Washington State law

View the rules regarding Reserve Studies and Reserve Accounts here:

<http://app.leg.wa.gov/RCW/default.aspx?cite=64.90> - Sections 535, 540, 545, 550, 555, and 560

### Fulfilling lender requirements (such as FHA)

Many lenders are requiring up-to-date reserve studies that indicate adequate financial health before they lend. Having a reserve study in place that shows a healthy funding plan before a homeowner finds a buyer could save significant time in the closing process.

### Help maintain the property's value and appearance

A reserve study helps maintain the property's value and the property owner's investment. By identifying and budgeting for future repairs or replacement (anticipated capital expenditures), the property's common elements continue to look attractive and well-kept, adding to the community's overall quality of life. Many features, when properly maintained, can also benefit from an extended lifespan resulting in overall cost savings to the owners. Well maintained properties almost always have higher resale values than those that have been neglected.

### Establishing sound financial planning and budget direction

A comprehensive reserve study lays out a schedule of anticipated major repairs or replacements to common property elements and applies cost estimates to them. It typically spans a 30-year period and will serve as a financial planning tool for the association to use when determining homeowners dues and contributions to the reserve fund.

### Reducing the need for special assessments

An association that has properly implemented their reserve study will strategically collect fees over time from homeowners (via monthly dues) rather than need large sums of cash unexpectedly (special assessments). Therefore, the need for special assessments should be minimized because expenses have already been planned for and the funds exist when needed.

### Fulfilling the board of directors' fiduciary responsibility

Board members of community associations have a fiduciary responsibility to their members. Directors are legally bound to use sound business judgment in guiding the association and cannot ignore major capital expenditures or eliminate them from the budget.

### 3.0 PHYSICAL ANALYSIS

#### 3.1 COMPONENT ASSESSMENT AND VALUATION

The component assessment and valuation of the itemized capital expenses on this property was done by providing our opinion of Useful Life, Remaining Useful Life, and Repair or Replacement Costs for the Reserve components. Table 3.1A lists this component inventory and is based on the information that we were provided and on onsite visual observations.

The remainder of “Section 3.0 Physical Analysis” details each of the items in Table 3.1A using narratives and photos. They are meant to be read together.

Table 3.1B is a summary of expenses, grouped according to their expense category. Chart 3.1B is a pie chart illustrating the same.

#### Table 3.1A Key:

**Quantity** - The total quantity of each component.

**Units** -    SF = Square Feet                      SY = Square Yards                      LF = Lineal Feet  
                  EA = Each                      LS = Lump Sum                      SQ = Roofing Square (10 ft X 10 ft)

**Cost/Unit** - The cost of a component. The unit cost is multiplied by the component’s quantity to obtain the total estimated replacement cost for the component.

**Remaining Life** – An opinion of the probable remaining life, in years, that a reserve component can be expected to continue to serve its intended function. Replacements anticipated to occur in the initial or base year have “zero” Remaining Life.

**Useful Life** - Total Useful Life or Depreciable Life. An opinion of the total probable life, in years, that a reserve component can be expected to serve its intended function in its present condition.

**Table 3.1A: Component Assessment and Valuation**

*Note: All numbers provided are the engineer's opinion of probable life and cost in 2022 dollars. Exact numbers may vary.*

	Component	Quantity	Units	Cost/Unit	Remaining Life (Years)	Useful Life (Years)	Total Cost	Cost per Unit	Avg. Cost per Unit per Year
<b>3.2</b>	<b>SITE</b>								
	Drainage project at the tennis court area	1	LS	\$50,000	0	N/A	\$50,000	\$221	N/A
	Drainage project allotment	1	LS	\$10,000	3	3	\$10,000	\$44	\$14.75
	Asphalt overlay	369,600	SF	\$2.75	25	30	\$1,016,400	\$4,497	\$149.91
	Asphalt emulsion seal coating	369,600	SF	\$0.28	1	5	\$103,488	\$458	\$91.58
	Parking facilities restriping	1	BID	\$4,280.61	5	5	\$4,281	\$19	\$3.79
	Resurface dock decking	1,300	SF	\$9.25	18	20	\$12,025	\$53	\$2.66
	Rebuild the dock and pilings	1	LS	\$108,000	38	40	\$108,000	\$478	\$11.95
	Replace concrete bulkhead at north beach	220	LF	\$330	21	50	\$72,600	\$321	\$6.42
	Playground equipment replacement	1	LS	\$42,000	22	25	\$42,000	\$186	\$7.43
	Picnic assets replacement allotment	1	LS	\$3,000	1	5	\$3,000	\$13	\$2.65
	Rebuild the north beach stairs	1	LS	\$8,200	19	25	\$8,200	\$36	\$1.45
	Replace the bus stop shelter and entrance sign	1	LS	\$8,500	26	30	\$8,500	\$38	\$1.25
	Replace road map sign	1	LS	\$2,000	20	30	\$2,000	\$9	\$0.29
	Resurface the tennis court	1	LS	\$13,500	1	25	\$13,500	\$60	\$2.39
	Replace the tennis court chain link fence	360	LF	\$125	1	50	\$45,000	\$199	\$3.98
	<i>No privacy fencing is the responsibility of the Homeowners Association</i>								
	<i>Landscaping paid for via the operating budget</i>								
<b>3.3</b>	<b>STRUCTURE</b>								
	<i>No structural expenditures budgeted</i>								
<b>3.4</b>	<b>ROOFING</b>								
	<i>There are no common roofs on this property</i>								
<b>3.5</b>	<b>EXTERIOR</b>								
	<i>There are no common exteriors in this property</i>								
<b>3.6</b>	<b>ELECTRICAL SYSTEMS</b>								
	<i>There are no common electrical systems on this property</i>								

	Component	Quantity	Units	Cost/Unit	Remaining Life (Years)	Useful Life (Years)	Total Cost	Cost per Unit	Avg. Cost per Unit per Year
3.7	<b>PLUMBING SYSTEMS</b>								
	<i>Water distribution system owned and maintained via a private utility</i>								
	<i>Septic systems are all owned and maintained by individual owners</i>								
3.8	<b>HVAC SYSTEMS</b>								
	<i>No common HVAC systems</i>								
3.9	<b>ELEVATORS</b>								
	<i>No common elevators</i>								
3.10	<b>FIRE DETECTION &amp; SUPPRESSION</b>								
	<i>No common fire detection and suppression systems</i>								
3.11	<b>COMMON INTERIOR FINISHES</b>								
	<i>No common interior areas</i>								
3.12	<b>MISCELLANEOUS</b>								
	<i>No miscellaneous expenses</i>								
3.13	<b>AMENITIES</b>								
	<i>No amenities not mentioned in other areas of this table</i>								
<b>Average Cost Per Unit Per Year</b>									<b>\$301</b>

### 3.2 SITE

The address of this property is Raft Island, Gig Harbor, WA 98335.



Aerial image of property (courtesy of Google Earth)

#### General Description of Site

Raft Island is located in Henderson Bay of South Puget Sound in the suburban area west of Gig Harbor. The island is 201.86 acres and contains 226 single family lots, including a church camp in this Association (6 lots). We understand that the property was constructed in the 1950s. The property consists of approximately 3.5 miles of new private asphalt roads, a bridge to access the island, a tennis court, and two community beaches and a community dock.

There are no buildings that are the responsibility of the Homeowners Association.

#### Drainage Projects

We understand that there have been recent drainage projects on Raft Island and that there will be a large drainage project at the tennis court area in 2022 at a budgetary cost of \$50,000. Going forward, we have budgeted for \$10,000 in drainage projects every 3 years.



## **Asphalt**

There are approximately 3.5 miles of private roads on this island that were installed in 2017. The Homeowners Association is responsible for the maintenance of the asphalt of the private roadways on this island.

These roads should not have to be completely replaced (as they were in 2017) within the 30-year duration of this study; however, we do anticipate that a 2-inch asphalt overlay will be necessary 30 years after these roads were installed, in 2047.

We understand the Board budgets for annual road repairs in their annual budget, as this is considered a general operating expense. Therefore, we have not budgeted for road repairs in this study.

We have budgeted for emulsion seal coating to occur in 2023 and every 5 years thereafter. Following emulsion seal coating, the asphalt and curbing should be painted with any appropriate fire lane markings that are recommended.

The parking facilities were restriped in 2022. We have budgeted for restriping every 5 years.



Madrona Drive NW



South Asphalt Parking Area



Raft Island Drive NW



Park Avenue NW





Rhododendron Drive NW



Fir Drive NW



Alder Drive



Maple Lane NW



Hemlock Drive NW



Camp Road



## Dock

There is a community dock on in this development. We understand that the dock was replaced in 2020. We have assumed that the dock pilings and floats will have a total lifespan of 40 years, while the decking will have a total lifespan of 20 years.



Community Dock



Community Dock

## Concrete Bulkhead

There is a concrete bulkhead at both of the community beaches. The south bulkhead is short and does not appear to take much punishment. Therefore, we have not budgeted for replacement of the south bulkhead. We actually believe that both of these concrete bulkheads should have a lifespan well beyond the duration of this study. However, we understand that the north bulkhead had a design life of 50 years when it was installed in 1993. We believe that this is a bit conservative; however, we have budgeted for replacement of this bulkhead on this schedule. The original cost to install this bulkhead was \$25,000. Typically, these types of 8-foot bulkheads are installed at a cost of \$330 per linear foot. Therefore, we have budgeted for a replacement cost in today's dollar values at \$72,600.



South Concrete Bulkhead



North Concrete Bulkhead

### Bridge

The bridge leading to Raft Island was recently constructed in 2014/2015. The Association deposits funds for future bridge repairs in a separate “Bridge Reserve Fund” that is not factored into this study.



Bridge



Bridge

### Playground Equipment

There is playground equipment at the south beach that was installed in 2019. Generally, playground equipment should have a total lifespan of 25 years if maintained. The level of funding that can be spent on new playground equipment can vary widely.



Playground Equipment at South Beach



**Picnic Assets**

There are barbecues, picnic tables, a fire pit, and benches at the two community beaches and the community tennis court. The cost to replace these items is small in comparison to the large collective expenses on this property in the future. However, we have included a small line item in the Reserve Study as a lump sum picnic assets replacement allotment every 5 years.



Fire Pit at South Beach



Barbecues and Picnic Tables at South Beach



Picnic Tables at North Beach



Picnic Table and Bench at Tennis Court Area

### North Beach Stairs

There are wood stairs at the north community beach. These stairs were rebuilt in 2016. We have assumed that these stairs will have a total lifespan of 25 years.



Stairs to North Beach



Stairs to North Beach

### Wood Fence

There are wood fences on both sides of the road that accesses the bridge leading to the island. However, we understand that these fences are not the property of the Homeowners Association. We understand that there are no solid fences that are the responsibility of the HOA.



Wood Fence along Entrance



### Split Rail Fence

There is a split rail fence that is in the vicinity of the tennis court and at the north beach. This fence is the responsibility of the HOA; however, this fence is simple and can easily be replaced by members of the community as needed. Therefore, we have not budgeted for replacement of this fence in the Reserve Study.



Split Rail Fence adjacent Tennis Court



Split Rail Fence at North Beach

### Entrance Sign and Road Map Sign

There is a bus-stop shelter and community entrance sign at entrance to Raft Island Road off of Kopachuck Drive NW that was installed in 2018. We assume that this structure will have a total lifespan of 30 years.

There is a road map sign at the entrance to the island. This sign is in good condition and should have a long remaining life, if maintained. We have budgeted for replacement of this sign every 30 years.



Existing Front Sign and Bus Shelter



Road Map Sign

### Tennis Court

There is a community tennis court on this property. We understand that this tennis court was last resurfaced in the year 2000. We understand that the Board plans to resurface the tennis court in 2023. We have budgeted for resurfacing the tennis court every 25 years.

The chain link fence surrounding this tennis court is poor condition and should be replaced soon. Chain link fencing should have a total lifespan of 50 years.



Tennis Court



Tennis Court



Damaged Tennis Court Fence



Damaged Tennis Court Fence



### 3.3 STRUCTURE

*There are no common structures on this property.*

### 3.4 ROOFING

*There are no common roofs on this property.*

### 3.5 EXTERIOR

*There are no common exteriors in this property.*

### 3.6 ELECTRICAL SYSTEMS

*There are no common electrical systems on this property.*

### 3.7 PLUMBING SYSTEMS

#### Utility Operated Water Distribution System

A private utility owns and maintains the water distribution system on this island. We understand that the community water distribution system is currently being replaced though out this community. However, this is being done via the private utility at their cost and does not affect the Reserve Fund.



Private Water Distribution System

#### Private Septic Systems

Each lot has their own private septic system that is not the responsibility of the homeowners association.



### **3.8 HVAC SYSTEMS**

*There are no common HVAC Systems on this property.*

### **3.9 ELEVATORS**

*There are no common elevators on this property.*

### **3.10 FIRE DETECTION AND SUPPRESSION**

*There are no common fire detection and suppression systems on this property.*

### **3.11 COMMON INTERIOR FINISHES**

*There are no common interior finishes on this property that will need to be maintained via the Reserve Fund.*

### **3.12 MISCELLANEOUS MECHANICAL**

*There are no miscellaneous mechanical items not addressed in other areas of this report.*

### **3.13 AMENITIES**

*There are no amenities on this property that are not accounted for in other sections of this report.*

### **3.20 SUMMARY OF ANNUAL ANTICIPATED EXPENSES**

Using the conclusions described throughout “Section 3.0 Physical Analysis”, the following Table 3.20 lists the annual anticipated capital expenses for each reserve item in the year that we believe is most probable. All of these anticipated expenses already have inflation factored into them at the assumed level that is listed in “Section 4.3 Assumptions for Future Interest Rate and Inflation”.

## LEVEL 2 RESERVE STUDY FOR RAFT ISLAND HOA

### TABLE 3.20: ANNUAL CAPITAL EXPENSES

[illegible]

LEVEL 2 RESERVE STUDY FOR RAFT ISLAND HOA

**TABLE 3.20: ANNUAL CAPITAL EXPENSES**

Action Required		2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
<b>3.8</b>	<b>HVAC SYSTEMS</b>											
	No common HVAC systems											
<b>3.9</b>	<b>ELEVATORS</b>											
	No common elevators											
<b>3.10</b>	<b>FIRE DETECTION &amp; SUPPRESSION</b>											
	No common fire detection and suppression systems											
<b>3.11</b>	<b>COMMON INTERIOR FINISHES</b>											
	No common interior areas											
<b>3.12</b>	<b>MISCELLANEOUS</b>											
	No miscellaneous expenses											
<b>3.13</b>	<b>AMENITIES</b>											
	<i>No amenities not mentioned in other areas of this table</i>											
<b>ANNUAL EXPENSES BY YEAR</b>		<b>\$50,000</b>	<b>\$169,938</b>	<b>\$0</b>	<b>\$10,927</b>	<b>\$0</b>	<b>\$4,962</b>	<b>\$139,093</b>	<b>\$0</b>	<b>\$0</b>	<b>\$13,048</b>	<b>\$5,753</b>

## LEVEL 2 RESERVE STUDY FOR RAFT ISLAND HOA

### TABLE 3.20: ANNUAL CAPITAL EXPENSES

[illegible]

LEVEL 2 RESERVE STUDY FOR RAFT ISLAND HOA

**TABLE 3.20: ANNUAL CAPITAL EXPENSES**

Action Required		2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
<b>3.8</b>	<b>HVAC SYSTEMS</b>											
	No common HVAC systems											
<b>3.9</b>	<b>ELEVATORS</b>											
	No common elevators											
<b>3.10</b>	<b>FIRE DETECTION &amp; SUPPRESSION</b>											
	No common fire detection and suppression systems											
<b>3.11</b>	<b>COMMON INTERIOR FINISHES</b>											
	No common interior areas											
<b>3.12</b>	<b>MISCELLANEOUS</b>											
	No miscellaneous expenses											
<b>3.13</b>	<b>AMENITIES</b>											
	<i>No amenities not mentioned in other areas of this table</i>											
<b>ANNUAL EXPENSES BY YEAR</b>		<b>\$147,404</b>	<b>\$14,258</b>	<b>\$0</b>	<b>\$0</b>	<b>\$22,249</b>	<b>\$170,882</b>	<b>\$0</b>	<b>\$37,496</b>	<b>\$14,379</b>	<b>\$11,343</b>	<b>\$351,759</b>

## LEVEL 2 RESERVE STUDY FOR RAFT ISLAND HOA

### TABLE 3.20: ANNUAL CAPITAL EXPENSES

[illegible]

LEVEL 2 RESERVE STUDY FOR RAFT ISLAND HOA

**TABLE 3.20: ANNUAL CAPITAL EXPENSES**

Action Required		2044	2045	2046	2047	2048	2049	2050	2051	2052
<b>3.8</b>	<b>HVAC SYSTEMS</b>									
	No common HVAC systems									
<b>3.9</b>	<b>ELEVATORS</b>									
	No common elevators									
<b>3.10</b>	<b>FIRE DETECTION &amp; SUPPRESSION</b>									
	No common fire detection and suppression systems									
<b>3.11</b>	<b>COMMON INTERIOR FINISHES</b>									
	No common interior areas									
<b>3.12</b>	<b>MISCELLANEOUS</b>									
	No miscellaneous expenses									
<b>3.13</b>	<b>AMENITIES</b>									
	<i>No amenities not mentioned in other areas of this table</i>									
<b>ANNUAL EXPENSES BY YEAR</b>		<b>\$80,476</b>	<b>\$0</b>	<b>\$20,328</b>	<b>\$2,137,079</b>	<b>\$277,096</b>	<b>\$22,213</b>	<b>\$0</b>	<b>\$0</b>	<b>\$34,663</b>

## 4.0 FINANCIAL ANALYSIS

The financial analysis in this Reserve Study is a proprietary system that was developed by Samdal & Associates. We have provided the funding method that we believe will most adequately fund the reserves of this Association.

### 4.1 CURRENT FINANCIAL INFORMATION AND CURRENT FUNDING PLAN

The Association's Reserve Fund balance was \$183,561 as of July 31, 2022 (Balance provided by Carolyn Tucker). According to our calculations detailed in this report, the Reserve Fund balance required for "Full Funding" of this property at this time is \$419,169. Therefore, the property is 43.8% funded.

The current annual contribution to the reserve fund is \$29,592, which averages \$10.91 per unit per month. For the purpose of comparison to our recommended funding plans, we have assumed that the Association will increase their current reserve fund contribution by 3% annually to account for inflation. This is shown in Table 4.5 "Reserve Fund Balance Sheet" (Section 4.5) and all subsequent figures.

This property is  
currently  
**43.8% funded.**

**This funding contribution is not adequate to obtain "Full Funding" of this property.**

### 4.2 RECOMMENDED RESERVE FUNDING PLAN

Full Funding is the ideal position for any property and represents a strong financial position. We recommend that all properties be Fully Funded, as Full Funding allows Associations to maintain their properties adequately and minimizes their risk of unplanned special assessments.

Ideally, the Association should be Fully Funded immediately; however, we recognize that financial realities can sometimes make this difficult. Therefore, we have provided three different plans to get the Association Fully Funded within three different time frames: Immediately, Within Five Years, and Within Ten Years. It is to the Association's benefit to be Fully Funded as soon as possible.

Our funding recommendations are as follows:

#### Option One: Immediate Full Funding

If the Association desires to be Fully Funded immediately, then based on the anticipated expenditures the Association will need to immediately contribute a total of \$235,608 to the Reserve Fund. This translates to an average of \$1,043 per unit. Following this initial contribution, the funding plan necessary to maintain a Fully Funded Capital Reserve Fund for the duration of this study will be a total property contribution of \$67,918 per year in the initial year, which translates to \$25.04 per unit per month. This annual contribution will need to be increased 3% each subsequent year to maintain Full Funding and to account for inflation.

For a detailed look at the annual funding contribution necessary per year, see Table 4.5 "Reserve Fund Balance Sheet" (Section 4.5).

-OR-

#### Option One

Average Immediate  
Contribution Per Unit:

**\$1,043**

Avg. Contribution  
Thereafter Per Unit Per  
Month:

**2023 \$25.04**

(with 3% annual  
increase thereafter)



### Option Two: Full Funding Within Five Years

There is currently a “full funding” deficiency of \$235,608. This option makes up this deficiency over the next five years. Starting in 2023 for five years through 2027, the Association will make up their Reserve Fund deficiency by contributing \$117,866 annually (which includes \$49,948 in make-up funds and \$67,918 in capital maintenance funds that will increase annually with inflation). This translates to an average of \$43.46 per unit per month in the initial year.

If this plan is followed, the Association will be Fully Funded by the start of 2028. From this point on, the funding plan will be identical to funding plan listed above in the “Immediate Full Funding” option to maintain Full Funding. This means that the Association will reduce their Reserve Fund contribution to \$81,098 in 2028, which translates to \$29.90 per unit per month. This 2028 annual contribution will need to be increased 3% each subsequent year (to account for inflation) for the duration of this 30-year study to maintain Full Funding and to account for inflation.

For a detailed look at the annual funding contribution necessary per year, see Table 4.5 “Reserve Fund Balance Sheet” (Section 4.5).

-OR-

### Option Three: Full Funding Within Ten Years

There is currently a “full funding” deficiency of \$235,608. This option makes up this deficiency over the next ten years. Starting in 2023 for ten years through 2032, the Association will make up their Reserve Fund deficiency by contributing \$94,734 annually (which includes \$26,816 in make-up funds and \$67,918 in capital maintenance funds that will increase annually with inflation). This translates to an average of \$34.93 per unit per month in the initial year.

If this plan is followed, the Association will be Fully Funded by the start of 2033. From this point on, the funding plan will be identical to funding plan listed above in the “Immediate Full Funding” option to maintain Full Funding. This means that the Association will reduce their Reserve Fund contribution to \$94,015 in 2033, which translates to \$34.67 per unit per month. This 2033 annual contribution will need to be increased 3% each subsequent year for the duration of this 30-year study to maintain Full Funding and to account for inflation.

For a detailed look at the annual funding contribution necessary per year, see Table 4.5 “Reserve Fund Balance Sheet” (Section 4.5).

Other funding options are also possible. Section 4.6 details other common funding methods as well. It is up to the Association to decide which funding option is best for them.

#### Option Two

Average Contributions  
Per Unit Per Month:

2023 \$43.46

Increasing at 3% per  
year through:

2027 \$47.45

At year end, full funding  
will be achieved. Then:

2028 \$29.90

(with 3% annual  
increase thereafter)

#### Option Three

Average Contributions  
Per Unit Per Month:

2023 \$34.93

Increasing at 3% per  
year through:

2032 \$43.54

At year end, full funding  
will be achieved. Then:

2037 \$34.67

(plus 3% annual  
increase thereafter)

### 4.3 OTHER REQUIRED FUNDING PLAN OPTIONS

Per Washington State RCW 64.90.550, our Reserve Study is required to provide the following funding plans:

- **30-Year Make up** - Funding Plan necessary for the Association Reserve Fund to reach a Full Funding Level in 30 years.
- **Baseline Funding** - Minimum level of funding required in order to maintain the Reserve Fund above zero while paying for all components listed in Table 3.1 - Component Assessment and Valuation Table.

*Special Note: Because these are “bare minimum” funding options that increase an Association’s risk for special assessments (and financial instability), we do not recommend either of these funding options. We recommend that the Association obtain a level of Full Funding as soon as possible to ensure that the Association has the resources necessary to adequately maintain its collective property and minimize the burden of special assessments.*

These required options are as follows:

#### Option Four: Full Funding in 30 Years

There is currently a “full funding” deficiency of \$235,608. This option makes up this deficiency over the next thirty years. Starting in 2023 for thirty years through 2052, the Association will make up their Reserve Fund deficiency by contributing \$79,589 annually (which includes \$11,670 in make-up funds and \$67,918 in capital maintenance funds that will increase annually with inflation). This translates to an average of \$29.35 per unit per month in the initial year.

If this plan is followed, the Association will be Fully Funded by the start of 2052.

For a detailed look at the annual funding contribution necessary per year, see Table 4.5 “Reserve Fund Balance Sheet” (Section 4.5).

-OR-

#### Option Five: Baseline Funding – Keeping Reserve Balance above Zero

The funding plan necessary to maintain the Reserve Fund above zero for the duration of this study will be an annual contribution of \$72,788 per year in the initial year, which translates to \$26.84 per unit per month. This annual contribution will need to be increased 3% each subsequent year to maintain the Reserve Fund above zero and to account for inflation.

For a detailed look at the annual funding contribution necessary per year, see Table 4.5 “Reserve Fund Balance Sheet” (Section 4.5).

#### Option Four

Average Contributions  
Per Unit Per Month:

2023 \$29.35

Increasing at 3% per  
year through:

2052 \$65.09

#### Option Five

Average Contributions  
Per Unit Per Month:

\$26.84

(with 3% annual  
increase thereafter)

#### 4.4 ASSUMPTIONS FOR FUTURE INTEREST RATE AND INFLATION

For the purposes of this report, we have assumed that the inflation rate over the next 30 years will average 3%. This is based on historical averages over the last 25 years and our conservative best guess for the future. This percentage can vary greatly just as global economic conditions can vary, which is one reason this Reserve Study should be updated annually per Washington RCW 64.90.550, which we provide complimentary over the next two years with this Reserve Study (see Appendix).

For the purpose of this study, we will assume that the Association manages their money in the Reserve Fund so that the average interest rate return on its money will be equal to that of inflation. This is a conservative estimate given that since 1965, the average yield between short term treasuries and inflation has been 1.04%, which means that these relatively conservative investments have been able to outpace inflation over the long term (according to Crestmont Research, [www.crestmontresearch.com](http://www.crestmontresearch.com)). Since we have assumed that the inflation rate over the duration of this study will average 3%, we have conservatively also assumed that the Reserve Fund average interest rate will equal 3%. Again, this does not reflect current averages but rather a best guess of the future assuming you have invested effectively.

A common strategy is to invest in multiple accounts. Funds that will be necessary in the shorter term must be kept in a relatively liquid account. Funds that are not allotted for near future planned expenditures can be deposited into longer term investments which frequently earn higher interest rates. Consult with a qualified financial advisor for the best solution for your Association.

#### 4.5 ANNUAL FUND BALANCES; ANNUAL FUNDING TABLE AND FIGURES

The table and figures shown in this section are intended to give the Association a clearer view of the likely future financial position that the Association will be in, provided that the reserve funding plan is followed.

- Table 4.5: “Reserve Fund Balance Sheet”. This table lists annual revenue, expenses, and year end reserve fund balances. All Section 4.5 Figures are based on this data.
- Figure 4.5A-1: “Comparison of Funding Plans -- Reserve Fund Balances Through 2052”. This line graph depicts the funding balances of the proposed funding options vs. the current. Note the current plan, in dotted red, falls below zero in several places. This represents insufficient funding for repairs needed in these years.
- Figure 4.5A-2: “Comparison of Funding Plans -- Reserve Fund Balances Through 2032”. This line graph focuses on the next ten years, comparing the proposed plans to get the Association to a Full Funding status.
- Figure 4.5B: “Comparison of Funding Plans -- Association Contributions to Reserve Fund by Year”
- Figure 4.5C: “Comparison of Funding Plans – Percentage of Full Funding by Year”



LEVEL 2 RESERVE STUDY FOR RAFT ISLAND HOA

**TABLE 4.5: RESERVE FUND BALANCE SHEET**

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
<b>FULL FUNDING WITHIN 10 YEARS</b>												
Beginning Reserve Balance	183,561	138,761	66,592	168,943	265,468	378,239	491,685	474,789	601,035	733,612	859,542	999,353
Full Funding Annual Maintenance Funding	12,404	67,918	72,055	74,216	76,443	78,736	81,098	83,531	86,037	88,618	91,277	94,015
Planned Special Assessments / Make up Funds		26,816	26,816	26,816	26,816	26,816	26,816	26,816	26,816	26,816	26,816	
Annual Total Property Contribution to The Reserve Fund	12,404	94,734	98,870	101,032	103,259	105,552	107,914	110,347	112,853	115,434	118,092	94,015
Average Monthly Contribution to the Reserve Fund per Unit		34.93	36.46	37.25	38.07	38.92	39.79	40.69	41.61	42.56	43.54	34.67
Annual Capital Expenses	50,000	169,938	-	10,927	-	4,962	139,093	-	-	13,048	5,753	147,404
Interest Income		3,035	3,481	6,420	9,513	12,856	14,283	15,899	19,724	23,544	27,471	29,180
<b>Ending Reserve Balance</b>	<b>138,761</b>	<b>66,592</b>	<b>168,943</b>	<b>265,468</b>	<b>378,239</b>	<b>491,685</b>	<b>474,789</b>	<b>601,035</b>	<b>733,612</b>	<b>859,542</b>	<b>999,353</b>	<b>975,143</b>
Percentage of Full Funding	33.1%	23.9%	46.9%	61.0%	72.0%	79.8%	82.4%	88.6%	93.4%	97.0%	100.0%	100.0%
Yellow Highlighted Cells Represent Make-Up Funds												
<b>FULL FUNDING WITHIN 30 YEARS</b>												
Beginning Reserve Balance	183,561	138,761	51,219	137,737	217,952	313,926	410,069	375,352	483,242	596,912	703,369	823,122
Full Funding Annual Maintenance Funding	12,404	67,918	72,055	74,216	76,443	78,736	81,098	83,531	86,037	88,618	91,277	94,015
Planned Special Assessments / Make up Funds		11,670	11,670	11,670	11,670	11,670	11,670	11,670	11,670	11,670	11,670	11,670
Annual Total Property Contribution to The Reserve Fund	12,404	79,589	83,725	85,887	88,113	90,406	92,768	95,201	97,707	100,288	102,947	105,685
Average Monthly Contribution to the Reserve Fund per Unit		29.35	30.87	31.67	32.49	33.34	34.21	35.10	36.03	36.98	37.96	38.97
Annual Capital Expenses	50,000	169,938	-	10,927	-	4,962	139,093	-	-	13,048	5,753	147,404
Interest Income		2,808	2,792	5,256	7,860	10,699	11,607	12,689	15,963	19,216	22,559	24,068
<b>Ending Reserve Balance</b>	<b>138,761</b>	<b>51,219</b>	<b>137,737</b>	<b>217,952</b>	<b>313,926</b>	<b>410,069</b>	<b>375,352</b>	<b>483,242</b>	<b>596,912</b>	<b>703,369</b>	<b>823,122</b>	<b>805,471</b>
Percentage of Full Funding	33.1%	18.4%	38.3%	50.1%	59.7%	66.5%	65.2%	71.3%	76.0%	79.4%	82.4%	82.6%
<b>BASELINE FUNDING</b>												
Beginning Reserve Balance	183,561	138,761	44,316	121,742	192,682	279,193	365,685	321,123	418,973	522,405	618,423	727,533
Full Funding Annual Maintenance Funding	12,404	72,788	74,972	77,221	79,537	81,924	84,381	86,913	89,520	92,206	94,972	97,821
Planned Special Assessments / Make up Funds												
Annual Total Property Contribution to The Reserve Fund	12,404	72,788	74,972	77,221	79,537	81,924	84,381	86,913	89,520	92,206	94,972	97,821
Average Monthly Contribution to the Reserve Fund per Unit		26.84	27.64	28.47	29.33	30.21	31.11	32.05	33.01	34.00	35.02	36.07
Annual Capital Expenses	50,000	169,938	-	10,927	-	4,962	139,093	-	-	13,048	5,753	147,404
Interest Income		2,706	2,454	4,647	6,974	9,530	10,150	10,937	13,912	16,860	19,891	21,082
<b>Ending Reserve Balance</b>	<b>138,761</b>	<b>44,316</b>	<b>121,742</b>	<b>192,682</b>	<b>279,193</b>	<b>365,685</b>	<b>321,123</b>	<b>418,973</b>	<b>522,405</b>	<b>618,423</b>	<b>727,533</b>	<b>699,031</b>
Percentage of Full Funding	33.1%	15.9%	33.8%	44.3%	53.1%	59.3%	55.8%	61.8%	66.5%	69.8%	72.8%	71.7%

## LEVEL 2 RESERVE STUDY FOR RAFT ISLAND HOA

**TABLE 4.5: RESERVE FUND BALANCE SHEET**[illegible]

LEVEL 2 RESERVE STUDY FOR RAFT ISLAND HOA

**TABLE 4.5: RESERVE FUND BALANCE SHEET**

	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
<b>FULL FUNDING WITHIN 10 YEARS</b>												
Beginning Reserve Balance	975,143	1,088,214	1,222,097	1,363,033	1,488,743	1,470,584	1,628,644	1,756,806	1,915,797	2,086,265	1,920,061	2,028,070
Full Funding Annual Maintenance Funding	96,835	99,740	102,733	105,815	108,989	112,259	115,626	119,095	122,668	126,348	130,138	134,043
Planned Special Assessments / Make up Funds												
Annual Total Property Contribution to The Reserve Fund	96,835	99,740	102,733	105,815	108,989	112,259	115,626	119,095	122,668	126,348	130,138	134,043
Average Monthly Contribution to the Reserve Fund per Unit	35.71	36.78	37.88	39.02	40.19	41.39	42.64	43.91	45.23	46.59	47.99	49.43
Annual Capital Expenses	14,258	-	-	22,249	170,882	-	37,496	14,379	11,343	351,759	80,476	-
Interest Income	30,493	34,143	38,204	42,144	43,734	45,801	50,031	54,275	59,144	59,207	58,347	62,853
<b>Ending Reserve Balance</b>	<b>1,088,214</b>	<b>1,222,097</b>	<b>1,363,033</b>	<b>1,488,743</b>	<b>1,470,584</b>	<b>1,628,644</b>	<b>1,756,806</b>	<b>1,915,797</b>	<b>2,086,265</b>	<b>1,920,061</b>	<b>2,028,070</b>	<b>2,224,965</b>
Percentage of Full Funding	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Yellow Highlighted Cells Represent Make-Up Funds												
<b>FULL FUNDING WITHIN 30 YEARS</b>												
Beginning Reserve Balance	805,471	925,297	1,066,138	1,214,241	1,347,333	1,336,777	1,502,668	1,638,896	1,806,195	1,985,221	1,827,831	1,944,918
Full Funding Annual Maintenance Funding	96,835	99,740	102,733	105,815	108,989	112,259	115,626	119,095	122,668	126,348	130,138	134,043
Planned Special Assessments / Make up Funds	11,670	11,670	11,670	11,670	11,670	11,670	11,670	11,670	11,670	11,670	11,670	11,670
Annual Total Property Contribution to The Reserve Fund	108,506	111,411	114,403	117,485	120,659	123,929	127,297	130,766	134,338	138,018	141,809	145,713
Average Monthly Contribution to the Reserve Fund per Unit	40.01	41.08	42.18	43.32	44.49	45.70	46.94	48.22	49.53	50.89	52.29	53.73
Annual Capital Expenses	14,258	-	-	22,249	170,882	-	37,496	14,379	11,343	351,759	80,476	-
Interest Income	25,578	29,430	33,700	37,856	39,667	41,962	46,427	50,913	56,031	56,351	55,755	60,533
<b>Ending Reserve Balance</b>	<b>925,297</b>	<b>1,066,138</b>	<b>1,214,241</b>	<b>1,347,333</b>	<b>1,336,777</b>	<b>1,502,668</b>	<b>1,638,896</b>	<b>1,806,195</b>	<b>1,985,221</b>	<b>1,827,831</b>	<b>1,944,918</b>	<b>2,151,165</b>
Percentage of Full Funding	85.0%	87.2%	89.1%	90.5%	90.9%	92.3%	93.3%	94.3%	95.2%	95.2%	95.9%	96.7%
<b>BASELINE FUNDING</b>												
Beginning Reserve Balance	699,031	807,798	937,367	1,073,983	1,195,370	1,172,888	1,326,630	1,450,482	1,605,178	1,771,368	1,600,909	1,704,691
Full Funding Annual Maintenance Funding	100,756	103,778	106,892	110,098	113,401	116,803	120,307	123,917	127,634	131,463	135,407	139,469
Planned Special Assessments / Make up Funds												
Annual Total Property Contribution to The Reserve Fund	100,756	103,778	106,892	110,098	113,401	116,803	120,307	123,917	127,634	131,463	135,407	139,469
Average Monthly Contribution to the Reserve Fund per Unit	37.15	38.27	39.41	40.60	41.81	43.07	44.36	45.69	47.06	48.47	49.93	51.43
Annual Capital Expenses	14,258	-	-	22,249	170,882	-	37,496	14,379	11,343	351,759	80,476	-
Interest Income	22,268	25,791	29,724	33,537	34,999	36,939	41,041	45,158	49,900	49,837	48,851	53,233
<b>Ending Reserve Balance</b>	<b>807,798</b>	<b>937,367</b>	<b>1,073,983</b>	<b>1,195,370</b>	<b>1,172,888</b>	<b>1,326,630</b>	<b>1,450,482</b>	<b>1,605,178</b>	<b>1,771,368</b>	<b>1,600,909</b>	<b>1,704,691</b>	<b>1,897,393</b>
Percentage of Full Funding	74.2%	76.7%	78.8%	80.3%	79.8%	81.5%	82.6%	83.8%	84.9%	83.4%	84.1%	85.3%



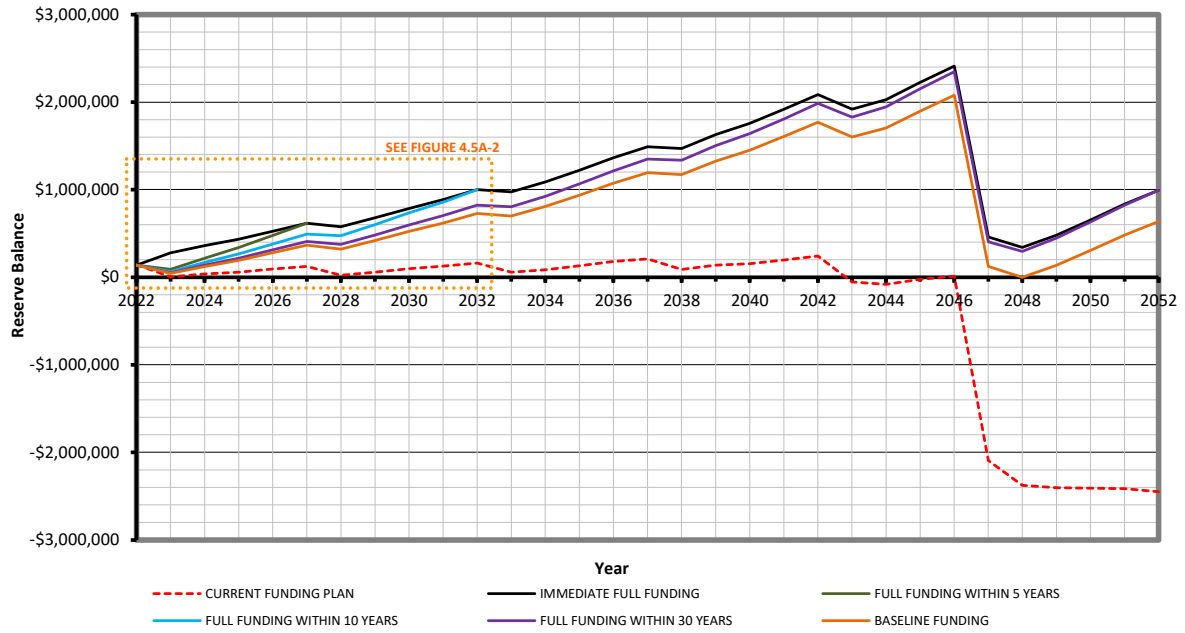


LEVEL 2 RESERVE STUDY FOR RAFT ISLAND HOA

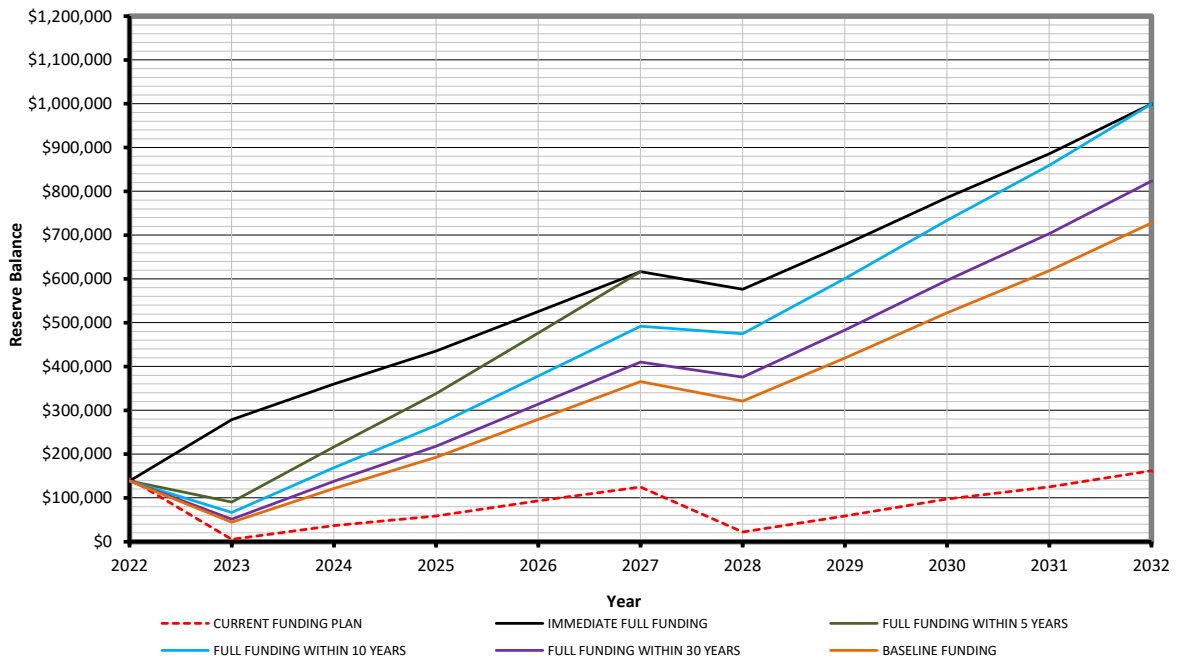
**TABLE 4.5: RESERVE FUND BALANCE SHEET**

	2046	2047	2048	2049	2050	2051	2052
<b>FULL FUNDING WITHIN 10 YEARS</b>							
Beginning Reserve Balance	2,224,965	2,411,216	458,757	339,936	480,717	652,862	834,902
Full Funding Annual Maintenance Funding	138,064	142,206	146,472	150,866	155,392	160,054	164,856
Planned Special Assessments / Make up Funds							
Annual Total Property Contribution to The Reserve Fund	138,064	142,206	146,472	150,866	155,392	160,054	164,856
Average Monthly Contribution to the Reserve Fund per Unit	50.91	52.44	54.01	55.63	57.30	59.02	60.79
Annual Capital Expenses	20,328	2,137,079	277,096	22,213	-	-	34,663
Interest Income	68,515	42,413	11,803	12,128	16,752	21,987	27,000
<b>Ending Reserve Balance</b>	<b>2,411,216</b>	<b>458,757</b>	<b>339,936</b>	<b>480,717</b>	<b>652,862</b>	<b>834,902</b>	<b>992,095</b>
Percentage of Full Funding	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Yellow Highlighted Cells Represent Make-Up Funds							
<b>FULL FUNDING WITHIN 30 YEARS</b>							
Beginning Reserve Balance	2,151,165	2,347,047	404,508	295,905	447,211	630,196	823,402
Full Funding Annual Maintenance Funding	138,064	142,206	146,472	150,866	155,392	160,054	164,856
Planned Special Assessments / Make up Funds	11,670	11,670	11,670	11,670	11,670	11,670	11,670
Annual Total Property Contribution to The Reserve Fund	149,734	153,876	158,142	162,537	167,063	171,724	176,526
Average Monthly Contribution to the Reserve Fund per Unit	55.21	56.74	58.31	59.93	61.60	63.32	65.09
Annual Capital Expenses	20,328	2,137,079	277,096	22,213	-	-	34,663
Interest Income	66,476	40,663	10,351	10,982	15,922	21,482	26,830
<b>Ending Reserve Balance</b>	<b>2,347,047</b>	<b>404,508</b>	<b>295,905</b>	<b>447,211</b>	<b>630,196</b>	<b>823,402</b>	<b>992,095</b>
Percentage of Full Funding	97.3%	88.2%	87.0%	93.0%	96.5%	98.6%	100.0%
<b>BASELINE FUNDING</b>							
Beginning Reserve Balance	1,897,393	2,079,490	122,923	46	136,829	305,043	483,226
Full Funding Annual Maintenance Funding	143,653	147,963	152,402	156,974	161,683	166,534	171,530
Planned Special Assessments / Make up Funds							
Annual Total Property Contribution to The Reserve Fund	143,653	147,963	152,402	156,974	161,683	166,534	171,530
Average Monthly Contribution to the Reserve Fund per Unit	52.97	54.56	56.20	57.88	59.62	61.41	63.25
Annual Capital Expenses	20,328	2,137,079	277,096	22,213	-	-	34,663
Interest Income	58,772	32,548	1,817	2,023	6,530	11,649	16,550
<b>Ending Reserve Balance</b>	<b>2,079,490</b>	<b>122,923</b>	<b>46</b>	<b>136,829</b>	<b>305,043</b>	<b>483,226</b>	<b>636,642</b>
Percentage of Full Funding	86.2%	26.8%	0.0%	28.5%	46.7%	57.9%	64.2%

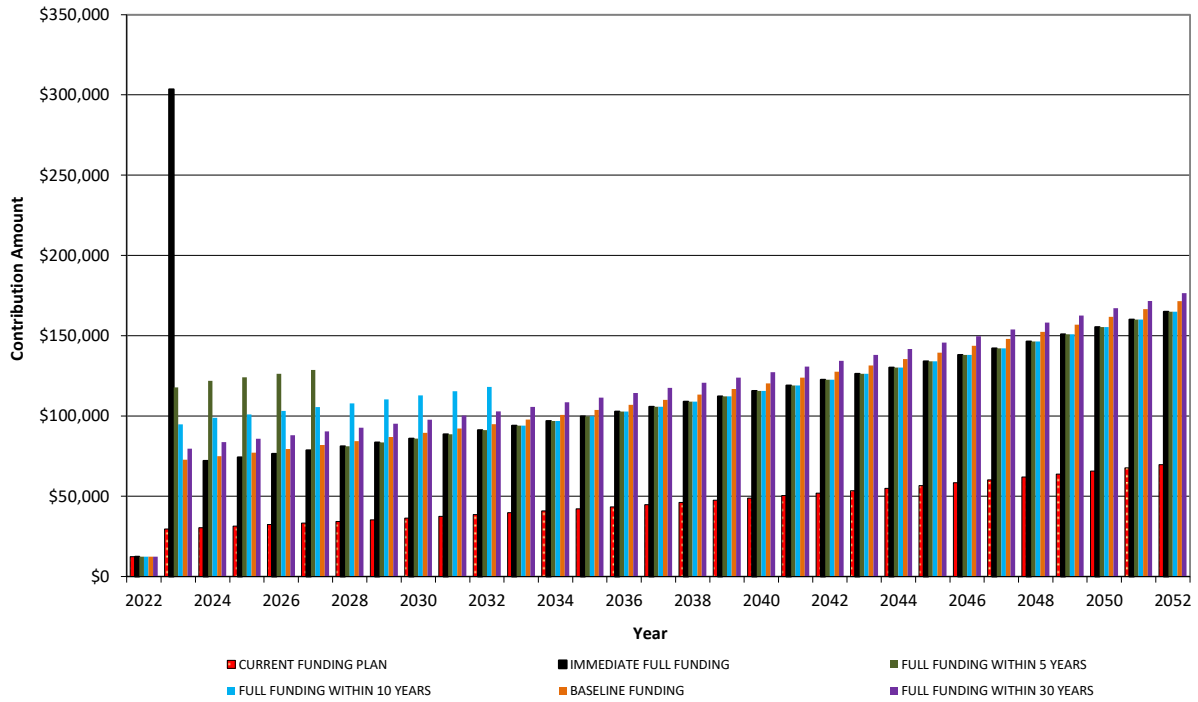
**Figure 4.5A-1 Comparison of Funding Plans – Reserve Fund Balances Through 2052**



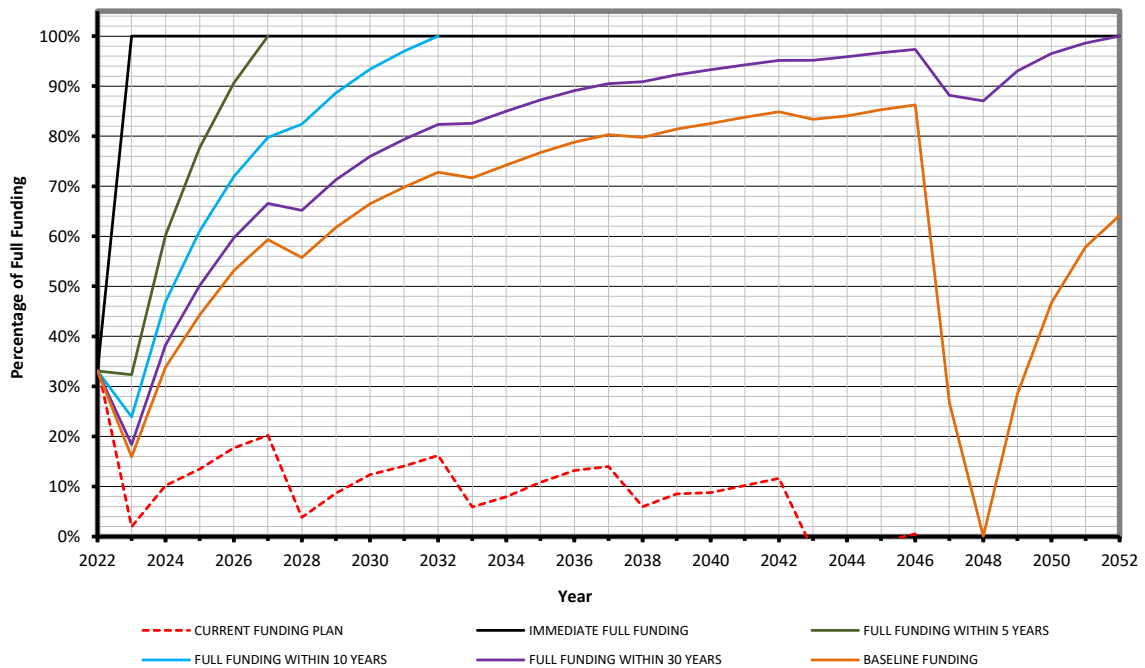
**Figure 4.5A-2 Comparison of Funding Plans – Reserve Fund Balances Through 2032**



**Figure 4.5B Comparison of Funding Plans -- Association Contributions to Reserve Fund by Year**



**Figure 4.5C Comparison of Funding Plans – Percentage of Full Funding by Year**



#### **4.6 OTHER COMMON FUNDING METHODS**

The following methods are methods that are sometimes implemented. We believe that many of these funding methods that keep the reserve fund at less than “Fully Funded” represent a weaker position for the Association. As the Fully Funded percentage decreases, the likelihood of unplanned special assessments increases.

##### **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 calculating Reserve contributions where the total reserve contribution is based on the sum of contributions for individual components.

##### **Baseline Funding**

Establishing a Reserve funding goal of keeping the Reserve cash balance above zero.

##### **Full Funding**

Setting a Reserve funding goal of attaining and maintaining the Reserve Fund at or near 100% funded. *Recommended by Samdal & Associates*

##### **Statutory Funding**

Establishing a Reserve funding goal of setting aside the specific minimum amount of Reserves required by local statutes.

##### **Threshold Funding**

Establishing a Reserve funding goal of keeping the Reserve Balance above a specified dollar or Percent Funded amount. Depending on the threshold this may be more or less conservative than “Fully Funded.”

## 5.0 LIMITATIONS

This report has been prepared for the exclusive use of Raft Island Homeowners Association and their property management company. We do not intend for any other party to rely on this report for any reason without our expressed written consent. If another individual or party relies on this study, they shall indemnify and hold Samdal & Associates harmless for any damages, losses, or expenses they may incur as a result of its use.

The Level 2 Reserve Study is a reflection of the information provided to us. This report has been prepared for Raft Island Homeowners Association's use, not for the purpose of performing an audit, quality/forensic analyses, or background checks of historical records. Our inspection report is not an exhaustive technical inspection of the property; we merely comment on the items that we believe that our clients would benefit from knowing. During a typical inspection, no invasive inspection is performed, no furnishings are moved, and no finishes are removed.

This report is a snap shot in time of the condition of the property at the time of inspection. The remaining life values that we list are based on our opinion of the remaining useful life and are by no means a guarantee. Our opinions are based on what we believe one could reasonably expect and are not based on worst case scenarios. These opinions are based upon our experience with other buildings of similar age and construction type. Opinions will vary and you may encounter contractors and/or consultants with differing opinions from ours. Ratings of various building components are most often determined by comparison to other buildings of similar age and construction type. The quality of materials originally impacts our judgment of their current state.

The life expectancy estimates that we prepare are based on National Association of Home Builders (NAHB) averages, Building Owners and Managers (BOMA) averages, product defined expected life averages, and our own assessment of typical life expectancy based on our experience with similar components in our area.

This report will tell you a great deal about the overall condition of this property. However, this report does not constitute a warranty, an insurance policy, or a guarantee of any kind. Owning any property involves some risk and while we can give an excellent overview of the property, we cannot inspect what we cannot see.

Our inspection and report do not include building code compliance or municipal regulatory compliance. Nor do they include mold investigations, hazardous materials investigations, or indoor air quality analysis.

The purpose of this report is not intended to be a statement of insurability of this property as insurance companies have particular standards for insurability of certain building types and certain building materials.

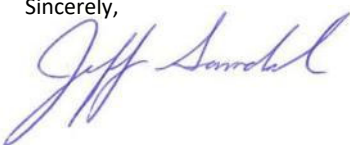
While we may comment that certain components have been recalled that we are aware of, we are not aware of all recalls. It is beyond the scope of this inspection to determine all systems or components that are currently or will be part of any recall in the future. You may wish to subscribe or contact the CPSC (Consumer Product Safety Commission) web site for recall information regarding any system or component. If a problem is encountered on your property, we cannot be responsible for any corrective action that you take, unless we have the opportunity to review the conditions before repairs are made.

Please ensure that you have read and understand the entire proposal to perform this Level 2 Reserve Study that was signed prior to our inspection. If you have any questions regarding this document, please contact us.

We appreciate the opportunity to be of assistance and we hope that we have provided you a clear understanding of your financial situation and given you a better overall understanding of the association. This report supersedes any opinion or discussion that occurred during the inspection and should be considered our complete opinion of the condition of this property.

Please contact us if you have any questions regarding this report. We will be happy to be of assistance.

Sincerely,



Jeff Samdal, PE, RS, PRA

## **APPENDIX**

### Resume of Engineer Performing Study

# **Jeff Samdal, P.E., Principal**

## **Professional Qualifications and Experience**

### **Areas of Expertise**

Mr. Samdal is the owner of Samdal & Associates, Inc., a corporation that specializes in building inspections, engineering, project management, and related services. He is a double-licensed Professional Engineer (Mechanical and Civil) in Washington State. He is also an accredited Building Inspection Engineer (BIE) and Reserve Specialist (RS), and Professional Reserve Analyst (PRA). He has performed thousands of building inspections as well as numerous additional services such as building envelope investigations, construction management, and general consulting for property owners pertaining to building maintenance and long-term budgeting. Mr. Samdal consistently earns repeat and referral business because of his attention to detail, practical approach, knowledge of the industry, and genuine appreciation for clients' concerns for their real estate investments.

### **Capabilities**

Mr. Samdal is experienced at performing residential (single- and multi-family), commercial, and industrial inspections in Washington State and beyond. Mr. Samdal's experience includes the following:

- Property Condition Assessments (PCAs)
- Capital Needs Assessments (CNAs)
- Reserve Studies for Condominiums and Homeowner's Association
- Building Envelope Studies

### **Relevant Work History**

Mr. Samdal has been owner and operator of Samdal & Associates since 2005, performing or managing all aspects of this business. Additionally, Mr. Samdal has been the co-owner and president of True North Construction Management since 2017, which is informative in obtaining current construction costs and keeping up to date with modern construction methods and construction products.

Prior to concentrating on building inspections, Mr. Samdal worked for Washington Group International's (WGI) Hydropower and Water Resources Group. While working for WGI, Mr. Samdal was involved in rebuilding and rehabilitating hydro facilities. He served as the on-site powerhouse and switchyard inspector during construction. His duties included design, drawing and specification preparation, cost estimating, scheduling, and construction management. Prior to working for WGI, Mr. Samdal worked for Duke Energy in a similar role.

### **Education**

BS in Mechanical Engineering, University of Washington

### **Licenses and Certifications**

- *Licensed Professional Engineer* (PE), Mechanical Engineering, State of Washington, #40985
- *Licensed Professional Engineer* (PE), Civil Engineering, State of Washington, #40985
- *Reserve Specialist* (RS), Community Associations Institute (CAI), #173
- *Professional Reserve Analyst* (PRA), Association of Professional Reserve Analysts
- *Building Inspection Engineer* (BIE), National Association of Building Inspection Engineers
- *Structural Pest Inspector*, State of Washington, #70763

### **Professional Affiliation**

American Society of Mechanical Engineers, 2002 – present

### **Community Involvement**

Mr. Samdal lives in Woodinville with his wife and 2 children and has been involved with many of their activities as a Little League coach, a scout leader, a personal fitness coach, among other activities.