

**RIVERWOOD
HOME OWNER'S ASSOCIATION
20 YEAR RESERVE STUDY**

Revised 7/3/2023

Over time the Riverwood HOA, through efficient self management, has been able to maintain a stable level of financial viability. Without special assessments, the homes and grounds have been kept in good shape. However, in the past few years, as the property has approached its fiftieth birthday it has been a challenge to keep up with the aging facilities as the inevitable deterioration occurs. In order to meet this challenge the Association needs to come up with a financial plan that will build a strong financial base and enable the Association to avoid surprise expenses, make informed decisions, save money and protect property values.

Previously, the Association has kept a "Ten Year Plan" that lists the various budgeted expenses associated with the complex. This plan simply takes each line item of the budget and increases the items by five per cent each year of the plan. This plan is fine, as far as it goes, but it does not take into consideration such things as the age of the various components and the cost to repair and replace them. The plan also does not take into consideration any components that are not currently in the budget. Nor does the plan provide a path for growing the Reserve Funds to cover the expenses.

The following Reserve Study is not a panacea that will solve all of Riverwood's financial challenges, but hopefully it will provide a path that will help the Association maintain the property values and keep Riverwood a beautiful place to live.

The study has been patterned after sample professional studies that are available on the internet and follows the National Reserve Study Standards.

In this Report, you will find three key results:

- **Reserve Funding Plan**

A multi-year funding plan based on current Reserve Fund strength that allows for component repairs & replacements to be completed in a timely manner, with an emphasis on avoiding "catch-up" funding sources.

- **Reserve Fund Strength**

A calculation that measures how well the Reserve Fund has kept pace with the property's physical deterioration.

- **Component List**

Unique to each property, the Component List serves as the foundation of the Reserve Study and details the scope and schedule of all necessary repairs & replacements.

Reserve Study Executive Summary Riverwood HOA

of Units: 93
(Including the Recreation Center)

Findings and recommendations as of July 3, 2023

Starting Reserve Balance	\$129,661
Average Reserve Deficit (Surplus) per Unit.....	\$1,394
Fully Funded Reserve Balance	\$305,277
%-Funded	42%
Recommended 2021/22 Monthly "Full Funding" Reserve Contribution.....	\$4,416
Recommended 2021/22 "Special Assessment" for Reserves	\$0
Most recent Reserve Contribution Rate	\$4,416

Reserve strength is measured by the % Funded. Less than 30% is considered poor, greater than 70% is good. Risk of special assessment is high when the % Funded is less than 30% and low when it is greater than 70%.

The low level of % Funded not only exacerbates the challenge of maintaining Riverwood's facilities, but makes cash flow management difficult. Obviously, Riverwood needs to increase the % Funded over time. The Budget calls for a transfer of 10% of the HOA Assessments - the recommended monthly Reserve Contribution needs to be followed in order to build the Reserve Balance.

In ten years, when the Roof loan is paid off, an additional \$63,000+ per year will be available to help build the Reserve.

Economic Assumptions:

Net Annual "After Tax" Interest Earnings, accruing to Reserves ----- 1.00%
Annual Inflation Rate -----3.00%

Comments:

This study was patterned after sample studies found on the Internet. The component inventory details were prepared by Jim Eveland. Jim is a retired engineer and has served Riverwood as the Chairman of the Riverwood Maintenance Committee since 2016. His experience on this committee has given him detailed insight as to the status of Riverwood assets and their various physical conditions. Financial spreadsheets provided by the Treasurer, Ashleigh Norment, show costs associated with the components. The Financial spreadsheets shown in the Study were prepared by Leo Zinn, the Budget Committee Chairman.

The following introduction has been taken directly from a sample study on the internet. Association Reserves, 17918-0
11/26/2018

Introduction

A Reserve Study is the art and science of anticipating, and preparing for, an association's major common area repair and replacement expenses. Partially art, because in this field we are making projections about the future. Partially science, because our work is a combination of research and well defined computations, following consistent National Reserve Study Standard principles.

The foundation of this and every Reserve Study is your Reserve Component List (what you are reserving for). This is because the Reserve Component List defines the scope and schedule of all your anticipated upcoming Reserve projects. Based on that List and your starting balance, we calculate the association's Reserve Fund Strength (reported in terms of "Percent Funded"). Then we compute a Reserve Funding Plan to provide for the Reserve needs of the association. These form the three results of your Reserve Study.

Reserve contributions are not "for the future". Reserve contributions are designed to offset the ongoing, daily deterioration of your Reserve assets. Done well, a stable, budgeted Reserve Funding Plan will collect sufficient funds from the owners who enjoyed the use of those assets, so the association is financially prepared for the irregular expenditures scattered through future years when those projects eventually require replacement.

Methodology

.....There is a national-standard four-part test to determine which expenses should appear in your Reserve Component List. First, it must be a common area maintenance responsibility. Second, the component must have a limited life. Third, the remaining life must be predictable (or it by definition is a surprise which cannot be accurately anticipated). Fourth, the component must be above a minimum threshold cost (often between .5% and 1% of an association's total budget). This limits Reserve Components to major, predictable expenses. Within this framework, it is inappropriate to include lifetime components, unpredictable expenses (such as damage due to fire, flood, or earthquake), and expenses more appropriately handled from the Operational Budget or as an insured loss.

How do we establish Useful Life and Remaining Useful Life estimates?

- 1) Visual Inspection (observed wear and age)*
- 2) Association Reserves database of experience*
- 3) Client History (install dates & previous life cycle information)*
- 4) Vendor Evaluation and Recommendation*

How do we establish Current Repair/Replacement Cost Estimates? In this order...

- 1) Actual client cost history, or current proposals*
- 2) Comparison to Association Reserves database of work done at similar associations*
- 3) Vendor Recommendations*
- 4) Reliable National Industry cost estimating guidebooks*

How much Reserves are enough?

Reserve adequacy is not measured in cash terms. Reserve adequacy is found when the amount of current Reserve cash is compared to Reserve component deterioration (the needs of the association). Having enough means the association can execute its projects in a timely manner with existing Reserve funds. Not having enough typically creates deferred maintenance or special assessments. Adequacy is measured in a two-step process:

1) Calculate the value of deterioration at the association (called Fully Funded Balance, or FFB). 2) Compare that to the Reserve Fund Balance, and express as a percentage. Each year, the value of deterioration at the association changes. When there is more deterioration (as components approach the time they need to be replaced), there should be more cash to offset that deterioration and prepare for the expenditure. Conversely, the value of deterioration shrinks after projects are accomplished. The value of deterioration (the FFB) changes each year, and is a moving but predictable target.

There is a high risk of special assessments and deferred maintenance when the Percent Funded is weak, below 30%. Approximately 30% of all associations are in this high risk range. While the 100% point is Ideal (indicating Reserve cash is equal to the value of deterioration), a Reserve Fund in the 70% - 130% range is considered strong (low risk of special assessment).

Measuring your Reserves by Percent Funded tells how well prepared your association is for upcoming Reserve expenses. New buyers should be very aware of this important disclosure!

How much should we contribute?

According to National Reserve Study Standards, there are four Funding Principles to balance in developing your Reserve Funding Plan. The first objective is to design a plan that provides you with sufficient cash to perform your Reserve projects on time. Second, a stable contribution is desirable because it keeps these naturally irregular expenses from unsettling the budget.

Reserve contributions that are evenly distributed over current and future owners enable each owner to pay their fair share of the association's Reserve expenses over the years. And finally, we develop a plan that is fiscally responsible and safe for Board members to recommend to their association. Remember, it is the Board's job to provide for the ongoing care of the common areas. Boardmembers invite liability exposure when Reserve contributions are inadequate to offset ongoing common area deterioration.

What is our Recommended Funding Goal?

Maintaining the Reserve Fund at a level equal to the value of deterioration is called "Full Funding" (100% Funded). As each asset ages and becomes "used up," the Reserve Fund grows proportionally. This is simple, responsible, and our recommendation. Evidence shows that associations in the 70 - 130% range enjoy a low risk of special assessments or deferred maintenance.

Allowing the Reserves to fall close to zero, but not below zero, is called Baseline Funding. Doing so allows the Reserve Fund to drop into the 0 - 30% range, where there is a high risk of special assessments & deferred maintenance. Since Baseline Funding still provides for the timely execution of all Reserve projects, and only the "margin of safety" is different, Baseline Funding contributions average only 10% - 15% less than Full Funding contributions. Threshold Funding is the title of all other Cash or Percent Funded objectives between Baseline Funding and Full Funding.

COMPONENTS FOR RESERVE PLANNING

RESIDENTIAL STRUCTURES

ROOFS

Expected life of 40 years; Certain Teed Pro certified material.

All of Riverwood except D10 reroofed 2015-D10 done 2012-2014.

Average cost per home in 2015: \$8,200. (With 17 stand-alone garage roofs factored in)

Total cost: \$754,400.

SIDING

16 homes in Driveways 10 & D20 remain to be resided.

2021 cost per residence: \$22,000. (2 homes per residence: \$11,000 each x 16 = \$176,000)

This should be a priority: exterior surfaces aging quickly.

PAINTING

HardiBoard siding should be repainted at least every 10 years.

76 homes have been sided with HardiBoard.

Last painted 15+ years ago.

Ref the proposal to paint 12 homes (a full driveway) every year, beginning with this coming year.

We use Metro paint, excellent quality (only one coat needed) at the lowest price, currently about \$65 for a 5-gallon bucket.

A duplex (ie, one of our two-family buildings) would consume about 15 gallons; thus 90 gallons per driveway of 12 residences, for \$5850.

Buildings must be pressure-washed all over to remove dirt, moss, stains, old paint, etc; then allowed to dry a few days.

Total labor estimate 160 hours over a 5-week period. Mace and a hired helper, call it \$7680 labor.

So, total \$13,530; call it \$14K

CHIMNEYS

Exposed brick chimneys in D40, D50, D60 & D70: 44 homes should be repointed and flashed

Every 10-15 years; last done in 2015.

Average cost per chimney in 2015: \$1,500.

GUTTERS/DOWNSPOUTS

Average life expectancy: 30 years. Ours average 10 years old.

Average cost to replace in 2015: \$5 per running foot.

FENCES

423 x 8 = 3384 feet of fencing (call it 3500)

Typical “section” is 8 feet, consisting of 1 post, 1 board 2x4x16, 2-80lb sacks of concrete, and 18 fence boards. Fence boards come in a “unit” of 48 boards

3500' divide by 8' = 437.5 sections; call it 438 sections.

Material costs:

Item	Past	Present spike	Estimated next year
Fence Bds Unit (480)	\$1200.00	\$ 2000.00	\$ 1600.00
Each board	\$ 2.50	\$ 4.17	\$ 3.33
Posts	\$ 8.00	\$ 16.00	\$ 12.00
2x4x16	\$ 10.00	\$ 20.00	\$ 13.00
Concrete 80 lb sacks, pallet/42	\$ 150.00	\$ 180.00	\$ 165.00
Each sack	\$ 1.88	\$ 2.25	\$ 2.06
Per fence section:			
Boards (18)	\$ 33.84	\$ 40.50	\$ 37.08
Concrete, 2 sacks	\$ 3.76	\$ 4.50	\$ 4.12
Post (1)	\$ 8.00	\$ 16.00	\$ 12.00
2x4x16	\$ 10.00	\$ 20.00	\$ 13.00
Labour	\$ 160.00	\$ 160.00	\$ 176.20
Total per section	\$ 215.60	\$ 241.00	\$ 242.20
Total 438 sections	\$ 94,432.80	\$ 105,558.00	\$106,083.60

Avg life expect. = 12 years

Therefore, Annual fence budget should be:	\$7,869.40	\$ 8,796.50	\$ 8,840.30
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COMMON STRUCTURES

Clubhouse Building (Including pool restrooms and saunas)

Roofs (included with general roofing numbers)

Siding (resided with HardiBoard)

Painting (included in general painting numbers)

Gutters (included in general gutter numbers)

Water heater replaced new in 2019; life expectancy 14 years; cost \$230

Our crew installed it; commercial installer, add \$500.

Furnace

Rental Garages

Roofs (included with overall roofing numbers)

Siding

Painting

Gutters

Major Pool Costs

Heater:

Life expectancy: Avg 10 years

Current heater: 4 years old

Replacement costs today: \$3,000, plus \$500 installation

Pump:

Life expectancy: Avg 10 years for our size/type

Current pump: 5 years old

Replacement costs today: \$1,200 plus \$250 installation

Resurface:

Plaster pool surface life expectancy: 12-15 years

Cost to Replaster: \$12,000

Current pool age: 20+ years

COMMON PAVEMENT

Asphalt Driving Surfaces

Driveways 10, 20, lower 30, upper 40,50,60 & 70 should be seal coated every 10 years.

Average cost per driveway in 2020: \$8,500.

Upper D30 and lower D40 should be totally repaved every 10 years.

Average cost in 2020: \$30,000.

Paved walkways

Curbs

COMMON DISTRIBUTED FACILITIES

Security Lighting

Light fixtures (SoVap, LED, and incandescent)

Underground wiring

Driveway Signage

The following components were not included in the Fully Funded Balance since the life expectancy is not easily predictable. The repair and maintenance will be covered by Reserves when needed.

Water Supply

Underground pipes to each residence from street meters.

Sewer Lines

Underground from each residence to street.

Main Drains

Underground to street.

Gutter Drains

Underground to street from each residence.

RESERVE COMPONENT DETAIL

<u>COMPONENT</u>		<u>USEFUL LIFE (UL)</u>	<u>REMAINING UL</u>	<u>COST ESTIMATE</u>
<u>RESIDENTIAL STRUCTURES</u>				
Roofs				
	D10 2012 (2 @ \$8,200)	40	30	\$ 16,400
	D10 2013 (2 @ \$8,200)	40	31	\$ 16,400
	D10 2014 (2 @ \$8,200)	40	32	\$ 16,400
	D10 2015 (2 @ \$8,200)	40	33	\$ 16,400
	Remainder 2016 (85)	40	34	\$ 688,800
Siding				
	D10 & D20 - 16 Homes to be resided, 2 per year			
	2022	20	0	\$ 22,000
	2023	20	0	\$ 22,000
	2024	20	0	\$ 22,000
	2025	20	0	\$ 22,000
	2026	20	0	\$ 22,000
	2027	20	0	\$ 22,000
	2028	20	0	\$ 22,000
	2029	20	0	\$ 22,000
Painting				
	D30 -12 homes 2022	10	0	\$ 14,000
	D30 -12 homes 2023	10	0	\$ 14,000
	D40 -11 homes 2024	10	0	\$ 12,837
	D50 - 11 homes 2025	10	0	\$ 12,837
	D60 - 11 homes 2026	10	0	\$ 12,837
	D70 - 11 homes 2027	10	0	\$ 12,837
	D10 - 8 homes 2028	10	0	\$ 9,336
	D10 - 12 homes 2039	10	0	\$ 14,000
	D20 - 12 homes 2040	10	0	\$ 14,000
Gutters		30	20	\$ 52,500

Chimneys

D40 - 11 homes	15	9	\$	16,500
D50 - 11 homes	15	9	\$	16,500
D60 - 11 homes	15	9	\$	16,500
D70 - 11 homes	15	9	\$	16,500

Walkways

Fences	12	12	\$	106,084
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COMMON STRUCTURES

CLUBHOUSE BUILDING

Furnace

Restrooms

Sauna

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RENTAL GARAGES

Roofs	Included above
Siding	Included above
Painting	Included above
Gutters	Included above

POOL

Heater	10	6	\$	3,500
Pump	10	5	\$	1,450
Resurface	15	0	\$	12,000

COMMON PAVEMENT

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Asphalt Driving Surfaces

Seal Coat	D10	10	0	\$	8,500
	D20	10	0	\$	8,500
	D Lower 30	10	0	\$	8,500
	D Upper 40	10	0	\$	8,500
	D50	10	0	\$	8,500
	D60	10	0	\$	8,500
	D70	10	0	\$	8,500

Repave	D Upper 30	10	8	\$	43,000
	D Lower 40	10	10	\$	30,000
	D 50	10	9	\$	32,000

Paved Walkways

Curbs

COMMON DISTRIBUTED FACILITIES

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Metal Railings

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Security Lighting

Light Fixtures (SoVap, LED & Incand.)

Underground Wiring

Water Supply

Underground pipes meter to Res.

Sewer Lines

Underground Res. to St.

Main Drains

Underground to street

Gutter Drains

Underground to St. from Res.

FULLY FUNDED BALANCE

		<u>COST</u>		<u>EFFECTIVE</u>	DIVIDED	<u>USEFUL</u>		<u>FULLY</u>
<u>COMPONENT</u>		<u>ESTIMATE</u>	TIMES	<u>AGE</u>	BY	<u>LIFE</u>	EQUALS	<u>FUNDED</u>
<u>RESIDENTIAL STRUCTURES</u>								<u>BALANCE</u>
Roofs								
	D10 2012 (2 @ \$8,200)	\$ 16,400		10		40		\$ 4,100
	D10 2013 (2 @ \$8,200)	\$ 16,400		9		40		\$ 3,690
	D10 2014 (2 @ \$8,200)	\$ 16,400		8		40		\$ 3,280
	D10 2015 (2 @ \$8,200)	\$ 16,400		7		40		\$ 2,870
	Remainder 2016							
	(85)	\$ 688,800		6		40		\$ 103,320
**	Siding							
	D10 & D20 - 16 Homes to be resided, 2 per year							
	2022	\$ 22,000		20		20		\$ 22,000
	2023	\$ 22,000		20		20		\$ 22,000
	2024	\$ 22,000		20		20		\$ 22,000
	2025	\$ 22,000		20		20		\$ 22,000
	2026	\$ 22,000		20		20		\$ 22,000
	2027	\$ 22,000		20		20		\$ 22,000
	2028	\$ 22,000		20		20		\$ 22,000
	2029	\$ 22,000		20		20		\$ 22,000
Painting								
	76 Homes	\$ 88,692		10		10		\$ 88,692
Gutters								
	10500 ' x \$5	\$ 52,500		10		30		\$ 17,500
Chimneys								
	D40 - 11 homes	\$ 16,500		6		15		\$ 6,600
	D50 - 11 homes	\$ 16,500		6		15		\$ 6,600
	D60 - 11 homes	\$ 16,500		6		15		\$ 6,600

	D70 - 11 homes	\$	16,500	6	15	\$	6,600	
	Walkways							
**	Fences	\$	106,084	1	12	\$	8,840	
<u>COMMON STRUCTURES</u>								
<u>CLUBHOUSE BUILDING</u>								
	Furnace							
	Restrooms							
<u>POOL</u>								
	Heater	\$	3,500	4	10	\$	1,400	
	Pump	\$	1,450	5	10	\$	725	
	Resurface	\$	12,000	15	15	\$	12,000	
<u>COMMON PAVEMENT</u>								
-	<u>Asphalt Driving Surfaces</u>							
	Seal Coat	D10	\$	8,500	10	10	\$	8,500
		D20	\$	8,500	10	10	\$	8,500
		D Lower 30	\$	8,500	10	10	\$	8,500
		D Upper 40	\$	8,500	10	10	\$	8,500
		D50	\$	8,500	10	10	\$	8,500
		D60	\$	8,500	10	10	\$	8,500
		D70	\$	8,500	10	10	\$	8,500
	Repave	D Upper 30	\$	43,000	2	10	\$	8,600
		D Lower 40	\$	30,000	10	10	\$	-30,000
		D 50	\$	32,000	1	10		
	Paved Walkways							

Curbs

COMMON DISTRIBUTED FACILITIES

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Security Lighting

Light Fixtures (SoVap, LED & Incand.)

Underground Wiring

Total

\$ 305,277

** Fences and old siding paid from operating funds

20 Year Reserve Plan Summary

Fiscal Year Start: 2021					Interest	1.00%	Inflation	3.00%
Reserve Fund Strength Calculations: (All Values as of Fiscal Year Start Date)					Projected Reserve Balance Changes			
Year	Ending Reserve Balance	Fully Funded Balance	Percent Funded	Special Assmt Risk	Reserve Contribs .	Loan or Special Assmts	Interest Income	Reserve Expenses
2021	129661	305277	42%	Medium	48576	0	1043	0
2022	119991	317182	38%	Medium	50033	0	1297	61000
2023	130030	306887	42%	Medium	51534	0	1505	43000
2024	154848	311455	50%	Medium	53080	0	1575	29837
2025	190007	344023	55%	Medium	54672	0	1824	21337
2026	234137	359841	65%	Medium	56313	0	2104	14287
2027	265240	374314	71%	Low	58002	0	2438	29337
2028	301981	389775	77%	Low	59742	0	2843	25844
2029	307312	381030	81%	Low	61534	0	3297	59500
2030	306849	531967	58%	Low	63380	0	3656	67500
2031	326736	448032	73%	Low	65282	0	3606	49000
2032	379324	469381	81%	Low	67240	0	4348	19000
2033	418439	479068	87%	Low	69257	0	4694	34837
2034	459845	485886	95%	Low	71335	0	4908	34837
2035	503640	492704	102%	Low	73475	0	5157	34837
2036	561649	511515	110%	Low	75679	0	5174	22844
2037	639230	547570	117%	Low	77950	0	6081	6450
2038	717604	670972	107%	Low	80288	0	6585	8500
2039	759929	668977	114%	Low	82697	0	7129	47500
2040	774382	649532	119%	Low	85178	0	7775	78500

* \$63,955 debt service ends

COMPONENT SIGNIFICANCE

<u>COMPONENT</u>	<u>USEFUL LIFE (UL)</u>	<u>CURRENT COST ESTIMATE</u>	<u>DETERIORATION COST</u>	<u>DETERIORATION SIGNIFICANCE</u>
<u>RESIDENTIAL STRUCTURES</u>				
Roofs - 93 Structures	40	\$ 754,400	\$ 18,860	23%
Siding - 93 Structures	50	\$ 1,023,000	\$ 20,460	25%
Painting - 76 Structures	10	\$ 88,692	\$ 8,869	11%
Gutters	30	\$ 52,500	\$ 1,750	2%
Chimneys - 44 Structures	15	\$ 66,000	\$ 4,400	5%
Walkways				
Fences	12	\$ 106,084	\$ 8,840	11%
<u>CLUBHOUSE BUILDING</u>				
Furnace				
Restrooms				
Sauna				
<u>POOL</u>				
Heater	10	\$ 3,500	\$ 350	0%
Pump	10	\$ 1,450	\$ 145	0%
Resurface	15	\$ 12,000	\$ 800	1%
<u>COMMON PAVEMENT</u>				
<u>Asphalt Driving Surfaces</u>				
Seal Coat	10	\$ 59,500	\$ 5,950	7%
Repave D Upper 30	10	\$ 43,000	\$ 4,300	5%
D Lower 40	10	\$ 30,000	\$ 3,000	4%
D 50	10	\$ 32,000	\$ 3,200	4%
Paved Walkways				
Curbs				

COMMON DISTRIBUTED FACILITIES

Metal Railings

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Security Lighting

Light Fixtures (SoVap, LED & Incand.)

Underground Wiring

Water Supply

Underground Pipes to each residence from street meters

Sewer Lines

Underground from Res. To St.

Main Drains

Underground to street

Gutter Drains

Undergroun to street

Total Funded Components

\$

81,125

100%

20-Year Income/Expense Detail

Fiscal Year	2021/22	2022/23	2023/24	2024/25	2025/26
Starting Reserve Balance	\$ 80,042	\$ 129,661	\$ 119,991	\$ 130,030	\$ 154,788
Annual Reserve Contributions	\$ 48,576	\$ 50,033	\$ 51,534	\$ 53,080	\$ 54,672
Recommended Reserve Assessments	\$ -	\$ -	\$ -	\$ -	\$ -
Interest Earnings	\$ 1,043	\$ 1,297	\$ 1,505	\$ 1,515	\$ 1,697
Total Reserve Balance	\$ 129,661	\$ 180,991	\$ 173,030	\$ 184,625	\$ 211,157

COMPONENT						
RESIDENTIAL STRUCTURES						
	Roofs	\$ -	\$ -	\$ -	\$ -	\$ -
	D10 2012 (2@\$8,200)					
	D10 2013 (2@\$8,200)					
	D10 2014 (2@\$8,200)					
	D10 2015 (2@\$8,200)					
	Remainder 2016 (85)					
**	Siding					
	D10 & D20 - 16 Homes to be resided, 2 per year	\$ 22,000	\$ 22,000	\$ 22,000	\$ 22,000	\$ 22,000
	Painting					
	D30 -12 homes 2022		\$ 14,000			
	D30 -12 homes 2023			\$ 14,000		
	D40 -11 homes 2024				\$ 12,837	\$ 12,837
	Gutters					
	Chimneys					
	Walkways					
**	Fences	\$ 8,840	\$ 8,840	\$ 8,840	\$ 8,840	\$ 8,840

CLUBHOUSE BUILDING

POOL

COMMON PAVEMENT

Curbs

COMMON DISTRIBUTED FACILITIES

Security Lighting

Light Fixtures (SoVap, LED & Incand.)
Underground Wiring

Water Supply
Underground pipes meter to Res.

Sewer Lines
Underground Res. to St.

Main Drains
Underground to street

Gutter Drains
Underground to St. from Res.

Total Expenses	0	\$ 61,000	\$ 43,000	\$ 29,837	\$ 21,337
Ending Reserve Balance	\$ 129,661	\$ 119,991	\$ 130,030	\$ 154,788	\$ 189,820

Fiscal Year	2026/27	2027/28	2028/29	2029/30	2030/31
Starting Reserve Balance	\$ 189,820	\$ 233,851	\$ 264,926	\$ 301,620	\$ 306,799
Annual Reserve Contributions	\$ 56,313	\$ 58,002	\$ 59,742	\$ 61,534	\$ 63,380
Recommended Reserve Assessments	\$ -	\$ -	\$ -	\$ -	\$ -
Interest Earnings	\$ 2,005	\$ 2,410	\$ 2,796	\$ 3,145	\$ 3,365
Total Reserve Balance	\$ 248,138	\$ 294,263	\$ 327,464	\$ 366,299	\$ 373,545

<u>COMPONENT</u>						
<u>RESIDENTIAL STRUCTURES</u>						
	Roofs					
**	Siding					
	D10 & D20 - 16 Homes to be resided, 2 per year	\$ 22,000	\$ 22,000	\$ 22,000		
	Painting					
	D50 - 11 homes 2026	\$ 12,837				\$ 14000
	D60 - 11 homes 2027		\$ 12,837			
	D70 - 8 homes 2028			\$ 9,344		
	Gutters					\$ 5,000
	Chimneys		\$ 16,500	\$ 16,500	\$ 16,500	\$ 16500
	Walkways					
**	Fences	\$ 8,840	\$ 8,840	\$ 8,840	\$ 8,840	\$ 8,840
<u>COMMON STRUCTURES</u>						
<u>CLUBHOUSE BUILDING</u>						
	Furnace					
	Restrooms					

<u>POOL</u>						
	Heater	\$	1,450			
	Pump					
	Resurface					
<u>COMMON PAVEMENT</u>						
-						
	<u>Asphalt Driving Surfaces</u>	-				
	Seal Coat					
	D10					
	D20					
	D Lower 30					
	D Upper 40					
	D50					
	D60					
	D70					
	D Upper 30			\$	43,000	
	D Lower 40					\$ 32,000
	<u>Paved Walkways</u>					
	<u>Curbs</u>					
<u>COMMON DISTRIBUTED FACILITIES</u>						
-						
-	<u>Metal Railings</u>					
-						
	<u>Security Lighting</u>					
	Light Fixtures (SoVap, LED & Incand.)					
	Underground Wiring					
	<u>Water Supply</u>					
	Underground pipes meter to Res.					

Sewer Lines

Underground Res. to St.

Main Drains

Underground to street

Gutter Drains

Underground to St. from Res.

Total Expenses

Ending Reserve Balance

\$	14,287	\$	29,337	\$	25,844	\$	59,500	\$	67,500
\$	233,851	\$	264,926	\$	301,620	\$	306,799	\$	306,045

Fiscal Year	2031/32	2032/33	2033/34	2034/35	2035/36
Starting Reserve Balance	\$ 306,045	\$ 325,391	\$ 377,130	\$ 415,416	\$ 456,242
Annual Reserve Contributions	\$ 65,282	\$ 67,240	\$ 69,257	\$ 71,335	\$ 73,475
Recommended Reserve Assessments	\$ -	\$ -	\$ -	\$ -	\$ -
Interest Earnings	\$ 3,064	\$ 3,499	\$ 3,866	\$ 4,328	\$ 4,737
Total Reserve Balance	\$ 374,391	\$ 396,130	\$ 450,253	\$ 491,079	\$ 534,454

Fiscal Year	2036/37	2037/38	2038/39	2039/40	2040/41
Starting Reserve Balance	\$ 500,067	\$ 557,683	\$ 634,875	\$ 713,044	\$ 755,413
Annual Reserve Contributions	\$ 75,679	\$ 77,950	\$ 80,288	\$ 82,697	\$ 85,178
Recommended Reserve Assessments	\$ -	\$ -	\$ -	\$ -	\$ -
Interest Earnings	\$ 4,782	\$ 5,691	\$ 6,381	\$ 7,173	\$ 7,792
Total Reserve Balance	\$ 580,527	\$ 641,325	\$ 721,544	\$ 802,913	\$ 848,383

COMPONENT						
RESIDENTIAL STRUCTURES						
	Roofs					
**	Siding					
	Painting					
		\$ 9,344				
	D10 - 12 homes 2039			\$ 14,000		
	D20 - 12 homes 2040				\$ 14,000	
	Gutters	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000
	Chimneys				16500	16500
	Walkways					
**	Fences	\$ 8,840	\$ 8,840	\$ 8,840	\$ 8,840	\$ 8,840
COMMON STRUCTURES						

<u>CLUBHOUSE BUILDING</u>		-			
	Furnace				
	Restrooms				
<u>POOL</u>					
	Heater			\$ 3,500	
	Pump		\$ 1,450		
	Resurface			\$ 12,000	
<u>COMMON PAVEMENT</u>					
-					
	<u>Asphalt Driving Surfaces</u>				
	Seal Coat		\$ 8,500		
	D10				
	D20				
	D Lower 30				
	D Upper 40				
	D50				
	D60				
	D70				
	D Upper 30				\$ 43,000
	D Lower 40				
	<u>Paved Walkways</u>				
	<u>Curbs</u>				
<u>COMMON DISTRIBUTED FACILITIES</u>					
-					
-	<u>Metal Railings</u>				
-					
	<u>Security Lighting</u>				
	Light Fixtures (SoVap, LED & Incand.)				
	Underground Wiring				

Water Supply

Underground pipes meter to Res.

Sewer Lines

Underground Res. to St.

Main Drains

Underground to street

Gutter Drains

Underground to St. from Res.

Total Expenses

Ending Reserve Balance

\$	22,844	\$	6,450	\$	8,500	\$	47,500	\$	78,500
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\$	557,683	\$	634,875	\$	713,044	\$	755,413	\$	769,883
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Will be paid from Operating Funds, not Reserve
New Siding also has 40 yr Useful Life and is beyond
scope of this study.

RS

National Reserve Study Standards

General Information about Reserve Studies

One of the primary responsibilities of the board of directors of a community association is to protect, maintain, and enhance the assets of the association. To accomplish this objective, associations must develop multi-year plans to help them anticipate and responsibly prepare for the timely repair and replacement of common area components such as roofs, roads, mechanical equipment, and other portions of the community's common elements.

Originally published in 1998, the National Reserve Study Standards provide a consistent set of terminology, calculations, and expectations so reserve study providers and those they serve together can build a successful future for millions of community association homeowners across the country.

A reserve study is made up of two parts, the physical analysis and the financial analysis. The physical analysis includes the component inventory, condition assessment, and life and valuation estimates. The component inventory should be relatively stable from year to year, while the condition assessment and life and valuation estimate change from year to year.

The financial analysis is made up of an analysis of the client's current reserve fund status (measured in cash or as percent funded) and a recommendation for an appropriate reserve contribution rate (a funding plan).

Physical Analysis

- Component Inventory
- Condition Assessment
- Life and Valuation Estimates

Financial Analysis

- Fund Status
- Funding Plan

Levels of Service

The following four categories describe the various types of reserve studies, from exhaustive to minimal.

Full: A reserve study in which the following five reserve study tasks are performed:

- Component Inventory (including quantification)
- Condition assessment (based on on-site visual observations)
- Life and valuation estimates
- Fund status
- Funding plan

Update, With Site Visit/On-Site Review: A reserve study update in which the following five reserve study tasks are performed:

- Component inventory (verification only, not quantification)
- Condition assessment (based on on-site visual observations)
- Life and valuation estimates

Update, No Site Visit/Off-Site Review: A reserve study update with no on-site visual observations in which the following three reserve study tasks are performed:

- Life and valuation estimates
- Fund status
- Funding plan

Preliminary, Community Not Yet Constructed: A reserve study prepared before construction that is generally used for budget estimates. It is based on design documents such as the architectural and engineering plans. The following three tasks are performed to prepare this type of study.

- Component inventory
- Life and valuation estimates
- Funding plan

Terms and Definitions

CAPITAL IMPROVEMENTS: Additions to the association's common elements that previously did not exist. While these components should be added to the reserve study for future replacement, the cost of construction should not be taken from the reserve fund.

CASH FLOW METHOD: A method of developing a reserve funding plan 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: The individual line items in the reserve study developed or updated in the physical analysis. These elements form the building blocks for the reserve study. These components comprise the common elements of the community and typically are: 1. association responsibility, 2. with limited useful life expectancies, 3. predictable remaining useful life expectancies, and 4. above a minimum threshold cost. It should be noted that in certain jurisdictions there may be statutory requirements for including components or groups of components in the reserve study.

COMPONENT INVENTORY: The task of selecting and quantifying reserve components. This task can be accomplished through on-site visual observations, review of association design and organizational documents, review of association precedents, and discussion with appropriate representative(s) of the association.

COMPONENT METHOD: A method of developing a reserve funding plan where the total contribution is based on the sum of contributions for the individual components.

CONDITION ASSESSMENT: The task of evaluating the current condition of the component based on observed or reported characteristics.

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 computations.

FINANCIAL ANALYSIS: The portion of a reserve study where the current status of the reserves (measured as cash or percent funded) and a recommended reserve contribution rate (funding plan) are derived, and the projected reserve income and expense over a period of time are presented. The financial analysis is one of the two parts of a reserve study.

FULLY FUNDED: 100 percent funded. When the actual (or projected) reserve balance is equal to the fully funded balance.

FULLY FUNDED BALANCE (FFB): An indicator against which the actual (or projected) reserve balance can be compared. The reserve balance that is in direct proportion to the fraction of life "used up" of the current repair or replacement cost. This number is calculated for each component, and then summed for an association total.

$$\text{FFB} = \text{Current Cost} \times \text{Effective Age} / \text{Useful Life}$$

Example:

For a component with a \$10,000 current replacement cost, a 10-year useful life and effective age of 4 years the fully funded balance would be \$4,000.

FUND STATUS: The status of the reserve fund reported in terms of cash or percent funded.

FUNDING GOALS: Independent of methodology used, the following represent the basic categories of funding plan goals. They are presented in order of greatest risk to least risk. Risk includes, but is not limited to, cash problems, special assessments, and deferred maintenance.

Baseline Funding: Establishing a reserve funding goal of allowing the reserve cash balance to never be below zero during the cash flow projection. This is the funding goal with the greatest risk due to the variabilities encountered in the timing of component replacements and repair and replacement costs.

Threshold Funding: Establishing a reserve funding goal of keeping the reserve balance above a specified dollar or percent funded amount. Depending on the threshold selected, this funding goal may be weaker or stronger than “Fully Funded” with respective higher risk or less risk of cash problems.

Full Funding: Setting a reserve funding goal to attain and maintain reserves at or near 100percent funded. This is the most conservative funding goal.

It should be noted that in certain jurisdictions there may be statutory funding requirements that would dictate the minimum requirements for funding.

FUNDING PLAN: An association's plan to provide income to a reserve fund to offset anticipated expenditures from that fund. The plan must be a minimum of twenty (20) years.

FUNDING PRINCIPLES: The reserve provider must provide a funding plan addressing these principles.

- Sufficient funds when required
- Stable contribution rate over the years
- Equitable contribution rate over the years
- Fiscally responsible

LIFE AND VALUATION ESTIMATES: The task of estimating useful life, remaining useful life, and current repair or replacement costs for the reserve components.

PERCENT FUNDED: The ratio, at a particular point in time related to the fiscal year end, of the actual (or projected) reserve balance to the fully funded balance, expressed as a percentage. While percent funded is an indicator of an association's reserve fund size, it should be viewed in the context of how it is changing due to the association's reserve funding plan in light of the association's risk tolerance.

PHYSICAL ANALYSIS: The portion of the reserve study where the component inventory, condition assessment, and life and valuation estimate tasks are performed. This represents one of the two parts of the reserve study.

REMAINING USEFUL LIFE (RUL): Also referred to as “remaining life” (RL). The estimated time, in years, that a reserve component can be expected to serve its intended function. Projects expected to occur in the initial year have zero remaining useful life.

REPLACEMENT COST: The cost to replace, repair, or restore the component to its original functional condition during that particular year, including all related expenses (including but not limited to shipping, engineering and design, permits, installation, disposal, etc.).

RESERVE BALANCE: Actual or projected funds, as of a particular point in time that the association has identified, to defray the future repair or replacement cost of those major components that the association is obligated to maintain or replace. Also known as reserves, reserve accounts, cash reserves. Based on information provided and not audited.

RESERVE PROVIDER: An individual who prepares reserve studies. In many instances the reserve provider will possess a specialized designation such as the Reserve Specialist (RS) designation provided by Community Associations Institute (CAI). This designation indicates that the provider has shown the necessary skills to perform a reserve study that conforms to these standards.

RESERVE PROVIDER FIRM: A company that prepares reserve studies as one of its primary business activities.

RESERVE STUDY: A budget planning tool which identifies the components that the association is responsible to maintain or replace, the current status of the reserve fund, and a stable and equitable funding plan to offset the anticipated future major common area expenditures. The reserve study consists of two parts: the physical analysis and the financial analysis.

RESPONSIBLE CHARGE: A Reserve Specialist (RS) in responsible charge of a reserve study shall render regular and effective supervision to those individuals performing services that directly and materially affect the quality and competence of services rendered by the Reserve Specialist.

A Reserve Specialist shall maintain such records as are reasonably necessary to establish that the Reserve Specialist exercised regular and effective supervision of a reserve study of which he or she was in responsible charge. A Reserve Specialist engaged in any of the following acts or practices shall be deemed not to have rendered the regular and effective supervision required herein:

1. The regular and continuous absence from principal office premises from which professional services are rendered; except for performance of field work or presence in a field office maintained exclusively for a specific project;
2. The failure to personally inspect or review the work of subordinates where necessary and appropriate;
3. The rendering of a limited, cursory or perfunctory review of plans or projects in lieu of an appropriate detailed review; and
4. The failure to personally be available on a reasonable basis or with adequate advance notice for consultation and inspection where circumstances require personal availability.

SPECIAL ASSESSMENT: A temporary assessment levied on the members of an association in addition to regular assessments. Note that special assessments are often regulated by governing documents or local statutes.

USEFUL LIFE (UL): The estimated time, in years, that a reserve component can be expected to serve its intended function if properly constructed in its present application or installation.

Reserve Study Contents

The following is a list of the minimum contents to be included in the Reserve Study.

- 1.A summary of the association's number of units, physical description and reserve fund financial condition.
- 2.A projection of reserve starting balance, recommended reserve contributions, projected reserve expenses, and projected ending reserve fund balance for a minimum of 20 years.
- 3.A tabular listing of the component inventory, component quantity or identifying descriptions, useful life, remaining useful life and current replacement cost.
- 4.A description of methods and objectives utilized in computing the Fund Status and development of the Funding Plan.
- 5.Source(s) utilized to obtain component repair or replacement cost estimates.
- 6.A description of the level of service by which the Reserve Study was prepared.
- 7.Fiscal year for which the Reserve Study is prepared.

Disclosures

The following are the minimum disclosures to be included in the Reserve Study:

- 1.General: Description of the other involvement(s) with the association, which could result in actual or perceived conflicts of interest.
- 2.Physical Analysis: Description of how thorough the on-site observations were performed: representative samplings vs, all common areas, destructive testing or not, field measurements vs. drawing take-offs, etc.
- 3.Financial Analysis: Description of assumptions utilized for interest and inflation, tax and other outside factors.
- 4.Personnel Credentials: State or organizational licenses or credentials carried by the individual responsible for Reserve Study preparation or oversight.
- 5.Update Reports: Disclosure of how the current work is reliant on the validity of prior Reserve Studies.
- 6.Completeness: Material issues which, if not disclosed, would cause a distortion of the association's situation.
- 7.Reliance on Client Data: Information provided by the official representative of the association regarding financial, physical, quantity, or historical issues will be deemed reliable by the consultant and assembled for the association's use, not for the purpose of performing an audit, quality/forensic analysis, or background checks of historical records.
- 8.Reserve Balance: The actual or projected total presented in the Reserve Study is based upon information provided and was not audited.
- 9.Component Quantities: For update with site visit and update no site visit levels of service, the client is considered to have deemed previously developed component quantities as accurate and reliable.
- 10.Reserve Projects: Information provided about reserve projects will be considered reliable. Any on-site inspection should not be considered a project audit or quality inspection.