



# Reserve Funding



## **Arbor Ridge P.U.D. Homeowners Association-Cottage Collection**

NW Laidlaw Road & NW 174th Avenue  
Beaverton, Oregon 97006  
June 15, 2015

Prepared by:  
D.L. "Dan" Huntley, RS, PRA  
Tamarra "Tammy" Axton, PRA  
Ray Axton, PRA



Reserve Study Professionals credentialed by  
Community Association Institute (RS )and  
Association of Professional Reserve Analysts (PRA)

**ARBOR RIDGE P.U.D. HOMEOWNERS ASSOCIATION-COTTAGE COLLECTION**

**Executive Summary**

**Fiscal Year of Report**

**January 1, 2016 to December 31, 2016**

**Number of Lots 316**

**Parameters**

**Beginning Balance \$64,045.52**

**Fiscal Year 2016 Suggested Contribution \$27,684.60**

**Average Bi-Annual Reserve Assessment Per Lot \$43.90**

**Prior Year's Actual Contribution \$18,444**

**Fiscal Year Projected Interest Rate .04%**

**Fiscal Year Inflation Rate 2.38%**

**Annual Increase To Suggested Contribution 2.38%**

**Lowest Cash Balance Over 30 Years (Threshold) \$26,426**

This work is copyright and has been supplied under contract to the Association and/or its representatives. Apart from the Client's right to reproduce and distribute copies of this report as required by its governing documents or state law, no part of this reserve study may be reproduced by any process without prior written permission from Reserve Studies by Reserve Funding or its parent company Reserve Funding (Western States Subdivision Consulting). Requests and inquiries concerning reproduction and rights should be addressed to Reserve Studies by Reserve Funding at its main office at 16869 SW 65th Avenue, Suite 366, Lake Oswego, OR 97035.

16869 SW 65th Avenue, Suite 366  
Lake Oswego, Oregon 97035  
800-301-3411

**TABLE OF CONTENTS**  
**Arbor Ridge P.U.D. Homeowners Association-Cottage Collection**

Executive Summary .....	2
Category Detail Index .....	4
Base Line Assessment Funding Model Summary .....	5
Base Assessment Funding Model Projection .....	12
Funding Goals & Plans .....	13
Base Line Funding Model & Fully Funded Comparison Chart .....	14
Asset Current Cost by Category .....	15
Component Summary .....	16
Annual Expenditure Detail .....	17
Annual Expenditure Detail .....	22
Detail Report by Category .....	25
Revenue Ruling 70-604 .....	38
Maintenance Plan .....	39
Member Summary Report .....	40

**PART I • EXECUTIVE SUMMARY**

Executive Report - OR .....	1-1
-----------------------------	-----

**PART II • RESERVE STUDY**

**Part III • Information About Your Reserve Study**

Important Information .....	3-1
Introduction .....	3-2
Funding Options .....	3-2
Types of Reserve Studies .....	3-3
The Reserve Study: A Physical and a Financial Analysis .....	3-3
Definitions .....	3-9
Your Reserve Study is a Multi-Purpose Tool .....	3-10

**Arbor Ridge P.U.D. Homeowners Association-Cottage Collection  
Category Detail Index**

Asset ID	Description	Replacement	Page
<b>Landscaping</b>			
1001	Bark Dust: Replace	2017	25
1009	Landscape: Enhancement	2024	26
1010	Landscape: Irrigation-Phase 1	2016	27
1011	Landscape: Irrigation-Phase 2	2017	28
1012	Landscape: Irrigation-Phase 3	2018	29
1013	Landscape: Power Supply	2031	30
1003	Tree Pruning: Newer	2018	31
1002	Tree Pruning: Older	2016	32
1004	Trees: Removal-Trimming-A	2022	33
1005	Trees: Removal-Trimming-B	2023	34
1006	Trees: Removal-Trimming-C	2024	35
1007	Trees: Removal-Trimming-D	2016	36
1008	Trees: Removal-Trimming-E	2016	37
	Total Funded Assets	13	
	Total Unfunded Assets	<u>0</u>	
	Total Assets	13	

**Arbor Ridge P.U.D. Homeowners Association-Cottage Collection  
Base Line Assessment Funding Model Summary**

Report Date	June 15, 2015
Account Number	316-TMG
Version	1 (2016) Level III
Budget Year Beginning	January 01, 2016
Budget Year Ending	December 31, 2016
Total Units	316

<i>Report Parameters</i>	
Inflation	2.38%
Interest Rate on Reserve Deposit	0.04%
2016 Beginning Balance	\$64,045.52

**Current Assessment Funding Model Summary  
Cash Flow Time Value of Money Threshold Funding**

**BUSINESS JUDGEMENT RULE**

**To avoid personal liability for their actions/decisions, directors must perform their fiduciary duties "with such care, including reasonable inquiry, as an ordinarily prudent person in a like position would use under similar circumstances."**

\*\*\*\*\*

**NOTE: The Board MUST (under the new statutes) - Changes to ORS 94.595 & 100.175 by Senate Bill 963B in 2009**

- (3)(a) The board of directors of the association annually shall conduct a reserve study or review and update of an existing study to determine reserve account requirements. Subject to subsection (8) of this section, after review of the reserve study or reserve study update, the board of directors may, without any action of owners:
  - (A) Adjust the amount of payments as indicated by the study or update; and
  - (B) Provide for other reserve items that the board of directors, in its discretion, may deem appropriate.

**Arbor Ridge P.U.D. Homeowners Association-Cottage Collection  
Base Line Assessment Funding Model Summary**

**(b) The reserve study shall:**

**(A) Identify all items for which reserves are or will be established;**

**(B) Include the estimated remaining useful life of each item as of the date of the reserve study;  
and**

**(C) Include for each item, as applicable, an estimated cost of maintenance and repair and replacement at the end of the item's useful life.**

**(8)(a) Except as provided under paragraph (b) of this section, unless the board of directors under subsection (3) of this section determines that the reserve account will be adequately funded for the following year, the board of directors or the owners may not vote to eliminate funding a reserve account required under this section or under the declaration or bylaws.**

**(b) Following the turnover meeting described in ORS 94.609 & ORS 100.210 on an annual basis, the board of directors, with the approval of all owners, may elect not to fund the reserve account for the following year. (Daniel Zimberoff Attorney-Barker Martin)**

- **This reserve study is for budget and planning purposes and identifies the status of the reserve fund and schedules the anticipated major commonly owned item replacements.**

**This reserve study will also estimate the expected useful life and remaining useful life of the building and site components or systems, and will provide an estimate replacement or refurbishment cost for those components or systems. Major components or systems may include, but are not limited to, painting, gutters and downspouts, mailboxes, roofing, siding, windows, doors, paving, mechanical equipment, common area furnishings and amenities and other commonly owned systems or items.**

- **The scope of work identified within our contract is to provide the association with an "Updated No-Site Visit" (Level III) reserve study which includes:**

**Component/System Inventory**

**Expected Useful Life and Remaining Useful Life Estimates**

**Condition Assessment (based upon on-site visual observations if applicable).**

**Component/System Replacement Schedule and Estimated Pricing**

**Arbor Ridge P.U.D. Homeowners Association-Cottage Collection  
Base Line Assessment Funding Model Summary**

**Identify Current Reserve Account Balance  
30 Year Funding Plan**

- **How to Use a Reserve Study**

The documents included within the reserve study are intended to be used as guidelines and estimates. It is nearly impossible to know exactly when a building component system will fail; however, an estimation of useful life based on similar product history and professional experience is used to estimate the time of replacement and associated costs. All costs included within this reserve study should be used as budgeting figures. For exact pricing, a qualified, licensed contractor should be contacted to provide a bid for any anticipated replacements.

The replacement schedule lists all known components and systems that are anticipated to "wear out" or fail within 30 years. Items which are anticipated to be replaced or repaired in the current year are not included within the reserve study as those items should already be budgeted for, and scheduled to be replaced or repaired.

On the reserve schedule, review which items are anticipated to fail in the near future, and keep a close eye on them. It is always better to replace items prior to failure to eliminate the opportunity for surrounding components or associated systems to be affected. Be cognizant of items scheduled for replacement or repair within 2-3 years of the current year. Remember, items listed are scheduled based on history and replacement or repair is scheduled as an estimate. Items commonly fail sooner or later than the estimated date.

- **Disclosures**

- **General - The Arbor Ridge P.U.D. Homeowners Association (Cottages) and Reserve Studies by Reserve Funding have no professional or personal involvements with each other, other than the scope of work identified in the reserve study contract. This relationship cannot be perceived as a conflict of interest.**
- **Physical Analysis - If an on-site reserve study was performed observations were limited to visual observations only. Destructive testing (invasive testing) was not performed. Any items that were not clearly visible at the time of the site observation were not viewed, and therefore were not included in the drafting of this reserve study.**

**Arbor Ridge P.U.D. Homeowners Association-Cottage Collection  
Base Line Assessment Funding Model Summary**

- **Measurements - Measuring and inventory (+/- 10%) were identified via a combination of on-site physical measurements, previous reserve study and/or drawing take-offs. Drawing sets (if used) were provided by the property manager or Declarant for our use relating only to the reserve study scope of work.**
- **Reliance on Client Data - Data received from property management, association representatives and/or Declarant is deemed reliable by Reserve Funding. Such data may include financial information, physical deficiencies or physical conditions, quantity of physical assets, or historical issues.**
- **Scope - The Reserve Study is a reflection of information provided to 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.**
- **Reserve Balance - The actual or projected (estimated) total presented in this reserve study is based upon information provided or collected and was not audited.**
- **Reserve Projects -Information provided or collected for the purpose of this reserve study will be considered reliable and should not be considered a project audit or quality inspection.**
- **Adjustments to Reserve Study - Should components suggested by Consultant be removed from the reserve study or any life cycles or costs other than current bids, engineering construction standards, or current component history be used in this reserve study the Client accepts full responsibility for the results of the reserve study and is not warranted by Consultant.**
- **Information Provided - Quantity, design and material information included in this report was provided in part by the Association and is subject to course of construction changes.**
- **Limitations on Inventory -The following items, but not limited to, are not included in the physical analysis because they have a useful life greater than 30 years. Grading/drainage, foundations/footings, party walls, bearing and shear walls, perimeter walls, beams, columns and girders, sub floors, unfinished floors, concrete stair surfaces, windows, exterior doors, window and door frames, plumbing system, flues (chimneys), air delivery or return systems, ducts, chutes, conduits, pipes, plumbing, sanitary sewage and storm drains, wire, telephone, cable, central television system, sprinklers systems and internet lines.**



**Arbor Ridge P.U.D. Homeowners Association-Cottage Collection  
Base Line Assessment Funding Model Summary**

- **Warranty or Guaranty - This reserve study and its recommendations should not be construed in any way to constitute a warranty or guaranty regarding the current or future performance of the components. Components will be replaced as required, not necessarily in their expected replacement year.**
- **Annual Updates - Often times there can be a significant expenditure in those years that exceeds the life of the reserve study. Hence, annual updates should be done to allow adjustments in the reserve contribution each year if required.**
- **Tax Consequences - The tax consequences are not considered in this reserve study due to the uncertainty of all factors affecting net taxable income and the election of the tax form to be filed.**
- **If applicable, we recommend a building envelope (water intrusion) inspection every six years and a roofing inspection every six years (not funded in the reserve).**
- **House Bill 955 (HB 955), in Oregon since 1/1/2006, specifically calls for the provision of a reserve study, reserve study update, maintenance plan and reserve summary. ORS 94.595 states that: "The board of directors of the association annually shall conduct a reserve study, or review and update an existing reserve study to determine the reserve study requirements". In addition ORS 94.595 (3)(B)(c) and ORS 100.175 (3)(C)(c) further require that a Reserve Study Update be done each year.**
- **House Bill 2665 (Chapter 409, Oregon Laws 2007) revises portions on SB 955 by removing the requirement for a maintenance plan from the reserve study and makes it a separate requirement. Also, after 9/27/2007 HB 2665 no longer requires that owners be provided a reserve summary of the reserve study or any revisions thereto.**
- **Further House Bill 2665 makes windows and unit access doors, except for glazing and screening, general common elements, unless Declaration provides otherwise, (Sec 5).**
- **NOTE: Management or the Board shall notify the reserve study provider if the windows and doors are the responsibility of the Association and if so, will be added to the next update of the reserve study. Management or the Association to provide the count of windows and doors including type and size.**

**Arbor Ridge P.U.D. Homeowners Association-Cottage Collection  
Base Line Assessment Funding Model Summary**

- **Preparation of a Reserve Study**

Data is collected from many sources to prepare a reserve study and a variety of document reviews, interviews, and site observations are required to adequately fulfill our duties as a reserve provider. The following sources, but not limited to, and methods were utilized in the preparation of this reserve study document:

Property Management Personnel Interviews

As built Plans and Specifications Document Reviews

On-site Observations - If Applicable

In-house company consultations with accredited RS and PRA personnel

Discussions with Engineering or Architectural Consultants

RS Means Facilities Maintenance & Repair Cost Data, 22nd Edition (2015) printed manual

Interviewing General Contractor Consultants

- A tabular list of commonly owned items has been developed and given a current condition grade, expected useful life, and remaining useful life. A portion of that data will determine in what year it is estimated the component should be replaced.
- **Property Information**
- **Original Starting Date of Reserve Study - Unless otherwise indicated, we have used January 1, 2001 to begin aging the original components in this reserve study.**
- **Number of Units/Lots and Location - This reserve study is a total of 316 lots located in Beaverton, Oregon.**
- **Date of Last Reserve Study (if applicable) - The last plan take-off physical analysis done by Reserve Funding by WSSC was completed on October 15, 2004.**
- **NOTE: All interest accrued from reserve savings account(s) must remain in the reserve savings account(s) and not used as an off-set for operating expenses.**
- **NOTE: The water intrusion and roofing (building envelope) inspection is part of the operating budget and not a reserve line item at the request of the board.**

**Arbor Ridge P.U.D. Homeowners Association-Cottage Collection  
Base Line Assessment Funding Model Summary**

- **NOTE: The tree inventory report prepared by the Davey Resource Group and dated 8/2012 is made an addendum to this reserve study by reference.**
- **Funding Required - A minimum balance of \$26,426.00 has been used over the thirty years of this reserve study with an average bi-annual reserve assessment of \$43.80 per Lot and an annual increase of 2.38% to reach 70% funding within the thirty years of the reserve study.**

**The industry standards for percent funded are:**

**0% to 29% - Poor**

**30% to 69% - Fair**

**70% to 100% - Good**

**This association is 47% funded on 1/1/2016.**

***Base Line Funding Model Summary of Calculations***

Required Biannual Contribution	\$13,840.80
<i>\$43.80 per unit biannually</i>	
Average Net Biannual Interest Earned	\$7.32
Total Biannual Allocation to Reserves	\$13,848.12
<i>\$43.82 per unit biannually</i>	

**Arbor Ridge P.U.D. Homeowners Association-Cottage Collection  
Base Assessment Funding Model Projection**

Beginning Balance: \$64,046

Year	Current Cost	Annual Contribution	Annual Interest	Annual Expenditures	Projected Ending Reserves	Fully Funded Reserves	Percent Funded
2016	172,842	27,682	15	48,213	43,528	93,382	47%
2017	176,956	28,340	9	42,178	29,700	77,550	38%
2018	181,168	29,015	8	32,296	26,426	72,122	37%
2019	185,479	29,705	12	17,878	38,266	81,578	47%
2020	189,894	30,412	23	2,445	66,257	107,302	62%
2021	194,413	31,136	27	23,293	74,127	113,415	65%
2022	199,040	31,877	30	24,155	81,880	119,450	69%
2023	203,778	32,636	28	37,526	77,017	112,911	68%
2024	208,627	33,413	27	34,973	75,483	109,440	69%
2025	213,593	34,208	32	20,587	89,136	120,958	74%
2026	218,676	35,022	34	29,953	94,239	124,086	76%
2027	223,881	35,856	38	26,823	103,309	131,137	79%
2028	229,209	36,709	51	2,951	137,118	162,964	84%
2029	234,664	37,583	57	22,618	152,140	176,636	86%
2030	240,249	38,477	55	42,829	147,844	171,193	86%
2031	245,967	39,393	47	59,267	128,016	149,972	85%
2032	251,821	40,330	37	66,310	102,073	122,011	84%
2033	257,815	41,290	32	53,517	89,879	107,006	84%
2034	263,951	42,273	33	38,064	94,121	107,945	87%
2035	270,233	43,279	40	26,046	111,394	121,791	91%
2036	276,664	43,279	40	44,378	110,335	118,523	93%
2037	283,249	43,279	46	27,301	126,360	133,164	95%
2038	289,990	43,279	62	3,734	165,967	172,652	96%
2039	296,892	43,279	65	35,571	173,741	182,196	95%
2040	303,958	43,279	81	3,913	213,187	224,600	95%
2041	311,192	43,279	86	29,994	226,558	242,931	93%
2042	318,599	43,279	85	46,127	223,796	246,589	91%
2043	326,181	43,279	78	60,067	207,086	237,441	87%
2044	333,944	43,279	58	95,567	154,856	193,649	80%
2045	341,892	43,279	39	89,500	108,674	155,978	70%

# FUNDING GOALS AND FUNDING PLANS

## EXPLANATION OF FUNDING GOALS

In 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 “funding plan”.

In an **Update with site inspection**, the reserve provider conducts a component inventory (verification only, not quantification unless new components have been added to the inventory), a condition assessment (based upon on-site visual observations), and life and valuation estimates to determine both the “fund status and “funding plan.”

In an **Update without site inspection**, the reserve provider conducts life and valuation estimates to determine the “fund status” and “funding plan.”

## EXPLANATION OF FUNDING PLANS

**Baseline Funding Model.** The goal of this funding method is to keep the reserve cash balance above zero. This means that while each individual component may not be fully funded, the reserve balance overall does not drop below zero during the projected period. An association using this funding method must understand that even a minor reduction in a component’s remaining useful life can result in a deficit in the reserve cash balance.

**Greatest risk to Client for a special assessment**

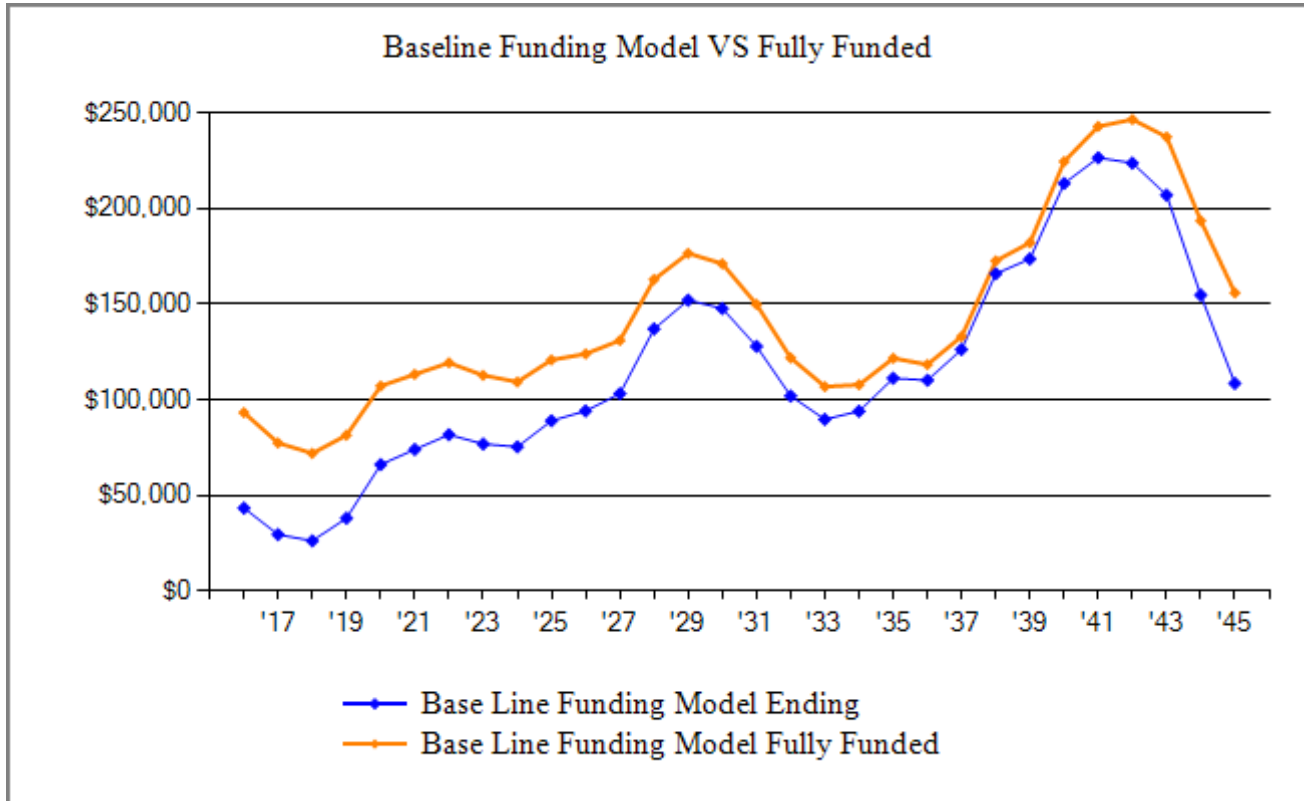
**Threshold Funding Model.** This method is based upon the cash flow funding concept. The minimum reserve cash balance in threshold funding, however, is set at a predetermined dollar or percent amount (other than \$0) and Client may select a dollar or percent amount. **Lesser risk to Client for a special assessment**

**Full Funding Model (Proportional Funding)**---Given that the basis of funding for reserves is to distribute the costs of the replacements over the lives of the components in question, it follows that the ideal level of reserves will be proportionately related to those lives and costs. If an association has a component with an expected estimated useful life of ten years, it will set aside approximately one-tenth of the replacement cost each year. At the end of three years, one will expect three-tenths of the replacement cost to have accumulated, and if so, that component will be “fully-funded.” This model is important in that it is a measure of the adequacy of an association’s reserves at any one point of time, and is independent of any particular method which may have been used for past funding or may be under consideration for future funding. This formula represents a snapshot in time and is based upon current replacement cost, independent of future inflationary or investment factors:

Fully Funded Reserves =  $\text{Age} \div \text{Useful Life} \times \text{Current Replacement Cost}$

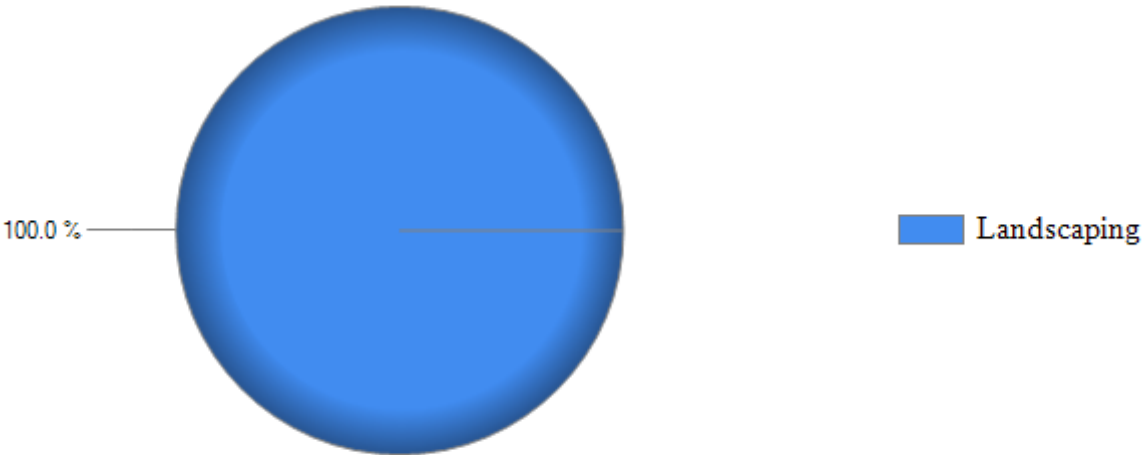
When an association’s total accumulated reserves for all components meet this criterion, its reserves are considered “fully-funded.” **Least risk to Client for a special assessment.**

**Arbor Ridge P.U.D. Homeowners Association-Cottage Collection  
Base Line Funding Model & Fully Funded Comparison Chart**



**The Current Assessment Funding Model** is based on the current annual assessment, parameters, and reserve fund balance. Because it is calculated using the current annual assessment, it will give the accurate projection of how well the association is funded for the next 30 years of planned reserve expenditures.

Asset Current Cost by Category



**Arbor Ridge P.U.D. Homeowners Association-Cottage Collection**  
 Beaverton, Oregon 97006  
**Component Summary**

Description	Future Cost	Useful Life	Remaining Life	Adjustment	Distribution	Required Contribution	Ideally Funded
<b>Landscaping</b>							
Bark Dust: Replace	14,778	2	1		7,217	1,865.72	7,217
Landscape: Enhancement	13,700	10	8		0	422.16	2,270
Landscape: Irrigation-Phase 1	24,538	14	0	1	24,538	599.86	24,538
Landscape: Irrigation-Phase 2	25,122	14	1	2	8,615	4,074.07	23,004
Landscape: Irrigation-Phase 3	25,720	14	2	3	0	3,173.99	21,651
Landscape: Power Supply	640	30	15		0	10.51	225
Tree Pruning: Newer	4,244	3	2		0	523.74	1,350
Tree Pruning: Older	2,225	1	0		2,225	562.42	2,225
Trees: Removal-Trimming-A	21,592	10	6		0	887.48	7,500
Trees: Removal-Trimming-B	17,885	10	7		0	629.98	4,551
Trees: Removal-Trimming-C	13,700	10	8		0	422.16	2,270
Trees: Removal-Trimming-D	10,850	10	0	5	10,850	338.26	10,850
Trees: Removal-Trimming-E	10,600	10	0	5	10,600	330.47	10,600
Landscaping - Total	<u>\$185,594</u>				<u>\$64,046</u>	<u>\$13,841</u>	<u>\$118,252</u>
 Grand Total:	 <u><u>\$185,594</u></u>				 <u><u>\$64,046</u></u>	 <u><u>\$13,841</u></u>	 <u><u>\$118,252</u></u>



**Arbor Ridge P.U.D. Homeowners Association-Cottage Collection  
Annual Expenditure Detail**

Description	Expenditures
<b>Replacement Year 2016</b>	
Landscape: Irrigation-Phase 1	24,538
Tree Pruning: Older	2,225
Trees: Removal-Trimming-D	10,850
Trees: Removal-Trimming-E	10,600
<b>Total for 2016</b>	<b>\$48,213</b>
<b>Replacement Year 2017</b>	
Bark Dust: Replace	14,778
Landscape: Irrigation-Phase 2	25,122
Tree Pruning: Older	2,278
<b>Total for 2017</b>	<b>\$42,178</b>
<b>Replacement Year 2018</b>	
Landscape: Irrigation-Phase 3	25,720
Tree Pruning: Newer	4,244
Tree Pruning: Older	2,332
<b>Total for 2018</b>	<b>\$32,296</b>
<b>Replacement Year 2019</b>	
Bark Dust: Replace	15,490
Tree Pruning: Older	2,388
<b>Total for 2019</b>	<b>\$17,878</b>
<b>Replacement Year 2020</b>	
Tree Pruning: Older	2,445
<b>Total for 2020</b>	<b>\$2,445</b>
<b>Replacement Year 2021</b>	
Bark Dust: Replace	16,236
Tree Pruning: Newer	4,554
Tree Pruning: Older	2,503
<b>Total for 2021</b>	<b>\$23,293</b>
<b>Replacement Year 2022</b>	
Tree Pruning: Older	2,563
Trees: Removal-Trimming-A	21,592
<b>Total for 2022</b>	<b>\$24,155</b>

**Arbor Ridge P.U.D. Homeowners Association-Cottage Collection  
Annual Expenditure Detail**

Description	Expenditures
<b>Replacement Year 2023</b>	
Bark Dust: Replace	17,018
Tree Pruning: Older	2,624
Trees: Removal-Trimming-B	17,885
<b>Total for 2023</b>	<b>\$37,526</b>
<b>Replacement Year 2024</b>	
Landscape: Enhancement	13,700
Tree Pruning: Newer	4,887
Tree Pruning: Older	2,686
Trees: Removal-Trimming-C	13,700
<b>Total for 2024</b>	<b>\$34,973</b>
<b>Replacement Year 2025</b>	
Bark Dust: Replace	17,837
Tree Pruning: Older	2,750
<b>Total for 2025</b>	<b>\$20,587</b>
<b>Replacement Year 2026</b>	
Tree Pruning: Older	2,815
Trees: Removal-Trimming-D	13,727
Trees: Removal-Trimming-E	13,411
<b>Total for 2026</b>	<b>\$29,953</b>
<b>Replacement Year 2027</b>	
Bark Dust: Replace	18,696
Tree Pruning: Newer	5,245
Tree Pruning: Older	2,882
<b>Total for 2027</b>	<b>\$26,823</b>
<b>Replacement Year 2028</b>	
Tree Pruning: Older	2,951
<b>Total for 2028</b>	<b>\$2,951</b>
<b>Replacement Year 2029</b>	
Bark Dust: Replace	19,597
Tree Pruning: Older	3,021
<b>Total for 2029</b>	<b>\$22,618</b>

**Arbor Ridge P.U.D. Homeowners Association-Cottage Collection  
Annual Expenditure Detail**

Description	Expenditures
<b>Replacement Year 2030</b>	
Landscape: Irrigation-Phase 1	34,108
Tree Pruning: Newer	5,628
Tree Pruning: Older	3,093
<b>Total for 2030</b>	<b>\$42,829</b>
<b>Replacement Year 2031</b>	
Bark Dust: Replace	20,541
Landscape: Irrigation-Phase 2	34,919
Landscape: Power Supply	640
Tree Pruning: Older	3,167
<b>Total for 2031</b>	<b>\$59,267</b>
<b>Replacement Year 2032</b>	
Landscape: Irrigation-Phase 3	35,750
Tree Pruning: Older	3,242
Trees: Removal-Trimming-A	27,318
<b>Total for 2032</b>	<b>\$66,310</b>
<b>Replacement Year 2033</b>	
Bark Dust: Replace	21,530
Tree Pruning: Newer	6,040
Tree Pruning: Older	3,319
Trees: Removal-Trimming-B	22,628
<b>Total for 2033</b>	<b>\$53,517</b>
<b>Replacement Year 2034</b>	
Landscape: Enhancement	17,333
Tree Pruning: Older	3,398
Trees: Removal-Trimming-C	17,333
<b>Total for 2034</b>	<b>\$38,064</b>
<b>Replacement Year 2035</b>	
Bark Dust: Replace	22,567
Tree Pruning: Older	3,479
<b>Total for 2035</b>	<b>\$26,046</b>
<b>Replacement Year 2036</b>	
Tree Pruning: Newer	6,481

**Arbor Ridge P.U.D. Homeowners Association-Cottage Collection  
Annual Expenditure Detail**

Description	Expenditures
<b><i>Replacement Year 2036 continued...</i></b>	
Tree Pruning: Older	3,562
Trees: Removal-Trimming-D	17,367
Trees: Removal-Trimming-E	16,967
<b>Total for 2036</b>	<b><u>\$44,378</u></b>
<b>Replacement Year 2037</b>	
Bark Dust: Replace	23,654
Tree Pruning: Older	3,647
<b>Total for 2037</b>	<b><u>\$27,301</u></b>
<b>Replacement Year 2038</b>	
Tree Pruning: Older	3,734
<b>Total for 2038</b>	<b><u>\$3,734</u></b>
<b>Replacement Year 2039</b>	
Bark Dust: Replace	24,794
Tree Pruning: Newer	6,955
Tree Pruning: Older	3,822
<b>Total for 2039</b>	<b><u>\$35,571</u></b>
<b>Replacement Year 2040</b>	
Tree Pruning: Older	3,913
<b>Total for 2040</b>	<b><u>\$3,913</u></b>
<b>Replacement Year 2041</b>	
Bark Dust: Replace	25,988
Tree Pruning: Older	4,007
<b>Total for 2041</b>	<b><u>\$29,994</u></b>
<b>Replacement Year 2042</b>	
Tree Pruning: Newer	7,463
Tree Pruning: Older	4,102
Trees: Removal-Trimming-A	34,562
<b>Total for 2042</b>	<b><u>\$46,127</u></b>
<b>Replacement Year 2043</b>	
Bark Dust: Replace	27,240

**Arbor Ridge P.U.D. Homeowners Association-Cottage Collection  
Annual Expenditure Detail**

Description	Expenditures
<b><i>Replacement Year 2043 continued...</i></b>	
Tree Pruning: Older	4,199
Trees: Removal-Trimming-B	28,628
<b>Total for 2043</b>	<b>\$60,067</b>
<b>Replacement Year 2044</b>	
Landscape: Enhancement	21,929
Landscape: Irrigation-Phase 1	47,409
Tree Pruning: Older	4,299
Trees: Removal-Trimming-C	21,929
<b>Total for 2044</b>	<b>\$95,567</b>
<b>Replacement Year 2045</b>	
Bark Dust: Replace	28,552
Landscape: Irrigation-Phase 2	48,538
Tree Pruning: Newer	8,009
Tree Pruning: Older	4,402
<b>Total for 2045</b>	<b>\$89,500</b>

**Arbor Ridge P.U.D. Homeowners Association-Cottage Collection  
Annual Expenditure Detail**

<b>Description</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>
Bark Dust: Replace		14,778		15,490		16,236		17,018		17,837
Landscape: Enhancement									13,700	
Landscape: Irrigation-Phase 1	24,538									
Landscape: Irrigation-Phase 2		25,122								
Landscape: Irrigation-Phase 3			25,720							
Landscape: Power Supply										
Tree Pruning: Newer			4,244			4,554			4,887	
Tree Pruning: Older	2,225	2,278	2,332	2,388	2,445	2,503	2,563	2,624	2,686	2,750
Trees: Removal-Trimming-A							21,592			
Trees: Removal-Trimming-B								17,885		
Trees: Removal-Trimming-C									13,700	
Trees: Removal-Trimming-D	10,850									
Trees: Removal-Trimming-E	10,600									
<b>Year Total:</b>	<b>48,213</b>	<b>42,178</b>	<b>32,296</b>	<b>17,878</b>	<b>2,445</b>	<b>23,293</b>	<b>24,155</b>	<b>37,526</b>	<b>34,973</b>	<b>20,587</b>

**Arbor Ridge P.U.D. Homeowners Association-Cottage Collection  
Annual Expenditure Detail**

<b>Description</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>2035</b>
Bark Dust: Replace		18,696		19,597		20,541		21,530		22,567
Landscape: Enhancement									17,333	
Landscape: Irrigation-Phase 1					34,108					
Landscape: Irrigation-Phase 2						34,919				
Landscape: Irrigation-Phase 3							35,750			
Landscape: Power Supply						640				
Tree Pruning: Newer		5,245			5,628			6,040		
Tree Pruning: Older	2,815	2,882	2,951	3,021	3,093	3,167	3,242	3,319	3,398	3,479
Trees: Removal-Trimming-A							27,318			
Trees: Removal-Trimming-B								22,628		
Trees: Removal-Trimming-C									17,333	
Trees: Removal-Trimming-D	13,727									
Trees: Removal-Trimming-E	13,411									
<b>Year Total:</b>	<b>29,953</b>	<b>26,823</b>	<b>2,951</b>	<b>22,618</b>	<b>42,829</b>	<b>59,267</b>	<b>66,310</b>	<b>53,517</b>	<b>38,064</b>	<b>26,046</b>

**Arbor Ridge P.U.D. Homeowners Association-Cottage Collection  
Annual Expenditure Detail**

<b>Description</b>	<b>2036</b>	<b>2037</b>	<b>2038</b>	<b>2039</b>	<b>2040</b>	<b>2041</b>	<b>2042</b>	<b>2043</b>	<b>2044</b>	<b>2045</b>
Bark Dust: Replace		23,654		24,794		25,988		27,240		28,552
Landscape: Enhancement									21,929	
Landscape: Irrigation-Phase 1									47,409	
Landscape: Irrigation-Phase 2										48,538
Landscape: Irrigation-Phase 3										
Landscape: Power Supply										
Tree Pruning: Newer	6,481			6,955			7,463			8,009
Tree Pruning: Older	3,562	3,647	3,734	3,822	3,913	4,007	4,102	4,199	4,299	4,402
Trees: Removal-Trimming-A							34,562			
Trees: Removal-Trimming-B								28,628		
Trees: Removal-Trimming-C									21,929	
Trees: Removal-Trimming-D	17,367									
Trees: Removal-Trimming-E	16,967									
<b>Year Total:</b>	<b>44,378</b>	<b>27,301</b>	<b>3,734</b>	<b>35,571</b>	<b>3,913</b>	<b>29,994</b>	<b>46,127</b>	<b>60,067</b>	<b>95,567</b>	<b>89,500</b>



**Arbor Ridge P.U.D. Homeowners Association-Cottage Collection  
Detail Report by Category**

**Bark Dust: Replace**

		65,610 SF	@ \$0.22
Asset ID	1001	Asset Cost	\$14,434.20
Group	Non-Capital	Percent Replacement	100%
Category	Landscaping	Future Cost	\$14,777.73
Placed in Service	May 2015		
Useful Life	2		
Replacement Year	2017		
Remaining Life	1		



**Remarks:**

This component is the bark dust spread around the landscaped areas of 316 lots.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means, Craftsman, Marshall Swift, The National Construction Estimator, National Repair and Remodel Estimator, Dodge Cost Manual, McGraw Hill Professional, assorted independent contractors, various specialists, assorted vendors catalogues, actual quotations or historical costs, Consultant's own experience in like components or as provided by the Client.

The Association should obtain a bid to confirm this estimate.

These costs do not take into consideration any changes to the building code.

Note: This is a provision for an anticipated expense. Should the Association find that the cost of this item is greater or less than the amount provided for herein, this reserve study should be updated to reflect the actual component cost.

**Arbor Ridge P.U.D. Homeowners Association-Cottage Collection  
Detail Report by Category**

**Landscape: Enhancement**

		1 Total	@ \$11,350.00
Asset ID	1009	Asset Cost	\$11,350.00
Group	Non-Capital	Percent Replacement	100%
Category	Landscaping	Future Cost	\$13,699.88
Placed in Service	September 2014		
Useful Life	10		
Replacement Year	2024		
Remaining Life	8		



**Remarks:**

This component is the enhancement of the common area landscaping.

Also, this item is the tree management as defined in the Davey Tree Inventory Report, which is made an addendum to the reserve study by reference.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means, Craftsman, Marshall Swift, The National Construction Estimator, National Repair and Remodel Estimator, Dodge Cost Manual, McGraw Hill Professional, assorted independent contractors, various specialists, assorted vendors catalogues, actual quotations or historical costs, Consultant's own experience in like components or as provided by the Client.

The Association should obtain a bid to confirm this estimate.

These costs do not take into consideration any changes to the building code.

Note: This is a provision for an anticipated expense. Should the Association find that the cost of this item is greater or less than the amount provided for herein, this reserve study should be updated to reflect the actual component cost.

**Arbor Ridge P.U.D. Homeowners Association-Cottage Collection  
Detail Report by Category**

**Landscape: Irrigation-Phase 1**

		1 SF	@ \$24,538.00
Asset ID	1010	Asset Cost	\$24,538.00
Group	Non-Capital	Percent Replacement	100%
Category	Landscaping	Future Cost	\$24,538.00
Placed in Service	May 2001		
Useful Life	14		
Adjustment	1		
Replacement Year	2016		
Remaining Life	0		



**Remarks:**

This component is the rework of the irrigation system in phase 1.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means, Craftsman, Marshall Swift, The National Construction Estimator, National Repair and Remodel Estimator, Dodge Cost Manual, McGraw Hill Professional, assorted independent contractors, various specialists, assorted vendors catalogues, actual quotations or historical costs, Consultant's own experience in like components or as provided by the Client.

The Association should obtain a bid to confirm this estimate.

These costs do not take into consideration any changes to the building code.

Note: This is a provision for an anticipated expense. Should the Association find that the cost of this item is greater or less than the amount provided for herein, this reserve study should be updated to reflect the actual component cost.

**Arbor Ridge P.U.D. Homeowners Association-Cottage Collection  
Detail Report by Category**

**Landscape: Irrigation-Phase 2**

			1 SF	@ \$24,538.00
Asset ID	1011		Asset Cost	\$24,538.00
Group	Non-Capital		Percent Replacement	100%
Category	Landscaping		Future Cost	\$25,122.00
Placed in Service	May 2001			
Useful Life	14			
Adjustment	2			
Replacement Year	2017			
Remaining Life	1			



**Remarks:**

This component is the rework of the irrigation system in phase 2.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means, Craftsman, Marshall Swift, The National Construction Estimator, National Repair and Remodel Estimator, Dodge Cost Manual, McGraw Hill Professional, assorted independent contractors, various specialists, assorted vendors catalogues, actual quotations or historical costs, Consultant's own experience in like components or as provided by the Client.

The Association should obtain a bid to confirm this estimate.

These costs do not take into consideration any changes to the building code.

Note: This is a provision for an anticipated expense. Should the Association find that the cost of this item is greater or less than the amount provided for herein, this reserve study should be updated to reflect the actual component cost.

**Arbor Ridge P.U.D. Homeowners Association-Cottage Collection  
Detail Report by Category**

**Landscape: Irrigation-Phase 3**

			1 SF	@ \$24,538.00
Asset ID	1012		Asset Cost	\$24,538.00
Group	Non-Capital		Percent Replacement	100%
Category	Landscaping		Future Cost	\$25,719.91
Placed in Service	May 2001			
Useful Life	14			
Adjustment	3			
Replacement Year	2018			
Remaining Life	2			



**Remarks:**

This component is the rework of the irrigation system in phase 3.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means, Craftsman, Marshall Swift, The National Construction Estimator, National Repair and Remodel Estimator, Dodge Cost Manual, McGraw Hill Professional, assorted independent contractors, various specialists, assorted vendors catalogues, actual quotations or historical costs, Consultant's own experience in like components or as provided by the Client.

The Association should obtain a bid to confirm this estimate.

These costs do not take into consideration any changes to the building code.

Note: This is a provision for an anticipated expense. Should the Association find that the cost of this item is greater or less than the amount provided for herein, this reserve study should be updated to reflect the actual component cost.

**Arbor Ridge P.U.D. Homeowners Association-Cottage Collection  
Detail Report by Category**

**Landscape: Power Supply**

		1 Total	@ \$450.00
Asset ID	1013	Asset Cost	\$450.00
Group	Capital	Percent Replacement	100%
Category	Landscaping	Future Cost	\$640.38
Placed in Service	September 2001		
Useful Life	30		
Replacement Year	2031		
Remaining Life	15		



**Remarks:**

This component is the power supply for the common area landscaping controllers.

Also, this item is the tree management as defined in the Davey Tree Inventory Report, which is made an addendum to the reserve study by reference.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means, Craftsman, Marshall Swift, The National Construction Estimator, National Repair and Remodel Estimator, Dodge Cost Manual, McGraw Hill Professional, assorted independent contractors, various specialists, assorted vendors catalogues, actual quotations or historical costs, Consultant's own experience in like components or as provided by the Client.

The Association should obtain a bid to confirm this estimate.

These costs do not take into consideration any changes to the building code.

Note: This is a provision for an anticipated expense. Should the Association find that the cost of this item is greater or less than the amount provided for herein, this reserve study should be updated to reflect the actual component cost.

**Arbor Ridge P.U.D. Homeowners Association-Cottage Collection  
Detail Report by Category**

**Tree Pruning: Newer**

		1 Total	@ \$4,049.00
Asset ID	1003	Asset Cost	\$4,049.00
Group	Non-Capital	Percent Replacement	100%
Category	Landscaping	Future Cost	\$4,244.03
Placed in Service	March 2015		
Useful Life	3		
Replacement Year	2018		
Remaining Life	2		



**Remarks:**

This component is the trimming and pruning of the trees in the yards of the newer homes (179) in the Cottage Collection.

Also, this item is the tree management as defined in the Davey Tree Inventory Report, which is made an addendum to the reserve study by reference.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means, Craftsman, Marshall Swift, The National Construction Estimator, National Repair and Remodel Estimator, Dodge Cost Manual, McGraw Hill Professional, assorted independent contractors, various specialists, assorted vendors catalogues, actual quotations or historical costs, Consultant's own experience in like components or as provided by the Client.

The Association should obtain a bid to confirm this estimate.

These costs do not take into consideration any changes to the building code.

Note: This is a provision for an anticipated expense. Should the Association find that the cost of this item is greater or less than the amount provided for herein, this reserve study should be updated to reflect the actual component cost.

**Arbor Ridge P.U.D. Homeowners Association-Cottage Collection  
Detail Report by Category**

**Tree Pruning: Older**

		55 Each	@ \$40.46
Asset ID	1002	Asset Cost	\$2,225.30
Group	Non-Capital	Percent Replacement	100%
Category	Landscaping	Future Cost	\$2,225.30
Placed in Service	March 2015		
Useful Life	1		
Replacement Year	2016		
Remaining Life	0		



**Remarks:**

This component is the trimming and pruning of the trees in the yards of the Arbor Ridge PUD-Cottages (older homes).

Also, this item is the tree management as defined in the Davey Tree Inventory Report, which is made an addendum to the reserve study by reference.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means, Craftsman, Marshall Swift, The National Construction Estimator, National Repair and Remodel Estimator, Dodge Cost Manual, McGraw Hill Professional, assorted independent contractors, various specialists, assorted vendors catalogues, actual quotations or historical costs, Consultant's own experience in like components or as provided by the Client.

The Association should obtain a bid to confirm this estimate.

These costs do not take into consideration any changes to the building code.

Note: This is a provision for an anticipated expense. Should the Association find that the cost of this item is greater or less than the amount provided for herein, this reserve study should be updated to reflect the actual component cost.



**Arbor Ridge P.U.D. Homeowners Association-Cottage Collection  
Detail Report by Category**

**Trees: Removal-Trimming-A**

			1 Total	@ \$18,750.00
Asset ID	1004		Asset Cost	\$18,750.00
Group	Non-Capital		Percent Replacement	100%
Category	Landscaping		Future Cost	\$21,591.96
Placed in Service	January 2012			
Useful Life	10			
Replacement Year	2022			
Remaining Life	6			



**Remarks:**

This component is the tree management as defined in the Davey Tree Inventory Report, which is made an addendum to the reserve study by reference.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means, Craftsman, Marshall Swift, The National Construction Estimator, National Repair and Remodel Estimator, Dodge Cost Manual, McGraw Hill Professional, assorted independent contractors, various specialists, assorted vendors catalogues, actual quotations or historical costs, Consultant's own experience in like components or as provided by the Client.

The Association should obtain a bid to confirm this estimate.

These costs do not take into consideration any changes to the building code.

Note: This is a provision for an anticipated expense. Should the Association find that the cost of this item is greater or less than the amount provided for herein, this reserve study should be updated to reflect the actual component cost.

**Arbor Ridge P.U.D. Homeowners Association-Cottage Collection  
Detail Report by Category**

**Trees: Removal-Trimming-B**

		1 Total	@ \$15,170.00
Asset ID	1005	Asset Cost	\$15,170.00
Group	Non-Capital	Percent Replacement	100%
Category	Landscaping	Future Cost	\$17,885.10
Placed in Service	January 2013		
Useful Life	10		
Replacement Year	2023		
Remaining Life	7		



**Remarks:**

This component is the tree management as defined in the Davey Tree Inventory Report, which is made an addendum to the reserve study by reference.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means, Craftsman, Marshall Swift, The National Construction Estimator, National Repair and Remodel Estimator, Dodge Cost Manual, McGraw Hill Professional, assorted independent contractors, various specialists, assorted vendors catalogues, actual quotations or historical costs, Consultant's own experience in like components or as provided by the Client.

The Association should obtain a bid to confirm this estimate.

These costs do not take into consideration any changes to the building code.

Note: This is a provision for an anticipated expense. Should the Association find that the cost of this item is greater or less than the amount provided for herein, this reserve study should be updated to reflect the actual component cost.

**Arbor Ridge P.U.D. Homeowners Association-Cottage Collection  
Detail Report by Category**

**Trees: Removal-Trimming-C**

		1 Total	@ \$11,350.00
Asset ID	1006	Asset Cost	\$11,350.00
Group	Non-Capital	Percent Replacement	100%
Category	Landscaping	Future Cost	\$13,699.88
Placed in Service	January 2014		
Useful Life	10		
Replacement Year	2024		
Remaining Life	8		



**Remarks:**

This component is the tree management as defined in the Davey Tree Inventory Report, which is made an addendum to the reserve study by reference.

\$6,010 was spent in 2014 for tree enhancements.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means, Craftsman, Marshall Swift, The National Construction Estimator, National Repair and Remodel Estimator, Dodge Cost Manual, McGraw Hill Professional, assorted independent contractors, various specialists, assorted vendors catalogues, actual quotations or historical costs, Consultant's own experience in like components or as provided by the Client.

The Association should obtain a bid to confirm this estimate.

These costs do not take into consideration any changes to the building code.

Note: This is a provision for an anticipated expense. Should the Association find that the cost of this item is greater or less than the amount provided for herein, this reserve study should be updated to reflect the actual component cost.

**Arbor Ridge P.U.D. Homeowners Association-Cottage Collection  
Detail Report by Category**

**Trees: Removal-Trimming-D**

		1 Total	@ \$10,850.00
Asset ID	1007	Asset Cost	\$10,850.00
Group	Non-Capital	Percent Replacement	100%
Category	Landscaping	Future Cost	\$10,850.00
Placed in Service	January 2001		
Useful Life	10		
Adjustment	5		
Replacement Year	2016		
Remaining Life	0		



**Remarks:**

This component is the tree management as defined in the Davey Tree Inventory Report, which is made an addendum to the reserve study by reference.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means, Craftsman, Marshall Swift, The National Construction Estimator, National Repair and Remodel Estimator, Dodge Cost Manual, McGraw Hill Professional, assorted independent contractors, various specialists, assorted vendors catalogues, actual quotations or historical costs, Consultant's own experience in like components or as provided by the Client.

The Association should obtain a bid to confirm this estimate.

These costs do not take into consideration any changes to the building code.

Note: This is a provision for an anticipated expense. Should the Association find that the cost of this item is greater or less than the amount provided for herein, this reserve study should be updated to reflect the actual component cost.

**Arbor Ridge P.U.D. Homeowners Association-Cottage Collection  
Detail Report by Category**

**Trees: Removal-Trimming-E**

		1 Total	@ \$10,600.00
Asset ID	1008	Asset Cost	\$10,600.00
Group	Non-Capital	Percent Replacement	100%
Category	Landscaping	Future Cost	\$10,600.00
Placed in Service	January 2001		
Useful Life	10		
Adjustment	5		
Replacement Year	2016		
Remaining Life	0		



**Remarks:**

This component is the tree management as defined in the Davey Tree Inventory Report, which is made an addendum to the reserve study by reference.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means, Craftsman, Marshall Swift, The National Construction Estimator, National Repair and Remodel Estimator, Dodge Cost Manual, McGraw Hill Professional, assorted independent contractors, various specialists, assorted vendors catalogues, actual quotations or historical costs, Consultant's own experience in like components or as provided by the Client.

The Association should obtain a bid to confirm this estimate.

These costs do not take into consideration any changes to the building code.

Note: This is a provision for an anticipated expense. Should the Association find that the cost of this item is greater or less than the amount provided for herein, this reserve study should be updated to reflect the actual component cost.

**ASSOCIATION RESOLUTION FOR REVENUE RULING 70-604 ELECTION  
EXCESS INCOME APPLIED TO THE FOLLOWING YEAR'S ASSESSMENTS**

**RESOLUTION MUST BE VOTED ON BY THE MEMBERSHIP  
AT THE ANNUAL MEETING**

**ANNUAL RESOLUTION OF THE (Association)\_\_\_\_\_**  
\_\_\_\_\_

**RE: EXCESS INCOME APPLIED TO THE FOLLOWING YEAR'S  
ASSESSMENTS REVENUE RULING 70-604**

**WHEREAS, The (Association)\_\_\_\_\_ is a (State)  
\_\_\_\_\_ corporation duly organized and existing under the laws of the State of  
(State) \_\_\_\_\_;**

**and**

**WHEREAS, The members desire that the corporation shall act in full accordance with the  
rulings and regulations of the Internal Revenue Service;**

**and**

**NOW, THEREFORE, the members hereby adopt the following resolution by and on behalf  
of the (Association) \_\_\_\_\_:**

**RESOLVED, that any excess of membership income over membership expenses for the year  
ending \_\_\_\_\_20\_\_ shall be applied against the subsequent tax year  
member assessment as provided by IRS Revenue Ruling 70-604.**

**This resolution was voted on and made a part of the minutes of the annual meeting of  
(Association) \_\_\_\_\_.**

**BY: \_\_\_\_\_  
President**

**ATTESTED: \_\_\_\_\_  
Secretary**

**Form compliant with IRS Ruling 70-604**

# **ARBOR RIDGE P.U.D. HOMEOWNERS ASSOCIATION-COTTAGE COLLECTION**

## **Maintenance Plan (The maintenance plan will follow later by email)**

The current maintenance plan prepared by Reserve Studies by Reserve Funding is attached as an addendum to this reserve study by separate document. The reserve study and the maintenance plan should be filed together as one document.

Each year, during the update process whether Level II or Level III, the maintenance plan should be updated and revised as required.

The maintenance plan should be used as a guide for the timing of maintenance procedures and the forms attached to the maintenance plan used in order to have an on-going record of maintenance done.

This maintenance plan may be the original maintenance plan done (Level 1) or an update of a previous maintenance plan.

If component materials have been changed or substituted the Client should notify Reserve Funding by Reserve Studies so that changes can be taken into consideration during the preparation of the reserve study.

**Arbor Ridge P.U.D. Homeowners Association-Cottage Collection  
Member Summary Report**

Description	Date In Service	Replacement Year	Current Cost	Useful Life	Adjustment	Remaining	Future Cost	Quantity	Unit Cost
<b>Bark Dust: Replace</b>	2015	2017	14,434	2	0	1	14,778	65610 @	0.22
<b>Landscape: Enhancement</b>	2014	2024	11,350	10	0	8	13,700	1 @	11,350.00
<b>Landscape: Irrigation-Phase 1</b>	2001	2016	24,538	14	1	0	24,538	1 @	24,538.00
<b>Landscape: Irrigation-Phase 2</b>	2001	2017	24,538	14	2	1	25,122	1 @	24,538.00
<b>Landscape: Irrigation-Phase 3</b>	2001	2018	24,538	14	3	2	25,720	1 @	24,538.00
<b>Landscape: Power Supply</b>	2001	2031	450	30	0	15	640	1 @	450.00
<b>Tree Pruning: Newer</b>	2015	2018	4,049	3	0	2	4,244	1 @	4,049.00
<b>Tree Pruning: Older</b>	2015	2016	2,225	1	0	0	2,225	55 @	40.46
<b>Trees: Removal-Trimming-A</b>	2012	2022	18,750	10	0	6	21,592	1 @	18,750.00
<b>Trees: Removal-Trimming-B</b>	2013	2023	15,170	10	0	7	17,885	1 @	15,170.00
<b>Trees: Removal-Trimming-C</b>	2014	2024	11,350	10	0	8	13,700	1 @	11,350.00
<b>Trees: Removal-Trimming-D</b>	2001	2016	10,850	10	5	0	10,850	1 @	10,850.00
<b>Trees: Removal-Trimming-E</b>	2001	2016	10,600	10	5	0	10,600	1 @	10,600.00





## **RESERVE STUDIES BY RESERVE FUNDING**

Attached herewith is the reserve study (physical and financial analysis) for the Association. **Interest from reserve savings accounts must stay in the reserve account(s) and not be used as an offset against monthly assessments.**

You are encouraged to thoroughly review this document and its individual reports for conformity to the description of responsibility for the Association's Common Areas and Commonly Maintained Property as those terms are defined in your Declaration of Covenants, Conditions and Restrictions. In addition, please pay close attention to the reserve bank balance estimated to be on hand by your staff. **Any discrepancy in the figure or interest rate can have a significant effect on the reserve study and the outcome of the assumptions shown.**

The intention of the reserve study is to forecast, as they wear out in future years, the Association's ability to repair, replace, restore or maintain major components with a life expectancy of over one year and an estimated cost of over one thousand dollars. The reports will provide the Association's Board of Directors (Board) the information necessary to make the reserve projection disclosures required by existing statutes, lender's requirements, or the governing documents.

The cost outlined in the reserve study is subjective in some areas, therefore we may use costs submitted by the Declarant, Management or the Board, and are for budgetary and planning purposes only. Actual bid costs would depend upon the defined scope of work at the time the repair, replacement or restoration is done, and on actual price levels prevailing at the time the future repair, replacement, or restoration must be done.

The estimates on future repair, replacement and restoration in the reserve study will be good faith estimates and projections, based upon the estimated future inflation rate and interest (yield) on the monies set aside which may or may not prove accurate. Consultant submits that the probability that it may project in its reserve study, or that the Board could project in its disclosures, future costs or actual future remaining useful lives of components having useful lives extended beyond one year with precision is the functional equivalent of winning the lottery (while it may happen in rare instances by chance, one may not reasonably expect it to happen). As a result, Consultant cannot, and does not, warrant or guaranty its projections. Assumptions on future costs and life expectancy's should be reviewed and adjusted on an annualized basis, as current and future cost projections and life expectancy's become more uncertain.

This reserve study is limited to an off-site, on-site or plan take-off physical analysis of the property, and as such did not disturb the major components. Therefore, all Common Areas and Commonly Maintained Property as those terms are defined in the Declaration for which there is no access without defacement are specifically omitted. However, if sufficient historical data including costs were available that would allow a reasonable projection of future expenditures for any unobserved components, e.g., plumbing, utilities, electrical wiring, those components could be included in the reserve study and may require an engineer's report.

Since no destructive testing was undertaken, this reserve study, as stated above, does not purport to address any latent and/or patent defects, nor does it address any life expectancies that are abnormally short due either to improper design or installation, or to subsequent improper maintenance. It is assumed that all components are to be reasonably maintained for the remainder of their life expectancy.

The seals below the signature is evidence that the reserve study was performed under the guidelines and policies of the Association of Professional Reserve Analysts and the Community Association Institute.

Sincerely,

*D. L. "Dan" Huntley, PRA, RS*  
*Tamarra "Tammy" Axton, PRA*

Association of Professional Reserve Analyst-APRA-(PRA)  
Community Association Institute-CAI-(RS) Reserve Specialist



## EXECUTIVE SUMMARY

At the direction of the Association that recognizes the need for proper reserve planning, we have prepared a Reserve Study (physical and financial analysis) of the Association's Common Areas and Commonly Maintained Property as those terms are defined in the Declaration and submit our findings in this report. The purpose of this Reserve Study is to establish a reasonable yearly reserve contribution necessary to meet future expenditures for major replacements or repairs of the Common Areas and Commonly Maintained Property as those terms may be defined in the Declaration, as amended, and that components have a life expectancy of more than one year and less than thirty years.

All major Common Areas and Commonly Maintained Property as those terms are defined in the Declaration are likely to require capital repair or replacement over the next thirty years. Our analysis considered current and future costs of replacement for the subject Common Areas and Commonly Maintained Property as those terms are defined in the Declaration, the average annual fund balance, interest on invested funds, and anticipated inflation. Based on the investigation and analysis as detailed in the accompanying narrative, the attached *CURRENT ASSESSMENT FUNDING MODEL PROJECTION* report details the average reserve contributions that are recommended to fund the expected capital expenditures of the subject Common Areas and Commonly Maintained Property as those terms are defined in the Declaration over the next thirty years.

We arrived at these recommendations in part by matching the anticipated expenditures noted in the *ANNUAL EXPENDITURE DETAIL* against current fund balances and the annual levels of funding. **Reserve funds would not become depleted within the next thirty years at the levels of funding recommended.**

The *CURRENT ASSESSMENT FUNDING MODEL PROJECTION* enumerates the details regarding recommended annual reserve contributions and projected year-end reserve balances. We recommend, in accordance with state statutes, subsequent yearly off-site updates of this reserve study and an on-site physical analysis every five years to confirm that the recommended reserve contributions are appropriate in view of possible changes in the property, components not completed as detailed in the expenditure report, interest rates, inflation rates, costs, and movement of any excess operating funds to the reserve savings accounts as approved by the membership.

It is necessary that regular maintenance of the Common Areas and Commonly Maintained Property as those terms are defined in the Declaration be done to insure maximum useful life and optimum performance of the reserve components. Components of concern include items associated with water intrusion and safety.

The maintenance plan is a cyclical plan that calls for regular maintenance at regular intervals and will list the maintenance activity and the frequency of maintenance as well as a short narrative.

Checklists developed by Reed Construction Data, Inc. can be accessed, photocopied or downloaded from the RS Means web site at [www.rsmeans.com/supplement/67346.asp](http://www.rsmeans.com/supplement/67346.asp). We strongly urge the Board to use these forms.

## **NARRATIVE REPORT**

The following reports illustrate our recommendations and observations concerning anticipated expenditures, recommended reserve funding and projected fund balances during the next thirty years.

We have not investigated the title to or any liabilities against the property subject to this report.

At the direction of the Association, which recognizes the need for proper reserve planning, we have made a reserve study (physical and financial analysis) of this community and submit our findings in this report.

The purpose of this study is to establish a reasonable yearly reserve contribution necessary to meet future expenditures for major replacements or repairs of the Common Areas and Commonly Maintained Property of the Association as those terms are defined in the Declaration as of the beginning of its fiscal year.

Reserves for replacement are estimates of that amount of money that must be put aside to repair or replace major items or building components that will wear out before the entire facility or project wears out.

State law, such as that found in Texas, Nevada, California, Oregon and Washington, clearly establishes the fiduciary duty of “boards” and the necessity for adequate assessments including reserve funds. The legislative intent of these acts is to better protect current owners and future buyers of units in community associations. Reserving funds for future repair or replacement of the shorter-lived building components is also one of the most reliable ways of protecting the future market value of an individual’s investment property from the deleterious effects of special assessments.

For the purposes of this study, the detailed cash flow analysis is limited to those components or elements that are likely to require replacement or major rehabilitation during the next thirty-year period. Replacement of an entire planned development or condominium in 50 to 75 years is not a typical event. Preventive maintenance generally extends the useful life of many components. As such, estimating useful lives beyond thirty years from the date of this study is indeterminate and it is recommended that periodic updates of this study be made to consider actual facts and circumstances regarding extended or diminished component lives, inflation, and appreciation of the reserves.

Our investigation included Common Areas and Commonly Maintained Property as those terms are defined in the Declaration as set forth in your Declaration associated with the property of the Association. Excluded from our consideration was all other property, including land, property owned individually by unit or home owners that is not Commonly Maintained Property, personal property, and intangible assets.

Expenditures relating to the operating budget and apart from reserves are excluded from this reserve analysis. It is our understanding that the operating budget and future operating budgets will provide for the on-going normal maintenance of Common Areas and Commonly Maintained Property as those terms are defined in the Declaration unless specifically identified in the component description on the *DETAIL REPORT BY CATEGORY*.

### **Our report comprises:**

This letter, that sets forth the nature and extent of the investigation, identifies the classes of

property considered, and presents the conclusions reached.

An Executive Summary identifies the property, current reserves, recommended reserve funding, and projections concerning reserve funding.

### **Consideration and Methodology**

The purpose of this study is to estimate the amount of yearly reserve contributions necessary to meet future expenditures for major replacements and repairs of the Common Area and Commonly Maintained Property as those terms are defined in the Declaration of the Association without a special assessment. We reviewed the property subject of this investigation and considered the following:

Local costs of material, equipment and labor combined in the cost factor.

The current and future costs of replacement or repair for the Common Areas and Commonly Maintained Property as those terms are defined in the Declaration as detailed in the *DETAIL REPORT BY CATEGORY*.

The cost of removal if required of the worn out components as part of the cost of replacement.

The anticipated effects of inflation on the amount to be reserved annually.

The anticipated effects of appreciation of the reserves over time in accord with your average current return or yield on investments. **We were informed all accrued interest on Association investments would be included within the reserve funds.**

The past and current maintenance practices of your Association and their effects on remaining lives.

We have not considered as part of the reserve contributions the amounts required for yearly maintenance activities.

## SUMMARY AND CONCLUSION

This study indicates that based on the anticipated expenditures noted in the ANNUAL EXPENDITURE DETAIL report, the current reserves and annual recommended levels of funding are adequate to avoid future special assessments. Reserves would not become depleted within the next thirty years at current recommended levels of funding.

## ASSUMPTIONS, SCOPE, AND LIMITED CONDITIONS

To the best of our knowledge, all data set forth in this report are true and accurate. Although gathered from reliable sources, no guarantee is made nor liability assumed for the accuracy of any data, opinions, or estimates identified as being furnished by others or ourselves that have been used in formulating this analysis.

No soils analysis or geological studies were ordered or made in conjunction with this report, nor was any water, oil, gas, coal or other subsurface mineral and use rights or conditions investigated.

Any latent defects will not be a part of the reserve study. Should we find signs of possible latent defects or problems not within the scope of the reserve study, the Association will be notified so that the Association can retain the proper experts. However, the study will not be designed to uncover any possible latent defects, and the absence of any indications to such effect will not be, and should not be construed to be, an indication that there are no defects not so noted, or that we warrant the absence of any such defects.

Substances such as fungi, mold, asbestos, lead paint, urea-formaldehyde foam insulation, termite control substances other chemicals, toxic wastes, radon gas, electro-magnetic radiation or other potentially hazardous materials (on the surface or sub-surface) could, if present, adversely affect the validity of our reserve study. Unless otherwise stated in our reserve study, the existence of hazardous substances, that may or may not be present on the property, will not be considered nor will there be any inspection for termites. Our opinions are predicated on the assumption that there is no such material on or in the property nor existence of termites. No responsibility is assumed for any such conditions, and you are advised that we are not qualified to detect such substances, quantify the impact, or develop the remedial cost.

**The Association needs to review each line item in the reports to be certain corrections are made from information you may possess that we are not aware of. It is assumed in our reserve study that no work, or expenditures from the reserve funds will occur for the balance of the fiscal year. If this is not correct, you need to let us know what extra work was done and how much money will be spent.**

This physical analysis was made by individuals generally familiar with real estate and building construction and 33 years experience preparing reserve studies; however, no invasive testing was performed. Our report does not consider electrical wiring, plumbing or utilities that may be the responsibility of the Association. Accordingly, we do not opine on, nor are we responsible for, the structural integrity of the property, including, but not limited to, its conformity to specific governmental code requirements, such as fire, building safety, earthquake, occupancy, land movement and/or slides, or any physical defects that were not readily apparent in our physical analysis. This reserve study is not an engineering study.

**The cost outlined in the reserve study is subjective in some areas; therefore, we may use costs submitted by the Association that are for budgetary and planning purposes only.** Actual bid costs would depend upon the defined scope of work at the time the repair, replacement or restoration is done, and on actual price levels prevailing at the time the future repair, replacement or restoration must be done. The estimates on future repair, replacement and restoration in the reserve study will be good faith estimates and projections, based upon the estimated future inflation rate and interest (yield) on the monies set aside which may or may not prove accurate. We submit that the probability that the board may project in its reserve study or disclosures, future costs or actual future remaining useful lives of components having useful lives extended beyond one year with precision is the functional equivalent of winning the lottery (while it may happen in rare instances by chance, one may not reasonably expect it to happen). As a result, we cannot, and do not, guaranty its projections. Assumptions on future costs and life expectancies should be reviewed and adjusted on an annualized basis, as current future costs projections and life expectancies become more uncertain.

## PROFESSIONAL SERVICE CONDITIONS

The services provided by Reserve Studies by Reserve Funding© were performed in accordance with our professional practice standards. Our compensation is not contingent in any way upon our conclusions. We assume, without independent verification, the accuracy of all data provided to us. We will act as an independent contractor. All files, work papers or documents developed by us during the course of the engagement will remain our property.

Our report is to be used only for the purposes stated herein. Any use or reliance for any other purpose, by you or third parties, is invalid. You may show our report in its entirety to those third parties that need to review the information contained herein. No reference to our name or our report, in whole or in part, in any document you prepare and/or distribute to third parties may be made without our written consent.

Association shall defend, indemnify, and hold harmless Reserve Studies by Reserve Funding© and its employees and subagents, who were or are a party or are threatened to be made a party to any threatened, pending, or completed actions, suits, or proceedings, whether civil, criminal, administrative, or investigative by reason of the fact that Reserve Studies by Reserve Funding©, and its employees and subagents, are or were the authorized representatives of the Association, as to any expense, including attorneys' fees, judgments, fines, and amounts paid in settlement actually and reasonably incurred by Reserve Studies by Reserve Funding© and its employees and subagents, in connection with such action, suit, or proceeding, if Reserve Studies by Reserve Funding© and its employees and subagents acted in good faith and in a manner Reserve Studies by Reserve Funding© and its employees and subagents reasonably believed to be in, or not opposed to, the best interest of the Association, and with respect to any criminal action or proceeding, had no reasonable cause to believe their conduct was unlawful.

We have prepared an initial draft of the study and will make one adjustment to the report upon a written request from the Association within 30 days of the date the initial draft of the study is sent to the Board.

We reserve the right to include your Association's name in our client list, but we will maintain the confidentiality of all conversations, documents provided to us, and the contents of our reports, subject to legal or administrative process or proceedings.

These conditions can only be modified by written documents executed by both parties.

Respectfully submitted,

*D. L. "Dan" Huntley*, PRA, RS

*Tamarra "Tammy" Axton*, PRA

Association of Professional Reserve Analyst-APRA-(PRA)

Community Association Institute-CAI-(RS) Reserve Specialist



## **Important Information About Your Reserve Study**

### **Important Information**

This document has been provided pursuant to an agreement containing restrictions on its use. No part of this document may be copied or distributed, in any form or by any means, nor disclosed to third parties without the expressed written permission of Reserve Studies by Reserve Funding©. The client shall have the right to reproduce and distribute copies of this report, or the information contained within, as may be required for compliance with all applicable regulations.

This reserve analysis study and the parameters under which it has been completed are based upon information provided to us in part by representatives of the association, its contractors, assorted vendors, specialist and independent contractors, the Community Association Institute, Association of Professional Reserve Analyst and various construction pricing and scheduling manuals including, but not limited to: Marshall & Swift Valuation Service, RS Means Facilities Maintenance & Repair Cost Data, RS Means Repair & Remodeling Cost Data, National Construction Estimator, National Repair & Remodel Estimator, Dodge Cost Manual and McGraw-Hill Professional. Additionally, costs are obtained from numerous vendor catalogues, actual quotations or historical costs, and our own experience in the field of property management and reserve study preparation.

It has been assumed, unless otherwise noted in this report, that all assets have been designed and constructed properly and that each estimated useful life will approximate that of the norm per industry standards and/or manufacturer's specifications. In some cases, estimates may have been used on assets, which have an indeterminable but potential liability to the association. The decision for the inclusion of these as well as all assets considered is left to the client.

We recommend that your reserve analysis study be updated on an annual basis due to fluctuating interest rates, inflationary changes, and the unpredictable nature of the lives of many of the assets under consideration (our contract provides that we shall update the reserve study annually). All of the information collected during our physical analysis of the association and computations made subsequently in preparing this reserve analysis study are retained in our computer files. Therefore, annual updates may be completed quickly and inexpensively each year.

Reserve Studies by Reserve Funding© would like to thank you for using our services. We invite you to call us at any time, should you have questions, comments or need assistance. In addition, any of the parameters and estimates used in this study may be changed at your request, after which we will provide a revised study. Client shall accept all responsibility and liability for changes made and the results thereof. Consultant does not warranty the results of the revised study.

This reserve analysis study is provided as an aid for planning purposes and not as an accounting tool. Since it deals with events yet to take place, there is no assurance that the results enumerated within it will, in fact, occur as described.

## Part III

### Introduction

Preparing the annual budget and overseeing the association's finances are perhaps the most important responsibilities of board members. The annual operating and reserve budgets reflect the planning and goals of the association and set the level and quality of service for all of the association's activities.

### Funding Options

When a major repair or replacement is required in a community, an association has essentially four options available to address the expenditure:

The first, and only logical means that the Board of Directors has to ensure its ability to maintain the assets for which it is obligated, is by **assessing an adequate level of reserves** as part of the regular membership assessment, thereby distributing the cost of the replacements uniformly over the entire membership. The community is not only comprised of present members, but also future members. Any decision by the Board of Directors to adopt a calculation method or funding plan which would disproportionately burden future members in order to make up for past reserve deficits, would be a breach of its fiduciary responsibility to those future members. Unlike individuals determining their own course of action, the board is responsible to the "community" as a whole.

Whereas, if the association was setting aside reserves for this purpose, using the vehicle of the regularly assessed membership dues, it would have had the full term of the life of the roof, for example, to accumulate the necessary monies. Additionally, those contributions would have been evenly distributed over the entire membership and would have earned interest as part of that contribution.

The second option is for the association to **acquire a loan** from a lending institution in order to effect the required repairs. In many cases, banks will lend to an association using "future homeowner assessments" as collateral for the loan. With this method, the current board is pledging the future assets of an association. They are also incurring the additional expense of interest fees along with the original principal amount. In the case of a \$150,000 roofing replacement, the association may be required to pay back the loan over a three to five year period, with interest.

The third option, too often used, is simply to defer the required repair or replacement. This option, which is not recommended, can create an environment of declining property values due to expanding lists of deferred maintenance items and the association's financial inability to keep pace with the normal aging process of the common area components. This, in turn, can have a seriously negative impact on sellers in the association by making it difficult, or even impossible, for potential buyers to obtain financing from lenders. Increasingly, lending institutions are requesting copies of the association's most recent reserve study before granting loans, either for the association itself, a prospective purchaser, or for an individual within such an association.

The fourth option is to pass a “**special assessment**” to the membership in an amount required to cover the expenditure. When a special assessment is passed, the association has the authority and responsibility to collect the assessments, even by means of foreclosure, if necessary. However, an association considering a special assessment cannot guarantee that an assessment, when needed, will be passed. Consequently, the association cannot guarantee its ability to perform the required repairs or replacements to those major components for which it is obligated when the need arises. Additionally, while relatively new communities require very little in the way of major “reserve” expenditures, associations reaching 12 to 15 years of age and older, find many components reaching the end of their effective useful lives. These required expenditures, all accruing at the same time, could be devastating to an association’s overall budget.

## **Types of Reserve Studies**

Most reserve studies fit into one of three categories:

Full Reserve Study;

Update with site inspection; and

Update without site inspection.

In 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 “funding plan”.

In an **Update with site inspection**, the reserve provider conducts a component inventory (verification only, not quantification unless new components have been added to the inventory), a condition assessment (based upon on-site visual observations), and life and valuation estimates to determine both the “fund status and “funding plan.”

In an **Update without site inspection**, the reserve provider conducts life and valuation estimates to determine the “fund status” and “funding plan.”

## **The Reserve Study: A Physical and a Financial Analysis**

There are two components of a reserve study: a physical analysis and a financial analysis.

### **Physical Analysis**

During the physical analysis, a reserve study 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.

### **Developing a Component List**

The budget process begins with full inventory of all the major components for which the association is responsible. The determination of whether an expense should be labeled as operational, reserve, or excluded altogether is sometimes subjective. Since this labeling may have a major impact on the financial plans of the association, subjective determinations should be minimized. We suggest the following considerations when labeling an expense.

## Operational Expenses

Occur at least annually, no matter how large the expense, and can be effectively budgeted each year. They are characterized as being reasonably predictable, both in terms of frequency and cost. Operational expenses include all minor expenses, which would not otherwise adversely affect an operational budget from one year to the next. Examples of *some operational expenses* include:

<b>Utilities:</b>	<b>Administrative:</b>	<b>Services:</b>	<b>Repair Expenses:</b>
Electrical/Lights	Supplies	Landscape	Operating Contingency
Water/Irrigation	Bank Service Charges	Reserve Study Costs	
	Insurance		

These are major expenses that occur other than annually, and which must be budgeted in advance in order to ensure the availability of the necessary funds in time for their use. Reserve expenses are reasonably predictable both in terms of frequency and cost. However, they may include significant assets that have an indeterminable but potential liability that may be demonstrated as a likely occurrence. They are expenses that, when incurred, would have a significant effect on the smooth operation of the budgetary process from one year to the next, if they were not reserved in advance. Examples of some reserve expenses include:

Asphalt Seal Coating	Painting-Mail Box Structures
Asphalt Overlays	Lighting Replacement
Asphalt Repair or Replacement	Underground Utilities
Masonry Repair	Concrete Curbs, Sidewalks, Aprons, and Parking Pads
Fencing Repair and Replacement	Insurance Deductible

### **Budgeting is Normally Excluded for:**

Repairs or replacements of assets which are deemed to have an estimated useful life equal to or exceeding the estimated useful life of the facility or community itself, or exceeding the legal life of the community as defined in an association's governing documents. Examples include the complete replacement of masonry walls and concrete. Also excluded are insignificant expenses that may be covered either by an operating or reserve contingency, or otherwise in a general maintenance fund. Expenses that are necessitated by acts of nature, accidents, or other occurrences that are more properly insured, rather than reserved, are also excluded.

### **Financial Analysis**

The financial analysis assesses the association's reserve balance or "fund status" (measured in cash or as percent fully funded) to determine a recommendation for the appropriate reserve contribution rate in the future, known as the "funding plan."

## **Preparing the Reserve Study**

Once the reserve assets have been identified and quantified, their respective replacement costs, useful lives, and remaining lives must be assigned so that a funding schedule can be constructed. Replacement costs and useful lives can be found in published manuals such as construction estimators, appraisal handbooks, and valuation guides. Remaining lives are calculated from the useful lives and ages of assets and adjusted according to conditions such as design, manufactured quality, usage, exposure to the elements, and maintenance history.

By following the recommendations of an effective reserve study, the association should avoid any major shortfalls. However, to remain accurate, the report should be updated on an annual basis to reflect such changes as shifts in economic parameters, additions of phases or assets, or expenditures of reserve funds. The association can assist in simplifying the reserve analysis update process by keeping accurate records of these changes throughout the year.

## **Funding Methods**

From the simplest to the most complex, reserve analysis providers use many different computational processes to calculate reserve requirements. However, there are two basic processes identified as industry standards: the cash flow method and the component method.

The cash flow method develops 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 actual anticipated schedule of reserve expenses until the desired funding goal is achieved. This method sets up a “window” in which all future anticipated replacement costs are computed, based upon the individual lives of the components under consideration. The Reserve Studies by Reserve Funding© Threshold and the Reserve Studies by Reserve Funding© Current Assessment funding models are based upon the cash flow method.

The component method develops a reserve-funding plan where the total contribution is based upon the sum of contributions for individual components. The component method is the more conservative of the two funding options, and assures that the association will achieve and maintain an ideal level of reserve over time. This method also allows for computations on individual components in the analysis. The Reserve Studies by Reserve Funding© Component Funding model is based upon the component methodology.

## Funding Strategies

Once an association has established its funding goals, the association can select an appropriate funding plan. There are four basic strategies from which most associations select. It is recommended that associations consult professionals to determine the best strategy or combination of plans that best suit the association's need. Additionally, associations should consult with their financial advisor to determine the tax implications of selecting a particular plan. Further, consultation with the American Institute of Certified Public Accountants (AICPA) for their reporting requirements is advisable. The four funding plans and descriptions of each are detailed below. Associations will have to update their reserve studies more or less frequently depending on the funding strategy they select.

Full Funding---Given that the basis of funding for reserves is to distribute the costs of the replacements over the lives of the components in question, it follows that the ideal level of reserves would be proportionately related to those lives and costs. If an association has a component with an expected estimated useful life of ten years, it would set aside approximately one-tenth of the replacement cost each year. At the end of three years, one would expect three-tenths of the replacement cost to have accumulated, and if so, that component would be "fully-funded." This model is important in that it is a measure of the adequacy of an association's reserves at any one point of time, and is independent of any particular method which may have been used for past funding or may be under consideration for future funding. This formula represents a snapshot in time and is based upon current replacement cost, independent of future inflationary or investment factors:

Fully Funded Reserves = **Age** divided by **Useful Life** the results multiplied by **Current Replacement Cost**

When an association's total accumulated reserves for all components meet this criterion, its reserves are considered "fully-funded."

The Reserve Studies by Reserve Funding© **Threshold Funding Model (Minimum Funding)**. The goal of this funding method is to keep the reserve cash balance above zero. This means that while each individual component may not be fully funded, the reserve balance overall does not drop below zero during the projected period. An association using this funding method must understand that even a minor reduction in a component's remaining useful life can result in a deficit in the reserve cash balance.

The Reserve Studies by Reserve Funding © **Threshold Funding Model**. This method is based upon the cash flow funding concept. The minimum reserve cash balance in threshold funding, however, is set at a predetermined dollar amount (other than \$0).

The Reserve Studies by Reserve Funding © **Current Assessment Funding Model**. This method is also based upon the cash flow funding concept. The initial reserve assessment is set at the association's current fiscal year funding level and a 30-year projection is calculated to illustrate the adequacy of the current funding over time.

The Reserve Studies by Reserve Funding © **Component Funding Model**. This is a straight-line funding model. It distributes the cash reserves to individual reserve components and then calculates what the reserve assessment and interest contribution (minus taxes) should be, again by each reserve component. The current annual assessment is then determined by summing all the individual component assessments, hence the name “Component Funding Model”. This is the most conservative funding model. It leads to or maintains the fully funded reserve position. The following details this calculation process.

## **Distribution of Reserves**

### **Component Funding Model Distribution of Accumulated Reserves**

The “Distribution of Accumulated Reserves Report” is a “Component Funding Model” calculation. This distribution **does not** apply to the cash flow funding models.

When calculating reserves based upon the component methodology, a beginning reserve balance must be allocated for each of the individual components considered in the analysis, before the individual calculations can be completed. When this distribution is not available, or of sufficient detail, the following method is suggested for allocating reserves:

The first step the program performs in this process is subtracting, from the total accumulated reserves, any amounts for assets that have predetermined (fixed) reserve balances. The user can “fix” the accumulated reserve balance within the program on the individual asset’s detail page. If, by error, these amounts total more than the amount of funds available, then the remaining assets are adjusted accordingly. A provision for a contingency reserve is then deducted by the determined percentage used, and if there are sufficient remaining funds available.

The second step is to identify the ideal level of reserves for each asset. As indicated in the prior section, this is accomplished by evaluating the component’s age proportionate to its estimated useful life and current replacement cost. Again, the equation used is as follows:

Fully Funded Reserves = (Age/Useful Life) x Current Replacement Cost

The Reserve Studies by Reserve Funding® software program performs the above calculations to the actual month the component was placed-in-service. The program projects that the accumulation of necessary reserves for repairs or replacements will be available on the first day of the fiscal year in which they are scheduled to occur.

The next step the program performs is to arrange all of the assets used in the study in ascending order by remaining life, and alphabetically within each grouping of remaining life items. These assets are then assigned their respective ideal level of reserves until the amount of funds available is depleted, or until all assets are appropriately funded. If any assets are assigned a zero remaining life (scheduled for replacement in the current fiscal year), then the amount assigned equals the current replacement cost and funding begins for the next cycle of replacement. If there are insufficient funds available to accomplish this, then the software automatically adjusts the zero remaining life items to one year, and that asset assumes its new grouping position alphabetically in the final printed report.

If, at the completion of this task, there are additional moneys that have not been distributed, the remaining reserves are then assigned, in ascending order, to a level equal to, but not exceeding, the current replacement cost for each component. If there are sufficient moneys available to fund all assets at their current replacement cost levels, then any excess funds are designated as such and are not factored into any of the report computations. If, at the end of this assignment process there are designated excess funds, they can be used to offset the monthly contribution requirements recommended, or used in any other manner the client may desire.

Assigning the reserves in this manner defers the make-up period for any under-funding over the longest remaining life of all assets under consideration, thereby minimizing the impact of any deficiency. For example, if the report indicates an under funding of \$50,000, this under-funding will be assigned to components with the longest remaining lives in order to give more time to “replenish” the account. If the \$50,000 under-funding were to be assigned to short remaining life items, the impact would be felt immediately.

If the reserves are under-funded, the monthly contribution requirements, as outlined in this report, can be expected to be higher than normal. In future years, as individual assets are replaced, the funding requirements will return to their normal levels. In the case of a large deficiency, a special assessment may be considered. The program can easily generate revised reports outlining how the monthly contributions would be affected by such an adjustment, or by any other changes that may be under consideration.

### **Funding Reserves**

Three assessment and contribution figures are provided in the report, the “Monthly Reserve Assessment Required”, the “Average Net Monthly Interest Earned” contribution and the “Total Monthly Allocation to Reserves.” The association should allocate the “Monthly Reserve Assessment Required” amount to reserves each month when the interest earned on the reserves is left in the reserve accounts as part of the contribution. Any interest earned on reserve deposits, must be left in the reserve account and only amounts set aside for taxes should be removed .

The second alternative is to allocate the "Total Monthly Allocation" to reserves (this is the member assessment plus the anticipated interest earned for the fiscal year. This method assumes that all interest earned will be assigned directly as operating income. This allocation takes into consideration the anticipated interest earned on accumulated reserves regardless of whether or not it is actually earned. When taxes are paid, the amount due will be taken directly from the association's operating accounts as the reserve accounts are allocating only those moneys net of taxes.



## **Users' Guide to your Reserve Analysis Study**

Part II of your Reserve Funding© Report contains the reserve analysis study for your association. There are seven types of reports in the study as described below.

### **Report Summaries**

The Report Summary for all funding models lists all of the parameters that were used in calculating the report as well as the summary of your reserve analysis study.

### **Index Reports**

The **Distribution of Accumulated Reserves** report lists all assets in remaining life order. It also identifies the ideal level of reserves that should have accumulated for the association as well as the actual reserves available. This information is valid only for the "Component Funding Model" calculation.

The **Component Listing/Summary** lists all assets by category (i.e. roofing, painting, lighting, etc.) together with their remaining life, current cost, monthly reserve contribution, and net monthly allocation.

### **Detail Reports**

The Detail Report itemizes each asset and lists all measurements, current and future costs, and calculations for that asset. Provisions for percentage replacements, salvage values, and one-time replacements can also be utilized. These reports can be sorted by category or group.

The numerical listings for each asset are enhanced by extensive narrative detailing factors such as design, manufactured quality, usage, exposure to elements and maintenance history.

The Reserve Studies by Reserve Funding© Detail Index is an alphabetical listing of all assets, together with the page number of the asset's detail report, the projected replacement year, and the asset number.

### **Projections**

Thirty-year projections add to the usefulness of your reserve analysis study.

# Definitions

## **Report I.D.**

Includes the Report Date (example: June 19, 2006), Account Number (example: 9773), and Version (example: 1.0). Please use this information (displayed on the summary page) when referencing your report.

## **Budget Year Beginning/Ending**

The budgetary year for which the report is prepared. For associations with fiscal years ending December 31<sup>st</sup>, the monthly contribution figures indicated are for the 12-month period beginning 1/1/20xx and ending 12/31/20xx.

## **Number of Units and/or Phases**

If applicable, the number of units and/or phases included in this version of the report.

## **Inflation**

This figure (information taken from "Inflationdata.com" and averaged over 5 years is used to approximate the future cost to repair or replace each component in the report. The current cost for each component is compounded on an annual basis by the number of remaining years to replacement, and the total is used in calculating the monthly reserve contribution that will be necessary to accumulate the required funds in time for replacement.

## **Annual Assessment Increase**

This represents the percentage rate at which the association will increase its assessment to reserves at the end of each year. For example, in order to accumulate \$10,000 in 10 years, you could set aside \$1,000 per year. As an alternative, you could set aside \$795 the first year and increase that amount by 5% each year until the year of replacement. In either case you arrive at the same amount. The idea is that you start setting aside a lower amount and increase that number each year in accordance with the planned percentage. Ideally this figure should be equal to the rate of inflation. It can, however, be used to aide those associations that have not set aside appropriate reserves in the past, by making the initial year's allocation less formidable.

## **Investment Yield Before Taxes**

The average interest rate anticipated by the association based upon its current investment practices.

## **Taxes on Interest Yield**

The estimated percentage of interest income that will be set aside to pay income taxes on the interest earned.

## **Projected Reserve Balance**

The anticipated reserve balance on the first day of the fiscal year for which this report has been prepared. This is based upon information provided and not audited.

## **Percent Fully Funded**

The ratio, at the beginning of the fiscal year, of the actual (or projected) reserve balance to the calculated fully funded balance, expressed as a percentage.

**Phase Increment Detail and/or Age**

Comments regarding aging of the components on the basis of construction date or date of acceptance by the association.

**Monthly Assessment**

The assessment to reserves required by the association each month.

**Interest Contribution (After Taxes)**

The interest that should be earned on the reserves, net of taxes, based upon their beginning reserve balance and monthly contributions for one year. This figure is averaged for budgeting purposes.

**Total Monthly Allocation**

The sum of the monthly assessment and interest contribution figures.

**Group and Category**

The report may be prepared and sorted either by group (location, building, phase, etc.) or by category (roofing, painting, etc.). The standard report printing format is by category.

**Percentage of Replacement or Repairs**

In some cases, an asset may not be replaced in its entirety or the cost may be shared with a second party. Examples are budgeting for a percentage of replacement of streets over a period of time, or sharing the expense to replace a common wall with a neighboring party.

**Placed-In-Service Date**

The month and year that the asset was placed-in-service. This may be the construction date, the first escrow closure date in a given phase, or the date of the last servicing or replacement.

**Estimated Useful Life**

The estimated useful life of an asset based upon industry standards, manufacturer specifications, visual inspection, location, usage, association standards and prior history. All of these factors are taken into consideration when tailoring the estimated useful life to the particular asset. For example, the carpeting in a hallway or elevator (a heavy traffic area) will not have the same life as the identical carpeting in a seldom-used meeting room or office.

**Adjustment to Useful Life**

Once the useful life is determined, it may be adjusted, up or down, by this separate figure for the current cycle of replacement. This will allow for a current period adjustment without affecting the estimated replacement cycles for future replacements.

**Estimated Remaining Life**

This calculation is completed internally based upon the report's fiscal year date and the date the asset was placed-in-service.

**Replacement Year**

The year that the asset is scheduled to be replaced. The appropriate funds will be available by the first day of the fiscal year for which replacement is anticipated.

**Annual Fixed Reserves**

An optional figure which, if used, will override the normal process of allocating reserves to each asset.

**Fixed Assessment**

An optional figure which, if used, will override all calculations and set the assessment at this amount. This assessment can be set for monthly, quarterly or annually as necessary.

**Salvage Value**

The salvage value of the asset at the time of replacement, if applicable.

**One-Time Replacement**

Notation if the asset is to be replaced on a one-time basis.

**Current Replacement Cost**

The estimated replacement cost effective at the beginning of the fiscal year for which the report is being prepared.

**Future Replacement Cost**

The estimated cost to repair or replace the asset at the end of its estimated useful life based upon the current replacement cost and inflation.

**Component Inventory**

The task of selecting and qualifying reserve components. This task can be accomplished through on-site visual, review of association design and organizational documents, a review of established association precedents, and discussion with appropriate association representative(s).

# A Multi-Purpose Tool

Your Reserve Studies by Reserve Funding © Report is an important part of your association's budgetary process. Following its recommendations should ensure the association's smooth budgetary transitions from one fiscal year to the next, and either decrease or eliminate the need for "special assessments".

In addition, your Reserve Studies by Reserve Funding© reserve study serves a variety of useful purposes:

- Following the recommendations of a reserve study performed by a professional consultant can protect the Board of Directors in a community from personal liability concerning reserve components and reserve funding.
- A reserve analysis study is required by your accountant during the preparation of the association's annual audit.
- The Reserve Studies by Reserve Funding© reserve study is often requested by lending institutions during the process of loan applications, both for the community and, in many cases, the individual owners.
- Your Reserve Studies by Reserve Funding© Report is also a detailed inventory of the association's major assets and serves as a management tool for scheduling, coordinating and planning future repairs and replacements.
- Your Reserve Studies by Reserve Funding© Report is a tool that can assist the Board in fulfilling its legal and fiduciary obligations for maintaining the community in a state of good repair. If a community is operating on a special assessment basis, it cannot guarantee that an assessment, when needed, will be passed. Therefore, it cannot guarantee its ability to perform the required repairs or replacements to those major components for which the association is obligated.
- Since the Reserve Studies by Reserve Funding© reserve analysis study includes measurements and cost estimates of the client's assets, the detail reports may be used to evaluate the accuracy and price of contractor bids when assets are due to be repaired or replaced.
- The Reserve Studies by Reserve Funding© reserve study is an annual disclosure to the membership concerning the financial condition of the association, and may be used as a "consumers' guide" by prospective purchasers.
- The Reserve Studies by Reserve Funding© Owners' Summary meets the disclosure requirements of the Texas Timeshare Act
- Your Reserve Studies by Reserve Funding© Report provides a record of the time, cost, and quantities of past reserve replacements. At times the association's management company and board of directors are transitory which may result in the loss of these important records.