NEW COLUMBIA OWNERS ASSOCIATION

MAINTENANCE PLAN UPDATE

RESERVE STUDY UPDATE

LEVEL II: UPDATE WITH VISUAL SITE INSPECTION

2013

Schwindt & Co.
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A Professional Corporation
Members American Institute of Certified Public Accountants / Oregon Society of Certified Public Accountants

NEW COLUMBIA OWNERS ASSOCIATION

Executive Summary

Year of Report:

January 1, 2013 to December 31, 2013

Number of Units:

849 Units

Parameters:

Beginning Balance: $227,700

Year 2013 Suggested Contribution: $80,000

Year 2013 Projected Interest Earned: $60

Inflation: 3%

Annual Increase to Suggested Contribution: 4.75%

Lowest Cash Balance Over 30 Years (Threshold): $97,022

Average Reserve Assessment per Unit: $7.85

Prior Year's Actual Contribution: $76,500

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New Columbia Owners Association
Maintenance Plan Update
Reserve Study Update - Onsite
Disclosure Information
2013

We have conducted an onsite reserve study update and maintenance plan update for the New Columbia Owners Association for the year beginning January 1, 2013 in accordance with guidelines established by Community Associations Institute and the American Institute of Certified Public Accountants.

This Reserve Study Update and Maintenance Plan Update is in compliance with the legislative changes made in 2007 to ORS Chapters 94 and 100.

In addition to providing the reserve study and maintenance plan, we also provide review/audit services to the Association.

Article IV, Section 4.10.1.1 of the Association's Declaration states, "the Association shall be responsible for maintenance and repair of the Common Areas (including all improvements and any utilities thereon, to the extent such utilities are not maintained by governmental authorities). Maintenance of the Common Areas shall include maintaining, repairing, and replacing of grass, sod, trees, shrubs, and bushes in a neat, clean, and attractive condition and the maintenance and repair of all underground sprinkler systems."

Article IV, Section 4.10.1.2 of the Association's Declaration states, "In connection with the Conditions of Approval, as defined in Section 7.12.1, the Declarant has entered into, or will be entering into, maintenance agreements with the City of Portland for operation and maintenance of portions of the Property. Declarant may, at its election and from time to time, assign any or all such maintenance agreements to the Association and the Association shall accept such assignment without condition, shall faithfully perform all of its obligations thereunder, and shall indemnify Declarant from any claim, cause of action, damage, cost, or expense arising from the Association's performance under such maintenance agreement. Until such time as the operation and maintenance agreements are assigned to the Association, Declarant hereby reserves the right to enter any Lot or Common Area to perform any activity Declarant deems necessary to its performance under such agreements."

Article 7, Section 7.6 of the Association's Declaration states, "Each Owner shall maintain such Owner's Lot(s) and improvements thereon in a clean and attractive condition, in good repair and in such fashion as not to create a fire hazard. Such maintenance shall include, without limitation, painting, repair, replacement and care for roofs, gutters, downspouts, exterior building surfaces, walks and other exterior improvements and glass surfaces. In addition, each Owner shall keep all shrubs, trees, grass and plantings of every kind on such Owner's Lot neatly trimmed, properly cultivated and free of trash, weeds and other unsightly material. Damage caused by fire, flood, storm, earthquake, riot, vandalism, or other causes shall likewise be the responsibility of each Owner and shall be repaired within a reasonable period of time."

Article XII, Section 12.1 of the Association's Bylaws states, "The necessary work to maintain, repair or replace any improvements on the New Columbia Common Areas shall be the responsibility of the Association. The Association shall have the right, to be exercised by the Board of Directors, to have access to each Lot as may be necessary for the maintenance, repair or replacement of any improvements on the New Columbia Common Areas to make emergency repairs necessary for the public safety, or to abate any nuisance existing in any residence."

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Assumptions used for inflation, interest, and other factors are detailed on page 15. Income tax factors were not considered due variables affecting net taxable income and the election of tax form to be filed.

David T. Schwindt, the representative in charge of this report, is a designated Reserve Study Specialist, Professional Reserve Analyst, and Certified Public Accountant licensed in the states of Oregon, Washington, California, and Arizona.

The terms *RS Means*, *National Construction Estimator*, and *Fannie Mae Expected Useful Life Tables and Forms* refer to construction industry estimating databases that are used throughout the industry to establish cost estimates and useful life estimates for common building components and products. We suggest that the Association obtain firm bids for these services.

All information regarding the useful lives and costs of reserve components were derived by the vendors, the Association's prior reserve study provided by Donna Kelly of Housing Authority of Portland, and various construction pricing and scheduling manuals.

We are not aware of any material issues which, if not disclosed, would cause a material distortion of this report.

Certain information, such as the beginning balance of reserve funds and other information as detailed on the component detail reports, was provided by Association representatives and is deemed to be reliable by us. This reserve study is a reflection of the information provided to us and cannot be used for the purpose of performing an audit, a quality/forensic analysis, or background checks of historical records.

Site visits should not be considered a project audit or quality inspection of the Association's property. This site visit does not evaluate the condition of the property to determine the useful life or needed repairs. Schwindt & Company suggests that the Association perform a building envelope inspection to determine the condition, performance, and the useful life of all the components.

Certain costs outlined in the reserve study are subjective and, as a result, are for planning purposes only. The Association should obtain firm bids at the time of work. Actual costs will depend upon the scope of work as defined at the time the repair, replacement, or restoration is performed. All estimates relating to future work are good faith estimates and projections are based on the estimated inflation rate, which may or may not prove accurate. All future costs and life expectancies should be reviewed and adjusted annually.

This reserve study, unless specifically stated in the report, assumes no 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), or termites on the property. The existence of any of these substances may adversely affect the accuracy of this reserve study. Schwindt & Company assumes no responsibility regarding such conditions, as we are not qualified to detect substances, determine the impact, or develop remediation plans/costs.

Since destructive testing was not performed, this reserve study does not attempt to address latent and/or patent defects. Neither does it address useful life expectancies that are abnormally short due either to improper design, installation, nor to subsequent improper maintenance. This reserve study assumes all components will be reasonably maintained for the remainder of their life expectancy.

Physical Analysis:

New projects generally include information provided by developers and/or refer to drawings.

Full onsite reserve studies generally include field measurements and do not include destructive testing. Drawings are usually not available for existing projects.

Onsite updates generally include observations of physical characteristics, but do not include field measurements.

The client is considered to have deemed previously developed component quantities as accurate and reliable. The current work is reliant on the validity of prior reserve studies.

This reserve study should be reviewed carefully. It may not include all common and limited common element components that will require major maintenance, repair, or replacement in future years, and may not include regular contributions to a reserve account for the cost of such maintenance, repair, or replacement. The failure to include a component in a reserve study, or to provide contributions to a reserve account for a component, may, under some circumstances, require both homeowners and multi-family building owners to pay a special assessment their share of common expenses for the cost of major maintenance, repair, or replacement of a reserve component.

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Portland, Oregon
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New Columbia Owners Association
Portland, Oregon
Category Detail Index

Total Funded Assets	37
Total Unfunded Assets	0
Total Assets	37

NEW COLUMBIA OWNERS ASSOCIATION

MAINTENANCE PLAN UPDATE

2013

New Columbia Owners Association
Executive Summary of Maintenance Plan

Regular maintenance of common elements is necessary to insure the maximum useful life and optimum performance of components. Of particular concern are items that may present a safety hazard to residents or guests if they are not maintained in a timely manner and components that perform a water-proofing function.

This maintenance plan is a cyclical plan that calls for maintenance at regular intervals. The frequency of the maintenance activity and the cost of the activity at the first instance follow a short descriptive narrative. This maintenance plan should be reviewed on an annual basis when preparing the annual operating budget for the Association

Checklists, developed by Reed Construction Data, Inc., can be photocopied or accessed from the RS Means website:

http://www.rsmeans.com/supplement/67346.asp

They can be used to assess and document the existing condition of an association's common elements and to track the carrying out of planned maintenance activities.

New Columbia Owners Association
Maintenance Plan Update
2013

Pursuant to Oregon State Statutes Chapters 94 and 100, which require a maintenance plan as an integral part of the reserve study, the maintenance procedures are as follows:

The Board of Directors should refer to this maintenance plan each year when preparing the annual operating budget for the Association to ensure that annual maintenance costs are included in the budget for the years that they are scheduled.

Landscape Irrigation System Upgrades

Maintenance, upgrades and repairs to the landscape irrigation system should be anticipated with this type of component. These maintenance procedures will include replacement of the control mechanism, replacement of damaged piping, upgrading of sprinkler heads and valve components and any other work that is advised by repair professionals.

In recent years improvements have been made to this type of system which has increased the efficiency of the water distribution process. Such improvements can be expected to continue to be made and the owners of such systems are well advised to plan on periodic upgrades to maintain the efficiency of their systems.

Lawn irrigation systems also require periodic testing to insure proper operation. Sometimes this testing is mandated by ordinance or building codes. All such testing and any routine maintenance is assumed to be included in the operating budget.

All work on lawn irrigation systems must be performed by licensed contractors who specialize in this type of work.

The irrigation system is maintained by Rob Hamrick of TruGreen.

According to Rob, the clock and software for the irrigation system will need upgrades and/or replacement in 2014 for $72,000.

This expense is included in the reserve study for the Association.

Frequency: Every 10 years, beginning in 2013

Playground Equipment Maintenance

The playground equipment should be visually inspected each year to check for loose or broken parts. Particular attention should be paid to any item which may present a safety hazard when children are playing on or around the equipment. Repair of any defective conditions should be completed immediately to insure safe operation and maximum useful life of these components.

Other maintenance to be expected will include cleaning, lubricating and touch up painting of exposed, painted surfaces to prevent rust and surface oxidation.

This work should be performed periodically throughout the year.

The expense for this maintenance is assumed to be included in the annual operating budget for the Association.

Frequency: Annually.

Lighting: Exterior – Inspection/Maintenance

Note: Replacement of flickering or burned-out bulbs should be immediate.

Lighting is a crucial element in the provision of safety and security. All lighting systems should be inspected frequently and care must be taken to identify and correct deficiencies.

Various fixture types may be used according to area needs. Lighting systems should be designed to provide maximum, appropriate illumination at minimal energy expenditures. Lighting maintenance processes should include a general awareness of factors that cause malfunctions in lighting systems, such as dirt accumulation and lumen depreciation. It is important to fully wash, rather than dry-wipe, exterior surfaces to reclaim light and prevent further deterioration.

Deficiencies, required maintenance, and required repairs after completion of the review should be noted by the maintenance contractor and/or association representatives.

Repairs and inspections should be completed by a qualified professional.

This expense should be included in the annual operating budget for the Association as general property maintenance expense.

Frequency: Bi-Weekly

Concrete Pavement Maintenance

Maintenance of the concrete pavement will include cleaning and pressure washing the exposed surfaces to maintain appearances and to insure that the walking surfaces are free of slippery surface deposits that may create a safety hazard.

Cracks caused by settling or heaving of the ground should be examined and repaired to insure that no trip hazard is present on the walking surfaces. These cracks should be filled with a suitable concrete patching compound to prevent water intrusion below the surface of the concrete which can undermine

the integrity of the base material, thereby causing further settling.

This cost is included in the reserve study as Concrete Pavement – Maintenance.

Frequency: Every 4 years, beginning in 2016

Asphalt Seal Coating – Alleys

Maintenance of asphalt paving includes the periodic application of an asphalt emulsion sealer or "seal coat" as it is commonly known. This procedure is typically performed every 4-7 years depending on a variety of factors that can affect the useful life of the sealer.

Vehicle traffic is one such factor and Association's that have asphalt paving that carries considerable vehicle traffic should consider a maintenance program that calls for seal coating of asphalt driving surfaces as frequently as every 4 years.

This maintenance procedure involves thoroughly cleaning all pavements, filling of any surface cracks and patching of any locally damaged pavement surfaces. The emulsion sealer is then applied, typically with a vehicle mounted spraying system or for small areas a roller application is sometimes used.

Parking area demarcation lines will need to be renewed each time that a seal coat is applied. The component expense includes the cost of this work as well as the seal coating cost.

This work should be performed by a licensed paving contractor.

This cost is included in the reserve study as Alleys – Asphalt – Seal Coating.

Frequency: Every 7 years beginning in 2013

This maintenance plan is designed to preserve and extend the useful life of assets and is dependent upon proper inspection and follow up procedures.

NEW COLUMBIA OWNERS ASSOCIATION

RESERVE STUDY UPDATE

LEVEL II: UPDATE WITH VISUAL SITE INSPECTION

2013

New Columbia Owners Association
Property Description

New Columbia Owners Association is a Planned Unit Development (P.U.D.) that manages and maintains land and improvements for the owners of dwellings within the New Columbia development. The property is located in Portland, Oregon and was constructed in the year 2005. The Association is not responsible for the maintenance, repair and replacement of any part of the individual unit owners home or improvements on their private property.

The Association will maintain a variety of infrastructure improvements including but not limited to asphalt and concrete pavement, common area lighting, park areas and playground equipment and the lawn irrigation system.

The individual homeowners are responsible for all maintenance and repair of their homes.

This study uses information supplied by the Association's prior reserve study provided by Donna Kelly of Housing Authority of Portland in 2006, vendors, and various construction pricing and scheduling manuals to determine useful lives and replacement costs.

A site visit was performed by Schwindt & Company in 2012. Schwindt and Company did not investigate components as to condition and estimated useful life.

Funds are being accumulated in the replacement fund based on estimates of future need for repairs and replacement of common property components. Actual expenditures, investment income and provisions for income taxes however, may vary from estimated amounts and the variations may be material. Therefore, amounts accumulated in the replacement fund may not be adequate to meet future funding needs.

If additional funds are needed, the Association has the right, subject to board approval, to increase regular assessments, levy special assessments, otherwise the Association may delay repairs or replacements until funds are available.

New Columbia Owners Association
Portland, Oregon
Cash Flow Method - Threshold Funding Model Summary

Report Date	October 05, 2012
Account Number	2NEWCO
Budget Year Beginning	January 01, 2013
Budget Year Ending	December 31, 2013
Total Units	849

Report Parameters

Inflation	3.00%
Annual Assessment Increase	4.75%
Interest Rate on Reserve Deposit	0.10%
Tax Rate on Interest	0.00%
2013 Beginning Balance	$227,700.00

Threshold Funding

Fully Reserved Model Summary

- This study utilizes the cash flow method and the threshold funding model, which establishes a reserve funding goal that keeps the reserve balance above a specified dollar or percent funded amount. It is assumed that the threshold method is funded with a positive threshold balance, therefore, "fully reserved."
- The following items were not included in the analysis because they have useful lives greater than 30 years: ***grading/drainage, foundation/footings, sanitary sewage and storm drains, telephone, cable, and Internet lines.***
- ***This funding scenario begins with a contribution of $80,000 in 2013 and increases 4.75% each year to for the remaining years of the study.*** A minimum balance of $***97,022*** is maintained.
- The purpose of this study is to insure that adequate replacement funds are available when components reach the end of their useful life. Components will be replaced as required, not necessarily in their expected replacement year. This analysis should be updated annually.

Cash Flow Method - Threshold Funding Model Summary of Calculations

Required Monthly Contribution	$6,666.67
$7.85 per unit monthly	
Average Net Monthly Interest Earned	$5.03
Total Monthly Allocation to Reserves	$6,671.69
$7.86 per unit monthly	

New Columbia Owners Association
Portland, Oregon
Cash Flow Method - Threshold Funding Model Projection

Beginning Balance: $227,700

Year	Annual Contribution	Annual Interest	Annual Expenditures	Projected Ending Reserves
2013	80,000	60	210,739	97,022
2014	83,800	85	57,642	123,264
2015	87,780	111	59,371	151,785
2016	91,950	181	20,543	223,373
2017	96,318	276		319,966
2018	100,893	355	19,285	401,929
2019	105,685	424	35,822	472,216
2020	110,705	446	86,583	496,784
2021	115,964	109	450,388	162,470
2022	121,472	228		284,170
2023	127,242	256	97,567	314,101
2024	133,286	283	103,490	344,180
2025	139,617	340	79,790	404,347
2026	146,249	440	44,056	506,980
2027	153,196	528	62,416	598,287
2028	160,472	321	364,804	394,276
2029	168,095	486		562,856
2030	176,079	659		739,594
2031	184,443	233	606,134	318,136
2032	193,204	356	66,936	444,761
2033	202,381	369	185,305	462,207
2034	211,995	473	104,108	570,566
2035	222,064	584	107,231	685,983
2036	232,612	73	738,793	179,876
2037	243,661	312		423,850
2038	255,235	338	223,899	455,524
2039	267,359	601		723,483
2040	280,059	767	108,399	895,910
2041	293,361	1,055		1,190,327
2042	307,296	1,260	97,243	1,401,640

New Columbia Owners Association
Component Summary By Category

Description	Date in Service	Replacement Year	Useful	Adjustment	Remaining	Units	Unit Cost	Current Cost
Lighting								
Lighting - Upgrade	2005	2013	8	0	0	1 Total	80,936.00	80,936
Lighting - Total								$80,936
Grounds Components								
Alleys - Storm Drain Pavers	2005	2055	50	0	42	3,350 SF	28.52	95,542
Alleys - Storm Drain Pavers - Maintenance	2005	2013	5	0	0	1 TOTAL	16,635.58	16,636
Alleys Concrete Sidewalk - Partial Replace..	2005	2028	25	-2	15	6,660 SF	10.56	70,330
Concrete Pavement - Maintenance	2012	2016	4	0	3	94,000 SF	0.20	18,800
Concrete Sidewalk Partial Replacement - B..	2005	2028	25	-2	15	780 SF	10.56	8,237
Concrete Sidewalk Partial Replacement - B..	2005	2028	25	-2	15	1,080 SF	10.56	11,405
Concrete Sidewalk Partial Replacement - ..	2005	2028	25	-2	15	7,090 SF	10.56	74,870
Concrete Sidewalk Partial Replacement - P..	2005	2028	25	-2	15	3,208 SF	10.56	33,876
Irrigation System Upgrades I	2005	2013	10	-2	0	1 Total	78,676.34	25,963
Irrigation System Upgrades II	2005	2014	10	-1	1	1 Total	78,676.34	25,963
Irrigation System Upgrades III	2005	2015	10	0	2	1 Total	78,676.34	25,963
Landscaping I	2005	2013	10	-2	0	1 Total	30,000.00	30,000
Landscaping II	2005	2014	10	-1	1	1 Total	30,000.00	30,000
Landscaping III	2005	2015	10	0	2	1 Total	30,000.00	30,000
Grounds Components - Total								$497,585
Common Area Lighting								
Exterior Lights - Pole only	2012	2032	20	0	19	20 Each	931.37	19,372
Exterior Lights Electrical - Ballasts	2012	2027	15	0	14	288 Each	143.28	41,265
Common Area Lighting - Total								$60,637
Asphalt Pavement								
Alleys - Asphalt - Overlay	2005	2031	25	1	18	258,000 SF	1.38	356,040
Alleys - Asphalt - Seal Coat	2005	2013	7	1	0	258,000 SF	0.20	51,600
Alleys - Asphalt - Seal Coat (II)	2031	2038	7	7	25	258,000 SF	0.35	90,300
Asphalt Pavement - Total								$497,940
Park & Playground Equipment								
Pocket - Benches	2012	2019	7	0	6	20 EA	750.00	15,000
Pocket - Picnic Tables	2012	2019	7	0	6	10 EA	1,500.00	15,000
Pocket Park - Rubber Tiles	2005	2021	15	1	8	10,800 SF	14.92	161,136
Pocket Park 1 - Bellatrix	2005	2021	15	1	8	1 EA	35,940.97	35,941
Pocket Park 1 - Spica	2005	2021	15	1	8	2 EA	3,277.68	6,555
Pocket Park 2 - Argo	2005	2021	15	1	8	1 EA	4,656.79	4,657
Pocket Park 2 - Decorative Metal Fence	2005	2021	15	1	8	60 LF	62.10	3,726
Pocket Park 2 - Play Structure II	2005	2021	15	1	8	1 Total	40,597.78	40,598
Pocket Park 2 - Supernova	2005	2021	15	1	8	1 EA	7,337.45	7,337
Pocket Park 3 - Double Shifter	2005	2021	15	1	8	1 EA	9,194.20	9,194

New Columbia Owners Association
Component Summary By Category

Description	Date in Service	Replacement Year	Useful	Adjustment	Remaining	Units	Unit Cost	Current Cost
Park & Playground Equipment continued...								
Pocket Park 3 - Homestead	2005	2021	15	1	8	1 EA	25,851.24	25,851
Pocket Park 3 - Satellite Binocular	2005	2021	15	1	8	1 EA	2,322.42	2,322
Pocket Park 3 - Triple Shifter	2005	2021	15	1	8	1 EA	8,889.71	8,890
Pocket Park 3 - Ziggy	2005	2021	15	1	8	1 EA	2,179.14	2,179
Pocket Park 4 - Play Structure I	2005	2021	15	1	8	1 Total	40,597.78	40,598
Pocket Park 4 - Spica	2005	2021	15	1	8	2 EA	3,277.68	6,555
Park & Playground Equipment - Total								$385,540
Contingency								
Insurance Deductible	2012	2013	1	0	0	1 Total	5,604.00	5,604
Contingency - Total								$5,604
Total Asset Summary								$1,528,243

New Columbia Owners Association
Portland, Oregon
Component Summary By Group

Description	Date in Service	Replacement Year	Useful	Adjustment	Remaining	Units		Unit Cost	Current Cost
Capital									
Alleys - Asphalt - Overlay	2005	2031	25	1	18	258,000	SF	1.38	356,040
Alleys - Storm Drain Pavers	2005	2055	50	0	42	3,350	SF	28.52	95,542
Alleys Concrete Sidewalk - Partial Replace..	2005	2028	25	-2	15	6,660	SF	10.56	70,330
Concrete Sidewalk Partial Replacement - B..	2005	2028	25	-2	15	780	SF	10.56	8,237
Concrete Sidewalk Partial Replacement - B..	2005	2028	25	-2	15	1,080	SF	10.56	11,405
Concrete Sidewalk Partial Replacement - ..	2005	2028	25	-2	15	7,090	SF	10.56	74,870
Concrete Sidewalk Partial Replacement - P..	2005	2028	25	-2	15	3,208	SF	10.56	33,876
Exterior Lights - Pole only	2012	2032	20	0	19	20	Each	931.37	19,372
Exterior Lights Electrical - Ballasts	2012	2027	15	0	14	288	Each	143.28	41,265
Irrigation System Upgrades I	2005	2013	10	-2	0	1	Total	78,676.34	25,963
Irrigation System Upgrades II	2005	2014	10	-1	1	1	Total	78,676.34	25,963
Irrigation System Upgrades III	2005	2015	10	0	2	1	Total	78,676.34	25,963
Lighting - Upgrade	2005	2013	8	0	0	1	Total	80,936.00	80,936
Pocket - Benches	2012	2019	7	0	6	20	EA	750.00	15,000
Pocket - Picnic Tables	2012	2019	7	0	6	10	EA	1,500.00	15,000
Pocket Park - Rubber Tiles	2005	2021	15	1	8	10,800	SF	14.92	161,136
Pocket Park 1 - Bellatrix	2005	2021	15	1	8	1	EA	35,940.97	35,941
Pocket Park 1 - Spica	2005	2021	15	1	8	2	EA	3,277.68	6,555
Pocket Park 2 - Argo	2005	2021	15	1	8	1	EA	4,656.79	4,657
Pocket Park 2 - Decorative Metal Fence	2005	2021	15	1	8	60	LF	62.10	3,726
Pocket Park 2 - Play Structure II	2005	2021	15	1	8	1	Total	40,597.78	40,598
Pocket Park 2 - Supernova	2005	2021	15	1	8	1	EA	7,337.45	7,337
Pocket Park 3 - Double Shifter	2005	2021	15	1	8	1	EA	9,194.20	9,194
Pocket Park 3 - Homestead	2005	2021	15	1	8	1	EA	25,851.24	25,851
Pocket Park 3 - Satellite Binocular	2005	2021	15	1	8	1	EA	2,322.42	2,322
Pocket Park 3 - Triple Shifter	2005	2021	15	1	8	1	EA	8,889.71	8,890
Pocket Park 3 - Ziggy	2005	2021	15	1	8	1	EA	2,179.14	2,179
Pocket Park 4 - Play Structure I	2005	2021	15	1	8	1	Total	40,597.78	40,598
Pocket Park 4 - Spica	2005	2021	15	1	8	2	EA	3,277.68	6,555
Capital - Total									$1,255,303
Non-Capital									
Alleys - Asphalt - Seal Coat	2005	2013	7	1	0	258,000	SF	0.20	51,600
Alleys - Asphalt - Seal Coat (II)	2031	2038	7	7	25	258,000	SF	0.35	90,300
Alleys - Storm Drain Pavers - Maintenance	2005	2013	5	0	0	1	TOTAL	16,635.58	16,636
Concrete Pavement - Maintenance	2012	2016	4	0	3	94,000	SF	0.20	18,800
Insurance Deductible	2012	2013	1	0	0	1	Total	5,604.00	5,604
Landscaping I	2005	2013	10	-2	0	1	Total	30,000.00	30,000
Landscaping II	2005	2014	10	-1	1	1	Total	30,000.00	30,000
Landscaping III	2005	2015	10	0	2	1	Total	30,000.00	30,000
Non-Capital - Total									$272,940

New Columbia Owners Association
Portland, Oregon
Component Summary By Group

Description	Date in Service	Replacement Year	Useful	Adjustment	Remaining	Units	Unit Cost	Current Cost
Total Asset Summary								$1,528,243

New Columbia Owners Association
Distribution by Percentage of Ideally Funded

Description	Remaining Life	Beginning Balance	Assessment Distributed	Interest Distributed	Expenditures	Ending Balance
Lighting						
Lighting - Upgrade	0	71,541	9,388	7	80,936	0
Lighting - Total		$71,541	$9,388	$7	$80,936	
Grounds Components						
Alleys - Storm Drain Pavers - Maintenance	0	14,704	1,930	1	16,636	0
Irrigation System Upgrades I	0	22,949	3,012	2	25,963	0
Landscaping I	0	26,518	3,480	3	30,000	0
Irrigation System Upgrades II	1	1,996	2,677	2		4,675
Landscaping II	1	2,306	3,093	2		5,402
Irrigation System Upgrades III	2	1,796	2,409	2		4,208
Landscaping III	2	2,076	2,784	2		4,862
Concrete Pavement - Maintenance	3	407	545			952
Alleys Concrete Sidewalk - Partial Replace..	15	2,116	2,838	2		4,955
Concrete Sidewalk Partial Replacement - B..	15	248	332			580
Concrete Sidewalk Partial Replacement - B..	15	343	460			804
Concrete Sidewalk Partial Replacement - ..	15	2,252	3,021	2		5,275
Concrete Sidewalk Partial Replacement - P..	15	1,019	1,367	1		2,387
Alleys - Storm Drain Pavers	42	1,322	1,773	1		3,097
Grounds Components - Total		$80,053	$29,720	$22	$72,599	$37,197
Common Area Lighting						
Exterior Lights Electrical - Ballasts	14	238	319			557
Exterior Lights - Pole only	19	84	112			196
Common Area Lighting - Total		$322	$431			$753
Asphalt Pavement						
Alleys - Asphalt - Seal Coat	0	45,610	5,985	5	51,600	0
Alleys - Asphalt - Overlay	18	9,475	12,707	10		22,192
Alleys - Asphalt - Seal Coat (II)	25					0
Asphalt Pavement - Total		$55,085	$18,693	$14	$51,600	$22,192
Park & Playground Equipment						
Pocket - Benches	6	185	249			434
Pocket - Picnic Tables	6	185	249			434
Pocket Park - Rubber Tiles	8	6,968	9,345	7		16,321
Pocket Park 1 - Bellatrix	8	1,554	2,084	2		3,640
Pocket Park 1 - Spica	8	283	380			664
Pocket Park 2 - Argo	8	201	270			472
Pocket Park 2 - Decorative Metal Fence	8	161	216			377
Pocket Park 2 - Play Structure II	8	1,756	2,355	2		4,112
Pocket Park 2 - Supernova	8	317	426			743

New Columbia Owners Association
Distribution by Percentage of Ideally Funded

Description	Remaining Life	Beginning Balance	Assessment Distributed	Interest Distributed	Expenditures	Ending Balance
Park & Playground Equipment continued...						
Pocket Park 3 - Double Shifter	8	398	533			931
Pocket Park 3 - Homestead	8	1,118	1,499	1		2,618
Pocket Park 3 - Satellite Binocular	8	100	135			235
Pocket Park 3 - Triple Shifter	8	384	516			900
Pocket Park 3 - Ziggy	8	94	126			221
Pocket Park 4 - Play Structure I	8	1,756	2,355	2		4,112
Pocket Park 4 - Spica	8	283	380			664
Park & Playground Equipment - Total		$15,746	$21,118	$16		$36,879
Contingency						
Insurance Deductible	0	4,953	650		5,604	0
Contingency - Total		$4,953	$650		$5,604	
Grand - Total		$227,700	$80,000	$60	$210,739	$97,022

New Columbia Owners Association
Annual Expenditure Detail

Description	Expenditures
Replacement Year 2013	
Alleys - Asphalt - Seal Coat	51,600
Alleys - Storm Drain Pavers - Maintenance	16,636
Insurance Deductible	5,604
Irrigation System Upgrades I	25,963
Landscaping I	30,000
Lighting - Upgrade	80,936
Total for 2013	**$210,739**
Replacement Year 2014	
Irrigation System Upgrades II	26,742
Landscaping II	30,900
Total for 2014	**$57,642**
Replacement Year 2015	
Irrigation System Upgrades III	27,544
Landscaping III	31,827
Total for 2015	**$59,371**
Replacement Year 2016	
Concrete Pavement - Maintenance	20,543
Total for 2016	**$20,543**
No Replacement in 2017	
Replacement Year 2018	
Alleys - Storm Drain Pavers - Maintenance	19,285
Total for 2018	**$19,285**
Replacement Year 2019	
Pocket - Benches	17,911
Pocket - Picnic Tables	17,911
Total for 2019	**$35,822**
Replacement Year 2020	
Alleys - Asphalt - Seal Coat	63,461

New Columbia Owners Association
Annual Expenditure Detail

Description	Expenditures
Replacement Year 2020 continued...	
Concrete Pavement - Maintenance	23,122
Total for 2020	**$86,583**
Replacement Year 2021	
Pocket Park - Rubber Tiles	204,122
Pocket Park 1 - Bellatrix	45,529
Pocket Park 1 - Spica	8,304
Pocket Park 2 - Argo	5,899
Pocket Park 2 - Decorative Metal Fence	4,720
Pocket Park 2 - Play Structure II	51,428
Pocket Park 2 - Supernova	9,295
Pocket Park 3 - Double Shifter	11,647
Pocket Park 3 - Homestead	32,748
Pocket Park 3 - Satellite Binocular	2,942
Pocket Park 3 - Triple Shifter	11,261
Pocket Park 3 - Ziggy	2,760
Pocket Park 4 - Play Structure I	51,428
Pocket Park 4 - Spica	8,304
Total for 2021	**$450,388**
No Replacement in 2022	
Replacement Year 2023	
Alleys - Storm Drain Pavers - Maintenance	22,357
Irrigation System Upgrades I	34,892
Landscaping I	40,317
Total for 2023	**$97,567**
Replacement Year 2024	
Concrete Pavement - Maintenance	26,024
Irrigation System Upgrades II	35,939
Landscaping II	41,527
Total for 2024	**$103,490**
Replacement Year 2025	
Irrigation System Upgrades III	37,017

New Columbia Owners Association
Annual Expenditure Detail

Description	Expenditures
Replacement Year 2025 continued...	
Landscaping III	42,773
Total for 2025	**$79,790**
Replacement Year 2026	
Pocket - Benches	22,028
Pocket - Picnic Tables	22,028
Total for 2026	**$44,056**
Replacement Year 2027	
Exterior Lights Electrical - Ballasts	62,416
Total for 2027	**$62,416**
Replacement Year 2028	
Alleys - Storm Drain Pavers - Maintenance	25,918
Alleys Concrete Sidewalk - Partial Replacement	109,571
Concrete Pavement - Maintenance	29,290
Concrete Sidewalk Partial Replacement - Block 19 Common Gre..	12,833
Concrete Sidewalk Partial Replacement - Block 20 Common Gre..	17,768
Concrete Sidewalk Partial Replacement - Other common greens	116,646
Concrete Sidewalk Partial Replacement - Pedestrian Connections	52,778
Total for 2028	**$364,804**
No Replacement in 2029	
No Replacement in 2030	
Replacement Year 2031	
Alleys - Asphalt - Overlay	606,134
Total for 2031	**$606,134**
Replacement Year 2032	
Concrete Pavement - Maintenance	32,966
Exterior Lights - Pole only	33,970
Total for 2032	**$66,936**
Replacement Year 2033	
Alleys - Storm Drain Pavers - Maintenance	30,046

New Columbia Owners Association
Annual Expenditure Detail

Description	Expenditures
Replacement Year 2033 continued...	
Irrigation System Upgrades I	46,892
Landscaping I	54,183
Pocket - Benches	27,092
Pocket - Picnic Tables	27,092
Total for 2033	**$185,305**
Replacement Year 2034	
Irrigation System Upgrades II	48,299
Landscaping II	55,809
Total for 2034	**$104,108**
Replacement Year 2035	
Irrigation System Upgrades III	49,748
Landscaping III	57,483
Total for 2035	**$107,231**
Replacement Year 2036	
Concrete Pavement - Maintenance	37,103
Pocket Park - Rubber Tiles	318,016
Pocket Park 1 - Bellatrix	70,933
Pocket Park 1 - Spica	12,938
Pocket Park 2 - Argo	9,191
Pocket Park 2 - Decorative Metal Fence	7,354
Pocket Park 2 - Play Structure II	80,123
Pocket Park 2 - Supernova	14,481
Pocket Park 3 - Double Shifter	18,146
Pocket Park 3 - Homestead	51,020
Pocket Park 3 - Satellite Binocular	4,583
Pocket Park 3 - Triple Shifter	17,545
Pocket Park 3 - Ziggy	4,301
Pocket Park 4 - Play Structure I	80,123
Pocket Park 4 - Spica	12,938
Total for 2036	**$738,793**
No Replacement in 2037	
Replacement Year 2038	
Alleys - Asphalt - Seal Coat (II)	189,068

New Columbia Owners Association
Annual Expenditure Detail

Description	Expenditures
Replacement Year 2038 continued...	
Alleys - Storm Drain Pavers - Maintenance	34,831
Total for 2038	**$223,899**
No Replacement in 2039	
Replacement Year 2040	
Concrete Pavement - Maintenance	41,760
Pocket - Benches	33,319
Pocket - Picnic Tables	33,319
Total for 2040	**$108,399**
No Replacement in 2041	
Replacement Year 2042	
Exterior Lights Electrical - Ballasts	97,243
Total for 2042	**$97,243**

Lighting - Upgrade

		1 Total	@ $80,936.00
Asset ID	1037	Asset Cost	$80,936.00
	Capital	Percent Replacement	100%
	Lighting	Future Cost	$80,936.00
Placed in Service	January 2005		
Useful Life	8		
Replacement Year	2013		
Remaining Life	0		

This provision is for an upgrade of the lighting system. The Association is currently investigating upgrading their lighting system.

The cost and useful life is based on information from the Association.

Lighting - Total Current Cost **$80,936**

Alleys - Storm Drain Pavers

		3,350 SF	@ $28.52
Asset ID	1005	Asset Cost	$95,542.00
	Capital	Percent Replacement	100%
	Grounds Components	Future Cost	$330,641.80
Placed in Service	July 2005		
Useful Life	50		
Replacement Year	2055		
Remaining Life	42		

This component provides funding for the replacement of the Storm Drain Pavers located in the Alleys. The New Columbia reserve study lists the useful life of the pavers at 25 years and estimates the cost to replace them at $80,400 of $24 per square feet.

The estimated useful life of the Storm Drain Pavers is based on the recommendations of John Manson a Senior Project Manager at the Housing Authority of Portland.

The area was provided in the Association's reserve study prior to 2007.

Alleys - Storm Drain Pavers - Maintenance

		1 TOTAL	@ $16,635.58
Asset ID	1031	Asset Cost	$16,635.58
	Non-Capital	Percent Replacement	100%
	Grounds Components	Future Cost	$16,635.58
Placed in Service	January 2005		
Useful Life	5		
Replacement Year	2013		
Remaining Life	0		

This provision funds for the washing and vacuum cleaning of the Storm Drain Pavers once every 10 years.

The estimated cost and useful life of this component was provided by John Manson a Senior Project Manager at the Housing Authority of Portland.

Alleys Concrete Sidewalk - Partial Replacement

		33,300 SF	@ $10.56
Asset ID	1009	Asset Cost	$70,329.60
	Capital	Percent Replacement	20%
	Grounds Components	Future Cost	$109,571.22
Placed in Service	July 2005		
Useful Life	25		
Adjustment	-2		
Replacement Year	2028		
Remaining Life	15		

This provision funds for the partial replacement of 20% of the concrete sidewalk portion of the alleys every 25 years.

Since the expected useful life of a typical concrete sidewalk installation is greater than 30 years, this component only provides funding for the replacement of a percentage of the total amount of sidewalk area.

The New Columbia Capital Reserve Study prior to 2007 has indicated that there are approximately 33,300 square feet (SF) of alley sidewalk area.

The cost is based on per square feet estimates provided by Coast Pavement. The Association should obtain a bid to confirm this estimate.

The useful life assumption is based on estimates established on RS Means and/or the National Estimator.

Concrete Pavement - Maintenance

		94,000 SF	@ $0.20
Asset ID	1030	Asset Cost	$18,800.00
	Non-Capital	Percent Replacement	100%
	Grounds Components	Future Cost	$20,543.27
Placed in Service	July 2012		
Useful Life	4		
Replacement Year	2016		
Remaining Life	3		

This component provides funding for the periodic maintenance and repair of the concrete pavement surfaces.

Maintenance includes cleaning the exposed surfaces areas with a light pressure washing to remove dirt, and surface deposits that may create a slip hazard and repairing of cracks to

Concrete Pavement - Maintenance continued...

eliminate trip hazards and to prevent water intrusion below the surface of the concrete.

According to the Association, this was done in 2012 for approximately $15,000.

The useful life assumption is based on estimates established on RS Means and/or the National Estimator.

The area was provided in the Association's reserve study prior to 2007.

Concrete Sidewalk Partial Replacement - Block 19 Common Green

		3,900 SF	@ $10.56
Asset ID	1006	Asset Cost	$8,236.80
	Capital	Percent Replacement	20%
	Grounds Components	Future Cost	$12,832.67
Placed in Service	July 2005		
Useful Life	25		
Adjustment	-2		
Replacement Year	2028		
Remaining Life	15		

This provision funds for the partial replacement of 20% of the concrete sidewalks portions of the Block 19 common green every 25 years.

Since the expected useful life of a typical concrete sidewalk installation is greater than 30 years, this component only provides funding for the replacement of a percentage of the total amount of sidewalk area.

The New Columbia Capital Reserve Study has indicated that there are approximately 3,900 square feet (SF) of sidewalk area at Block 19.

The cost is based on per square feet estimates provided by Coast Pavement. The Association should obtain a bid to confirm this estimate.

The useful life assumption is based on estimates established on RS Means and/or the National Estimator.

Concrete Sidewalk Partial Replacement - Block 20 Common Green

		5,400 SF	@ $10.56
Asset ID	1007	Asset Cost	$11,404.80
	Capital	Percent Replacement	20%
	Grounds Components	Future Cost	$17,768.31
Placed in Service	July 2005		
Useful Life	25		
Adjustment	-2		
Replacement Year	2028		
Remaining Life	15		

This provision funds for the partial replacement of 20% of the concrete sidewalks portions of the Block 20 common green every 25 years.

Since the expected useful life of a typical concrete sidewalk installation is greater than 30 years, this component only provides funding for the replacement of a percentage of the total amount of sidewalk area.

The New Columbia Capital Reserve Study has indicated that there are approximately 5,400 square feet (SF) of sidewalk area at Block 20.

The cost is based on per square feet estimates provided by Coast Pavement. The Association should obtain a bid to confirm this estimate.

The useful life assumption is based on estimates established on RS Means and/or the National Estimator.

Concrete Sidewalk Partial Replacement - Other common greens

		35,450 SF	@ $10.56
Asset ID	1008	Asset Cost	$74,870.40
	Capital	Percent Replacement	20%
	Grounds Components	Future Cost	$116,645.64
Placed in Service	July 2005		
Useful Life	25		
Adjustment	-2		
Replacement Year	2028		
Remaining Life	15		

This provision funds for the partial replacement of 20% of the concrete sidewalks portions of the other common greens every 25 years.

Since the expected useful life of a typical concrete sidewalk installation is greater than 30

Concrete Sidewalk Partial Replacement - Other common greens continued...

years, this component only provides funding for the replacement of a percentage of the total amount of sidewalk area.

The New Columbia Capital Reserve Study has indicated that there are approximately 35,450 square feet (SF) of sidewalk area at the other common greens.

The cost is based on per square feet estimates provided by Coast Pavement. The Association should obtain a bid to confirm this estimate.

The useful life assumption is based on estimates established on RS Means and/or the National Estimator.

Concrete Sidewalk Partial Replacement - Pedestrian Connections

		16,040 SF	@ $10.56
Asset ID	1010	Asset Cost	$33,876.48
	Capital	Percent Replacement	20%
	Grounds Components	Future Cost	$52,778.45
Placed in Service	July 2005		
Useful Life	25		
Adjustment	-2		
Replacement Year	2028		
Remaining Life	15		

This provision funds for the partial replacement of 20% of the concrete sidewalks portions of the public pedestrian connections every 25 years.

Since the expected useful life of a typical concrete sidewalk installation is greater than 30 years, this component only provides funding for the replacement of a percentage of the total amount of sidewalk area.

The New Columbia Capital Reserve Study has indicated that there are approximately 16,040 square feet (SF) of sidewalk areas at pedestrian connections.

The cost is based on per square feet estimates provided by Coast Pavement. The Association should obtain a bid to confirm this estimate.

The useful life assumption is based on estimates established on RS Means and/or the National Estimator.

Irrigation System Upgrades I

		1 Total	@ $78,676.34
Asset ID	1033	Asset Cost	$25,963.19
	Capital	Percent Replacement	33%
	Grounds Components	Future Cost	$25,963.19
Placed in Service	January 2005		
Useful Life	10		
Adjustment	-2		
Replacement Year	2013		
Remaining Life	0		

This provision provides funding for upgrades to the irrigation. The original system was installed in 2005.

The irrigation system is maintained by Rob Hamrick of TruGreen.

According to Rob, the clock and software for the irrigation system will need upgrades and or replacement in 2014 for $72,000.

Because the original system will last approximately 9 years, a 10 years useful life is use for another upgrade. If the Association decides that the useful life should be longer, this component will need to be revised.

Irrigation System Upgrades II

		1 Total	@ $78,676.34
Asset ID	1034	Asset Cost	$25,963.19
	Capital	Percent Replacement	33%
	Grounds Components	Future Cost	$26,742.09
Placed in Service	January 2005		
Useful Life	10		
Adjustment	-1		
Replacement Year	2014		
Remaining Life	1		

This provision provides funding for upgrades to the irrigation. The original system was installed in 2005.

The irrigation system is maintained by Rob Hamrick of TruGreen.

According to Rob, the clock and software for the irrigation system will need upgrades and or replacement in 2014 for $72,000.

Because the original system will last approximately 9 years, a 10 years useful life is use for another upgrade. If the Association decides that the useful life should be longer, this component will need to be revised.

Irrigation System Upgrades III

		1 Total	@ $78,676.34
Asset ID	1036	Asset Cost	$25,963.19
	Capital	Percent Replacement	33%
	Grounds Components	Future Cost	$27,544.35
Placed in Service	January 2005		
Useful Life	10		
Replacement Year	2015		
Remaining Life	2		

This provision provides funding for upgrades to the irrigation. The original system was installed in 2005.

The irrigation system is maintained by Rob Hamrick of TruGreen.

According to Rob, the clock and software for the irrigation system will need upgrades and or replacement in 2014 for $72,000.

Because the original system will last approximately 9 years, a 10 years useful life is use for another upgrade. If the Association decides that the useful life should be longer, this component will need to be revised.

Landscaping I

		1 Total	@ $30,000.00
Asset ID	1038	Asset Cost	$30,000.00
	Non-Capital	Percent Replacement	100%
	Grounds Components	Future Cost	$30,000.00
Placed in Service	January 2005		
Useful Life	10		
Adjustment	-2		
Replacement Year	2013		
Remaining Life	0		

This provision is for the renewal of the landscaping.

The cost and useful life are based on information from the Association.

Landscaping II

		1 Total	@ $30,000.00
Asset ID	1039	Asset Cost	$30,000.00
	Non-Capital	Percent Replacement	100%
	Grounds Components	Future Cost	$30,900.00
Placed in Service	January 2005		
Useful Life	10		
Adjustment	-1		
Replacement Year	2014		
Remaining Life	1		

This provision is for the renewal of the landscaping.

The cost and useful life are based on information from the Association.

Landscaping III

		1 Total	@ $30,000.00
Asset ID	1040	Asset Cost	$30,000.00
	Non-Capital	Percent Replacement	100%
	Grounds Components	Future Cost	$31,827.00
Placed in Service	January 2005		
Useful Life	10		
Replacement Year	2015		
Remaining Life	2		

This provision is for the renewal of the landscaping.

The cost and useful life are based on information from the Association.

Grounds Components - Total Current Cost **$497,585**

Exterior Lights - Pole only

		208 Each	@ $931.37
Asset ID	1002	Asset Cost	$19,372.50
	Capital	Percent Replacement	10%
	Common Area Lighting	Future Cost	$33,969.79
Placed in Service	July 2012		
Useful Life	20		
Replacement Year	2032		
Remaining Life	19		

This provision funds for the partial replacement of exterior common area lighting poles. The expected useful life of the component is greater than the scope of this reserve study. This provision is a contingency for replacement of the poles due to accidents or vandalism.

Note: This component provides funding for the poles only, one of three parts included in the common area lighting.

This assumes the 2013 lighting project is completed.

The New Columbia Reserve Study provided by Donna Kelley provided a quantity of 208 light poles.

The estimated cost to replace the poles was taken from the New Columbia Reserve Study. The Association should obtain a bid to confirm this estimate.

The useful life assumption is based on estimates established on RS Means and/or the National Estimator.

Exterior Lights Electrical - Ballasts

		288 Each	@ $143.28
Asset ID	1003	Asset Cost	$41,264.64
	Capital	Percent Replacement	100%
	Common Area Lighting	Future Cost	$62,416.47
Placed in Service	July 2012		
Useful Life	15		
Replacement Year	2027		
Remaining Life	14		

This component provides funding for the replacement of exterior common area lighting ballasts.

The New Columbia Reserve Study lists the useful life of the ballasts at 60,000 of continuous use, assuming that the lights should only be on 50% of the time, it was calculated to give them a useful life of 14 years.

This assumes the 2013 lighting project is completed.

Exterior Lights Electrical - Ballasts continued...

The New Columbia Reserve Study provided by Donna Kelley provided a quantity of 288 ballasts light.

Note: This component provides funding for the ballasts only.

The cost to replace the ballasts is based on an estimate provided by John Manson a Senior Project Manager at the Housing Authority of Portland.

Common Area Lighting - Total Current Cost	**$60,637**

Alleys - Asphalt - Overlay

		258,000 SF	@ $1.38
Asset ID	1028	Asset Cost	$356,040.00
	Capital	Percent Replacement	100%
	Asphalt Pavement	Future Cost	$606,134.27
Placed in Service	July 2005		
Useful Life	25		
Adjustment	1		
Replacement Year	2031		
Remaining Life	18		

This component provides funding for asphalt overlay.

Area was provided in the Association's reserve study prior to 2007.

The cost is based on per square feet estimates provided by Coast Pavement. The Association should obtain a bid to confirm this estimate.

The useful life assumption is based on estimates established on RS Means and/or the National Estimator.

Alleys - Asphalt - Seal Coat

		258,000 SF	@ $0.20
Asset ID	1029	Asset Cost	$51,600.00
	Non-Capital	Percent Replacement	100%
	Asphalt Pavement	Future Cost	$51,600.00
Placed in Service	July 2005		
Useful Life	7		
Adjustment	1		
Replacement Year	2013		
Remaining Life	0		

Maintenance of asphalt paving includes the periodic application of an asphalt emulsion sealer or “seal coat” as it is commonly known. This procedure is typically performed every 4-7 years depending on a variety of factors that can affect the useful life of the sealer.

Vehicle traffic is one such factor and Associations that have asphalt paving that carries considerable vehicle traffic should consider a maintenance program that calls for seal coating of asphalt driving surfaces as frequently as every 4 years.

This maintenance procedure involves thoroughly cleaning all pavements, filling of any surface cracks and patching of any locally damaged pavement surfaces. The emulsion sealer is then applied, typically with a vehicle mounted spraying system or for small areas a roller application is sometimes used. Asphalt contractors recommend seal coating immediately after performing an overlay (skim coat). This will help insure the prevention of water penetration

Alleys - Asphalt - Seal Coat continued...

which can lead to damage and deterioration.

Parking area demarcation lines will need to be renewed each time that a seal coat is applied. The component expense includes the cost of this work as well as the seal coating cost.

The cost is based on per square feet estimates provided by Coast Pavement. The Association should obtain a bid to confirm this estimate.

The useful life assumption is based on estimates established on RS Means and/or the National Estimator.

Area was provided in the Association's reserve study prior to 2007.

Alleys - Asphalt - Seal Coat (II)

		258,000 SF	@ $0.35
Asset ID	1032	Asset Cost	$90,300.00
	Non-Capital	Percent Replacement	100%
	Asphalt Pavement	Future Cost	$189,068.15
Placed in Service	July 2031		
Useful Life	7		
Adjustment	7		
Replacement Year	2038		
Remaining Life	25		

This provision provides funding for seal coating of the asphalt alleys every 7 years after the overlay scheduled in the year 2031.

Maintenance of asphalt paving includes the periodic application of an asphalt emulsion sealer or “seal coat” as it is commonly known. This procedure is typically performed every 4-7 years depending on a variety of factors that can affect the useful life of the sealer.

Vehicle traffic is one such factor and Associations that have asphalt paving that carries considerable vehicle traffic should consider a maintenance program that calls for seal coating of asphalt driving surfaces as frequently as every 4 years.

This maintenance procedure involves thoroughly cleaning all pavements filling of any surface cracks and patching of any locally damaged pavement surfaces. The emulsion sealer is then applied, typically with a vehicle mounted spraying system or for small areas a roller application is sometimes used. Asphalt contractors recommend seal coating immediately after performing an overlay (skim coat). This will help insure the prevention of water penetration which can lead to damage and deterioration.

Parking area demarcation lines will need to be renewed each time that a seal coat is applied.

Alleys - Asphalt - Seal Coat (II) continued...

The component expense includes the cost of this work as well as the seal coating cost.

The cost is based on per square feet estimates provided by Coast Pavement. The Association should obtain a bid to confirm this estimate.

The useful life assumption is based on estimates established on RS Means and/or the National Estimator.

The area was provided in the Association's reserve study prior to 2007.

Asphalt Pavement - Total Current Cost	**$497,940**

Pocket - Benches

		20 EA	@ $750.00
Asset ID	1014	Asset Cost	$15,000.00
	Capital	Percent Replacement	100%
	Park & Playground Equipment	Future Cost	$17,910.78
Placed in Service	July 2012		
Useful Life	7		
Replacement Year	2019		
Remaining Life	6		

This component provides funding for the replacement of the benches located in Pocket Park.

According to the Association, the tables and benches were replaced for approximately $30,000 total.

The New Columbia Reserve Study provided by Donna Kelley provided an estimated cost of $26,000 to replace benches.

The useful life assumption is based on estimates established on RS Means and/or the National Estimator.

Pocket - Picnic Tables

		10 EA	@ $1,500.00
Asset ID	1015	Asset Cost	$15,000.00
	Capital	Percent Replacement	100%
	Park & Playground Equipment	Future Cost	$17,910.78
Placed in Service	July 2012		
Useful Life	7		
Replacement Year	2019		
Remaining Life	6		

This component provides funding for the replacement of the picnic tables located in Pocket Park

According to the Association, the tables and benches were replaced for approximately $30,000 total.

The New Columbia Reserve Study provided by Donna Kelley provided an estimated cost of $26,000 to replace these picnic tables. There are 10 picnic tables.

The useful life assumption is based on estimates established on RS Means and/or the National Estimator.

Pocket Park - Rubber Tiles

		10,800 SF	@ $14.92
Asset ID	1017	Asset Cost	$161,136.00
	Capital	Percent Replacement	100%
	Park & Playground Equipment	Future Cost	$204,122.26
Placed in Service	July 2005		
Useful Life	15		
Adjustment	1		
Replacement Year	2021		
Remaining Life	8		

This component provides funding for the replacement of the rubber tiles located in Pocket Park.

The useful life assumption is based on estimates established on RS Means and/or the National Estimator.

The New Columbia Reserve Study provided by Donna Kelley provided an area of 10,800 square feet of rubber tiles. An estimated cost of $12.50 per square feet was provided to replace the rubber tiles.

Pocket Park 1 - Bellatrix

		1 EA	@ $35,940.97
Asset ID	1020	Asset Cost	$35,940.97
	Capital	Percent Replacement	100%
	Park & Playground Equipment	Future Cost	$45,528.95
Placed in Service	July 2005		
Useful Life	15		
Adjustment	1		
Replacement Year	2021		
Remaining Life	8		

This component provides funding for the replacement of the Bellatrix piece of the Kompan Play Equipment located in Pocket Park 1.

The New Columbia Reserve Study provided by Donna Kelley provided an estimated cost of $30,100 to replace Bellatrix piece.

The useful life assumption is based on estimates established on RS Means and/or the National Estimator.

Pocket Park 1 - Spica

		2 EA	@ $3,277.68
Asset ID	1019	Asset Cost	$6,555.36
	Capital	Percent Replacement	100%
	Park & Playground Equipment	Future Cost	$8,304.13
Placed in Service	July 2005		
Useful Life	15		
Adjustment	1		
Replacement Year	2021		
Remaining Life	8		

This component provides funding for the replacement of the Spica piece of the Kompan Play Equipment located in Pocket Park 1.

The useful life assumption is based on estimates established on RS Means and/or the National Estimator.

The New Columbia Reserve Study provided by Donna Kelley a quantity of four spica. An estimated cost of $2,745 was provided to replace each spica.

Pocket Park 2 - Argo

		1 EA	@ $4,656.79
Asset ID	1021	Asset Cost	$4,656.79
	Capital	Percent Replacement	100%
	Park & Playground Equipment	Future Cost	$5,899.08
Placed in Service	July 2005		
Useful Life	15		
Adjustment	1		
Replacement Year	2021		
Remaining Life	8		

This component provides funding for the replacement of the Argo piece of the Kompan Play Equipment located in Pocket Park 2.

The useful life assumption is based on estimates established on RS Means and/or the National Estimator.

The New Columbia Reserve Study provided by Donna Kelley provided a cost of $3,900 to replace the argo.

Pocket Park 2 - Decorative Metal Fence

		60 LF	@ $62.10
Asset ID	1016	Asset Cost	$3,726.00
	Capital	Percent Replacement	100%
	Park & Playground Equipment	Future Cost	$4,719.98
Placed in Service	July 2005		
Useful Life	15		
Adjustment	1		
Replacement Year	2021		
Remaining Life	8		

This component provides funding for the replacement of the decorative metal fence located in Pocket Park 2.

The useful life assumption is based on estimates established on RS Means and/or the National Estimator.

The New Columbia Reserve Study provided by Donna Kelley provided an area of 60 lineal feet with an estimated cost of $52 per lineal feet to replace the fence.

Pocket Park 2 - Play Structure II

		1 Total	@ $40,597.78
Asset ID	1041	Asset Cost	$40,597.78
	Capital	Percent Replacement	100%
	Park & Playground Equipment	Future Cost	$51,428.05
Placed in Service	July 2005		
Useful Life	15		
Adjustment	1		
Replacement Year	2021		
Remaining Life	8		

This component provides funding for the replacement of the play structure piece of the Hags Play Equipment located in Pocket Park 2.

The useful life assumption is based on estimates established on RS Means and/or the National Estimator.

The New Columbia Reserve Study provided by Donna Kelley provided a quantity of 2 play structure. An estimated cost of $68,000 was provided to replace the two play structures.

Pocket Park 2 - Supernova

		1 EA	@ $7,337.45
Asset ID	1022	Asset Cost	$7,337.45
	Capital	Percent Replacement	100%
	Park & Playground Equipment	Future Cost	$9,294.86
Placed in Service	July 2005		
Useful Life	15		
Adjustment	1		
Replacement Year	2021		
Remaining Life	8		

This component provides funding for the replacement of the Super Nova piece of the Kompan Play Equipment located in Pocket Park 2.

The useful life assumption is based on estimates established on RS Means and/or the National Estimator.

The New Columbia Reserve Study provided by Donna Kelley provided a cost of $6,145 to replace the supernova.

Pocket Park 3 - Double Shifter

		1 EA	@ $9,194.20
Asset ID	1023	Asset Cost	$9,194.20
	Capital	Percent Replacement	100%
	Park & Playground Equipment	Future Cost	$11,646.94
Placed in Service	July 2005		
Useful Life	15		
Adjustment	1		
Replacement Year	2021		
Remaining Life	8		

This component provides funding for the replacement of the Double Shifter piece of the Kompan Play Equipment located in Pocket Park 3.

The useful life assumption is based on estimates established on RS Means and/or the National Estimator.

The New Columbia Reserve Study provided by Donna Kelley provided an estimated cost of $7,700 to replace the double shifter.

Pocket Park 3 - Homestead

		1 EA	@ $25,851.24
Asset ID	1025	Asset Cost	$25,851.24
	Capital	Percent Replacement	100%
	Park & Playground Equipment	Future Cost	$32,747.58
Placed in Service	July 2005		
Useful Life	15		
Adjustment	1		
Replacement Year	2021		
Remaining Life	8		

This component provides funding for the replacement of the Homestead piece of the Kompan Play Equipment located in Pocket Park 3.

The useful life assumption is based on estimates established on RS Means and/or the National Estimator.

The New Columbia Reserve Study provided by Donna Kelley provided an estimated cost of $21,650 to replace the homestead piece.

Pocket Park 3 - Satellite Binocular

		1 EA	@ $2,322.42
Asset ID	1026	Asset Cost	$2,322.42
	Capital	Percent Replacement	100%
	Park & Playground Equipment	Future Cost	$2,941.97
Placed in Service	July 2005		
Useful Life	15		
Adjustment	1		
Replacement Year	2021		
Remaining Life	8		

This component provides funding for the replacement of the Satellite Binocular piece of the Kompan Play Equipment located in Pocket Park 3.

The useful life assumption is based on estimates established on RS Means and/or the National Estimator.

The New Columbia Reserve Study provided by Donna Kelley provided a cost of $1,945 to replace the satellite binocular.

Pocket Park 3 - Triple Shifter

		1 EA	@ $8,889.71
Asset ID	1024	Asset Cost	$8,889.71
	Capital	Percent Replacement	100%
	Park & Playground Equipment	Future Cost	$11,261.22
Placed in Service	July 2005		
Useful Life	15		
Adjustment	1		
Replacement Year	2021		
Remaining Life	8		

This component provides funding for the replacement of the Triple Shifter piece of the Kompan Play Equipment located in Pocket Park 3.

The useful life assumption is based on estimates established on RS Means and/or the National Estimator.

The New Columbia Reserve Study provided by Donna Kelley provided a cost of $7,445 to replace the triple shifter.

Pocket Park 3 - Ziggy

		1 EA	@ $2,179.14
Asset ID	1027	Asset Cost	$2,179.14
	Capital	Percent Replacement	100%
	Park & Playground Equipment	Future Cost	$2,760.47
Placed in Service	July 2005		
Useful Life	15		
Adjustment	1		
Replacement Year	2021		
Remaining Life	8		

This component provides funding for the replacement of the Ziggy piece of the Kompan Play Equipment located in Pocket Park 3.

The useful life assumption is based on estimates established on RS Means and/or the National Estimator.

The New Columbia Reserve Study provided by Donna Kelley provided a cost of $1,825 to replace the ziggy.

Pocket Park 4 - Play Structure I

		1 Total	@ $40,597.78
Asset ID	1018	Asset Cost	$40,597.78
	Capital	Percent Replacement	100%
	Park & Playground Equipment	Future Cost	$51,428.05
Placed in Service	July 2005		
Useful Life	15		
Adjustment	1		
Replacement Year	2021		
Remaining Life	8		

This component provides funding for the replacement of the play structure piece of the Hags Play Equipment located in Pocket Park 4.

The useful life assumption is based on estimates established on RS Means and/or the National Estimator.

The New Columbia Reserve Study provided by Donna Kelley provided a quantity of 2 play structure. An estimated cost of $68,000 was provided to replace the two play structures.

Pocket Park 4 - Spica

		2 EA	@ $3,277.68
Asset ID	1042	Asset Cost	$6,555.36
	Capital	Percent Replacement	100%
	Park & Playground Equipment	Future Cost	$8,304.13
Placed in Service	July 2005		
Useful Life	15		
Adjustment	1		
Replacement Year	2021		
Remaining Life	8		

This component provides funding for the replacement of the Spica piece of the Kompan Play Equipment located in Pocket Park 4.

The useful life assumption is based on estimates established on RS Means and/or the National Estimator.

The New Columbia Reserve Study provided by Donna Kelley a quantity of four spica. An estimated cost of $2,745 was provided to replace each spica.

Park & Playground Equipment - Total Current Cost $385,540

Insurance Deductible

		1 Total	@ $5,604.00
Asset ID	1035	Asset Cost	$5,604.00
	Non-Capital	Percent Replacement	100%
	Contingency	Future Cost	$5,604.00
Placed in Service	January 2012		
Useful Life	1		
Replacement Year	2013		
Remaining Life	0		

This provision is for the insurance deductible in the event a claim is made.

Contingency - Total Current Cost **$5,604**

Additional Disclosures

Levels of Service

The following three categories describe the various types of Reserve Studies from exhaustive to minimal.

I. Full: A Reserve Study in which the following five Reserve Study tasks are performed:

- Component Inventory
- Condition Assessment (based upon on-site visual observations)
- Life and Valuation Estimates
- Fund Status
- Funding Plan

II. Update, With Site Visit/On-Site Review: A Reserve Study update in which the following five Reserve Study tasks are performed:

- Component Inventory (verification only, not quantification)
- Condition Assessment (based on on-site visual observations)
- Life and Valuation Estimates
- Fund Status
- Funding Plan

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

- Life and Valuation Estimates
- Fund Status
- Funding Plan

Terms and Definitions

CASH FLOW METHOD: A method of developing a reserve *Funding Plan* where contributions to the reserve fund are designed to offset the variable annual expenditures from the reserve fund. Different reserve *Funding Plans* are tested against the anticipated schedule of reserve expenses until the desired *Funding Goal* is achieved.
COMPONENT: The individual line items in the *Reserve Study* developed or updated in the *Physical Analysis*. These elements form the building blocks for the *Reserve Study*. *Components* typically are: 1) association responsibility; 2) with limited *Useful Life* expectancies; 3) predictable *Remaining Useful Life* expectancies; 4) above a minimum threshold cost; and 5) as required by local codes.
COMPONENT INVENTORY: The task of selecting and quantifying reserve *Components*. This task can be accomplished through on-site visual observations, review of association design and organizational documents, a review of established association precedents, and discussion with appropriate association representative(s) of the Association or cooperative.
COMPONENT METHOD: A method of developing a reserve *Funding Plan* where the total contribution is based on the sum of contributions for individual *Components*. See *Cash Flow Method*.
CONDITION ASSESSMENT: The task of evaluating the current condition of the *Component* based on observed or reported characteristics.
CURRENT REPLACEMENT COST: See *Replacement Cost*.

DEFICIT: An actual or projected *Reserve Balance* that is less than the *Fully Funded Balance*. The opposite would be a *Surplus*.
EFFECTIVE AGE: The difference between *Useful Life* and *Remaining Useful Life*. Not always equivalent to chronological age since some *Components* age irregularly. Used primarily in computations.
FINANCIAL ANALYSIS: The portion of a *Reserve Study* where current status of the reserves (measured as cash or *Percent Funded*) and a recommended reserve contribution rate (reserve *Funding Plan*) are derived, and the projected reserve income and expense over time is presented. The *Financial Analysis* is one of the two parts of a *Reserve Study*.
FULLY FUNDED: 100% Funded. When the actual or projected *Reserve Balance* is equal to the *Fully Funded Balance*.
FULLY FUNDED BALANCE (FFB): Total accrued depreciation, an indicator against which actual or projected *Reserve Balance* can be compared. The *Reserve Balance* that is in direct proportion to the fraction of life "used up" of the current repair or *Replacement Cost*. This number is calculated for each *Component*, then added together for an association total. Two formulas can be utilized, depending on the provider's sensitivity to interest and inflation effects. Note: Both yield identical results when interest and inflation are equivalent.

FFB = Current Cost X *Effective Age* / *Useful Life*

or

FFB = (Current Cost X *Effective Age* / *Useful Life*) + [(Current Cost X *Effective Age* / *Useful Life*) / (1 + Interest Rate) ^ Remaining Life] - [(Current Cost X *Effective Age* / *Useful Life*) / (1 + Inflation Rate) ^ Remaining Life]

FUND STATUS: The status of the reserve fund as compared to an established benchmark such as percent funding. The Association appears to be adequately funded as the threshold method.

FUNDING GOALS: Independent of methodology utilized, the following represent the basic categories of *Funding Plan* goals:

- Baseline Funding: Establishing a reserve funding goal of keeping the reserve cash balance above zero.
- Full Funding: Setting a reserve funding goal of attaining and maintaining reserves at or near 100% funded.
- Statutory Funding: Establishing a reserve funding goal of setting aside the specific minimum amount of reserves required by local statues.
- Threshold Funding: Establishing a reserve funding goal of keeping the *Reserve Balance* above a specified dollar or *Percent Funded* amount. Depending on the threshold, this may be more or less conservative than fully funding.

FUNDING PLAN: An association's plan to provide income to a reserve fund to offset anticipated expenditures from that fund.
FUNDING PRINCIPLES:

- Sufficient Funds When Required
- Stable Contribution Rate over the Years
- Evenly Distributed Contributions over the Years
- Fiscally Responsible

LIFE AND VALUATION ESTIMATES: The task of estimating *Useful Life*, *Remaining Useful Life*, and repair or *Replacement Costs* for the reserve *Components*.
PERCENT FUNDED: The ratio at a particular point of time (typically the beginning of the Fiscal Year) of the actual or projected *Reserve Balance* to the *Fully Funded Balance*, expressed as a percentage.
PHYSICAL ANALYSIS: The portion of the *Reserve Study* where the *Component Inventory*, *Condition Assessment*, and *Life and Valuation Estimate* tasks are performed. This represents one of the two parts of the *Reserve Study*.
REMAINING USEFUL LIFE (RUL): Also referred to as "Remaining Life" (RL). The estimated time, in years, that a reserve *Component* can be expected to continue to serve its intended function. Projects anticipated to occur in the initial year have "zero" *Remaining Useful Life*.
REPLACEMENT COST: The cost of replacing, repairing, or restoring a reserve *Component* to its original functional condition. The *Current Replacement Cost* would be the cost to replace, repair, or restore the *Component* during that particular year.
RESERVE BALANCE: Actual or projected funds as of a particular point in time that the Association has identified for use to defray the future repair or replacement of those major *Components* which the Association is obligated to maintain. Also known as reserves, reserve accounts, or cash reserves. Based upon information provided and not audited.
RESERVE PROVIDER: An individual that prepares *Reserve Studies*.
RESERVE STUDY: A budget planning tool which identifies the current status of the reserve fund and a stable and equitable *Funding Plan* to offset the anticipated future major common area expenditures. The *Reserve Study* consists of two parts: the *Physical Analysis* and the *Financial Analysis*.
RESPONSIBLE CHARGE: A reserve specialist in *Responsible Charge* of a *Reserve Study* shall render regular and effective supervision to those individuals performing services which directly and materially affect the quality and competence rendered by the reserve specialist. A reserve specialist shall maintain such records as are reasonably necessary to establish that the reserve specialist exercised regular and effective supervision of a *Reserve Study* of which he was in *Responsible Charge*. A reserve specialist engaged in any of the following acts or practices shall be deemed not to have rendered the regular and effective supervision required herein:

- The regular and continuous absence from principal office premises from which professional services are rendered, except for performance of field work or presence in a field office maintained exclusively for a specific project;

- The failure to personally inspect or review the work of subordinates where necessary and appropriate;

- The rendering of a limited, cursory, or perfunctory review of plans or projects in lieu of an appropriate detailed review;

- The failure to personally be available on a reasonable basis or with adequate advance notice for consultation and inspection where circumstances require personal availability.

SPECIAL ASSESSMENT: An assessment levied on the members of an association in addition to regular assessments. *Special Assessments* are often regulated by governing documents or local statutes.

SURPLUS: An actual or projected *Reserve Balance* greater than the *Fully Funded Balance*.
The opposite would be a *Deficit*.

USEFUL LIFE (UL): Total *Useful Life* or depreciable life. The estimated time, in years, that a R*eserve Component* can be expected to serve its intended function if properly constructed in its present application or installation.