

**GARDEN HOMES AT CHARBONNEAU GREEN**  
**TOWNHOME ASSOCIATION**  
**MAINTENANCE PLAN**  
**RESERVE STUDY**  
**LEVEL II: UPDATE WITH VISUAL SITE INSPECTION**  
**2018**



 **SCHWINDT & Co.**  
RESERVE STUDY SERVICES  
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**CHARBONNEAU GREEN TOWNHOME ASSOCIATION**

**Executive Summary**

**Year of Report:**

January 1, 2018 to December 31, 2018

**Number of Units:**

48 Units

**Parameters:**

Beginning Balance: \$80,000

Year 2018 Suggested Contribution: \$38,500

Year 2018 Projected Interest Earned: \$29

Inflation: 2.50%

Annual Increase to Suggested Contribution: 5.00%

Lowest Cash Balance Over 30 Years (Threshold): \$25,110

Average Reserve Assessment per Unit: \$66.84

Prior Year's Actual Contribution: \$40,116

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**Charbonneau Green Townhome Association  
Maintenance Plan Update  
Reserve Study Update – Onsite  
Disclosure Information  
2018**

We have conducted an onsite reserve study update and maintenance plan update for Charbonneau Green Townhome Association for the year beginning January 1, 2018, in accordance with guidelines established by Community Associations Institute and the American Institute of Certified Public Accountants.

This reserve study and maintenance plan are in compliance with the legislative changes made in 2007 to ORS Chapters 94 and 100.

We have no other involvement with the Association other than providing the reserve study and maintenance plan.

Schwindt & Company believes that every association should have a complete building envelope inspection within 12 months of completion of all construction and every 7 years. This inspection must be performed by a licensed building envelope inspector. Ongoing inspections of the property should be performed by a licensed inspector, with the exception of a roof inspection which may be performed by a licensed roofing contractor.

Assumptions used for inflation, interest, and other factors are detailed in page 17. Income tax factors were not considered due to the uncertainty of factors 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.

All information regarding the useful life and cost of reserve components was derived from the Association, local vendors, and/or from various construction pricing and scheduling manuals.

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.

An earthquake insurance deductible is not included in the reserve study.

**According to Section 6 of the Declaration, the Commonly Maintained Property shall mean all Common Areas of the Townhome Association as depicted on the plat. The Association shall also be responsible for the exterior painting of the residential unit buildings, painting of fences, and planting, watering, and maintenance of plants and landscaping, excluding landscaping within a Residential Unit's patio or courtyard area or within a Residential Unit's fence area. The Residential Unit Owner will also be responsible for the maintenance and replacement of the driveways, roofs, gutters and downspouts, fences (other than painting), exterior lights, window, window frames, and glass surfaces. The Association is responsible for the maintenance of nine access drives identified as common area on the plat.**



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RESERVE STUDY SERVICES

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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.

Please note that the Association has not had a complete building envelope inspection. The effects of not having information relating to this inspection are not known.

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 homeowners to pay on demand (as a special assessment) their share of common expenses for the cost of major maintenance, repair, or replacement of a reserve component.

**GARDEN HOMES AT CHARBONNEAU GREEN**  
**TOWNHOME ASSOCIATION**  
**MAINTENANCE PLAN**  
**2018**

## **Garden Homes at Charbonneau Green Townhome 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.

**Garden Homes at Charbonneau Green Townhome Association  
Maintenance Plan  
2018**

**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.**

**Property Inspection**

Schwindt & Company recommends that a provision for the annual inspection of common area components be included in the maintenance plan for all Associations. This valuable management tool will help to ensure that all components achieve a maximum useful life expectancy and that they are functioning as intended throughout their lifespan.

The inspection should be performed by a qualified professional and should include a written summary of conclusions with specific recommendations for any needed repairs or maintenance.

We suggest that the Association obtain firm bids for this service.

This expense should be included in the annual operating budget for the Association.

Frequency: Annually

**Lighting: Exterior & Common Area Interior – Inspection/Maintenance**

***Note: Replacement of flickering or burned-out bulbs or lamps 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 and lamp 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

### **Hot Water Heater –Common Area Only – Inspection/Maintenance**

Maintenance of the hot water heater includes regularly scheduled inspections and maintenance.

The water heater and related components should be checked for water leaks and fuel supply leaks. The water heater and related components should also be checked for proper operation and settings. Filters should be changed and all components serviced as required. The surrounding area should be cleaned at the time of servicing.

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

Inspections and maintenance should be performed by a qualified, licensed service provider.

We understand that this expense should be included in the annual operating budget for the Association.

Frequency: Monthly to Annually

### **Swimming Pool**

Swimming pool maintenance should be performed in conjunction with a service contractor. Preventive maintenance in this area consists of validating all equipment is present and functional on a monthly basis. Only certified professionals should complete repairs or maintenance procedures more advanced than manufacturer's prescribed chemical treatments and cleaning. Maintenance staff should accompany the certified professional during statutory inspections and maintenance to ensure that the physical work complies with contract and manufacturer's specifications.

Preventive maintenance includes, but is not limited to, the review of the following: automatic fill device function; electrical component condition; pump/filter/chlorination function; thermostat; and heater function.

Deck surface condition should be reviewed for deficiencies such as rough areas and tripping and slippage hazards. Fence and gates should be reviewed for the function of the anchors, latches and the overall condition. Handrails and ladders should be reviewed for stability, hardware and overall condition. Steps and treads should be reviewed for security and tread condition.

Safety equipment should be reviewed for its condition and function including, but not limited to, the following: the location and condition of the life ring; emergency telephone equipment; compliance of signage with codes and standards; visibility and overall condition of the signage; and fire extinguishers tag currency, placement, housing, hose, and overall condition.

***Note: Any and all electrical outlets near water should be serviced by a ground-fault circuit-interrupter (GFI) to protect users from electrical shock.***

Water condition and cleanliness should be reviewed and must comply with local health standards. The County Health Department or local water management authority determines health standards in most communities. Standards must be posted within the pool area.

Pool tile/plaster should be reviewed for its overall condition.

During the off-season when the pool is covered, check the security of the fastening system monthly to make sure it hasn't been tampered with.

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

This expense should be included in the annual operating budget for the Association.

Frequency: Monthly

### **Gutter & Downspout**

Schwindt & Company recommends that all gutters and downspouts be cleaned, visually inspected, and repaired as required every six months in the spring and fall.

This important maintenance procedure will help to ensure that the gutters and downspouts are free-flowing at all times, thus preventing the backup of water within the drainage system. Such backup can lead to water ingress issues along the roof edges, around scuppers or other roof penetrations, and at sheet metal flashing or transition points that rely on quick and continuous discharge of water from surrounding roof surfaces to maintain a watertight building exterior.

This expense should be included in the annual operating budget for the Association.

Frequency: Semi-Annually, more often if necessary

### **Exterior Walls**

The siding, trim, and other wood building components should be inspected for loose, missing, cracked or otherwise damaged components. Sealant joints should be checked for missing or cracked sealant.

Painted surfaces should be checked for paint deterioration, bubbling, or other signs of deterioration.

Dryer vents should be checked **twice a year** and cleared of lint. Also check operation of exhaust baffles to make sure they are present and that they move freely. Exhaust ducts should be cleared of debris **every 3 years**.

**The payment for maintenance and the performance of maintenance repair of dryer vents, exhaust baffles, and exhaust ducts is solely the responsibility of the owners.**

Any penetrations of the building envelope such as utility lines and light fixtures should be checked annually for signs of water intrusion. Hose bibs should be checked for leaks and other failures. Each

hose bib should be shut off and drained during the winter to prevent damage from freezing.

**The payment for and performance of maintenance and repair of all outlets of utility service lines, including water, sewerage, gas or electricity is solely the responsibility of the Owners.**

Annual inspections to check for signs of water intrusion should be made of the building envelope interfaces such as where the windows intersect with the walls and where the walls intersect with the roof.

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

Inspections should be made by a qualified professional.

This expense should be included in the annual operating budget for the Association.

Frequency: Annually

### **Fence – Swimming Pool - Inspection**

Metal fences require regular inspection of paint condition, rust and other corrosion, and vegetation and trash buildup. The overall condition of the fence should be reviewed for deficiencies such as vegetation encroachment, debris buildup, holes, sagging areas, missing segments, rust and/or vandalism.

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

This expense should be included in the Association's operating budget and may be considered part of the annual property inspection.

Frequency: Annually

### **Lawn Irrigation System**

Periodic maintenance to the lawn 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 ensure proper operation. Sometimes this testing is mandated by ordinance or building codes. All work on lawn irrigation systems must be performed by licensed contractors who specialize in this type of work.

This expense should be included in the annual operating budget for the Association.

Frequency: Annually

**Exterior Siding Maintenance – Painting**

Maintenance of the exterior siding includes regularly scheduled cleaning and inspection of the surface areas for cracks, peeling paint or other sealants, deterioration of the base material and failure of caulking or other sealant materials that serve a waterproofing function.

This maintenance provision is for the periodic painting of the exterior siding. The siding should be cleaned, repaired as required, primed and painted with premium quality exterior house paint in accordance with the siding manufacturer’s specifications. The work should be performed by a qualified, licensed painting contractor.

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

Frequency: Every 7 years, beginning in 2024

**Fence – Swimming Pool - Maintenance**

There is a steel fence located around the perimeter of the swimming pool area on the property that should undergo periodic maintenance in order to achieve a maximum useful life. Maintenance includes cleaning, locally repairing, prepping, sealing and painting of the steel fence.

This expense is included in the reserve study for the Association in the exterior siding painting component.

Frequency: Every 7 years, beginning in 2018

**Backflow Device Maintenance**

Maintenance of the backflow device and components related to the water system includes, but is not limited to, inspecting for leaks under pressure and checking for damage or deterioration.

Annual maintenance on the backflow device includes the testing and calibrating of valve operation. Air should be bled from the backflow preventer and area should be cleaned.

Inspections and maintenance should be performed by a qualified, licensed service provider.

This maintenance item should be included in the Association’s annual operating budget.

Frequency: Annually

**Concrete Pavement**

Maintenance of the concrete pavement should include cleaning the surface areas with pressure washing equipment. The pavement should also be visually reviewed for signs of undue stress and cracking.

Noticeable cracks should be filled with a suitable concrete crack filler to prevent penetration of moisture below the concrete surface which will undermine the integrity of the base material over time.

This maintenance item should be included in the Association's annual operating budget.

Frequency: Annually

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

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**TOWNHOME ASSOCIATION**  
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**LEVEL II: UPDATE WITH VISUAL SITE INSPECTION**  
**2018**

**Charbonneau Green Townhome Association**  
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<b>Fencing/Security</b>			
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<b>Lighting</b>			
1008	Pool House: Light Fixtures - Replacement	2018	31 of 47
<b>Recreation/Pool</b>			
1022	Pool - Resurface	2023	32 of 47
1028	Pool Cover - Replacement	2023	32 of 47
1005	Pool Deck - Resurface	2018	33 of 47
1004	Pool Filter - Replacement	2019	33 of 47
1011	Pool Furniture/Equipment - Replacement	2028	34 of 47
1003	Pool Heater - Replacement	2019	34 of 47
1007	Pool House: Hot Water Heater - Replacement	2018	35 of 47
1009	Pool House: Restroom - Renewal	2033	35 of 47
1006	Pool House: Shower Repair	2043	36 of 47
1002	Pool House: Siding/Roof/Gutter Repairs	2027	36 of 47
1010	Pool Pump - Replacement	2020	37 of 47
<b>Grounds Components</b>			
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1021	Brick Roundabout - Curbing Project	2018	38 of 47
1015	Concrete Paving - Partial Replacement	2018	39 of 47
1030	Irrigation System - Renovation	2018	39 of 47
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1016	Landscaping - Upgrade	2018	41 of 47
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1018	Trees - Maintenance	2018	42 of 47
<b>Contingency</b>			
1027	Insurance Deductible	2018	43 of 47
	Total Funded Assets	25	
	Total Unfunded Assets	<u>0</u>	
	Total Assets	25	

## **Garden Homes at Charbonneau Green Townhome Association**

### **Property Description**

Garden Homes at Charbonneau Green Townhome Association consists of 48 townhome units located in Wilsonville, Oregon. The Association was created in 1978. The Association shall be responsible for the maintenance, repair and replacement of the common element items and provide paint upon each unit. The individual homeowners are responsible for all maintenance and repairs of their home, including siding (excluding painting), roofing, gutters and downspouts, doors, door frames, windows, and window frames, driveways and the private property adjacent to the homes. The Association is responsible for the maintenance of nine access drives identified as common area on the plat.

A site visit was performed by Schwindt & Company in 2011 and 2017. Schwindt & Co did not investigate components for defects, materials, design or workmanship. This would ordinarily be considered in a complete building envelope inspection. Our condition assessment considers if the component is wearing as intended. All components are considered to be in fair condition and appear to be wearing as intended unless noted otherwise in the component detail.

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 approval, to increase regular assessments, levy special assessments, or it may delay repairs or replacements until funds are available.



**Charbonneau Green Townhome Association**  
Wilsonville, Oregon  
**Cash Flow Method - Threshold Funding Model Summary**

Report Date	July 26, 2017
Account Number	2ghcgt
Budget Year Beginning	January 01, 2018
Budget Year Ending	December 31, 2018
Total Units	48

<i>Report Parameters</i>	
Inflation	2.50%
Annual Assessment Increase	5.00%
Interest Rate on Reserve Deposit	0.10%
2018 Beginning Balance	\$80,000

**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 **\$38,500** in **2018** and increases **5.00%** each year for the remaining years of the study. A minimum balance of **\$25,110** 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 Month Contribution	\$3,208.33
<i>\$66.84 per unit monthly</i>	
Average Net Month Interest Earned	<u>\$2.45</u>
Total Month Allocation to Reserves	\$3,210.79
<i>\$66.89 per unit monthly</i>	

**Charbonneau Green Townhome Association**  
**Cash Flow Method - Threshold Funding Model Projection**

Beginning Balance: \$80,000

Year	Annual Contribution	Annual Interest	Annual Expenditures	Projected Ending Reserves
2018	38,500	29	71,430	47,099
2019	40,425	55	14,083	73,495
2020	42,446	76	20,529	95,488
2021	44,569	95	24,957	115,195
2022	46,797	121	19,361	142,752
2023	49,137	111	58,245	133,755
2024	51,594	1	160,241	25,110
2025	54,173	46	8,963	70,366
2026	56,882	80	21,371	105,957
2027	59,726	108	30,416	135,375
2028	62,712	122	47,316	150,894
2029	65,848	174	12,780	204,136
2030	69,140	200	41,927	231,549
2031	72,597	121	149,624	154,644
2032	76,227	177	19,132	211,917
2033	80,039	195	60,387	231,764
2034	84,041	257	20,100	295,962
2035	88,243	339	5,387	379,156
2036	92,655	384	45,503	426,692
2037	97,288	472	7,546	516,906
2038	102,152	314	258,484	360,888
2039	107,260	377	42,619	425,904
2040	112,623	460	26,753	512,234
2041	118,254	570	6,247	624,811
2042	124,166	640	52,770	696,848
2043	130,375	681	86,931	740,972
2044	136,893	790	25,730	852,925
2045	143,738	689	241,868	755,484
2046	150,925	811	27,033	880,187
2047	158,471	957	9,659	1,029,956

**Charbonneau Green Townhome Association  
Component Summary By Category**

Description	Date in Service	Replacement Year	Useful	Adjustment	Remaining	Units	Unit Cost	Current Cost
<b>Painting</b>								
Exterior Siding - Painting	2017	2024	7	0	6	1 Total	105,000.00	<u>105,000</u>
Painting - Total								\$105,000
<b>Fencing/Security</b>								
Brick Posts - Repair	1978	2018	25	9	0	14 Each	295.00	4,130
Metal Fence - Replacement	1978	2028	50	0	10	225 LF	30.68	<u>6,903</u>
Fencing/Security - Total								\$11,033
<b>Lighting</b>								
Pool House: Light Fixtures - Replacement	1978	2018	20	20	0	3 Each	88.50	<u>265</u>
Lighting - Total								\$265
<b>Recreation/Pool</b>								
Pool Deck - Resurface	1978	2018	30	10	0	300 SF	11.80	3,540
Pool House: Hot Water Heater - Replacem..	1978	2018	15	19	0	1 Total	1,000.00	1,000
Pool Filter - Replacement	1978	2019	10	31	1	1 Total	1,200.00	1,200
Pool Heater - Replacement	1978	2019	10	31	1	1 Total	5,000.00	5,000
Pool Pump - Replacement	2010	2020	10	0	2	1 Total	2,000.00	2,000
Pool - Resurface	2008	2023	15	0	5	1 Total	24,780.00	24,780
Pool Cover - Replacement	2013	2023	10	0	5	1 Total	5,000.00	5,000
Pool House: Siding/Roof/Gutter Repairs	2017	2027	10	0	9	1 Total	1,180.00	1,180
Pool Furniture/Equipment - Replacement	2013	2028	15	0	10	1 Total	2,360.00	2,360
Pool House: Restroom - Renewal	2013	2033	20	0	15	1 Total	2,360.00	2,360
Pool House: Shower Repair	2013	2043	30	0	25	1 Total	1,180.00	<u>1,180</u>
Recreation/Pool - Total								\$49,600
<b>Grounds Components</b>								
Barkdusting - Renewal	2016	2018	2	0	0	1 Total	10,000.00	10,000
Brick Roundabout - Curbing Project	1978	2018	1	36	0	1 Total	5,900.00	5,900
Concrete Paving - Partial Replacement	2016	2018	3	-1	0	1,325 SF	11.80	15,635
Irrigation System - Renovation	2013	2018	1	0	0	1 Total	4,000.00	4,000
Landscaping - Upgrade	2010	2018	5	-2	0	1 Total	5,900.00	5,900
Parking Area - Repair	1978	2018	25	9	0	7,000 SF	2.36	16,520
Trees - Maintenance	2015	2018	1	0	0	1 Total	3,540.00	3,540
Irrigation System - Upgrade	2023	2023	5	0	5	1 Total	5,900.00	5,900
Irrigation System: Clock/Timers - Replac..	2023	2023	5	0	5	4 Each	590.00	<u>2,360</u>
Grounds Components - Total								\$69,755
<b>Contingency</b>								
Insurance Deductible	2011	2018	1	0	0	1 Total	1,000.00	<u>1,000</u>
Contingency - Total								\$1,000

**Charbonneau Green Townhome Association  
Component Summary By Category**

Description	Date in Service	Replacement Year	Useful	Adjustment Remaining	Units	Unit Cost	Current Cost
Total Asset Summary							\$236,653

## Charbonneau Green Townhome Association Component Summary By Group

Description	Date in Service	Replacement Year	Useful	Adjustment	Remaining	Units	Unit Cost	Current Cost
<b>Capital</b>								
Brick Roundabout - Curbing Project	1978	2018	1	36	0	1 Total	5,900.00	5,900
Irrigation System - Renovation	2013	2018	1	0	0	1 Total	4,000.00	4,000
Irrigation System - Upgrade	2023	2023	5	0	5	1 Total	5,900.00	5,900
Irrigation System: Clock/Timers - Replace..	2023	2023	5	0	5	4 Each	590.00	2,360
Metal Fence - Replacement	1978	2028	50	0	10	225 LF	30.68	6,903
Pool - Resurface	2008	2023	15	0	5	1 Total	24,780.00	24,780
Pool Cover - Replacement	2013	2023	10	0	5	1 Total	5,000.00	5,000
Pool Deck - Resurface	1978	2018	30	10	0	300 SF	11.80	3,540
Pool Filter - Replacement	1978	2019	10	31	1	1 Total	1,200.00	1,200
Pool Furniture/Equipment - Replacement	2013	2028	15	0	10	1 Total	2,360.00	2,360
Pool Heater - Replacement	1978	2019	10	31	1	1 Total	5,000.00	5,000
Pool House: Hot Water Heater - Replacem..	1978	2018	15	19	0	1 Total	1,000.00	1,000
Pool House: Light Fixtures - Replacement	1978	2018	20	20	0	3 Each	88.50	265
Pool Pump - Replacement	2010	2020	10	0	2	1 Total	2,000.00	2,000
Capital - Total								<u>\$70,208</u>
<b>Non-Capital</b>								
Barkdusting - Renewal	2016	2018	2	0	0	1 Total	10,000.00	10,000
Brick Posts - Repair	1978	2018	25	9	0	14 Each	295.00	4,130
Concrete Paving - Partial Replacement	2016	2018	3	-1	0	1,325 SF	11.80	15,635
Exterior Siding - Painting	2017	2024	7	0	6	1 Total	105,000.00	105,000
Insurance Deductible	2011	2018	1	0	0	1 Total	1,000.00	1,000
Landscaping - Upgrade	2010	2018	5	-2	0	1 Total	5,900.00	5,900
Parking Area - Repair	1978	2018	25	9	0	7,000 SF	2.36	16,520
Pool House: Restroom - Renewal	2013	2033	20	0	15	1 Total	2,360.00	2,360
Pool House: Shower Repair	2013	2043	30	0	25	1 Total	1,180.00	1,180
Pool House: Siding/Roof/Gutter Repairs	2017	2027	10	0	9	1 Total	1,180.00	1,180
Trees - Maintenance	2015	2018	1	0	0	1 Total	3,540.00	3,540
Non-Capital - Total								<u>\$166,445</u>
Total Asset Summary								<u>\$236,653</u>

**Charbonneau Green Townhome Association  
Annual Expenditure Detail**

Description	Expenditures
<b>Replacement Year 2018</b>	
Barkdusting - Renewal	10,000
Brick Posts - Repair	4,130
Brick Roundabout - Curbing Project	5,900
Concrete Paving - Partial Replacement	15,635
Insurance Deductible	1,000
Irrigation System - Renovation	4,000
Landscaping - Upgrade	5,900
Parking Area - Repair	16,520
Pool Deck - Resurface	3,540
Pool House: Hot Water Heater - Replacement	1,000
Pool House: Light Fixtures - Replacement	265
Trees - Maintenance	3,540
<b>Total for 2018</b>	<b>\$71,430</b>
<b>Replacement Year 2019</b>	
Irrigation System - Renovation	4,100
Pool Filter - Replacement	1,230
Pool Heater - Replacement	5,125
Trees - Maintenance	3,628
<b>Total for 2019</b>	<b>\$14,083</b>
<b>Replacement Year 2020</b>	
Barkdusting - Renewal	10,506
Irrigation System - Renovation	4,202
Pool Pump - Replacement	2,101
Trees - Maintenance	3,719
<b>Total for 2020</b>	<b>\$20,529</b>
<b>Replacement Year 2021</b>	
Concrete Paving - Partial Replacement	16,837
Irrigation System - Renovation	4,308
Trees - Maintenance	3,812
<b>Total for 2021</b>	<b>\$24,957</b>

**Charbonneau Green Townhome Association  
Annual Expenditure Detail**

Description	Expenditures
<b>Replacement Year 2022</b>	
Barkdusting - Renewal	11,038
Irrigation System - Renovation	4,415
Trees - Maintenance	3,907
<b>Total for 2022</b>	<b>\$19,361</b>
<b>Replacement Year 2023</b>	
Irrigation System - Renovation	4,526
Irrigation System - Upgrade	6,675
Irrigation System: Clock/Timers - Replacement	2,670
Landscaping - Upgrade	6,675
Pool - Resurface	28,036
Pool Cover - Replacement	5,657
Trees - Maintenance	4,005
<b>Total for 2023</b>	<b>\$58,245</b>
<b>Replacement Year 2024</b>	
Barkdusting - Renewal	11,597
Concrete Paving - Partial Replacement	18,132
Exterior Siding - Painting	121,768
Irrigation System - Renovation	4,639
Trees - Maintenance	4,105
<b>Total for 2024</b>	<b>\$160,241</b>
<b>Replacement Year 2025</b>	
Irrigation System - Renovation	4,755
Trees - Maintenance	4,208
<b>Total for 2025</b>	<b>\$8,963</b>
<b>Replacement Year 2026</b>	
Barkdusting - Renewal	12,184
Irrigation System - Renovation	4,874
Trees - Maintenance	4,313
<b>Total for 2026</b>	<b>\$21,371</b>

**Charbonneau Green Townhome Association  
Annual Expenditure Detail**

Description	Expenditures
<b>Replacement Year 2027</b>	
Concrete Paving - Partial Replacement	19,526
Irrigation System - Renovation	4,995
Pool House: Siding/Roof/Gutter Repairs	1,474
Trees - Maintenance	4,421
<b>Total for 2027</b>	<b>\$30,416</b>
<b>Replacement Year 2028</b>	
Barkdusting - Renewal	12,801
Irrigation System - Upgrade	7,552
Irrigation System: Clock/Timers - Replacement	3,021
Landscaping - Upgrade	7,552
Metal Fence - Replacement	8,836
Pool Furniture/Equipment - Replacement	3,021
Trees - Maintenance	4,531
<b>Total for 2028</b>	<b>\$47,316</b>
<b>Replacement Year 2029</b>	
Pool Filter - Replacement	1,575
Pool Heater - Replacement	6,560
Trees - Maintenance	4,645
<b>Total for 2029</b>	<b>\$12,780</b>
<b>Replacement Year 2030</b>	
Barkdusting - Renewal	13,449
Concrete Paving - Partial Replacement	21,027
Pool Pump - Replacement	2,690
Trees - Maintenance	4,761
<b>Total for 2030</b>	<b>\$41,927</b>
<b>Replacement Year 2031</b>	
Exterior Siding - Painting	144,744
Trees - Maintenance	4,880
<b>Total for 2031</b>	<b>\$149,624</b>



**Charbonneau Green Townhome Association  
Annual Expenditure Detail**

Description	Expenditures
<b>Replacement Year 2032</b>	
Barkdusting - Renewal	14,130
Trees - Maintenance	5,002
<b>Total for 2032</b>	<b>\$19,132</b>
<b>Replacement Year 2033</b>	
Concrete Paving - Partial Replacement	22,644
Irrigation System - Upgrade	8,545
Irrigation System: Clock/Timers - Replacement	3,418
Landscaping - Upgrade	8,545
Pool Cover - Replacement	7,241
Pool House: Hot Water Heater - Replacement	1,448
Pool House: Restroom - Renewal	3,418
Trees - Maintenance	5,127
<b>Total for 2033</b>	<b>\$60,387</b>
<b>Replacement Year 2034</b>	
Barkdusting - Renewal	14,845
Trees - Maintenance	5,255
<b>Total for 2034</b>	<b>\$20,100</b>
<b>Replacement Year 2035</b>	
Trees - Maintenance	5,387
<b>Total for 2035</b>	<b>\$5,387</b>
<b>Replacement Year 2036</b>	
Barkdusting - Renewal	15,597
Concrete Paving - Partial Replacement	24,385
Trees - Maintenance	5,521
<b>Total for 2036</b>	<b>\$45,503</b>
<b>Replacement Year 2037</b>	
Pool House: Siding/Roof/Gutter Repairs	1,886
Trees - Maintenance	5,659
<b>Total for 2037</b>	<b>\$7,546</b>

**Charbonneau Green Townhome Association  
Annual Expenditure Detail**

Description	Expenditures
<b>Replacement Year 2038</b>	
Barkdusting - Renewal	16,386
Exterior Siding - Painting	172,055
Irrigation System - Upgrade	9,668
Irrigation System: Clock/Timers - Replacement	3,867
Landscaping - Upgrade	9,668
Pool - Resurface	40,605
Pool House: Light Fixtures - Replacement	435
Trees - Maintenance	5,801
<b>Total for 2038</b>	<b>\$258,484</b>
<b>Replacement Year 2039</b>	
Concrete Paving - Partial Replacement	26,260
Pool Filter - Replacement	2,015
Pool Heater - Replacement	8,398
Trees - Maintenance	5,946
<b>Total for 2039</b>	<b>\$42,619</b>
<b>Replacement Year 2040</b>	
Barkdusting - Renewal	17,216
Pool Pump - Replacement	3,443
Trees - Maintenance	6,094
<b>Total for 2040</b>	<b>\$26,753</b>
<b>Replacement Year 2041</b>	
Trees - Maintenance	6,247
<b>Total for 2041</b>	<b>\$6,247</b>
<b>Replacement Year 2042</b>	
Barkdusting - Renewal	18,087
Concrete Paving - Partial Replacement	28,279
Trees - Maintenance	6,403
<b>Total for 2042</b>	<b>\$52,770</b>
<b>Replacement Year 2043</b>	
Brick Posts - Repair	7,657

**Charbonneau Green Townhome Association  
Annual Expenditure Detail**

Description	Expenditures
<b><i>Replacement Year 2043 continued...</i></b>	
Irrigation System - Upgrade	10,938
Irrigation System: Clock/Timers - Replacement	4,375
Landscaping - Upgrade	10,938
Parking Area - Repair	30,627
Pool Cover - Replacement	9,270
Pool Furniture/Equipment - Replacement	4,375
Pool House: Shower Repair	2,188
Trees - Maintenance	6,563
<b>Total for 2043</b>	<b>\$86,931</b>
<b>Replacement Year 2044</b>	
Barkdusting - Renewal	19,003
Trees - Maintenance	6,727
<b>Total for 2044</b>	<b>\$25,730</b>
<b>Replacement Year 2045</b>	
Concrete Paving - Partial Replacement	30,454
Exterior Siding - Painting	204,519
Trees - Maintenance	6,895
<b>Total for 2045</b>	<b>\$241,868</b>
<b>Replacement Year 2046</b>	
Barkdusting - Renewal	19,965
Trees - Maintenance	7,068
<b>Total for 2046</b>	<b>\$27,033</b>
<b>Replacement Year 2047</b>	
Pool House: Siding/Roof/Gutter Repairs	2,415
Trees - Maintenance	7,244
<b>Total for 2047</b>	<b>\$9,659</b>

**Charbonneau Green Townhome Association  
Detail Report by Category**

**Exterior Siding - Painting**

		1 Total	@ \$105,000.00
Asset ID	1019	Asset Cost	\$105,000.00
	Non-Capital	Percent Replacement	100%
	Painting	Future Cost	\$121,767.81
Placed in Service	January 2017		
Useful Life	7		
Replacement Year	2024		
Remaining Life	6		

This component provides funding for the painting of the exterior siding. This includes the 48 homes, pool house and fence.

The useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator. The Association was painted in 2010 at a cost of \$105,000.

**Painting - Total Current Cost                                   \$105,000**

**Charbonneau Green Townhome Association**  
**Detail Report by Category**

**Brick Posts - Repair**

		14 Each	@ \$295.00
Asset ID	1014	Asset Cost	\$4,130.00
	Non-Capital	Percent Replacement	100%
	Fencing/Security	Future Cost	\$4,130.00
Placed in Service	January 1978		
Useful Life	25		
Adjustment	9		
Replacement Year	2018		
Remaining Life	0		

This component provides funding for the repair of the brick sections of the fence at the pool

At the time of the site visit, there were 14 posts in various stages of disrepair. Many of the top bricks were losing mortar between them. The posts should be repointed, cleaned, and sealed to prevent future water intrusion. Each posts has about 30 square feet of brick surface.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator. The Association should obtain a bid to confirm this cost estimate.

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

**Metal Fence - Replacement**

		225 LF	@ \$30.68
Asset ID	1013	Asset Cost	\$6,903.00
	Capital	Percent Replacement	100%
	Fencing/Security	Future Cost	\$8,836.42
Placed in Service	January 1978		
Useful Life	50		
Replacement Year	2028		
Remaining Life	10		

This component provides funding for the replacement of the metal fence surrounding the pool.

Schwindt and Company estimated 225 lineal feet of metal fencing.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator. The Association should obtain a bid to confirm this cost estimate.

**Charbonneau Green Townhome Association  
Detail Report by Category**

<b>Fencing/Security - Total Current Cost</b>	<b>\$11,033</b>
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**Charbonneau Green Townhome Association  
Detail Report by Category**

**Pool House: Light Fixtures - Replacement**

		3 Each	@ \$88.50
Asset ID	1008	Asset Cost	\$265.50
	Capital	Percent Replacement	100%
	Lighting	Future Cost	\$265.50
Placed in Service	January 1978		
Useful Life	20		
Adjustment	20		
Replacement Year	2018		
Remaining Life	0		

This component provides funding for the replacement of the 3 light fixtures on the pool house. The cost and useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator. The Association should obtain a bid to confirm this cost estimate.

**Lighting - Total Current Cost \$265**

**Charbonneau Green Townhome Association  
Detail Report by Category**

**Pool - Resurface**

		1 Total	@ \$24,780.00
Asset ID	1022	Asset Cost	\$24,780.00
	Capital	Percent Replacement	100%
	Recreation/Pool	Future Cost	\$28,036.30
Placed in Service	January 2008		
Useful Life	15		
Replacement Year	2023		
Remaining Life	5		

This component provides funding for the resurfacing of the pool. The pool was resurfaced in 2008 at a cost of \$13,699. Retiling and caulking brought the cost up to \$21,000.

The cost and useful life of this component is based on information provided by Anderson Poolworks.

**Pool Cover - Replacement**

		1 Total	@ \$5,000.00
Asset ID	1028	Asset Cost	\$5,000.00
	Capital	Percent Replacement	100%
	Recreation/Pool	Future Cost	\$5,657.04
Placed in Service	January 2013		
Useful Life	10		
Replacement Year	2023		
Remaining Life	5		

This component provides funding for the pool cover.

According to the Association they are considering purchasing a pool cover in 2013 at a cost of \$2,000. The useful life assumption is based on accepted industry estimates as established by RS Means and/or The National Construction Estimator.

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



**Charbonneau Green Townhome Association  
Detail Report by Category**

<b>Pool Deck - Resurface</b>		3,000 SF	@ \$11.80
Asset ID	1005	Asset Cost	\$3,540.00
	Capital	Percent Replacement	10%
	Recreation/Pool	Future Cost	\$3,540.00
Placed in Service	January 1978		
Useful Life	30		
Adjustment	10		
Replacement Year	2018		
Remaining Life	0		

This component provides funding for the resurfacing of the pool deck.

Schwindt and Company estimated 3,000 square feet of concrete surface.

The useful life assumption is based on accepted industry estimates as established by RS Means and/or The National Construction Estimator. The cost is based on a per square foot estimate from Coast Pavement. The Association should obtain a bid to confirm this cost estimate.

<b>Pool Filter - Replacement</b>		1 Total	@ \$1,200.00
Asset ID	1004	Asset Cost	\$1,200.00
	Capital	Percent Replacement	100%
	Recreation/Pool	Future Cost	\$1,230.00
Placed in Service	January 1978		
Useful Life	10		
Adjustment	31		
Replacement Year	2019		
Remaining Life	1		

This component provides funding for the replacement of the pool filter sand.

The cost and useful life of this component is based on information provided by Pacific Pool and Spa.

**Charbonneau Green Townhome Association  
Detail Report by Category**

**Pool Furniture/Equipment - Replacement**

		1 Total	@ \$2,360.00
Asset ID	1011	Asset Cost	\$2,360.00
	Capital	Percent Replacement	100%
	Recreation/Pool	Future Cost	\$3,021.00
Placed in Service	January 2013		
Useful Life	15		
Replacement Year	2028		
Remaining Life	10		

This component provides funding for the replacement of the pool furniture and miscellaneous equipment.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator. The Association should obtain a bid to confirm this cost estimate.

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

**Pool Heater - Replacement**

		1 Total	@ \$5,000.00
Asset ID	1003	Asset Cost	\$5,000.00
	Capital	Percent Replacement	100%
	Recreation/Pool	Future Cost	\$5,125.00
Placed in Service	January 1978		
Useful Life	10		
Adjustment	31		
Replacement Year	2019		
Remaining Life	1		

This component provides funding for the replacement of the pool heater. According to Anderson Pool, the heater is on it's last leg and would cost approximately \$3,600 to install.

The cost and useful life of this component is based on information provided by Pacific Pool and Spa.

**Charbonneau Green Townhome Association  
Detail Report by Category**

**Pool House: Hot Water Heater - Replacement**

		1 Total	@ \$1,000.00
Asset ID	1007	Asset Cost	\$1,000.00
	Capital	Percent Replacement	100%
	Recreation/Pool	Future Cost	\$1,000.00
Placed in Service	January 1978		
Useful Life	15		
Adjustment	19		
Replacement Year	2018		
Remaining Life	0		

This comment provides funding for the replacement of the pool house hot water heater.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator. The Association should obtain a bid to confirm this cost estimate.

**Pool House: Restroom - Renewal**

		1 Total	@ \$2,360.00
Asset ID	1009	Asset Cost	\$2,360.00
	Non-Capital	Percent Replacement	100%
	Recreation/Pool	Future Cost	\$3,417.98
Placed in Service	January 2013		
Useful Life	20		
Replacement Year	2033		
Remaining Life	15		

This component provides funding for the renewal of the restroom at the pool house.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator. The Association should obtain a bid to confirm this cost estimate.

**Charbonneau Green Townhome Association  
Detail Report by Category**

**Pool House: Shower Repair**

		1 Total	@ \$1,180.00
Asset ID	1006	Asset Cost	\$1,180.00
	Non-Capital	Percent Replacement	100%
	Recreation/Pool	Future Cost	\$2,187.65
Placed in Service	January 2013		
Useful Life	30		
Replacement Year	2043		
Remaining Life	25		

This component provides funding for the repair of the exterior shower on the pool house.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator.

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

**Pool House: Siding/Roof/Gutter Repairs**

		1 Total	@ \$1,180.00
Asset ID	1002	Asset Cost	\$1,180.00
	Non-Capital	Percent Replacement	100%
	Recreation/Pool	Future Cost	\$1,473.66
Placed in Service	January 2017		
Useful Life	10		
Replacement Year	2027		
Remaining Life	9		

This component provides funding for the repair of the wood siding, concrete tile roof, and gutters on the pool house. The building measures 20 feet by 20 feet.

In 2007, the Association had \$684 of work done on the gutters.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator.

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

**Charbonneau Green Townhome Association  
Detail Report by Category**

<b>Pool Pump - Replacement</b>		1 Total	@ \$2,000.00
Asset ID	1010	Asset Cost	\$2,000.00
	Capital	Percent Replacement	100%
	Recreation/Pool	Future Cost	\$2,101.25
Placed in Service	January 2010		
Useful Life	10		
Replacement Year	2020		
Remaining Life	2		

This component provides funding for the replacement of the pool pump. The pool pump motor was replaced in 2010 for \$419. According to Anderson Pool, the State of Oregon is considering making a variable speed pump mandatory. This component assumes the statute is passed requiring installation of a variable speed pump.

The cost and useful life of this component is based on information provided by Pacific Pool and Spa.

**Recreation/Pool - Total Current Cost                         \$49,600**

**Charbonneau Green Townhome Association**  
**Detail Report by Category**

**Barkdusting - Renewal**

		1 Total	@ \$10,000.00
Asset ID	1023	Asset Cost	\$10,000.00
	Non-Capital	Percent Replacement	100%
	Grounds Components	Future Cost	\$10,000.00
Placed in Service	January 2016		
Useful Life	2		
Replacement Year	2018		
Remaining Life	0		

This component provides funding for the barkdusting of the property. In 2009 1/3rd of the property was barkdusted for \$3,486.

The Association plans to spend \$2,500 each year on barkdust.

**Brick Roundabout - Curbing Project**

		1 Total	@ \$5,900.00
Asset ID	1021	Asset Cost	\$5,900.00
	Capital	Percent Replacement	100%
	Grounds Components	Future Cost	\$5,900.00
Placed in Service	January 1978		
Useful Life	1		
Adjustment	36		
Replacement Year	2018		
Remaining Life	0		

This component provides funding for a curbing project for the roundabout on Cypress Point. Currently there is a landscaped circle surrounded by brick pavers. The Association is considering removing some pavers and installing a raised curb to protect the landscaping.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator. The Association should obtain a bid to confirm this cost estimate.

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

**Charbonneau Green Townhome Association**  
**Detail Report by Category**

<b>Concrete Paving - Partial Replacement</b>			
		26,500 SF	@ \$11.80
Asset ID	1015	Asset Cost	\$15,635.00
	Non-Capital	Percent Replacement	5%
	Grounds Components	Future Cost	\$15,635.00
Placed in Service	January 2016		
Useful Life	3		
Adjustment	-1		
Replacement Year	2018		
Remaining Life	0		

This component provides funding for the partial replacement of all the concrete paving and sidewalks on the property. There are 9 limited common area driveways and a sidewalk that allows access to the pool. Generally concrete installation has a useful life greater than 30 years, therefore this component funds for replacement of damaged portions which is estimated to be 5% of the total area every 2 years.

Schwindt and Company estimated 26,500 square feet of concrete paving.

The useful life assumption is based on accepted industry estimates as established by RS Means and/or The National Construction Estimator. The cost is based on a per square foot estimate from Coast Pavement. The Association should obtain a bid to confirm this cost estimate.

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

<b>Irrigation System - Renovation</b>			
		1 Total	@ \$4,000.00
Asset ID	1030	Asset Cost	\$4,000.00
	Capital	Percent Replacement	100%
	Grounds Components	Future Cost	\$4,000.00
Placed in Service	January 2013		
Useful Life	1		
Replacement Year	2018		
Remaining Life	0		

This component provides funding for the renovation and upgrade of the irrigation system.

The cost and useful life assumptions are based on information provided by Showplace Landscape.

The Association budgets \$2,500 in the operating budget. This number has been reduced to take this into account.

**Charbonneau Green Townhome Association  
Detail Report by Category**

**Irrigation System - Upgrade**

		1 Total	@ \$5,900.00
Asset ID	1026	Asset Cost	\$5,900.00
	Capital	Percent Replacement	100%
	Grounds Components	Future Cost	\$6,675.31
Placed in Service	January 2023		
Useful Life	5		
Replacement Year	2023		
Remaining Life	5		

This component provides funding for the renovation and upgrade of the irrigation system.

The cost and useful life assumptions are based on information provided by Showplace Landscape.

**Irrigation System: Clock/Timers - Replacement**

		4 Each	@ \$590.00
Asset ID	1025	Asset Cost	\$2,360.00
	Capital	Percent Replacement	100%
	Grounds Components	Future Cost	\$2,670.12
Placed in Service	January 2023		
Useful Life	5		
Replacement Year	2023		
Remaining Life	5		

This component provides funding for the replacement of damaged clocks and timers. According to Showplace, there are 4 timers.

The cost and useful life assumptions are based on information provided by Showplace Landscape.



**Charbonneau Green Townhome Association**  
**Detail Report by Category**

**Landscaping - Upgrade**

		1 Total	@ \$5,900.00
Asset ID	1016	Asset Cost	\$5,900.00
	Non-Capital	Percent Replacement	100%
	Grounds Components	Future Cost	\$5,900.00
Placed in Service	January 2010		
Useful Life	5		
Adjustment	-2		
Replacement Year	2018		
Remaining Life	0		

This component provides funding for the upgrade of the landscaping.

The cost and useful life assumptions are based on information provided by Showplace Landscape.

**Parking Area - Repair**

		7,000 SF	@ \$2.36
Asset ID	1020	Asset Cost	\$16,520.00
	Non-Capital	Percent Replacement	100%
	Grounds Components	Future Cost	\$16,520.00
Placed in Service	January 1978		
Useful Life	25		
Adjustment	9		
Replacement Year	2018		
Remaining Life	0		

This component provides funding for the repair of the street side parking areas.

Schwindt and Company estimated 7,000 square feet of asphalt parking areas.

The useful life assumption is based on accepted industry estimates as established by RS Means and/or The National Construction Estimator. The cost is based on a per square foot estimate from Coast Pavement. The Association should obtain a bid to confirm this cost estimate.

**Charbonneau Green Townhome Association  
Detail Report by Category**

<b>Trees - Maintenance</b>		1 Total	@ \$3,540.00
Asset ID	1018	Asset Cost	\$3,540.00
	Non-Capital	Percent Replacement	100%
	Grounds Components	Future Cost	\$3,540.00
Placed in Service	January 2015		
Useful Life	1		
Replacement Year	2018		
Remaining Life	0		

This component provides funding for the maintenance of the trees on the property.

The cost and useful life is based on information from Good News Tree Service.

Good News Tree Service provides annual inspections to help identify and plan tree work for the year. It is recommended that the Association have Good News Tree Service perform an inspection to determine needed tree maintenance each year.

**Grounds Components - Total Current Cost   \$69,755**

**Charbonneau Green Townhome Association  
Detail Report by Category**

<b>Insurance Deductible</b>			1 Total	@ \$1,000.00
Asset ID	1027		Asset Cost	\$1,000.00
	Non-Capital		Percent Replacement	100%
	Contingency		Future Cost	\$1,000.00
Placed in Service	January 2011			
Useful Life	1			
Replacement Year	2018			
Remaining Life	0			

This component provides funding for the insurance deductible if a claim is made.

**Contingency - Total Current Cost                                    \$1,000**

# 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.

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

or

$$\text{FFB} = (\text{Current Cost} \times \text{Effective Age} / \text{Useful Life}) + [(\text{Current Cost} \times \text{Effective Age} / \text{Useful Life}) / (1 + \text{Interest Rate})^{\text{Remaining Life}}] - [(\text{Current Cost} \times \text{Effective Age} / \text{Useful Life}) / (1 + \text{Inflation Rate})^{\text{Remaining Life}}]$$

**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 statutes.
  
- **Threshold Funding:** Establishing a reserve funding goal of keeping the *Reserve Balance* above a specified dollar or *Percent Funded* amount. Depending on the threshold, this may be more or less conservative than fully 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 *Reserve Component* can be expected to serve its intended function if properly constructed in its present application or installation.