

# CHAPARRAL ADULT VILLAGE

Plan No. 9810287 2023/2024 Reserve Fund Study



Prepared For: The Board of Directors Chaparral Adult Village Condominium Corporation

> c/o Go Smart Property Managers INC. #230 – 1010 8 Avenue S.W. Calgary, Alberta, T2P 1J2

Prepared By: Westview Consulting Ltd. 203 – 2526 Battleford Avenue S.W. Calgary, AB, T3E 7J4 January 17, 2024

Chaparral Adult Village Condominium Corporation c/o Go Smart Property Managers INC. #230 – 1010 8 Avenue S.W. Calgary, Alberta, T2P 1J2

#### **Reserve Fund Study**

Westview Consulting Ltd was retained by the Board of Directors to conduct a Reserve Fund Study of the Chaparral Adult Village Condominium Complex. I have prepared and submit to you this report.

The Reserve Fund Study describes the reserve fund concepts and various reserve fund items. It provides current and future replacement reserve estimates and recommends reserve fund actions. The Reserve Fund Study is a complex document and should be reviewed in detail and within the context of this report.

In my opinion, the current reserve fund position of Chaparral Adult Village will be sufficient to meet the ongoing reserve obligations of the corporation, provided that, a reserve fund plan and strategy is adopted and that the annual contributions to the reserve fund are aligned with the recommendations as outlined in schedule "B" of the addenda.

Westview Consulting Ltd would be pleased to provide you with complete review and updating services for the reserve fund requirements as required in the future.

The Assumptions and Limiting Conditions that apply to the opinions expressed herein are also contained in the report.

Should there be any additional questions, please do not hesitate to contact me directly.

Yours truly,

John Corl

John Cox, CPM®, CRP, CMOC 403-700-3235

#### CHAPARRAL ADULT VILLAGE - RESERVE FUND STUDY

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• Schedule "A" Benchmark Analysis - Summary of Reserve Data Estimates

Schedule "B" 30 Year Cash Flow Projections & Analysis

# **Executive Summary of Facts and Conclusions**

This executive summary has been prepared as a quick reference of pertinent facts and estimates of this Reserve Fund Study, and it is provided as convenience only. Readers are advised to refer to the full text of this Reserve Fund Study for detailed information.

DDO	БЕБТ	Y DATA
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Applicant	Chaparral Adult Village Condominium Corporation
Date of Study	September 1, 2023
Property	Chaparral Adult Village Chaparral Pointe S.E. Calgary, Alberta
Construction Inflation Factor Interest Rate	2.0% 1.5%

#### CASH FLOW TABLE

Westview Consulting Ltd. has prepared the following Cash Flow Table, which projects minimum annual funding requirements proposed to meet estimated Reserve Fund expenditures.

CHAPARR	AL ADULT V	/ILLAGE					
Year Starting September 1	Opening Balance	Recommended Annual Contribution	Estimated Expenditures	Estimated Interest Earned 1.50%	Percentage Increase in Recommended Annual Contributions	Closing Balance	Per Unit Per Month Averaged
2023	\$595,010	\$78,639	\$163,570	\$8,925	n/a	\$519,004	
2024	\$519,004	\$86,400	\$189,964	\$7,785	9.87%	\$423,225	
2025	\$423,225	\$100,800	\$213,300	\$6,348	16.67%	\$317,074	
2026	\$317,074	\$102,816	\$0	\$4,756	2.00%	\$424,646	\$179
2027	\$424,646	\$104,872	\$439,593	\$6,370	2.00%	\$96,295	\$182
2028	\$96,295	\$106,970	\$107,107	\$1,444	2.00%	\$97,602	\$186
2029	\$97,602	\$109,109	\$145,900	\$1,464	2.00%	\$62,275	\$189
2030	\$62,275	\$111,291	\$0	\$934	2.00%	\$174,501	\$193
2031	\$174,501	\$113,517	\$60,000	\$2,618	2.00%	\$230,635	\$197
2032	\$230,635	\$115,788	\$196,275	\$3,460	2.00%	\$153,607	\$201
2033	\$153,607	\$118,103	\$4,300	\$2,304	2.00%	\$269,715	\$205
2034	\$269,715	\$120,465	\$73,300	\$4,046	2.00%	\$320,926	\$209
2035	\$320,926	\$122,875	\$0	\$4,814	2.00%	\$448,614	\$213
2036	\$448,614	\$125,332	\$38,800	\$6,729	2.00%	\$541,876	\$218
2037	\$541,876	\$127,839	\$123,470	\$8,128	2.00%	\$554,372	\$222
2038	\$554,372	\$130,396	\$62,900	\$8,316	2.00%	\$630,184	
2039	\$630,184	\$133,003	\$0	\$9,453	2.00%	\$772,640	\$231
2040	\$772,640	\$135,664	\$0	\$11,590	2.00%	\$919,893	\$236
2041	\$919,893	\$138,377	\$0	\$13,798	2.00%	\$1,072,068	\$240
2042	\$1,072,068	\$141,144	\$10,300	\$16,081	2.00%	\$1,218,993	
2043	\$1,218,993	\$143,967	\$5,200	\$18,285	2.00%	\$1,376,046	\$250
2044	\$1,376,046	\$146,847	\$43,100	\$20,641	2.00%	\$1,500,433	
2045	\$1,500,433	\$149,783	\$507,761	\$22,506	2.00%	\$1,164,962	
2046	\$1,164,962	\$152,779	\$0	\$17,474	2.00%	\$1,335,215	
2047	\$1,335,215	\$155,835	\$628,757	\$20,028	2.00%	\$882,321	
2048	\$882,321	\$158,951	\$27,200	\$13,235	2.00%	\$1,027,308	
2049	\$1,027,308	\$162,130	\$0	\$15,410	2.00%	\$1,204,848	
2050	\$1,204,848	\$165,373	\$77,824	\$18,073	2.00%	\$1,310,470	
2051	\$1,310,470	\$168,681	\$0	\$19,657	2.00%	\$1,498,807	
2052	\$1,498,807	\$172,054	\$540,500	\$22,482	2.00%	\$1,152,843	

#### RECOMMENDATIONS

Westview Consulting Ltd. recommendations, set out below and detailed in this report, will assist the corporation to achieve and maintain an adequate reserve fund. In our opinion, the current reserve fund balance, recommended annual contributions and earned investment income will adequately fund immediate and future reserve fund expenditures.

- 1. The corporation should prepare and implement a long-term reserve fund strategy.
- 2. Major repairs and replacements should be recorded in, and funded from, a reserve fund account.
- 3. For the purposes of this study, we recommend, at a minimum, the contributions to the reserve fund are aligned with Schedule B in the addenda, at least until the next review in five years.
- 4. We suggest the Board continues to investigate funding options to maximize their investment.
- 5. The corporation should make such expenditures, as necessary to maintain the property in optimum condition.
- 6. The reserve fund should be reviewed every year to ensure that the underlying assumptions are still valid and that the estimates remain current.
- 7. The corporation should update the reserve fund study every five (5) years.

It should be noted that this is a 30-year study in accordance with the Provincial Condominium Act. The recommended increase in contributions maintains the fund at a level to complete planned replacements without over taxing the owners. This may change when the reserve study is completed in five years as the expenditures are within the 30-year period, however it should be noted that expenditures for common components between year 30 and beyond may change the contribution level.

#### RESERVE FUND PRACTITIONERS CERTIFICATION

I hereby certify that I inspected the within described property. The site, exterior, and interior of the building were inspected.

The analyses, opinions, and conclusions reported herein are my personal unbiased views and are limited only by the Contingent and Limiting Conditions contained in the report. To the best of my knowledge and belief, the statements contained in this report are true and correct, subject to the Limiting Conditions herein set forth.

All factors known to the report (and the extent that the data permits) that have an impact on the opinions contained in the Reserve Fund Study have been taken into consideration to the extent felt necessary in rendering a considered opinion of value. No significant data has been knowingly withheld.

Employment in and compensation for making this report are in no way contingent upon the opinions reported. The opinions contained in this report have not been influenced by any requirement to report a predetermined conclusion.

I further certify that I have no interest, present or contemplated, in the property or its management.

This Reserve Fund Study was prepared in conformity with accepted practices for reserve fund studies.

Not all details of the process are included in this report. Additional information is contained in the practitioner's files.

Unless otherwise stated, all work in completing this report has been personally completed by me.

John Cox, CRP Certified Reserve Planner

#### TERMS AND LIMITING CONDITIONS

- 1. No title search has been made. The legal and survey description of the property as stated herein are those provided by the Board of Directors and the land titles office and are assumed to be correct.
- Any architectural, structural, mechanical, electrical and other plans and specifications of the building and improvements provided by the Board of Directors and the Property Manager are assumed to be correct. Furthermore, all buildings and improvements are deemed to have been constructed and finished in accordance with such plans and specifications, unless otherwise noted.
- 3. Sketches, drawings, diagrams, photographs, or any exhibits in the report are intended to assist the reader in visualizing the property and its surroundings and are included for the sole purpose of illustration. The drawings are not intended as surveys and no responsibility is assumed for their cartographic accuracy. Any drawings are not intended to be exact in size, scale or detail.
- 4. No legal survey, soil tests, engineering investigations, detailed quantity survey compilations, nor exhaustive physical examinations have been made. Accordingly, no responsibility is assumed concerning these matters, or other technical and engineering techniques, which would be required to discover an inherent or hidden condition of the property.
- 5. Areas and dimensions of the property may or may not have been physically measured. If from plans, I assume the plans to be reasonably accurate.
- 6. In order to arrive at supportable replacement cost estimates, it was found necessary to utilize both documented and other cost data. A concerted effort has been put forth to verify the accuracy of the information contained herein. Accordingly, the information is believed to be reliable and correct, and it has been gathered to standard professional procedures, but no guarantee as to the accuracy of the data is implied.
- 7. The distribution of cost and other estimates in this report apply only under the program of utilization as identified in this report. The estimates herein must not be used in conjunction with any other appraisal or reserve fund study and are invalid if so used.
- 8. The client to whom this report is addressed may use it in deliberations affecting the subject property only, and in so doing, the report must not be extracted; it must be used in its entirety. Any and all liability is denied to all parties other than the party to whom this report is addressed.
- The agreed compensation for services rendered in preparing this report does not include fees for consultations and/or arbitrations, if any. Should personal appearance be required in connection with this report, additional fees will have to be negotiated. Unless otherwise noted, all estimates are expressed in Canadian dollars.
- 10. All opinions stated are presented as the Reserve Fund Practitioner's considered opinion based on the information set forth in the report. I assume no responsibility for changes in market conditions.
- 11. It is assumed that the construction and use of the subject property complies with all public authorities having jurisdiction, including but not limited to the Canadian Environmental Protection Act and any other applicable federal, provincial, municipal, and local environmental impact or energy laws or regulations.
- 12. Copyrights of this report remain with the author. This report cannot be duplicated in any format without the express written consent of the author.

# Purpose of Reserve Fund Study

The purpose of this Reserve Fund Study is to provide cost estimates of various reserve components, subject to major repairs and/or replacement over the lifetime of the property, and to estimate the funding required for such major repairs and replacement in accordance with the provisions of the Condominium Property Act of Alberta.

# Definition of Reserve Fund Study

This Reserve Fund Study is a financial document, and it includes cost estimates of major repairs and replacement of the common element components and assets of the corporation. It provides financial information, estimates and projections for funding the major repairs and replacement of the common element components and assets of the corporation.

# **Condominium Property**

The property is located on Chaparral Pointe S.E., in Calgary, Alberta.

The property is legally described as follows: Bareland Condominium Plan of Lot 65, Block 17, Plan 9810097 within the N.E. <sup>1</sup>/<sub>4</sub>, Sec. 23, Twp. 22, Rge. 1, W. 5<sup>th</sup> M.

# Boundaries of Condominium Units

Condominium unit boundaries are basically defined by the Bylaws and section 9 of the Condominium Property Act.

# **Reserve Fund Study**

This Reserve Fund Study is a financial document, which provides the basis for funding major repairs and replacement of the common elements and assets of the corporation.

It is a practical guide to planning budgets and maintenance programs, and unlike a technical audit, it deals not in detailed technical matters but rather takes a business approach to reserve fund management.

This Reserve Fund Study comprises the following elements: It identifies the reserve components, their quality, normal life span and present condition;

- It identifies the reserve components, their quality, normal life span and present condition;
- It provides current replacement cost estimates including the cost of removing worn-out items and special safety provisions;
- It provides observed condition estimates of components in terms of year's effluxed and accrued reserve costs;
- It projects the useful life of reserve components in terms of remaining serviceable years:
- It projects current replacement costs at an appropriate and compounded inflation rate;
- It projects the value of current reserve funds compounded at a long-term interest rate;

• It calculates current reserve fund contributions required and to be invested in interest bearing securities.

The salient estimates and conclusions of this Reserve Fund Study are contained in the various schedules hereinafter. Any recommendations are for guidance to management and the board of directors.

# Methodology

The methodology of a reserve fund study includes the examination of the condominium documentation, financial statements, budgets and existing reserve funds, the physical inspection of common elements, etc. Building plans; specifications and reports, field notes and other information is analyzed in preparation of various estimates and value judgements.

In estimating replacement reserves, the component method of valuation is used. Reserve items consist of building or site components, such as roof systems, pavement and sidewalks, each of which is deemed to have a limited life span, and therefore, they must be repaired, replaced or periodically upgraded to maintain the property in excellent condition.

Replacement cost estimates are based on the assumption of using quality materials, as specified, or built, or in the case of older developments, as required under current building code regulations, at contractors' prices, using union labour and current construction techniques, and including contractors' overhead and profit. The RS Means Manual and local contractor estimates have been utilized for pricing replacement components.

In estimating the life span of the various components, physical deterioration, functional obsolescence and environmental factors are being contemplated. In measuring the reserve requirements, we have considered depreciation tables and normal life span experience records. Finally, I relied on my own judgement and experience of estimating the current condition and remaining life spans of reserve components.

#### Scope and Investigation

The property has been inspected. Available building plans (as indicated later in this report) have been examined for details of construction, improvements and other relevant component data. I also examined the condominium documents and available financial statements and/or budgets.

Cost data have been investigated, using construction cost services, modified as to time, location and quality of construction.

#### **Reserve Fund Estimates**

Replacement reserve estimates are conveniently classified in terms of building groups, common element facilities and site improvements. Reserve fund estimates include not only replacement components but also repairs to building and equipment.

#### CHAPARRAL ADULT VILLAGE - RESERVE FUND STUDY

Reserve fund estimates apply to structures, improvements and equipment, which comprise common elements.

Any additions or improvements made by unit owners to their respective premises are not included in these estimates. Owners are advised to adopt maintenance programs for their respective units.

Reserve fund estimates include provisions for demolition and disposal costs, dumping fees, as required, and the applicable Goods and Services Tax ("GST").

# **Reserve Fund Definitions and Concepts**

In estimating reserves required for maintaining the building components and improvements at desired standards and conditions, one must quantify the various reserve components, estimate replacement costs and project cost estimates in accordance with anticipated life spans. Therefore, it is essential that the terminology and methodology be clearly understood.

Reserve Component or Item	Identification and description of the building component or improvement.
Replacement Cost	The estimated cost of repairing or replacing a reserve component at current prices including the cost of demolition and disposal.
Expected or Normal Life Span	The estimated life expectancy of a reserve component in terms of years under normal conditions.
Actual Age	The chronological age of the building components, expressed in years.
Effective Age	The observed condition estimate of building components and improvements not necessarily the actual age, expressed in years.
Remaining Life Span	The difference between the expected or normal life span and the effective age of the reserve component.
Projected Inflation	An estimated long-term inflation factor, used in projecting cost estimates.
Projected Interest Rate	An averaged long-term interest rate, used in calculating interest earned from the investment of reserve funds.
Current Replacement Costs	The estimated costs of replacing reserve components at current prices.
Future Replacement Costs	The estimated costs of replacing reserve components at future prices.

#### Annual Reserve Assessment

Annual amount required to be paid into the reserve fund and to be invested at the projected interest rate to fund the future reserve requirements.

#### Conditions and Assumptions

In estimating various reserve items, certain assumptions are made in respect to structural repairs and replacements of improvements. For example, reserves for exterior walls, structural repairs, replacements of mechanical and electrical components are difficult to predict and/or quantify. Therefore, the only reasonable approach is to provide contingency estimates.

The underlying assumptions and quantification of contingency reserves should be reviewed from time to time, particularly, in the context of repair experience and problem investigations, such as water damage, cracks in walls and concrete structures, noticeable deterioration, etc.

Reserve fund estimates are subjective, and it must be appreciated that reserve fund budgeting and projections are not exact sciences. They are, at best, prudent provisions for all possible contingencies, if, as and when they arise. Reserve fund requirements are subject to change and must be reviewed and modified over time, not less than every five years.

In essence, the corporation should adopt a long-term policy regarding reserve fund allocations, which must be flexible to accommodate changes in reserve fund requirements in the future.

#### **Reserve Fund Projection Factors**

Historically, building costs have been rising at various rates from year to year, depending on business cycles, economic conditions, interest rates, etc.

Long term cost increases in the future, are not expected to be impacted by extreme inflationary pressures, and therefore, I expect the long-term average cost factor will remain at or slightly above 2.0%. For the purpose of this study, the long-term inflation rate is assumed to be 2.0%.

Similarly, interest rates have fluctuated from period to period, and they have been impacted by the inflation as well as government policies. There are some indications that rates could rise slightly over the foreseeable future.

Based on the amount of funds currently held by the Board and the capacity to generate additional sums on an annual basis, it is assumed that an overall long-term investment rate of 1.5% is reasonable

Inflation Rate	2.0%
Interest Rate	1.5%

RESERVE FUND PROJECTIONS SHOULD BE REGULARLY REVIEWED TO ADJUST FOR CHANGES IN INFLATIONARY TRENDS AND INVESTMENT RETURNS, AS THEY SIGNIFICANTLY IMPACT RESERVE FUND REQUIREMENTS.

# **Descriptions - Buildings and Improvements**

#### GENERAL DESCRIPTION

Chaparral Adult Village was designed and constructed in 1998 and consists of 48 multi-unit residential townhome units.

Site improvements include paved access drive, concrete driveways, town storm and sanitary sewers and water supply system, vinyl and wood fencing, and landscaping.

The project is architecturally designed and has numerous design features. The overall construction, materials and workmanship are of good quality, and the property is in good condition.

#### **BUILDING PLANS**

The condominium plans were reviewed and measurements for several of the building components were used from these plans.

The building and improvements have been inspected and photographed. Various construction details, facilities, equipment installations and improvements have been noted for consideration in the component estimates herein.

#### BASIC CONSTRUCTION COMPONENTS

**Excavation and Foundations:** reinforced concrete, compacted gravel reinforced footing and reinforced concrete floor.

Framing: wood frame structure and structural floors.

**External Walls:** wood frame, building paper, sheathing on framing, fibreglass insulation, vapour barrier, vinyl and stone accent siding, double-glazed vinyl windows and metal doors.

**Roof Construction:** consists of a sloped asphalt roof assembly. Building paper, sheathing, vapour barrier and insulation, metal soffits, fascia, eavestroughs and downspouts.

Electrical: Incoming service, wiring, fixtures; light and power, TV and telephone wiring.

# **Reserve Components - Principles and Concepts**

Reserve components are considered to be such common element components or improvements, which will be subject to physical deterioration and/or functional obsolescence, and which must be repaired and/or replaced in the future.

Reserve components must be identified and analyzed. A detailed description and analysis of each reserve component will be provided in this Reserve Fund Study hereinafter.

The reserve fund analysis herein identifies, describes and analyzes reserve components in these terms:

Identification and Description:	This includes the name of the project and a brief description of the reserve component.
Quantity Survey:	This is the unit quantity of the reserve component within the project.
Unit Cost Estimate:	This is the current replacement cost estimate of the reserve component on a per unit basis.
Replacement Cost Estimate:	It provides a total current replacement cost estimate of the reserve component.
Life Span Analysis:	This is the life cycle analysis of each reserve component based on the observed condition estimate involving:
	<ul> <li>Life Span Estimate of the reserve component in terms of years;</li> <li>Effective Age Estimate, which is an observed condition judgment in terms of years; and</li> <li>Remaining Life Estimate, which is the useful life of the reserve remaining from the date of the inspection.</li> </ul>
Reserve Fund Estimates:	These are various estimates in respect to reserve fund budgeting, which include:
	1. <b>Current Replacement Costs:</b> these are the current replacement cost estimates of the various reserve components.
	<ol> <li>Future Replacement Costs: these are the future replacement cost estimates of the reserve components based on long-term inflationary trends.</li> </ol>
	3. <b>Current Reserve Fund Requirements:</b> these are the current reserve fund requirements (or obligations), which consist of the amount of reserve funding required today based on the effective age analysis of each reserve component.

- 4. Future Reserve Fund Accumulation: this is the estimated future reserve fund accumulation, which is the current amount in the reserve fund invested at a long term, stable interest rate, at the end of the life span of each reserve component.
- 5. Future Reserve Fund Requirements: these are the estimated future reserve fund requirements, which consist of the estimated amount required for the repair or replacement of the reserve component, which must be funded by adequate reserve fund contributions over the estimated remaining life span of the reserve component.
- 6. Annual Reserve Fund Assessment: this is the required reserve fund contribution expressed in annual payments invested at a long term, stable interest rate over the remaining life of the reserve component.

DeficiencyThis is a brief description of any observed condition, which requires remedial<br/>action.Analysis:action.

The reserve fund components are grouped in categories for easy reference and convenience. The cost estimates are taken from RS Means Repair & Remodeling Cost Data, Handscomb Yardsticks for Costing – cost data from contractors, the property manager, Condominium Corporation and our database of costs. The life span estimates herein are based on life cycle manuals, our experience and observation of conditions.

#### UNDERLYING ASSUMPTIONS

The following assumptions underlie the reserve fund estimates hereinafter and are based on my investigation, observation and analysis of the various reserve components and our experience.

#### QUALITY OF CONSTRUCTION

The project had been designed and constructed in accordance with applicable building codes and then current construction practices. The quality of construction, materials and workmanship are generally considered to be good.

The reserve fund estimates hereinafter are affected by observed conditions, the current program of renovations and preventive maintenance, and an analysis of building components, which reflect the quality of construction and finishing.

#### DEMOLITION AND DISPOSAL COSTS

The estimates herein include provisions for demolition and disposal costs including dumping fees. These costs have been rising in recent years; particularly, dumping of certain materials has become problematic and very costly. It appears that certain codes and environmental regulations will become more stringent in future years, all of which will further increase disposal costs.

#### GOODS AND SERVICE TAX

The Goods and Services Tax ("GST") applies to all repairs and replacements including disposal costs. Therefore, these costs are included in the reserve fund estimates hereinafter.

#### CONTINGENCY RESERVES

It is impossible to forecast the incidence of repairs or replacements of various reserve components, particularly, major components, such as exterior walls, structural elements, sewer and water systems. Therefore, reserve estimates are of a contingency nature, and as such, they are subject to changing conditions and repair experience over time.

#### STRUCTURAL DEFICIENCIES

The building appears to be structurally sound and there have not been any reports of structural deficiencies.

#### MANAGEMENT POLICIES

The Board of Directors should devise appropriate policies of reserve fund planning and management, differentiating between operating expenses and reserve fund expenditures.

#### LIFE SPAN ANALYSIS

Each reserve item grouping herein has been analyzed in terms of life cycle condition and expected remaining useful life. This life span analysis is based on the following factors:

#### 1. Normal Life Span

Each reserve item has been analyzed in terms of component type, quality of construction, statistical records, and normal life experience.

#### 2. Effective Life Analysis

This is the critical analysis of a reserve component and consists of determining the effective age of the reserve item within its normal life cycle based on the observed condition of the reserve item.

The validity of this analysis depends on the experience of the reserve fund planner or analyst, as this is a subjective estimate rather than an objective assessment.

#### 3. Remaining Life Span

Given a normal life span estimate and a sound estimate of the effective age, the remaining life span of a reserve item is determined by subtracting the effective age from the normal life span. This does not mean that reserve expenditures should only be made at the end of the remaining life. Reserve expenditures

should and must be made during the remaining life span to maintain building components and facilities in good condition.

A life span analysis is a subjective, or empirical, assessment of the life cycle status of a reserve component, and as such, it is only as good as the considered opinion of the reserve fund analyst. Furthermore, the life span of a reserve component is subject to change due to numerous factors.

#### PROPERTY MANAGEMENT AND MAINTENANCE

The property is professionally managed. Effective maintenance of the building and improvements, as the quality of management has a direct effect on reserve planning and building maintenance. Proactive management can prolong the life span of reserve components and ensure efficient building maintenance and operations, all of which are considerations in the reserve estimates hereinafter.

#### PREVENTIVE MAINTENANCE

The Board of Directors are well advised to have a preventative maintenance program as this type of maintenance is critical to effective and efficient operation of building components and assists in preventing premature major repair or replacement.

The Board should regularly conduct inspections and commission surveys and investigations to ensure the continued efficient operation of the building systems and the most effective use of resources.

#### REPAIR AND REPLACEMENT COST ESTIMATES

The costs of repairs and/or replacements of the many building components are invariably higher than original building costs.

When a building is being constructed, contractors have considerable latitude of planning their work and utilize economies of scale to keep costs within construction budgets, whereas repair work must frequently be performed in an expedient manner, and workers must work around existing structures. There are also other constraints, which increase the costs of remedial work.

Cost estimates must, therefore, consider such additional costs as special construction, safety installations, limited access, noise abatements, and the convenience of the occupants.

#### CHAPARRAL ADULT VILLAGE - RESERVE FUND STUDY

# Reserve Components - Description and Analysis

# STRUCTURAL & ARCHITECTURAL COMPONENTS

# Reserve Component: (1) Structures

This reserve provision covers the structural elements of the buildings.

The structure, footings and foundations consist of reinforced, cast-in-place concrete, and are deemed to have the building life span.

However, the structures are subject to freeze thaw cycles and settling over time that may cause damage to the foundations over their service life, therefore, we have reserved an allowance for a few foundation repairs.

Repairs to foundations can be completed from the inside for minor damage and with exterior excavation for any major damages.

This estimate should be reviewed in later years and updated based on any repair experience.

Reserve Component	Expected	Effective	Remaining	Current	Future
	Life (Yrs.)	Age (Yrs.)	Life (Yrs.)	Cost	Cost
Structures	50	25	25	20,000	32,812

#### **Deficiency Analysis**

No deficiencies were noted, and none were reported.

#### Reserve Component: (2) Vinyl Siding

This reserve provision covers replacement of the vinyl siding which makes up most of the siding on all buildings throughout the complex.

Vinyl siding is extruded polyvinylchloride (PVC). The colours go through the material, so scratching the surface will not reveal any colour inconsistencies. This allows for a more maintenance free finish that does not require repainting.

Good siding installations prevent or minimize water penetration.

With proper installation and maintenance this component has a life expectancy 35 plus years.

The Board stated that approximately one half of the vinyl siding was recently replaced so we have given and overall effective for this component of 10 years.

This is a long-term reserve. This estimate should be reviewed in later years based on repair experience.

Reserve Component	Expected	Effective	Remaining	Current	Future
	Life (Yrs.)	Age (Yrs.)	Life (Yrs.)	Cost	Cost
Vinyl Siding	35	10	25	351,300	576,345

#### **Deficiency Analysis**

No deficiencies were noted, and none were reported.

Any damage or deterioration should be promptly repaired and sealed to ensure the integrity of this exterior component.

#### Reserve Component: (3) Wood Siding

This reserve provision covers the wood trim siding on all buildings throughout the complex.

The wood batten siding and at the roof level.

With proper installation and maintenance, we estimate this component has a life expectancy 35 plus years, however isolated replacement may be required over its service life.

This is a long-term reserve. This estimate should be reviewed in later years based on repair experience.

Reserve Component	Expected	Effective	Remaining	Current	Future
	Life (Yrs.)	Age (Yrs.)	Life (Yrs.)	Cost	Cost
Wood Siding	35	25	10	48,000	58,512

#### **Deficiency Analysis**

No deficiencies were noted, and none were reported.

Any damage or deterioration should be promptly repaired and sealed to ensure the integrity of this exterior component.

#### Reserve Component: (4) Stone Siding

This reserve provision covers repairs any ongoing repairs needed to the stone siding.

This siding has a long-life expectancy, however, may require mortar repair or stone replacement throughout its service life.

For the purposes of this study, we have estimated repairs and isolated replacements on a 10-year cycle.

This is a long- term contingency reserve, which covers shorter-term repairs. This estimate should be reviewed in later years and updated based on repair experience.

Reserve Component	Expected	Effective	Remaining	Current	Future
	Life (Yrs.)	Age (Yrs.)	Life (Yrs.)	Cost	Cost
Stone Siding	10	5	5	2,000	2,208

#### **Deficiency Analysis**

No deficiencies were noted, and none were reported.

The exterior walls should be regularly inspected. Any cracks or deterioration should be promptly repaired/replaced to ensure the integrity of this exterior component.

#### Reserve Component: (5) Parging - Repairs

This reserve provision covers parging finishing on the building's exterior.

Parging is the coating applied to the visible (above-grade) portion of the foundation walls. It is applied to poured-concrete foundations to hide surface imperfections, marks from formwork and the like, so its role is essentially decorative.

This is an estimate for the repair/replacement of this component and should be regularly monitored and updated based on repair experience.

Reserve Component	Expected	Effective	Remaining	Current	Future
	Life (Yrs.)	Age (Yrs.)	Life (Yrs.)	Cost	Cost
Parging - Repairs	10	5	5	3,000	3,312

#### **Deficiency Analysis**

No major deficiencies were noted, and none were reported.

The exterior walls should be regularly inspected. Any cracks or deterioration should be promptly repaired/replaced to ensure the integrity of this exterior component.

#### Reserve Component: (6) Insulation & Venting

This reserve provision covers adding additional insulation and vents, vent replacement.

These components have a long-life expectancy, however may require replacement throughout the service life.

For the purposes of this study we have estimated repairs and isolated replacements on a 35-year cycle.

This is a long- term contingency reserve, which covers shorter-term repairs. This estimate should be reviewed in later years and updated based on repair experience.

Reserve Component	Expected	Effective	Remaining	Current	Future
	Life (Yrs.)	Age (Yrs.)	Life (Yrs.)	Cost	Cost
Insulation & Venting	35	5	30	93,500	169,362

#### **Deficiency Analysis**

No deficiencies were reported.

#### Reserve Component: (7) Windows

This reserve provision covers the windows that fall under common property and are included in this study.

They are constructed of vinyl material that we estimate to have a life expectancy of up to 30 years.

This is a long- term contingency reserve, which covers shorter term repair and replacement cycles.

Reserve Component	Expected	Effective	Remaining	Current	Future
	Life (Yrs.)	Age (Yrs.)	Life (Yrs.)	Cost	Cost
Windows	30	0	30	480,000	869,454

#### **Deficiency Analysis**

The Board stated that the windows are being replaced one third at a time starting in 2023 and provided the costing for these components.

Regular inspection of the windows will identify failed components at an early stage and allow for the prompt repair or replacement to maintain the integrity of the building envelope.

#### Reserve Component: (8) Sliding Doors

This reserve provision covers the sliding doors that fall under common property and are included in this study.

They are constructed of vinyl material that we estimate to have a life expectancy of up to 30 years.

This is a long- term contingency reserve, which covers shorter term repair and replacement cycles.

Reserve Component	Expected	Effective	Remaining	Current	Future
	Life (Yrs.)	Age (Yrs.)	Life (Yrs.)	Cost	Cost
Sliding Doors	30	27	3	127,300	135,092

#### **Deficiency Analysis**

The Board stated that these doors are being replaced 12 at a time starting in 2025 and provided the costing for these components.

Regular inspection of the doors will identify failed components at an early stage and allow for the prompt repair or replacement to maintain the integrity of the building envelope.

#### Reserve Component: (9) Unit Entry Doors

This reserve provision covers the unit entry doors located and the entrance of the units.

This is a long- term contingency reserve, which covers shorter term repair and replacement cycles which is estimated to be 35 years.

Reserve Component	Expected	Effective	Remaining	Current	Future
	Life (Yrs.)	Age (Yrs.)	Life (Yrs.)	Cost	Cost
Unit Entry Doors	35	32	3	66,700	70,783

#### **Deficiency Analysis**

The Board stated that these doors are being replaced approximately 12 at a time starting in 2025 and provided the costing for these components.

Regular inspection of the doors will identify failed components at an early stage and allow for the prompt repair or replacement to maintain the integrity of the building envelope.

#### Reserve Component: (10) Overhead Doors

This reserve provision covers the double metal overhead garage doors.

These doors are all metal panel doors and appear to be in good condition, we estimate the effective age to be 15 years.

This type of door has an estimated life of 25 years if maintained as necessary.

This is a long-term contingency reserve, which covers shorter-term repair and replacement cycles.

Reserve Component	Expected	Effective	Remaining	Current	Future
	Life (Yrs.)	Age (Yrs.)	Life (Yrs.)	Cost	Cost
Overhead Doors	25	15	10	117,600	143,354

#### **Deficiency Analysis**

Other than normal wear and tear, some rusting at the bottom of some doors and small creases, there were no major noted deficiencies, and none were reported.

Regular inspection of the doors will identify failed components at an early stage and allow for the prompt repair or replacement to maintain the integrity of the building envelope.

#### Reserve Component: (11) Decks

This reserve provision covers the rebuilding of the decks located at the back of the units.

For the purposes of this study, we estimate a life of 25 plus years provided they were installed and maintained throughout their service life.

There are different types of decks noted, this allocation is for a standard deck that still services many of them/

Although this is a long-term contingency reserve, it covers any repairs that may be necessary and incidental costs, which may occur.

Reserve Component	Expected	Effective	Remaining	Current	Future
	Life (Yrs.)	Age (Yrs.)	Life (Yrs.)	Cost	Cost
Decks	25	20	5	240,000	264,979

#### **Deficiency Analysis**

There were no major deficiencies noted, and none were reported. The surface of some decks appears to be deteriorating.

These components should be regularly inspected and must be kept free from any water retaining covering or obstruction; they must always be well drained.

#### ROOFING

#### Reserve Component: (12) Roofing System - Asphalt Shingles

This reserve provision covers the sloped asphalt roofing system employed on all buildings, including the recycle/refuse building.

This type of sloped asphalt roof has an estimated life expectancy of 25 years with maintenance as needed.

Regardless of the type of shingle used, there are a few significant factors with regards to wear which are exposure, hail and slope.

Sunlight and hail are a couple of the biggest enemies of asphalt roofs and in many areas, the south and west exposures wear out the fastest. The steeper the slope the longer the shingle will last.

Although this is a long-term contingency reserve, it covers any repairs that may be necessary and incidental costs, which may occur.

This component should be reviewed and updated based on any repair experience.

Reserve Component	Expected	Effective	Remaining	Current	Future
	Life (Yrs.)	Age (Yrs.)	Life (Yrs.)	Cost	Cost
Roofing System - Asphalt Shingles	25	2	23	264,000	416,301

#### **Deficiency Analysis**

The roofs were viewed from ground level and we did not note any deficiencies, and none were reported.

The roofing system is an important part of keeping the building envelope in good condition and should be inspected regularly. Vents and flashings should be inspected as part of an annual review and repaired and secured as necessary.

#### Reserve Component: (13) Prefinished Metal

This reserve provision covers the prefinished metal soffit and fascia. These components have a life expectancy of 35 plus years with maintenance as required.

Soffit helps to protect rafters from the roof assembly from the weather elements. This component also helps the with building ventilation to reduce mold buildup and beams from rotting.

Fascia typically runs along the roofline of the building and acts as a finishing edge that connects the ends of the rafters and trusses. Much like the soffit it also helps protect the roof assembly from the elements.

This is a long- term contingency reserve, which covers periodic repairs throughout its service life.

The Board may want to review this component in future years and make the appropriate adjustments based on the repair history.

Reserve Component	Expected	Effective	Remaining	Current	Future
	Life (Yrs.)	Age (Yrs.)	Life (Yrs.)	Cost	Cost
Prefinished Aluminum	35	2	33	5,000	9,611

#### **Deficiency Analysis**

There were no noted deficiencies, and none were reported.

Regular inspection on these components can identify problems at an early stage and allow for the prompt repair or replacement.

#### Reserve Component: (14) Eavestroughs & Downspouts

This reserve provision covers the metal eavestroughs and downspouts that provide drainage away from the building.

These components help to protect the walls of the buildings from water that would ordinarily run off the roof.

Eavestroughs and Downspouts are especially important in buildings with basements or crawlspaces as they help take water away from the foundation reducing the risk of water penetration.

This estimate should be reviewed in later years based on repair experience. Isolated repair/replacement can be completed to areas that may be damaged or fail early.

This is a long- term contingency reserve, which covers shorter-term repair and replacement cycles.

Reserve Component	Expected	Effective	Remaining	Current	Future
	Life (Yrs.)	Age (Yrs.)	Life (Yrs.)	Cost	Cost
Eavestroughs & Downspouts	25	2	23	58,000	91,460

#### **Deficiency Analysis**

No deficiencies were noted, and none were reported.

All eavestroughs and downspouts are prone to leakage at the joints and seems. Missing end caps and poor connections to downspouts are other common sources of leakage.

These areas of leakage can cause considerable damage to fascia's, soffits and exterior cladding. Regular inspection on these components can identify problems at an early stage and allow for the prompt repair or replacement.

#### SITE IMPROVEMENTS & MISCELLANEOUS

#### Reserve Component: (15) Asphalt

This component covers the asphalt driveway providing access to the units and the outdoor parking areas.

With proper maintenance, this component can have a life expectancy of up to 25 plus years with ongoing maintenance.

Repairs to asphalt would likely consist of localized replacement of deteriorated areas. We have allocated a small amount every 5th year for repairs while also reserving for a top coat in approximately 5 years.

This is a long-term contingency reserve, which covers shorter-term repair and should be reviewed and updated based on repair experience.

Reserve Component	Expected	Effective	Remaining	Current	Future
	Life (Yrs.)	Age (Yrs.)	Life (Yrs.)	Cost	Cost
Asphalt	25	20	5	98,000	108,200

#### **Deficiency Analysis**

The asphalt is starting to show its age and will likely require replacement around the time of the next study in five years.

Regular seal cycles will help extend the useful life of the asphalt, while reducing future resurfacing expenses.

This component must be regularly inspected as part of a preventative maintenance program. Any deficiencies must be promptly repaired.

#### Reserve Component: (16) Concrete

This is a contingency reserve provision to cover the ongoing repair and replacement of the concrete components around the property.

The concrete garage pads, sidewalks, curbs, and various other concrete components.

Concrete has a long life, up to the life of the project, however replacement to isolated areas may be required due to freeze thaw or poor material or workmanship.

For the purposes of this study we have estimated repairs on a 25-year cycle.

This is a long-term contingency reserve, which covers shorter-term repair. This estimate should be reviewed and updated based on repair/replacement experience.

Reserve Component	Expected Life (Yrs.)		Remaining Life (Yrs.)	Current Cost	Future Cost
Concrete	25	15	10	77,000	93,863

#### **Deficiency Analysis**

Other than typical cracking to concrete on a few driveway pads, no other deficiencies were noted, and none were reported.

This component must be regularly inspected as part of a preventative maintenance program. Any deficiencies must be promptly repaired.

#### Reserve Component: (17) Underground Services

This reserve includes all catch basins, area drains and storm and sanitary sewer systems and connections and backflow valves.

This allocation includes the incoming water main and connections and backflow valves.

The sewer and water supply system are a long-term contingency reserve. Many the components will have the building life.

The reserve being made is an allowance allocation, which is to cover the costs to make minor repairs, which may occur from time to time.

Reserve Component	Expected	Effective	Remaining	Current	Future
	Life (Yrs.)	Age (Yrs.)	Life (Yrs.)	Cost	Cost
Underground Services	40	25	15	60,000	80,752

#### **Deficiency Analysis**

This component should be periodically inspected as part of a preventative maintenance program.

#### Reserve Component: (18) Outdoor Lighting & Electrical

This reserve provision covers replacement of outdoor lighting throughout the property, mainly consisting light standards throughout the property.

This is a long-term contingency reserve, which covers shorter-term repair and replacement cycles.

Much of the electrical system will last the life of the building; however, there are several short-lived items, which will require replacement from time to time.

Reserve Component	Expected	Effective	Remaining	Current	Future
	Life (Yrs.)	Age (Yrs.)	Life (Yrs.)	Cost	Cost
<b>Outdoor Lighting &amp; Electrical</b>	30	25	5	14,000	15,457

#### **Deficiency Analysis**

There were no noted deficiencies, and none were reported.

We recommend cleaning of the fixtures on a regular basis to ensure full illumination.

#### Reserve Component: (19) Refuse Buildings

This reserve is for the ongoing repair/replacement of the recycle/refuse building and their materials that are consistent with the rest of the complex.

Management should expect to repair and remodel periodically to maintain a good aesthetic. Funding here is for periodic replacements on a 30-year cycle.

This estimate is an allowance allocation and should be reviewed in future years and updated based on repair experience.

Reserve Component	Expected	Effective	Remaining	Current	Future
	Life (Yrs.)	Age (Yrs.)	Life (Yrs.)	Cost	Cost
Refuse Buildings	25	10	15	10,000	13,459

#### **Deficiency Analysis**

There were no noted deficiencies, and none were reported.

This component must be regularly inspected as part of a preventative maintenance program. Any deficiencies must be promptly repaired.

### Reserve Component: (20) Privacy Fence - Vinyl

This reserve is for the repair/replacement of the vinyl privacy panels that separate the back of each unit.

It is best to eventually replace all fencing at the same time to maintain a uniform appearance.

Vinyl fencing can have an expected life of up to 30 years provided it was installed correctly and maintained properly.

This is a long-term contingency reserve, which covers shorter-term repair and replacement cycles for items such as replacing and repairing broken panels and rails.

Reserve Component	Expected	Effective	Remaining	Current	Future
	Life (Yrs.)	Age (Yrs.)	Life (Yrs.)	Cost	Cost
Vinyl Fencing	30	2	28	44,700	77,824

#### **Deficiency Analysis**

There were no noted deficiencies, and none were reported.

This component must be regularly inspected as part of a preventative maintenance program. Any deficiencies must be promptly repaired.

## Reserve Component: (21) Wood Fencing

This reserve is for the repair/replacement of the common area wood fencing around the perimeter of the property.

Regular paint cycles will help protect the fencing from damaging weather and irrigation elements, while maintaining an attractive appearance.

It is best to eventually replace all fencing at the same time to maintain a uniform appearance.

Wood fencing can have an expected life of up to 25 years provided it was installed correctly and maintained properly.

This is a long-term contingency reserve, which covers shorter-term repair and replacement cycles for items such as replacing and repairing broken panels and rails.

Reserve Component	Expected	Effective	Remaining	Current	Future
	Life (Yrs.)	Age (Yrs.)	Life (Yrs.)	Cost	Cost
Wood Fencing	25	20	5	146,000	161,196

#### **Deficiency Analysis**

The wood fencing is showing signs of deterioration and will likely need replacement at the time of the next study in 5 years.

This component must be regularly inspected as part of a preventative maintenance program. Any deficiencies must be promptly repaired.

#### Reserve Component: (22) Paint Wood Fence

This reserve provision covers replacement of the staining/painting of the wood fence.

We have estimated staining/painting on a 10-year cycle.

This is a long-term contingency reserve, which covers shorter-term repair and replacement cycles for items such as replacing and repairing damaged components and should be updated based on repair experience.

Reserve Component	Expected	Effective	Remaining	Current	Future
	Life (Yrs.)	Age (Yrs.)	Life (Yrs.)	Cost	Cost
Paint Wood Fence	10	4	6	13,200	14,865

#### **Deficiency Analysis**

We have estimated a remaining life of 6 years to coincide with the wood fence replacement in 5 years. Management should expect to paint or stain the new fence one year after installation.

This component must be regularly inspected as part of a preventative maintenance program. Any deficiencies must be promptly repaired.

#### Reserve Component: (23) Exterior Painting & Waterproofing

This reserve provision covers the costs related to exterior painting and waterproofing the buildings.

The painting includes the doors, and wood trim.

These components require painting on a cyclical basis to prevent early failure and to maintain the property in pristine condition.

Waterproofing consists of sealing the joints around windows, doors, and wall openings as well as joints of differing building materials to ensure the integrity of the building against climatic elements.

This reserve estimate is based on using high quality painting and caulking compounds and proper application on an estimated 10-year cycle.

The cost estimate for this reserve component is based on an educated guess. Due to the nature of the windows and exterior wall design, it is difficult to complete a unit in place cost estimate.

This is a critical component which helps to maintain the integrity of the building envelope and its resistance to water penetration.

Reserve Component	Expected	Effective	Remaining	Current	Future
	Life (Yrs.)	Age (Yrs.)	Life (Yrs.)	Cost	Cost
Exterior Painting & Waterproofing	10	8	2	28,800	29,964

#### **Deficiency Analysis**

Painting and waterproofing are important parts of sealing the building from outside elements and should be a cyclical function.

It is important to note that there are several types of paints and sealants that can be used, we recommend high quality products.

Painting and waterproofing should be regularly inspected and repaired as required.

## Reserve Component: (24) Landscaping, Irrigation & Drainage

This provision is a 20-year budget for the ongoing replacement of the shrubs, trees, mulch, and various other landscaping components including irrigation and landscaping around the foundation of the units to help with proper drainage.

These components have varying life cycles; therefore, the reserve being made is an allowance allocation, which is to cover the costs to make minor repairs, which may occur from time to time.

This component should be regularly monitored and updated based on repair experience.

Reserve Component	Expected	Effective	Remaining	Current	Future	
	Life (Yrs.)	Age (Yrs.)	Life (Yrs.)	Cost	Cost	
Landscaping, Irrigation & Drainage	20	5	15	10,000	13,459	

#### **Deficiency Analysis**

There were no noted deficiencies, and none were reported.

They have also advised that they will be contacting a third party to come up with a remedial plan for this issue.

#### Reserve Component: (25) Contingency

This component is for any unforeseen events or circumstances and includes consulting services such as structural engineering reviews, building envelope reviews, etc.

This contingency should be reviewed and updated based on experience.

Reserve Component	Expected	Effective	Remaining	Current	Future
	Life (Yrs.)	Age (Yrs.)	Life (Yrs.)	Cost	Cost
Contingency	5	0	5	5,000	5,520

#### **Deficiency Analysis**

Not applicable.

# Reserve Component: (26) Reserve Fund Study

This component is for the reserve fund study which should be carried out on at least a five-year cycle, in accordance with the Alberta Condominium Legislation.

Reserve Component	Expected	Effective	Remaining	Current	Future
	Life (Yrs.)	Age (Yrs.)	Life (Yrs.)	Cost	Cost
Professional Fees	5	0	5	3,570	3,942

# **Deficiency Analysis**

Not applicable.

## **Reserve Fund Estimates**

Reviewing the various reserve fund components in terms of their condition and life cycle and analyzing the contingencies for such items as exterior walls, structural elements, roofing and sewers, we have produced individual reserve fund estimates.

In estimating the replacement costs of reserve components, I relied on Building Service and Costing publications, such as Means Repair & Remodeling Cost Data and Yardsticks for Costing. In addition, I verified some estimates by seeking quotations from contractors, fabricators, and suppliers, as well as my own cost compilations.

The following Schedule of Reserve Fund Estimates shows detailed computations of various reserve items using the inflationary factor of 2.0% and a long-term interest rate of 1.5%. Due to rounding automatically executed by computer, there may be minor discrepancies in the data, which are not deemed significant.

The Reserve Fund Estimates for are shown in Schedule "A" – Benchmark Analysis hereinafter. Schedule "A" has been included in the addenda of this report. In summary, the current replacement reserve estimates, the current reserve fund requirements, and estimated annual reserve fund assessment are as follows:

#### BENCHMARK ANALYSIS - SCHEDULE A

Current Reserve Fund Requirements	\$953,040
Annual Reserve Fund Assessment	\$113,699

In accordance with these estimates, there should have approximately \$953,040 in its reserve fund and the assessed annual payments or contributions to the reserve fund by unit owners should be approximately \$113,699 based on the stated assumptions and in an optimal fully funded scenario.

The above estimates are calculated on schedule "A". Current replacement costs are the reserve fund provisions at current prices and under current economic conditions.

Current reserve fund requirements refer to reserve funds, which should now be retained by the corporation and be invested in interest bearing securities.

The annual reserve fund assessment consists of the annual payments by the unit owners into the reserve fund to meet all potential capital expenditure requirements in the future.

The reserve fund estimates herein have been prepared without regard to the current financial position of the corporation or the current reserve fund contributions by unit owners, and as such, they represent the optimum reserve fund operation, which assumes that the corporation has continuously assessed adequate reserve funding from the beginning.

#### SUMMARIES - RESERVE FUND ESTIMATES

The various reserve fund estimates in the Schedule of Reserve Fund Components herein before are further expanded and summarized in Schedule "A". Benchmark Analysis pursuant to prudent reserve fund practices, which provide for inflationary cost increases over time and interest income from reserve fund investments. In the preparation of the Schedule of Reserve Fund Estimates, the following criteria were considered:

- 1. Reserve fund estimates are grouped into categories which can readily be used for reserve fund budget preparation and accounting.
- 2. The reserve fund components are identified, and current replacement reserves are estimated.
- 3. Future replacement reserves are estimated by applying a long-term inflationary factor to the current replacement reserve estimates.
- 4. Current reserve requirements are calculated by applying the effective age to the current replacement reserve estimates.
- 5. Current reserve fund requirements when invested over time will grow at the compound rate of interest selected, and hence, they become future reserve accumulations.
- 6. Subtracting future reserve accumulations from future replacement costs, the difference is the amount of reserves to be funded by reserve fund contributions, or future reserve requirements.
- 7. Since reserve fund contributions are continually invested, the payments of such contributions represent discounted payments, which must be assessed by the condominium corporation.

The foregoing program represents the practical application of reserve fund budget planning and management. When applied, as outlined, the reserve fund will cover anticipated reserve fund expenditures and any contingencies. Moreover, unit owners must always contribute their fair share to the reserve fund.

#### **Reserve Fund Analysis and Recommendations**

Analyzing the reserve fund position and practices of Chaparral Adult Village, we have reviewed the available financial information provided by the Corporation.

The purpose of the corporation is to control, manage and maintain the real, personal, and common property and to provide common services for the benefit of the owners of the condominium common elements, as defined in the corporation's plan and By-laws.

The corporation, as required by the Condominium Property Act Revised Statutes of Alberta, has established a reserve for financing future major repairs and replacements of the common elements.

## **RESERVE FUND OPERATIONS**

Based on the available information, the current balance in the reserve fund is approximately \$595,010 and the annual estimated level of contributions within the reserve fund is approximately \$78,639.

## RECOMMENDATIONS (SEE SCHEDULE "B" 30-YEAR CASH FLOW PROJECTION AND ANALYSIS)

- 1. The corporation should prepare and implement a long-term reserve fund strategy.
- 2. Major repairs and replacements should be recorded in, and funded from, a reserve fund account.
- 3. For the purposes of this study, we recommend, at a minimum, the contributions to the reserve fund are aligned with Schedule B in the addenda, at least until the next review in five years.
- 4. We suggest the Board continues to investigate funding options to maximize their investment.
- 5. The corporation should make such expenditures, as necessary to maintain the property in optimum condition.
- 6. The reserve fund should be reviewed every year to ensure that the underlying assumptions are still valid and that the estimates remain current.
- 7. The corporation should update the reserve fund study every five (5) years.

It should be noted that this is a 30-year study in accordance with the Provincial Condominium Act. The recommended increase in contributions maintains the fund at a level to complete planned replacements without over taxing the owners. This may change when the reserve study is completed in five years as the expenditures are within the 30-year period, however it should be noted that expenditures for common components between year 30 and beyond may change the contribution level.

## MANAGEMENT PROGRAM

Adequate reserve funding must be the primary objective of management since a sound reserve fund ensures the long-term integrity and viability of a condominium project, and hence, it will enhance the value to the owner and the property value in the marketplace. The following comments and projections assume that the corporation will implement a proactive management program.

## **RESERVE FUND PROGRAM**

It is important that a Formal Reserve Fund program be established and implemented. A Reserve Fund Program will ensure that reserve fund requirements are adequate for contemplated major repairs and replacements and that reserve fund contributions are sufficient to cover all contingencies. Moreover, the Reserve Fund Program must be reviewed and adjusted from time to time to keep pace with changing conditions.

## **RESERVE FUND EXPENDITURES**

The corporation should implement a reserve fund expenditure program contemplated by management to ensure appropriate expenditures and the maintenance of the property in excellent condition.

Major reserve fund expenditures are projected in the 30-Year Cash Flow Projections and Analysis contained in Schedule "B" attached to the addenda.

## 30-Year Cash Flow Projections and Analysis (schedule "B")

The Reserve Fund Projected Cash Flow and Analysis presents a 30-year reserve fund projection showing cash positions, cash flows and cash expenditures in a format, which meets the Regulations pursuant to the Condominium Property Act. Following is a description of the "Headings" contained on schedule "B".

Near the upper left-hand corner of the cash flow projection sheet are two parameters, which can be changed to show the effects of different scenarios. The first parameter is "Annual Rate of RF assessment incr." This parameter sets the annual rate of increase of reserve fund contributions.

The second parameter is "Annual rate of interest". This parameter sets that annual rate of interest at which the reserve fund investments are made.

In completing the analysis these parameters are changed and the resulting effects are studied. This information is used to develop recommendations to remediate the reserve fund shortfall.

## **OPENING CASH BALANCE**

This is the reserve fund position at the beginning of each and every fiscal year showing the cash resources available, which consist of (1) bank deposits, (2) qualified investments, and (3) accrued interest earned.

## TOTAL CASH RESOURCES

This is the total amount of cash, which is on hand. It is made up of the opening balance, annual contributions, special assessments (if any), and interest income. The interest income is calculated using the interest rate selected and the "Opening Balance". This entry represents the total cash resources available in any fiscal year and includes the current year's cash flow.

#### CASH EXPENDITURES

These are annual expenditures listed in the categories established by the Reserve Fund Study. Records or ledger accounts of these expenditure categories should be kept showing reserve fund allocations and charges in a chronological order for control and reference.

#### CLOSING BALANCE

This is the reserve fund position at the end of each Fiscal year, which is carried forward to the next year.

# Addendum

- Schedule "A" Benchmark Analysis Summary of Reserve Data Estimates
- Schedule "B" 30 Year Cash Flow Projections & Analysis

CHAPARRAL ADULT VILLAGE

# **BENCHMARK ANALYSIS - SCHEDULE OF RESERVE FUND ESTIMATES**

SCHEDULE "A"

				1	2	3	4	
RESERVE COMPONENTS	EXPECTED	EFFECTIVE	REMAINING	CURRENT	FUTURE	CURRENT	ANNUAL	<b>RESERVE FUND</b>
48 Units	LIFESPAN	AGE	LIFE SPAN	REPLACEMENT	REPLACEMENT	<b>RESERVE FUND</b>	<b>RESERVE FUND</b>	ASSESSMENT
48 011115	Years	Years	Years	COST	COSTS	REQUIREMENTS	ASSESSMENT	ALLOCATION
Rate of Interest used in calculations	1.5%							
Rate of inflation used in calculations	2.0%							
STRUCTURAL & ARCHITECTURAL COMPONENTS								
1 Structures	50	25	25	20,000	32,812	10,000	609	0.54%
2 Vinyl Siding	35	10	25	351,300	576,345	100,371	14,327	12.60%
3 Wood Siding	35	25	10	48,000	58,512	34,286	1,749	1.54%
4 Stone Siding	10	5	5	2,000	2,208	1,000	219	0.19%
5 Parging	10	5	5	3,000	3,312	1,500	329	0.29%
6 Insulation & Venting	35	5	30	93,500	169,362	13,357	3,955	3.48%
7 Windows	30	0	30	480,000	869,454	0	23,162	20.37%
8 Sliding Doors	30	27	3	127,300	135,092	114,570	5,020	4.42%
9 Unit Entry Doors	35	32	3	66,700	70,783	60,983	2,303	2.03%
10 Overhead Doors	25	15	10	117,600	143,354	70,560	5,743	5.05%
11 Decks	25	20	5	240,000	264,979	192,000	11,285	9.92%
ROOFING								
12 Roofing System - Asphalt Shingles	25	2	23	264,000	416,301	21,120	14,199	12.49%
13 Prefinished Aluminum	35	2	33	5,000	9,611	286	216	0.19%
14 Eavestroughs & Downspouts	25	2	23	58,000	91,460	4,640	3,119	2.74%
SITE IMPROVEMENTS & MISCELLANEOUS								
15 Asphalt	25	20	5	98,000	108,200	78,400	4,608	4.05%
16 Concrete	25	15	10	77,000	93,863	46,200	3,760	3.31%
17 Underground Services	40	25	15	60,000	80,752	37,500	2,030	1.79%
18 Outdoor Lighting & Electrical	30	25	5	14,000	15,457	11,667	561	0.49%
19 Refuse Buildings	25	10	15	10,000	13,459	4,000	507	0.45%
20 Vinyl Fencing	30	2	28	44,700	77,824	2,980	2,126	1.87%
21 Wood Fencing	25	20	5	146,000	161,196	116,800	6,865	6.04%
22 Paint Wood Fence	10	4	6	13,200				
23 Exterior Painting & Waterproofing	10	8	2	28,800	29,964	23,040	3,090	2.72%
24 Landscaping, Irrigation & Drainage	20	5	15	10,000	13,459	2,500	619	0.54%
25 Contingency	5	0	5	5,000	5,520	0	1,071	0.94%
26 Professional Services	5	0	5	3,570	3,942	0	765	0.67%
TOTAL RESERVES						953,040	113,699	100%

CHAPARRAL ADULT VILLAGE	_								30 YEA	R RESE	RVE FL	IND CA	SH FLO	W PROJ	ECTION	& ANA	LYSIS												S	SCHEDU	LE "B"
		4		2		5		-	0	•	40	44	12	13	44	15	40	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Annual rate of increase	2.0%	Year	Year	Year	4 Year	9 Year	Year	Year	o Year	9 Year	10 Year	11 Year	Year	Year	14 Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year
Annual rate of Interest	1.5%	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052
	1.5/0	2023	2024	2023	2020	2021	2020	2023	2030	2031	2032	2000	2034	2000	2030	2007	2030	2033	2040	2041	2042	2043	2044	204J	2040	2047	2040	2043	2030	2031	2032
OPENING BALANCE - SEPTEMBER 1		595,010	519,004	423,225	317,074	424,646	96,295	97,602	62,275	174,501	230,635	153,607	269,715	320,926	448,614	541,876	554,372	630,184	772,640	919,893	1,072,068	1,218,993	1,376,046	1,500,433	1,164,962	1,335,215	882,321	1,027,308	1,204,848	1,310,470	1,498,807
Reserve Fund Contributions		78,639	86,400	100,800	102,816	104,872	106,970	109,109	111,291	113,517	115,788	118,103	120,465	122,875		127,839	130,396	133,003	135,664	138,377	141,144	143,967	146,847	149,783		155,835	158,951	162,130	165,373		
Reserve Fund Interest Income		8,925	7,785	6,348	4,756	6,370	1,444	1,464	934	2,618	3,460	2,304	4,046	4,814	6,729	8,128	8,316	9,453	11,590	13,798	16,081	18,285	20,641	22,506	17,474	20,028	13,235	15,410	18,073	19,657	22,482
Reserve Makeup		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Cash Resources		682,574	613,189	530,374	424,646	535,888	204,709	208,175	174,501	290,635	349,882	274,015	394,226	448,614	580,676	677,842	693,084	772,640	919,893	1,072,068	1,229,293	1,381,246	1,543,533	1,672,723	1,335,215	1,511,078	1,054,508	1,204,848	1,388,294	1,498,807	1,693,343
STRUCTURAL & ARCHITECTURAL COMPONENTS																															
1 Structures																										32,812					
2 Vinyl Siding																										576,345					
3 Wood Siding											58,512																				
4 Stone Siding						2,208										2,600										3,200					
5 Parging						3,312										4,000										4,800					
6 Insulation & Venting																															
7 Windows		160,000	160,000	160,000																											
8 Sliding Doors				33,800		35,100		36,500		38,000																					
9 Unit Entry Doors				19,500		20,300		21,100		22,000																					
10 Overhead Doors											35,800		37,300		38,800		40,300														
11 Decks						88,300	88,300	88,300																							
ROOFING																															
12 Roofing System - Asphalt Shingles																								416,301							
13 Prefinished Aluminum																															
14 Eavestroughs & Downspouts																								91,460							
SITE IMPROVEMENTS & MISCELLANEOUS																															
15 Asphalt	_					108,200					2,000					2,500					3,000					3,500					162,300
16 Concrete	_										93,863																				
17 Underground Services																80,752															
18 Outdoor Lighting & Electrical	-	H				15,457															ļ										
19 Refuse Buildings		H				L										13,459									ļ						
20 Vinyl Fencing		H																							ļ				77,824		
21 Wood Fencing		H				161,196																			ļ						241,800
22 Paint Wood Fence	_						14,865										17,800										21,400				
23 Exterior Painting & Waterproofing		H	29,964			ļ							36,000										43,100		ļ						
24 Landscaping, Irrigation & Drainage		<u>  </u>				L										13,459									ļ						
25 Contingency			I			5,520					6,100					6,700					7,300				L	8,100					8,900
26 Professional Services		3,570					3,942					4,300					4,800					5,200					5,800				
TOTAL EXPENDITURES		163,570	189,964	213,300	0	439,593	107,107	145,900	0	60,000	196,275	4,300	73,300	0	38,800	123,470	62,900	0	0	0	10,300	5,200	43,100	507,761	0	628,757	27,200	0	77,824	0	413,000
CLOSING BALANCE		510.004	122 225	317,074	121 646	96.205	97.602	62 275	174 504	230 625	153 607	260 745	320 026	118 614	541.976	554 272	630 494	772 640	010 002	1 072 069	1 210 002	1 376 046	1 500 422	1164 062	1 335 345	882 224	1 027 209	1 204 949	1,310,470	1 /08 907	1 280 242
CLOSING BALANCE		519,004	423,225	317,074	424,040	30,235	97,002	02,275	1/4,501	200,000	100,007	209,/15	320,920	440,014	341,070	004,072	030,104	112,040	313,033	1,072,068	1,210,993	1,3/0,046	1,500,453	1,104,902	1,333,215	002,321	1,027,308	1,204,048	1,310,470	1,430,007	1,200,343